



State Commission Staff Surge Call: State Roles in Transmission Development

On August 30, 2021, NARUC facilitated a state commission staff “surge” call to discuss how expanding transmission capacity to bring renewable generation to load centers can help states achieve decarbonization goals. Across different regulatory environments and decarbonization goals, state public utility commissions have varying levels of oversight and urgency in reviewing new transmission assets; however, with increasing attention towards attracting investment in new transmission from policymakers and federal regulators, state commissions may want to prepare for more transmission proceedings in the coming years. Commission staff from Arizona, New York, Maryland, and Michigan shared lessons learned from major transmission proceedings and addressed questions such as:

- How much of a role can grid-enhancing transmission technologies play in increasing the capacity of existing transmission?
- How do state commissions analyze costs and benefits of new transmission lines? What incentives (and disincentives) face regulated utilities considering new transmission lines?
- How do state commissions work with siting boards, landowners, and other stakeholders to ensure public input is heard? How do states collaborate with adjacent states or organized markets to facilitate interstate transmission?

Arizona

Arizona has a statutory requirement to conduct biannual transmission assessments, and any entity planning to build transmission of at least 115 kilovolts (kV) in the next 10-year period must file a plan with the Arizona Corporation Commission (ACC). In the plan, entities must conduct power flow and voltage studies and provide a summary of all planned facilities, including details such as the project description, voltage class, and length. The statute provides the ACC with a vehicle to assess adequacy of the existing and planned transmission system.

Within the statutes is a requirement to establish the Arizona Power Plant and Transmission Line Siting Committee, which hears applications for Certificates of Environmental Compatibility (CEC). The CECs are required for entities to start construction of their facilities. The Committee consists of members that represent different state agencies as well as members that represent the general public. The idea is to have these members, who vote on siting, to bring different perspectives to the table. The process was created to give people a forum to share their concerns and for the ACC to gather feedback that may not have been captured at the city or county level when a project goes through those jurisdictional requirements. The Committee sites the facilities and puts forth recommendations for CECs which the commission can then vote to approve.

The biennial transmission assessment process, in which the ACC reviews the 10-year plans, is the main vehicle for the ACC to establish the scope of what utilities are expected to study when it comes to transmission planning. ACC staff put together the assessment that summarizes all the planned projects in the pipeline within the state. Through this assessment process, the ACC has also contemplated issues such as coal plant retirements and their impacts on the transmission system and the impacts of distributed energy resources (DERs) and renewables on transmission. The ACC has also asked utilities to identify which transmission projects are being built to facilitate the integration of more renewables onto the grid.



New York

New York is currently engaged in revamping the state's planning processes for the purpose of meeting climate goals. There are a couple of statutes that have pushed the New York Public Service Commission (NY PSC) and utilities to explicitly plan for climate goals, and the NY PSC is in the early stages of implementation. One statute sets targets including a goal to achieve a zero-emission grid by 2040, and the second statute lays out mandates related to planning. As a result of these statutes, NY PSC has been working with utilities to revamp planning processes, studies, and the methodology to calculate headroom. To integrate climate goals into ongoing utility planning obligations, the commission has put forth several questions to the utilities such as:

- What are the appropriate investment criteria?
- Is there a benefit-cost analysis (BCA) that needs to be applied?
- What types of stakeholder engagement should be a part of the revised climate-oriented planning process?
- To whom do you allocate the costs of climate-driven transmission buildout?
- How do you recover the approved costs of transmission expansion?

The NY PSC received comments from utilities, with many highlighting that there is a fair amount of work to be done at the local level to replace aging assets and upgrade old equipment. This maintenance can help utilities capture climate-related benefits by increasing capacity and flexibility of the system. The NY PSC also conducted a study finding that significant climate benefits can be realized by pushing ahead with ordinary utility capital maintenance programs. As a result of this study, the commission issued an order in February 2021 outlining how utilities should proceed with these types of projects and how they should either integrate these investments in a rate case or propose projects to the commission outside of a rate case. This order precipitated questions about how utilities should integrate purely climate-driven investments that may not, for example, align with reliability requirements or load growth issues. The commission asked utilities to submit proposals for upgrade investments including information on investment criteria and prioritization. In September 2021, the NY PSC [ordered utilities](#) to resubmit their proposals over concerns over the BCA methodology.

In Fall 2021, the NY PSC expects to direct utilities to design a better coordinated statewide planning process that will result in climate-driven proposals that integrate with larger capital programs and the bulk planning processes of the New York Independent System Operator (NYISO). The intent is to put these proposals on a repeatable cycle that is transparent to stakeholders and that will support other agencies, particularly those that are involved in renewable generation procurement programs.

Regarding siting, New York has a generation and transmission siting board that consists of the heads of seven state agencies including the NY PSC, the Department of Environmental Conservation, and the Department of Health. The NY PSC still does all transmission siting and permitting with assistance from other agencies. The commission has been working to streamline this process, and they have put forth new policies including a preference for reuse of existing right-of-way to minimize new environmental impact. Siting has, however, remained difficult as the state ramps up climate-related transmission projects under the tight climate target deadlines.



Maryland

In Maryland, anyone looking to construct a new overhead transmission line greater than 69 kV must first obtain a Certificate of Public Convenience and Necessity (CPCN). The CPCN process is dictated by statutes and the application requirements are set forth in Maryland Public Service Commission (MD PSC) regulations. Once a CPCN application is filed with the commission, the public engagement process begins. The MD PSC provides advance notice to the public, invites local officials of the host jurisdiction to sit jointly with the commission in public comment hearings, and invites interested stakeholders to submit oral and written comments. Interested stakeholders are also encouraged to seek intervention to be granted party rights. The statutory factors that the commission must consider in their decisions include economics, such as the impacts to the local economy, and where projects costs will have a direct impact on ratepayers. The MD PSC also considers risks to ratepayers. This is a consideration the commission has paid more attention to in recent years.

Maryland staff shared lessons learned from two major transmission projects. The first is the Transource Maryland project with components on the Eastern and Western sides of Maryland. The Eastern Maryland project was the more controversial side, spanning two segments totaling about 6.6 miles from Harford County, Maryland to York County, Pennsylvania. The Pennsylvania portion of the project is still open and contested today. In June 2020, the MD PSC issued Order 89571 that approved a settlement agreement for a CPCN to build the project. The project was filed with the MD PSC as a PJM market efficiency project, which is part of the grid operator's Regional Transmission Expansion Plan (RTEP). The plan analyzes PJM's economic efficiency in energy and capacity markets to determine if there are reliability-based transmission projects that can be advanced or modified, and uses historical and projected congestion data to suggest new projects based on market efficiency. As part of this process, PJM performs a cost-benefit analysis, and a project must satisfy a benefit-cost ratio greater than 1.25 before being selected under a market efficiency label. Over the course of the Transource proceeding, the project's benefit-cost ratio ranged from an initial valuation of 2.48 down to 1.66 at its final approval.

Transource explained the need for the project, citing beneficial effects on grid reliability and stability and its overall cost effectiveness. Transource witnesses also testified that the project would provide greater access to renewable development in the PJM region, particularly for offshore wind. While PJM selected the project, neither PJM nor Transource considered specific requirements under Maryland's statutory requirements (i.e., considering existing rights-of-way and costs for construction). Despite attempts by Transource to procure individual easements from property owners, many refused to sign easements and Transource was forced to reach a settlement with the affected property owners. As part of the settlement, Transource agreed to work with Baltimore Gas & Electric Company (BG&E) to use its existing transmission towers and utility rights-of-way. Looking back on the process, MD PSC staff felt that earlier consideration by PJM of Maryland's statutory and regulatory requirements could have identified existing lines and earlier cooperation with BG&E would have saved time and money.

The Potomac Appalachian Transmission Highline (PATH) project highlights the concern of the MD PSC and neighboring state commissions regarding abandonment risks. The Federal Energy Regulatory Commission (FERC) awards incentives to transmission companies that enable companies to recover 100% of their prudently incurred costs in the event that the project is abandoned for reasons not related to the company. This approach can be risky if needs change, however. The PATH project was initiated in 2007 and was approved by PJM through its RTEP process. Following PJM's approval, both the Pennsylvania



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Public Utility Commission and the Virginia State Corporation Commission required reevaluation of the project's route. Ultimately, the project was abandoned because the need no longer existed as generation and other resources developed in the area. As a result, PATH companies filed for 100% recovery of abandoned costs, totaling approximately \$120.5 million. During the case, the joint consumer advocates for Maryland, Pennsylvania, and Virginia protested the abandonment cost and filed a 255-page brief, raising the issue of prudence. The administrative law judge (ALJ) decided in favor of the utility on prudence, which was later upheld by FERC. However, the joint consumer advocates prevailed on a part of the decision that reduced the original return on equity (ROE) from 12.4% to 10.4% with the 50-basis point adder for participation in an RTO, bringing the ROE to 10.9%. The MD PSC challenged this, stating that 10.4% was not reasonable for a project that would not be in the ground. The ALJ agreed with the MD PSC, assigning the PATH project a 6.27% ROE. FERC disagreed and initiated a paper hearing to determine an appropriate ROE that is still underway. In conclusion, if transmission owners want to move forward with a project, MD PSC staff emphasize that both the owners and PJM have a duty to evaluate state policies and commission signals to mitigate the recovery of abandonment costs by ratepayers.

Michigan

Michigan is a peninsula with limited land routes and interconnections with other states. With investor-owned utilities (IOUs) that participate in both the Midcontinent Independent System Operator (MISO) and PJM markets, transmission regulation is complex. The siting process demonstrates the limits of the Michigan Public Service Commission's (MI PSC) oversight of transmission companies within the state. Like Maryland, Michigan has a statute detailing the MI PSC's role in approving CPCNs for projects over 345 kV and more than five miles in length. There have been only seven proceedings over the last 13 years. Despite the lack of frequency, the MI PSC and its staff are very interested in leveraging transmission to achieve cost-effective pathways to clean energy.

There are several ongoing and recent proceedings which will significantly impact how Michigan views resource adequacy and transmission opportunities, given the geographic confines of a peninsula state. This includes both maximizing tie lines to bring in low-cost renewable resources from throughout the Midwest and leveraging opportunities in the distribution system. The MI PSC has been working extensively with MISO over the last couple of years to better understand how capacity import and export limits are modeled within the state and identify opportunities to make investments along tie lines to improve access to renewables around the nation. The MI PSC reached out to MISO and asked them to perform a study of three different scenarios that the commission thought would be useful to improve capacity import and export, cost-effectively bring renewables into the state, limit the state's need to develop lower-efficiency renewables, and meet the resource adequacy and reliability needs of customers. The commission has been working with utilities, regulatory staff, RTOs, and other stakeholders to understand the state's needs and how they can be addressed through transmission investments.

In May 2021, the MI PSC received the [final study](#) from MISO. The study looked at topology and tie lines around the state. Through the study, Michigan was able to increase the capacity import limit by nearly 2100 MW in this year's planning year and identify projects to increase the capacity by another 1200 MW in the coming years based on previous transmission planning efforts.

While the results of the study were positive, cost allocation questions still remain. If transmission investments are tied to a state policy goal and not to an individual transmission operator or distribution



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utility, it is unclear which party will take on the risks of financing transmission improvements. Through work with MISO, the commission is discussing how to properly allocate these “other” projects between other participants in the MISO Zone 7 so costs and benefits can be shared.

The MI PSC also has an ongoing process called [MI Power Grid](#), which focuses on the intersection of advanced planning efforts to see how transmission solutions work holistically with the system. To address the inefficiencies of existing processes which look at transmission solutions in a vacuum, the MI PSC established the Advanced Planning State Working Group within MI Power Grid. The group seeks to integrate the currently siloed processes of integrated resource planning, distribution systems planning, and transmission planning. Additionally, the MI PSC has been involved in national discussions such as the NARUC-NASEO Task Force on Comprehensive Electricity Planning, and the FERC-NARC Joint Federal-State Task Force on Electric Transmission. Through these efforts, the MI PSC aims to show that cross-jurisdictional coordination will lead to better policy.

Discussion

There was a question about whether transmission planning could address the chicken and egg problem for renewables. A NY PSC staffer acknowledged that this is currently a big question in the state. New York has a centralized procurement process for larger renewables, and over time, the commission has learned that transmission planning and the transparency of transmission system capabilities are lacking. As some projects have seen substantial curtailments, the NY PSC is aware of additional, co-located generation projects in the interconnection queue. These issues can be addressed; however, the current retrospective approach of fixing the issue after identifying the problem is not ideal. While it would be more advantageous for generation and transmission development to sync up, the NY PSC does not have the authority to mandate generation siting. The NY PSC has no interest in disrupting market signals that guide generation siting decisions. The commission hopes that, by encouraging utilities to revamp their planning and provide more transparent data, future generation developers will benefit. In the last couple of months, the NY PSC put in place similar principles for distribution system planning, under which utilities will start integrating DER interests during regular substation planning.

Conclusion

State commissions have statutorily defined roles, generally overseeing applications for CECs or CPCNs to build transmission projects over certain capacity or length thresholds. Other state agencies may be involved in siting decisions through committee structures. In states with utilities participating in regional transmission organizations, commissions have worked with grid operators to identify process improvements and opportunities for closer cooperation between utilities, grid operators, regulators, and other stakeholders. Additionally, improved data flow and early engagement between stakeholders may enable better transmission planning that can reduce risks to ratepayers.

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