UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Transmission Planning and Cost Allocation by	)	
	)	Docket No. RM10-23-000
Transmission Owning & Operating Public Utilities	)	

COMMENTS OF EARTHJUSTICE

1. On behalf of the Sierra Club, the Natural Resources Defense Council, and Citizens for Pennsylvania's Future, Earthjustice offers the following reply comments on the Notice of Proposed Rulemaking issued by the Federal Energy Regulatory Commission (FERC or Commission) in this proceeding on June 17, 2010 (NOPR). *See Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities,* 75 Fed. Reg. 37,884 (June 30, 2010).

2. We support the Commission's proposal to require transparent, regionally coordinated transmission planning criteria for integrating public policies. In so doing, we share the sentiment Senators Harry Reid and Byron Dorgan recently expressed to FERC: "Recognizing State and Federal policy in transmission planning is an important step toward integrating renewable energy sources into the nation's transmission system."[1] We also believe strongly that current methods of transmission planning must change to enable effective deployment of energy efficiency and demand response resources, as well as the timely retirement of old, inefficient fossil generation.

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[1] Letter to Chairman Jon Wellinghoff from Senators Harry Reid and Byron Dorgan (Sept. 29, 2010).

3. Various commenters questioned whether the Commission has the authority to require consideration of State and Federal public policy in regionally coordinated transmission planning. We offer the following comments to affirm that the Commission is empowered to require such consideration to the full extent authorized under the Federal Power Act (FPA) based on existing deficiencies in the transmission planning process. These reply comments bolster the Commission's preliminary finding that the failure to account for State and Federal public policy requirements in the transmission planning process may result in undue discrimination and rates, terms, and conditions of service that are not just and reasonable.

4. Additionally, Earthjustice has commissioned Synapse Energy Economics (Synpase) to prepare a report that will document why consideration of public policy mandates is needed to ensure just and reasonable rates for electricity (Synapse Report). These reply comments briefly summarize the anticipated nature and scope of this report. Upon its completion in the next two weeks, Earthjustice will submit supplemental reply comments that present the Synapse Report in its entirety.

I. Adopting the NOPR's Public Policy Proposal Does Not Exceed the Commission's Jurisdiction.

5. FERC's authority is prescribed by the FPA requirements to provide for just and reasonable rates, to ensure that jurisdictional service is not unduly discriminatory, and to advance the provision of reliable service. *See Nat'l Ass'n for the Advancement of Colored People v. Fed. Power Comm'n*, 425 U.S. 662, 669-71 (1976) (*NAACP*) (explaining the "Commission is authorized to consider the consequences of discriminatory employment practices on the part of its regulatees only insofar as such consequences are directly related to the Commission's establishment of just and

reasonable rates in the public interest."). Section 201(b) of the FPA grants FERC "exclusive jurisdiction over the transmission and wholesale sale of electricity in interstate commerce." *Wisconsin Public Power, Inc. v. F.E.R.C.*, 493 F.3d 239, 246 (D.C. Cir. 2007) (citing 16 U.S.C. § 824(b)). "Section 205 of the FPA provides that '[a]ll rates and charges made, demanded, or received by any public utility for or in connection with the transmission or sale of electric energy subject to the jurisdiction of the Commission . . . shall be just and reasonable, and any such rate or charge that is not just and reasonable is hereby declared to be unlawful.'" *Id.* (quoting 16 U.S.C. § 824d(a)).

6. "Section 205 also prohibits undue discrimination in rates, charges, or terms of service." *Id.* (citing 16 U.S.C. § 824d(b)). It makes it unlawful for a public utility, with respect to any transmission or sale subject to the jurisdiction of the Commission, to "(1) make or grant any undue preference or advantage to any person ... or (2) maintain any unreasonable difference in rates, charges, services, facilities, or in any other respect, either as between localities or as between classes of service." 16 U.S.C. § 824d(b). "To enforce these requirements, Section 205 requires that utilities file tariffs reflecting their rates and service terms with the Commission, which must in turn ensure that those rates and terms are just and reasonable and not unduly discriminatory." *Wisconsin Public*, 493 F.3d at 246 (citing 16 U.S.C § 824d(c)).

7. The commenters challenging FERC's legal authority to require consideration of State and Federal public policy requirements in the planning process either mischaracterize the NOPR or ignore the Commission's preliminary findings regarding the existing planning deficiencies that the NOPR is intended to address. The Large Public Power Council (LPPC) and Southern Company Services, Inc. (Southern

Company), for example, challenge FERC's authority to the extent the Commission is attempting to advance broad public policy notions in defiance of the Supreme Court's holding in *NAACP*. Comments of the Large Public Power Council (LPPC Comments), p. 21; Comments of Southern Company Services, Inc. (Southern Company Comments), pp. 27-28.

8. Here, however, FERC's proposed planning reforms are directly related to the establishment of just and reasonable rates. The NOPR is clear that FERC is not attempting "to advance 'public policy,' broadly construed." LPPC Comments at 21. The NOPR proposes reforms that are expressly intended to address current deficiencies in the transmission planning process notwithstanding compliance with Order No. 890, and as such, they represent a permissible exercise of FERC's authority in the same way that Order No. 890 itself does. *See* NOPR, ¶¶ 33-41 (identifying five existing planning process deficiencies that can result in unjust and unreasonable rates or undue discrimination). Specifically, FERC recognized that current planning fails to account for transmission needs driven by public policy requirements established by State or Federal laws, including State mandates to increase reliance on renewable energy, energy efficiency, and demand response resources. *See* NOPR, ¶ 36. FERC also has recognized the role that the Environmental Protection Agency (EPA) greenhouse gas (GHG) controls and other air and water quality regulations will play in eliciting retirements of older, dirtier generating plants.[2] As Commissioner Philip Moeller recently explained regarding the need for detailed transmission planning in connection with retirements:

[2] FERC Chairman Seeks Review Of EPA Rules Affecting Electricity Reliability (Sept. 17, 2010) ("Chairman Jon Wellinghoff is calling for an inter-agency taskforce that would include EPA to examine how upcoming greenhouse gas controls and other air quality requirements could affect the reliability of the electricity grid.").

> [I]t's not enough to be general. These are very locationally specific challenges, and that's where the engineering expertise is needed to make sure those issues can be addressed where they really make a difference one way or another . . . Transmission is tough, and if that's the needed solution for ensuring reliability, the regulators on all sides of the issue have to be cognizant of the complexities of getting those investments into the ground."[3]

So long as transmission planners fail to account for the dramatic influence that these mandates and EPA regulations will have on load, generation, and needed transmission infrastructure, there can be no assurance that compliance with these mandates and regulations will be achieved cost-effectively or in a manner that is non-discriminatory.

9. The North Carolina Agencies contend FERC has little authority over system planning and that the NOPR planning proposals infringe upon state jurisdiction. *See* Joint Comments of the North Carolina Utilities Commission, and the Public Staff of the North Carolina Utilities Commission, pp. 2-3. Citing a FERC White Paper, the North Carolina Agencies suggest incorrectly that "the FERC explicitly stated that '[s]pecific features of the proposed [Standard Market Design] rule, particularly.... the regional transmission planning requirement, infringe on state jurisdiction.'" *Id.* This was not FERC's assertion; this was a concern raised by commenters,[4] to which FERC responded by explaining: "The Commission clarifies that nothing in the Final Rule will change state authority over these matters."[5] The NOPR in no way purports to change existing state authority. *See* NOPR, ¶ 69 ("This proposed requirement is not intended in any way to infringe upon State authority with respect to integrated resource planning").

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[3] FERC's Moeller Warns Plant Location Key In Considering GHG Crackdown (Sept. 24, 2010).
[4] Federal Energy Regulatory Commission White Paper: Wholesale Power Market Platform 4, *available at* http://www.nwcouncil.org/energy/transmission/fercmarketdesign/FERCWhitePaper.pdf. (stating public concerns and providing Commission's responses).
[5] *Id.* at 5.

10. To the contrary, the proposed planning requirement actually enhances the ability of state and local governments to effectuate their own public policy priorities in the local and regional planning processes. New planning requirements that compel grid operators to account for state mandates will "help states to coordinate transmission and generation siting decisions, allow consideration of regional resource adequacy requirements, facilitate consideration of demand response and load management programs at the State level, and address other factors states wish to consider." *Id.*, ¶ 67.

11. We support FERC's preliminary finding "that the failure to account explicitly for such public policy requirements in the transmission planning process may result in undue discrimination and rates, terms, and conditions of service that are not just and reasonable." NOPR, ¶ 37. Notably, a court will afford FERC's finding "great deference" and "treat [the Commission's] factual findings as conclusive if supported by substantial evidence." *Louisiana Public Service Com'n v. F.E.R.C.*, 551 F.3d 1042, 1045 (D.C. Cir. 2008) (explaining that where the subject of judicial review is "a predictive judgment by FERC about the effects of a proposed remedy" the court's "deference is at its zenith"). As the following discussion makes clear, there is substantial evidence that public policy mandates can have a significant impact on load demand, the mix of generation and non-generation resources that are available to meet demand, and the site-specific need (or not) for new transmission infrastructure. It is impossible to ignore public policy mandates in grid-related planning and still maintain a reliable system that can deliver electricity services cost-effectively.

II. Considering Public Policies During Transmission Planning Decreases Costs, Prevents Undue Discrimination, and Ensures Reliability.

12. As the NOPR explains, "it has become apparent to the Commission that Order No. 890's regional participation principle may not be sufficient, in and of itself, to ensure an open, transparent, inclusive, and comprehensive regional transmission planning process." NOPR, ¶ 49. Without the reforms proposed in the NOPR, transmission providers will lack the information necessary to assess proposed projects and determine which ones could satisfy needs more efficiently and cost-effectively. *See id.* Making uninformed decisions regarding available resources means "the rates, terms and conditions of transmission services may not be just and reasonable." *Id.*

13. In light of these concerns, the Commission properly "finds that transmission needs driven by public policy requirements established by State or Federal laws or regulations should be taken into account in the transmission planning process." NOPR, ¶ 63. The Commission proposes to require each regional transmission planning process to "develop a regional transmission plan that identifies the transmission facilities that cost effectively meet the needs of transmission providers, their transmission customers, and other stakeholders." NOPR, ¶ 51. Thus, the proposals are tied directly to the Commission's identified concerns regarding unjust rates and conditions and transmission service that is discriminatory or preferential. *See* NOPR, ¶ 63.

14. For example, the Commission explains that when conducting transmission planning, a prudent transmission provider not only considers reliability issues, but also "consider[s] whether transmission upgrades or other investments can reduce the overall costs of serving native load," which includes making cost-effective changes as a result of compliance with State or Federal laws or regulations. NOPR, ¶ 63. The implications for

cost-effective transmission may also arise as a greater proportion of the transmission grid is constructed pursuant to proactive planning, "thereby reducing the proportion of network upgrades that would otherwise be triggered by individual generator interconnection requests, which can be time consuming and inefficient." NOPR, ¶ 68.

15. Some commenters claim that existing state planning processes already ensure the reliability and cost-effectiveness of electrical transmission. *See* Florida Public Utility Commission, p. 5; North Carolina Agencies Comments, p. 5. These comments, however, ignore the NOPR's preliminary finding that the failure to account for public policy requirements may result in undue preference or discrimination, as well as rates, terms, and conditions of service that are not just and reasonable. NOPR, ¶ 37. As discussed above, FERC has an independent obligation to address these concerns.

III. Case Studies Illustrate the Impacts Public Policy Requirements Have on Transmission Planning.

16. Failing to account for State and Federal public policy requirements has several practical consequences that can lead to excessive costs. These consequences can be broadly characterized as falling into one of three categories: (1) paying generators excessive costs to maintain reliability; (2) procuring more generation than is needed; and (3) making bad and/or unnecessary investments in transmission infrastructure — *i.e.* over-building, often as a result of failing to locate new transmission infrastructure where it is needed to allow for retirements and to integrate new generation resources.

17. First, industry is expecting to retire significant numbers of aging fossil-fuel fired units in response to new air, water, and waste regulations that the EPA will finalize over the next four years. In many instances, these retirements may have reliability implications, at least locally. In the absence of advance planning for these

retirements, grid operators may make determinations that the retiring facilities are needed for reliability purposes, which could entitle them to payments pursuant to reliability-must-run (RMR) contracts or their equivalent. In this scenario, ratepayers are saddled with the costs of RMR contracts even when there are more cost-effective solutions such as modest transmission upgrades available to maintain reliability. Where regional transmission organizations (RTOs) have established capacity markets, these RMR plants will not qualify as available capacity. Thus, ratepayers will foot the costs of out-of-market payments on top of the costs of market capacity procurements. Unfortunately, this scenario is already beginning to play out around the country. The Synapse Report will provide case studies of several prominent examples including the Cromby and Eddystone coal-fired power plants in Pennsylvania, the Salem Harbor coal-fired power plant in Massachusetts, and the Vermont Yankee nuclear plant in Vermont.

18. Second, state efficiency standards and clean energy programs are delivering reliable energy efficiency (EE) and demand response (DR) resources in rapidly increasing amounts. If transmission planners fail to account for increasing availability of EE and DR pursuant to state and federal policies, they will procure excess generation capacity and build-out excess transfer capacity to meet inflated demand projections — all at the ratepayers' expense. Given that expected retirements of coal and other fossil generation may create the perception of a capacity gap, it will be especially important to understand the full extent to which EE and DR resources are available to meet demand. As the forthcoming Synapse Report will make clear, EE resources alone are dramatically reducing demand across the Eastern Interconnection. It is crucial that these impacts figure into the annual transmission planning process.

19. By way of illustration, Synapse has conducted case studies for three RTOs: Midwest ISO (MISO), ISO New England (ISO-NE), and PJM. For each RTO, Synapse examined four different assumptions about EE penetration levels from 2010 through 2030. The following table shows the impact on 2030 peak loads for each assumption.[6]

Scenario	MISO	ISO-NE	PJM
Base Peak Load (MW), 2010	98,963	27,190	129,102
Base Peak Load (MW), 2030	116,165	35,808	176,956
RTO Assumptions, Cumulative EE (MW), 2030	11,233	1,073	679
Load - EE (MW)	104,932	34,735	176,277
Δ (RTO Assumptions Net Peak Load 2030 - Base Peak Load 2030), %	-9.67%	-3.00%	-0.38%
RTO Modified Assumption, Cumulative EE (MW), 2030	19,373	5,187	23,516
Load - EE (MW)	96,792	30,621	153,440
Δ (RTO Modified Assumptions Net Peak Load 2030 - Base Peak Load 2030), %	-16.68%	-14.49%	-13.29%
RTO Current Programs, Cumulative EE (MW), 2030	23,392	7,723	30,250
Load - EE (MW)	92,773	28,085	146,706
Δ (RTO Current Programs Net Peak Load 2030 - Base Peak Load 2030), %	-20.14%	-21.57%	-17.09%
RTO Best Practices, Cumulative EE (MW), 2030	29,618	10,075	40,984
Load - EE (MW)	86,547	25,733	135,972
Δ (RTO Best Practices Net Peak Load 2030 - Base Peak Load 2030), %	-25.50%	-28.14%	-23.16%

Based on an average of savings from existing state EE programs (the RTO Current Programs case in the table), all three RTOs would reduce peak loads in 2030 by almost 20% below a no-EE base case. In addition, peak loads for MISO in 2030 would be lower

[6] Citations for this research will be provided in the Synapse Report.

than 2010 peak loads; peak loads for ISO-NE would be about the same in 2030 as in 2010. Maintaining a constant peak load over twenty years for ISO-NE, or decreasing it as in the MISO case, would have profound impacts on system planning needs. The Synapse Report will provide full details on how the analysis was done that produced this summary table.

20. Third, transparent regional planning that reflects State and Federal requirements will improve the ability of planning authorities to provide transmission infrastructure when and where it is truly needed. State renewable portfolio standards (RPSs), efficiency standards, EPA regulations, and state and federal carbon regulation will play a major role, individually and collectively, in determining how the grid must evolve. To make cost-effective investments in transmission infrastructure, transmission planners must expressly address whether new transmission is actually needed and if so, where it needs to go *in light of state and federal mandates*. For instance, when planners account for the increasing amount of EE that is available as a result of state efficiency mandates, it may become clear that expensive new transmission lines are not needed (at least imminently) to increase transfer capacity from generation resources to load centers. PJM was obliged to come to precisely this conclusion last year when a Virginia hearing examiner required the RTO to undertake sensitivity analyses accounting for available EE and DR resources. In the course of costly litigation before the Virginia State Corporation Commission, PJM eventually was forced to concede that the $2 billion Potomac Appalachian Transmission Highline (PATH) was no longer needed in 2014 given reductions in peak load demand that were directly attributable to EE and DR. In the meantime, Dominion Power has come forward with a far more modest $300 million

proposal for an existing line reconstruction that will likely resolve all of the alleged reliability issues that PATH was designed to address.[7] In short, planning that fully accounts for clean energy mandates can save ratepayers money by avoiding the need to build expensive new transmission lines.

21. In addition, planning that expressly accounts for State and Federal policy mandates will ensure that new transmission infrastructure is strategically located. RPS standards and large numbers of power plant retirements will be altering the generation mix significantly, creating new transmission needs to maintain reliability and integrate renewable energy resources. Transmission planners must target new transmission to these areas of need in order to avoid over-building the grid and increasing the rate base unnecessarily. Put simply, State and Federal policies are shaping a new energy future, and grid operators need to plan for that future in order to maintain reliability cost-effectively and thus ensure just and reasonable rates.

IV. Transmission Planning Recommendations

22. The NOPR's proposal to require Planning Authorities (PAs) to include Federal and State public policy goals has the potential to improve analyses and provide more targeted information about bulk power system enhancements. With a more dynamic planning process, one that incorporates uncertainties around load growth, responsive demand, new technologies, and environmental regulations, ratepayer funded investments in transmission and traditional generation resources can be most cost-effective and improve overall system efficiency.

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[7] DVP Alternatives for Consideration to Resolve 2015 RTEP Issues (June 9, 2010), p. 5 (estimating costs for proposed reconstruction of the Mt. Storm to Doubs line by 2015), *available at* http://pjm.com/~/media/committees-groups/committees/teac/20100714/20100714-dominion-alternative-proposal.ashx.

23. To ensure that PAs provide a proper structure for evaluating Federal and State public policies, the Commission could provide useful guidance in at least four– planning areas:

a. At-risk and retiring generation;

b. Integrating new generation resources;

c. Minimizing load growth with energy efficiency resources; and.

d. Leveraging demand response resources to meet energy needs.

A. Criteria for Incorporating Public Policies

24. The criteria developed by the PAs for incorporating public policies into the planning process should address four types of planning issues. The first set of issues relates to retirement planning and what should be defined as "at- risk" generation. Generation could be at-risk due to age, competitive markets, new regulations, renewal of licenses, or other reasons related to public policy mandates. Each PA needs to develop criteria for identifying and evaluating at-risk generation within its planning footprint. The types of public policy mandates that would require consideration in this process are state and federal environmental mandates including EPA regulation of air pollution, water pollution, and waste disposal, regional initiatives to reduce carbon emissions including the Regional Greenhouse Gas Initiative (RGGI), and any federal commitments to reduce carbon emissions.

25. The second set of criteria that needs to be developed by each PA relates to grid integration of new generation resources. Public policy mandates that must be considered in this context include state initiatives to maintain or expand the portion of load served by renewable resources. Some states also adopt specific target quantities of

particular renewables such as wind or solar either through portfolio standards or feed-in tariffs. The Federal Tax Code is another example of a public policy initiative to support specific renewables through development tax credits. Tax incentives reduce the effective cost of a resource such as solar photo-voltaics. In the planning process, this "lower cost" value can be used to estimate penetration levels. PAs need to develop ways of incorporating these State and Federal initiatives into their assumptions about future resources. The criteria should compel assessments of both specific resources by fuel type and specific quantity targets for renewables.

26. The third set of criteria for PAs to develop relates to the determination of future load growth. These criteria need to address traditional econometric forecasting, adjustments for future efficiency standards and codes, and the impact of state/utility sponsored demand-side management programs. In addition, the development of small-scale distributed generation (e.g., combined heat and power, wind, solar photo-voltaics, bio-waste, and new technologies) will impact the bulk power system as a relatively inflexible load reduction. A good planning process needs to anticipate and adjust for these largely policy driven resource dynamics.

27. Finally, PAs need to develop planning criteria to address an important related issue: demand response. As both New England and PJM are discovering, the "simple" demand response model of interruptions during peak load events has evolved into a more complex issue of resource flexibility. When, and for how long, and how often can demand response resources be activated? Can demand resources effectively bid energy reductions into day-ahead energy markets? The Commission has been active over the years in encouraging the development of demand response resources. PAs need to

develop criteria for categorizing different types of "demand response" and neither over-estimate nor under-estimate the performance capabilities for resource adequacy analyses or contributions to balancing daily energy needs. Similar to state-adopted energy efficiency targets, some states establish target levels of demand response resources. These policy initiatives must also figure into the planning process.

B. Procedures to Monitor At-Risk and Retiring Generation

28. In addition to developing the criteria for defining at-risk and retiring generation, PAs need to develop a process by which at-risk generation is monitored for system planning processes. It is the consensus of most industry analysts that forthcoming EPA regulations will have a major impact on the ability of some fossil fueled resources to remain competitive. Each PA needs to catalog the resources in its planning footprint that meet its at-risk criteria. This may involve a broad stakeholder process to develop the criteria that are filed with the Commission as part of the PA's planning process pursuant to Order No. 890.

29. The Commission should require each PA to file an annual assessment of at-risk generation in its planning footprint as part of its annual system planning report. The assessment should include a process for monitoring at-risk generation with critical milestones identified. These critical milestones should include effective dates of new regulations; transmission enhancements to allow retirements; timing of upgrades to existing facilities to allow continued operation; or timing of upgrades to existing facilities to allow continued operation. The annual assessment should also explain how the PA is responding to retirement requests, how it is determining whether units must run for reliability, and what solutions it has identified to maintain grid reliability post-retirement.

This information will be essential to cost-effective decision-making not only by grid operators but also by state utility commissions.

30. In summary, these enhancements to the Order No. 890 planning rules will protect the public from both unnecessary and inefficient investments in transmission and generation infrastructure. In light of the substantial impacts that public policies can have on bulk power system costs, FERC action through detailed rulemaking is appropriate and necessary to meet the Commission's obligation to ensure just and reasonable rates under the FPA.

Respectfully submitted,

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