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The Importance and Implications of FERC Order 1920 for State Energy Offices

Building for the Future Through Electric Regional Transmission Planning and Cost Allocation

Photo Credit: NASEO Staff

Introduction

On May 13, 2024, the Federal Energy Regulatory Commission (FERC) issued a landmark order on Regional Transmission Planning and Cost Allocation (Order 1920). Order 1920 requires utilities that own, operate, or control facilities used for the transmission of electric energy in interstate commerce, referred to as transmission providers by FERC, as well as regional transmission organizations/independent system operators (RTOs/ISOs), to conduct long-term transmission planning to ensure the identification, selection, and evaluation of proposed cost-effective transmission facilities. Transmission facilities are defined to include wires, poles, and equipment related to

transmission.[1] Working with states, in accordance with the Commission's "beneficiaries-pay" approach, transmission providers are to allocate these transmission costs to those ratepayers that benefit from the facilities in a manner roughly commensurate with the benefits.

Order 1920 is widely considered the most significant rule on this topic in over a decade. The Order is over 1,300 pages, making a succinct summary a challenge.[2] Many details of the Order will have to be established and implemented over time. Additionally, the Order faces legal challenges, which further makes its implementation timeline uncertain. For example, compliance filings (how the entity will implement or plans to implement the changes required by FERC) will be due on June 12, 2025, unless the date is extended upon rehearing. In an effort to condense the Order in a relevant manner, this brief paper focuses on Order 1920's role for states, and in particular State Energy Offices, in transmission planning and cost allocation and is written for a broad, non-technical audience.

Transmission Benefits as Specified in FERC Order 1920

1. Reduced transmission costs by avoiding or deferring reliability transmission facilities and aging infrastructure replacement through improved transmission planning.
2. Improved resource adequacy, having sufficient generation to meet demand, or reduced generation planning reserve margins needed to obtain resource adequacy.
3. Reduced generation fuel and variable costs by dispatching lower-cost suppliers.
4. Reduced transmission losses and associated costs.
5. Reduced transmission congestion costs due to transmission outages.
6. Mitigation of the costs associated with extreme weather events and unexpected system conditions.
7. Reduced generation capacity cost from reduced peak energy losses.

[1] Summary: Divided FERC Issues Order No. 1920—Makes Sweeping and Controversial Changes to Transmission Planning and Cost Allocation Rules, Hunton Andrews Kurth (May 2024).

[2] There are many online summaries of Order 1920 including the FERC's Explainer on Transmission Planning and Cost Allocation Final Rule, the Americans for a Clean Energy Grid, Troutman Pepper, and Hunton Andrews Kurth that informed this document.

Order 1920 requires transmission providers to do the following:

- Before compliance filings are submitted, open a six-month engagement period with relevant state entities and provide a forum to negotiate cost allocation methods.
- Consider informing governor's offices and relevant legislative committees about the Order and its potential importance for the state from a policy, economic development, and reliability perspective and how it may affect existing energy goals and plans.
- Develop at least a 20-year long-term regional transmission plan every five years that identifies and evaluates proposed transmission facilities using at least three scenarios with reference to seven specified transmission benefits. (See textbox above.)
- Develop cost allocation methods that may include a state agreement process negotiated with the relevant state entity responsible for electric utility regulation or siting transmission.
- Address generation-interconnection-related needs that have arisen multiple times but have not yet been resolved.
- Consider the use of grid-enhancing technologies (GETs).
- Reevaluate transmission facilities to address delays and cost overruns.
- Enhance the stakeholder process for reviewing local transmission planning.
- Update interregional transmission coordination processes to consider new long-term regional transmission planning requirements.

In response to Order 1920, NASEO recommends that State Energy Offices consider the following activities:

- Track FERC rehearing and compliance filing processes that are required of the state's transmission providers in response to Order 1920.
- Work with their governor's office, public utility commission, and, as applicable, the energy infrastructure siting authority (Figure 1) to prepare for participation in the State Agreement Process to establish a transmission cost allocation policy.[3]
- Prepare input for the transmission planning process, including finalizing integrated resource plans, developing a list of priorities that should be included in the planning process and scenario development, and providing data and other information to shape possible planning scenarios for consideration, including relevant state laws.
- Prepare input on evaluation criteria and benefit calculations of proposed transmission facilities identified during the planning process.
- Consider the use of voluntary, alternative cost allocation methods for a specific facility, to voluntarily fund the cost (or a portion) of a facility.
- Seek data and analysis from sources such as the U.S. Department of Energy and National Laboratories.
- Update policymakers and stakeholders as the Order's implementation and planning process unfolds.Evaluate how implementation of this FERC Order works

[3] Mini Guide on Transmission Siting: State Agency Decision Making, National Council on Electricity Policy (December 2021).

in concert with state policies and continue addressing holistic approaches to energy policies with an eye to funding, resilience, energy security, and other priorities.

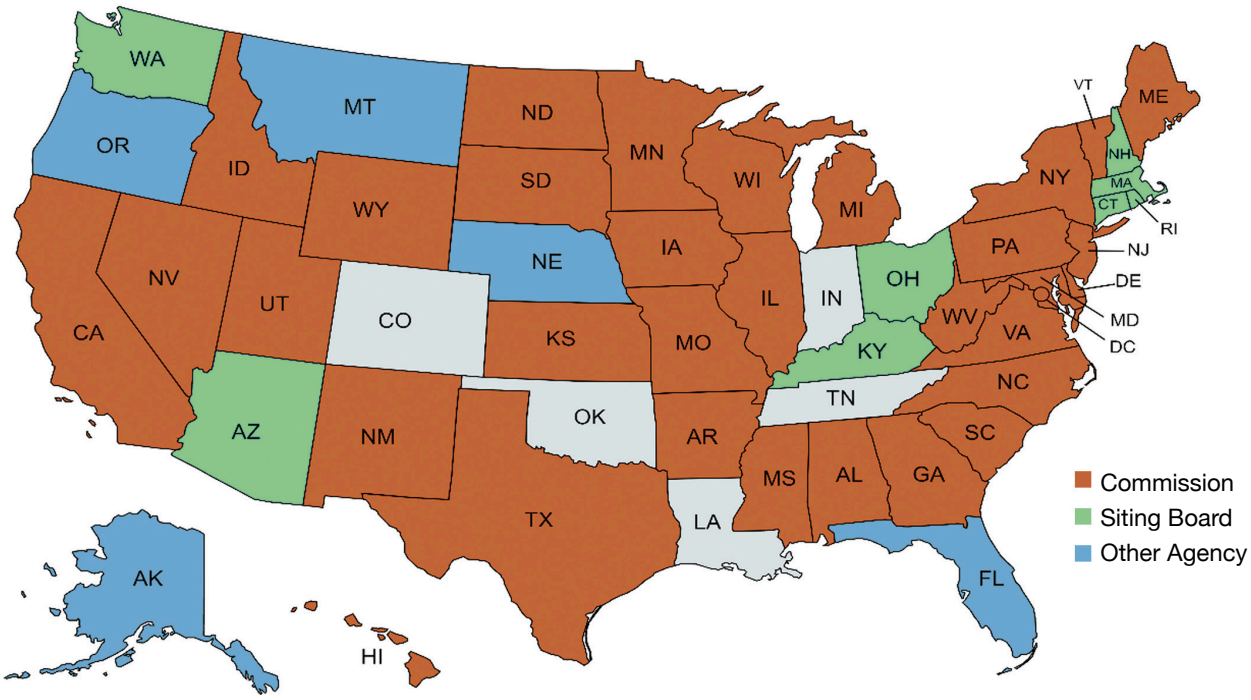

Figure 1: State Designated Transmission Siting Authorities, Mini Guide on Transmission Siting: State Agency Decision Making, National Council on Electricity Policy (December 2021). Grey colored states indicate States without a centralized transmission siting authority.

This paper summarizes Order 1920 and highlights the significant implications of the Order for State Energy Offices in a question-and-answer format, divided in the following sections:

- Motivation for and Overview of Order 1920
- Long-Term Regional Transmission Planning
- Transmission Facilities Cost Allocation
- Other Order 1920 Related Issues
- Timeline, Next Steps, and the Role of State Energy Offices
- Additional Resources

More information and references are provided throughout the document, with hyperlinks to facilitate access. FERC is also planning public events to allow for the sharing of best practices regarding long-term regional transmission planning among transmission experts, federal and state agencies, and stakeholders.

Motivation for and Overview of FERC Regional Transmission Planning and Cost Allocation Order

What is the policy context for Order 1920?
Regional and interregional transmission is critical to a reliable, efficient, and environmentally sound electricity grid that can fully support a state's economic development and security requirements. The challenge for policymakers is determining the appropriate mix of generation, transmission, and distributed energy resources (DER) to achieve these three objectives. Order 1920 is based upon the premise that the U.S. transmission system needs to be improved to ensure continued electric service in the face of growing reliability challenges and greater access to lower-cost generation supplied by a wide range of resources. The substantial increase in the amount of variable renewable electricity from wind and solar sources, which are typically located far from demand centers, extreme weather events that have disrupted the grid, anticipated electricity demand growth, and the siloed and locally focused transmission planning to date are all motivations for Order 1920. By improving long-term transmission planning, the objective is to reduce inefficiency of the existing combination of generation and transmission investments and grid operations and therefore reduce costs for retail ratepayers, thereby ensuring just and reasonable rates.

What are the significant components of Order 1920?
The two primary components of this Order are regional transmission planning and cost allocation (i.e., deciding who pays for transmission investments and how much they pay). These two pieces are tightly coupled because any proposed transmission plan determines who benefits from the plan and the costs that must be recovered. Under this Order, a transmission project can be considered by a transmission provider but does not have to be selected or constructed.

What was FERC's most recent major action regarding transmission planning before Order 1920?
FERC issued Order 1000, Transmission Planning and Cost Allocation, in June 2010. Order 1000 required transmission utilities to participate in a regional transmission process which considers transmission needs driven by public policy requirements at the federal or state level. Order 1000 also required neighboring transmission planning regions to have a standard interregional cost allocation method. Finally, Order 1000 removed from transmission utilities the federal right of first refusal to build transmission facilities in their service territories. This means that states may require a competitive solicitation process in which another entity, such as a merchant transmission developer, may build these facilities. The Additional Resources section below provides supplemental references on the development of U.S. transmission policy over the years.

How does Order 1920 respond to Order 1000?
Order 1920 identified several issues with the existing transmission planning processes. First, the processes were not leading to efficient and cost-effective transmission development, which was contrary to the goals set by Order 1000. Second, transmission

providers were using overly short planning horizons, resulting in fragmented planning efforts. Third, based on interconnection studies, utilities were allocating the costs of network upgrades to the transmission system to individual generation developers. The high cost of these upgrades prevented the construction of generation projects and discouraged investment in transmission infrastructure.

What was FERC's vote on Order 1920, and what are the significant points of the majority and minority positions?
FERC approved Order 1920 by a two-to-one vote. The majority found that the Order would create forward-looking and comprehensive transmission planning and cost allocation while allowing states to work with transmission providers to develop politically acceptable cost allocation approaches that reflect the benefits of transmission. The minority, Commissioner Christie, viewed Order 1920 as being beyond the Commission's statutory authority and he argued that the Order would shift transmission facility costs to states that do not benefit from them.

Long-Term Regional Transmission Planning

What does FERC mean by long-term regional transmission planning?
Order 1920 defines long-term regional transmission planning as "regional transmission planning on a sufficiently long-term, forward-looking, and comprehensive basis to identify Long-Term Transmission Needs, identify transmission facilities that meet such needs, measure the benefits of those transmission facilities, and evaluate those transmission facilities for potential selection in the regional transmission plan for purposes of cost allocation as the more efficient or cost-effective regional transmission facilities to meet Long-Term Transmission Needs."

The Order requires that every five years, transmission providers complete mandatory 20-year or greater long-term regional transmission plans within three years that:

- Identify long-term needs and the transmission facilities that meet those needs.
- Use the seven required benefits, listed below, to measure the benefit of proposed long-term transmission facilities.
- Evaluate these facilities to assess if more cost-effective transmission solutions exist and decide whether to select them for cost allocation.
- Use transparent criteria to select transmission facilities for potential inclusion in the plan developed with input from states.
- Consider grid-enhancing technologies, such as dynamic line ratings, advanced power flow control, advanced conductors, and transmission switching, and explain why they were or were not included in the plan's selected transmission facilities.

Does Order 1920 allow FERC to order transmission expansion?
No, Order 1920 does not allow FERC to order transmission expansion or the building of transmission facilities. Instead, the Order requires transmission providers to account for changes to their transmission systems and provides guidance for transmission planning. Transmission providers have the discretion to select or not select any facility identified in

their plan but must provide sufficient detail explaining why the choice was made. Transmission providers must consult with the "Relevant State Entities" regarding the evaluation process and selection criteria. The Order defines the term "Relevant State Entities" as "any state entity responsible for electric utility regulation or siting electric transmission facilities within the state or portion of a state located in the transmission planning region, including any state entity that may be designated for that purpose by the law of such state."

Why is long-term regional transmission planning important, and what is hindering it?

Order 1920 found that the absence of sufficiently long-term, forward-looking, and comprehensive transmission planning requirements results in the failure to anticipate and plan for future system conditions. Furthermore, it causes transmission providers to avoid consideration of many benefits of transmission infrastructure. This results in transmission investment decisions that focus on short-term generation interconnections and local transmission rather than larger projects which may provide regional or long-term benefits.

FERC's position is that the lack of long-term transmission planning is resulting in ratepayers paying more than necessary to meet their generation and transmission needs and forgoing many benefits, which if considered, would outweigh their costs. For example, inadequate transmission investment results in higher electric generation costs due to transmission congestion, higher electric losses, and higher costs to maintain reliability reserve margins, which are paid for by consumers. Another outcome could be diminished economic development for the state due to higher energy costs or unavailable power. Improved planning to achieve cost-effective transmission investment, although increasing transmission costs, would provide many benefits currently not considered including lower congestion costs, lower costs to maintain reserve margins and access to lower cost generation.

What are the benefits of transmission planning discussed in this Order, and why are they important?

Order 1920 found numerous benefits to regional transmission planning, seven of which must be used to assess long-term transmission plans. They are the following:

1. Reduced transmission costs by avoiding or deferring reliability transmission facilities and aging infrastructure replacement through improved transmission planning.
2. Improved resource adequacy, having sufficient generation to meet demand, or reduced generation planning reserve margins needed to obtain resource adequacy.
3. Reduced generation fuel and variable costs by dispatching lower-cost suppliers.
4. Reduced transmission losses and associated costs.
5. Reduced transmission congestion costs due to transmission outages.
6. Mitigation of the costs associated with extreme weather events and unexpected system conditions.
7. Reduced generation capacity cost from reduced peak energy losses.

Transmission providers are encouraged to consult with states to consider if and how to use additional transmission benefits in the planning process.

In addition, transmission projects identified in existing generation interconnection applications but not yet developed, and the modification of existing transmission facilities, can be considered in the planning process. The reasoning is that if multiple generation interconnection studies identified the need for the same or similar transmission facilities and if those facilities were not built because the generation projects did not proceed, then those transmission facilities may be viable ones in the future.

What is meant by 'planning scenarios' in this Order?
The Order does not prescribe the planning scenarios that transmission providers must consider. Instead, the Order stipulates the criteria that these scenarios must meet. Transmission providers must develop at least three long-term scenarios using the best available data and provide public disclosure of the inputs used to create them. The scenarios must be plausible (that is, reasonably probable) and diverse (that is, distinguish distinct transmission facilities or distinct benefits of similar facilities in each scenario). States (i.e., the Relevant State Entities) and stakeholders must be allowed to provide meaningful input regarding data and assumptions. These scenarios should be revisited every three years to update inputs.

The scenarios must incorporate the following categories of factors: federal, state, and local laws and regulations that affect the future resource mix, demand, decarbonization, and electrification; state-approved utility integrated resource plans and expected supply obligations for load-serving entities; trends in technology and fuel costs, resource retirements, generation interconnection requests and withdrawals, and utility and corporate commitments; and federal, state, and local goals affecting the resource mix and demand. Each scenario should be stress tested to account for extreme weather using sensitivity analysis. FERC did not prescribe specific scenarios that must be considered or the explicit data and assumptions that must be used.

Transmission Facilities Cost Allocation

Why is transmission cost allocation so controversial?
Due to the interconnecting nature of electric grids, actions taken at one location on the grid can have substantial reliability, economic, and environmental implications for the rest of the grid, spanning thousands of miles. Regional transmission facilities located in one state or traversing multiple states have varying types and amounts of benefits, which are challenging to quantify and assign over the life of transmission facilities that last multiple decades. As a result, cost allocation – i.e., which ratepayers pay for these benefits and how much – is a central question in regional transmission planning.

What is FERC's policy regarding transmission cost allocation?
FERC's cost allocation policy is that transmission costs are to be allocated roughly commensurate with their estimated benefits. These costs should be allocated based on something other than the types of transmission projects, i.e., not based upon the transmission line's voltage or whether the project is motivated by public policy reasons. In other words, what determines the allocation of costs of transmission projects is based upon the seven economic and reliability benefits of the project. Order 1920 does not change existing regional cost allocation methods for other transmission facilities.

Order 1920 does allow relevant state entities and transmission interconnection customers the option to voluntarily fund the cost or a portion of the cost of the proposed transmission facility. Transmission providers must provide timely notice of voluntary funding opportunities, the timeline, and other relevant information.

What is the role of states in determining cost allocation under Order 1920?
States have an essential role set by FERC in negotiating cost allocation policy. According to the Order, the State Agreement Process is a process "by which one or more Relevant State Entities may voluntarily agree to a cost allocation method for Long-Term Regional Transmission Facilities either before or no later than six months after the facilities are selected in the regional transmission plan for purposes of cost allocation." As noted above, Relevant State Entities are defined as any state entity responsible for electric utility regulation, siting electricity transmission, or designated by state law.

Transmission providers must engage in a one-time, six-month consultation with relevant state entities to determine whether agreement can be obtained regarding the cost allocation of new transmission facilities. The process may start before the transmission facility is selected but must be completed no later than six months after the selection. Transmission providers must provide notice of start and end dates, contact information, and a suitable forum for negotiations.

Transmission providers must include a backstop cost allocation method in their compliance filing even if they fail to reach an agreement during the six-month period. This method becomes the default if agreement with state entities fails. In the event that some transmission providers may simply "run out the clock" and not negotiate in good faith over cost allocation. Under this order, FERC will be the arbiter, and then the federal courts.

Other Related Issues Order 1920 Addresses

What are the other important topics that Order 1920 addresses?
Order 1920 addresses many other topics. It strives to improve the coordination of interregional transmission planning. Transmission providers must revise their existing interregional transmission coordination and planning processes by sharing information and identifying and evaluating cost-effective interregional facilities. Non-transmission

entities may propose interregional transmission facilities that are more efficient or cost-effective for long-term transmission needs.

It also requires local transmission planning inputs in the regional transmission planning process to enhance transparency, right-size facilities (that is, modifying a proposed replacement facility to increase its capacity in anticipation of a future need), and improve cost-effectiveness.

Order 1920 does not eliminate the construction work in progress (CWIP) incentive, allowing transmission utilities to start recovering costs prior to the completion of the facilities when they are placed into service. Order 1920 also declines to establish a federal right of first refusal (ROFR): it does not change Order 1000's elimination of the ROFR for transmission utilities within their service territories. However, it makes an exception for 'right-sizing' projects, allowing incumbent transmission owners to retain the ROFR from the replacement of existing facilities when they are being upgraded to increase capacity.

Order 1920 does not address several important topics related to transmission cost management. For example, it does not lay out provisions to ensure sufficient transparency and cost-effectiveness of transmission planning decisions nor does it address the processes in which transmission developers recover their costs. These issues may be taken up in the nascent but ongoing FERC Docket No. AD22-8-000 on Transmission Planning and Cost Management.

Timeline, Next Steps, and the Role of the State Energy Offices

What is the timeline for implementing the Order?
The final rule became effective on August 12, 2024, 60 days after publication in the Federal Register on June 11, 2024. Absent delays (see below), transmission utilities and ISOs/RTOs must submit general compliance filings to FERC within 10 months of the effective date, June 12, 2025. (Compliance filings are submissions that show how they plan to modify their existing Open Access Transmission Tariffs (OATT) to implement the terms of the Order.) Order 1920 requires transmission providers to hold a six-month engagement period with relevant state entities before filing a cost allocation method for a chosen project with FERC. Transmission providers also must propose a date within one year from the initial compliance filing due date on which they will commence the first long-term regional transmission planning cycle. However, they may propose a date later than one year to align transmission planning cycles.

As part of the regional transmission planning process, at least three stakeholder meetings must occur in succession and within 25 calendar days of the prior required meeting. Sequentially, these meetings are on the topics of assumptions, transmission needs, and solutions. Transmission providers must determine whether to select

proposed long-term transmission facilities within five years from the starting date of the five-year planning cycle.

What activities should State Energy Offices be considering in response to Order 1920?

States should consider tracking the ongoing FERC rehearing process for the Order that is discussed below. States should also consider monitoring the subsequent compliance filing process that is required of their transmission providers in response to Order 1920. Transmission providers must update their transmission tariffs that they file with FERC to reflect the Order's requirements regarding transmission planning and cost allocation.

State Energy Offices should also consider working with their state's Public Utility Commission and, as applicable, the energy infrastructure siting authority to prepare for participation in the State Agreement Process to establish a transmission cost allocation policy. FERC is looking to the States to help formulate such policies that are acceptable to the States and stakeholders. State Energy Offices should confirm the timeline that their relevant transmission utilities and ISOs/RTOs are following in implementing the Order.

State Energy Offices should also consider preparing input for the transmission planning process, including finalizing integrated resource plans, developing a list of priorities that should be included in the planning process and scenario development, providing data and other information to shape possible planning scenarios for consideration, and discussing these issues with their stakeholders. States should prepare input on evaluation criteria and benefit calculations of proposed transmission facilities identified during the planning process. State Energy Office should evaluate how transmission planning and development aligns with broader state energy policy on such matters as generation, distribution, energy services, electrification, distributed generation, energy storage, energy efficiency, demand response, climate, energy security, and resilience funding. Finally, State Energy Offices should update policymakers and stakeholders as the Order's implementation and planning process unfolds and participate either directly, or by proxy, in stakeholder meetings and at FERC or other forums.

What transmission-related issues may emerge after the implementation of the Order?

As with any major policy initiative, implementation of Order 1920 could be delayed by several factors including legal challenges and requests for rehearing. Rehearing requests were due on June 12, 2024, and must be reviewed and ruled on by FERC. Many topics are being raised as part of the rehearing requests, but one stands out as particularly important for states. Order 1920 reduced the role of states in negotiating with transmission providers regarding transmission cost allocation compared to the Order's draft rule. That being said, the Order does provide explicit avenues for states to provide input into the transmission planning process on topics of cost allocation, scenario development, and evaluation criteria of proposed transmission facilities. Overall, there are possible fundamental judicial and political challenges to Order 1920. The dissent to the Order lays out a roadmap for judicial challenge, and a change in the

White House or Congressional action (e.g., Manchin/Barrasso permitting reform legislation) may also affect the Order's implementation.

Although Order 1920 provides extensive planning requirements and guidance, the underlying challenges of siting, constructing, and allocating the costs of interregional transmission facilities remain. Order 1920 is not clear on how to coordinate state and utility integrated resource plans or wholesale electricity markets into a regional transmission planning process. Moreover, the Commission's recent Order 2222, Facilitating Participation in Electricity Markets by Distributed Energy Resources (DERs), seeks to expand DERs, which will also affect the need for new transmission facilities and therefore must be accommodated into regional transmission planning. Finally, the roles of electricity demand response and energy efficiency are not addressed in the Order but warrant consideration.

Additional Resources

FERC Order 1920, Transmission Planning and Cost Allocation, May 13, 2024
FERC Order 1000, Transmission Planning and Cost Allocation, issued July 21, 2011
FERC Docket AD22-8-000, Transmission Planning and Cost Management, ongoing docket
FERC Order1977, New Transmission Siting Procedures, May 13, 2024
FERC Order 2023, Generation Interconnection Rule, July 28, 2023
FERC Order 2222, Facilitating Participation in Electricity Markets by Distributed Energy Resources, September 17, 2020

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