ELECTRICITY TRANSMISSION

REGULATORY PROCESSES AND POLICY AUTHORITIES

A Summary for Defense Stakeholders

MARCH 2025



WHAT ARE THE REGULATORY PROCESSES AND POLICY AUTHORITIES THAT GOVERN TRANSMISSION?

Secretary Wright's Secretarial Order instructs the U.S. Department of Energy (DOE) to identify and exercise "all lawful authorities" to strengthen the nation's grid and the transmission system. Transmission development is governed by a complex mix of regulation and policy at the federal, regional, state, and local levels. This publication has been developed in response to interest from defense stakeholders to better understand the processes that govern transmission expansion.

It expands on information contained in the <u>Unleashing</u> the Grid: Energy <u>Dominance for National Defense</u>
(Section 6), and profiles the major planning and review processes at the state and federal levels that are relevant to transmission and national defense.

The structure is as follows:

- Section 1 is a high-level summary of transmission regulation and authority by jurisdiction — for example, what the federal government is responsible for vs. the states.
- **Section 2** defines the main stakeholders involved in transmission decision making.
- Section 3 reviews the different models of transmission project development, and relates them to different cost allocation methods (i.e., determining who pays for the infrastructure).
- Section 4 contains details on specific regulatory, planning, and permitting processes at the federal and state levels.

1. Summary of Transmission Regulation and Authority by Jurisdiction

The Federal Power Act (FPA) splits jurisdiction for transmission between state and federal government. The federal approach to transmission planning hinges in significant part on regional organizations of transmission providers.

The Federal Energy Regulatory Commission (FERC) is responsible for ensuring that rates and charges for the transmission of electric energy are just and reasonable and not unduly discriminatory. States regulate retail electricity rates. In regions where utilities are vertically integrated, states regulate "bundled" rates for each utility's retail customers, which determine a utility's revenues for the combined sale of generation, transmission, and distribution to those customers.

- State regulators are principally responsible for the siting and permitting of transmission infrastructure.
- Both states and FERC exercise authority over certain transmission planning processes, each regulating from within their own respective sphere of authority.
 States where utilities remain vertically integrated often regulate transmission planning through Integrated Resource Planning (IRP) and rate case processes.
- States with non-vertically integrated utilities may have separate transmission planning proceedings¹ or exercise a planning function through rate case or infrastructure siting proceedings.

¹ For example, the New York Public Service Commission (NY PSC) recently initiated a proceeding to "proactively identify and develop future grid infrastructure needs." NY PSC, Commission Announces New Proactive Grid Planning Proceeding to Prepare New York's Electric Grid for Building and Vehicle Electrification, August 2024.

2. Stakeholder Involvement in Transmission Decision Making

Defense stakeholders should be aware of the different types of stakeholders that may be involved in transmission decision making. This section defines and discusses several of the main stakeholder categories. The intent is to establish definitions that can be used in the remainder of this document, and not to comprehensively define all stakeholder types that may be involved in transmission.

FERC, the federal grid regulator: As described above, FERC primarily exercises its authority through regional planning regulations and transmission rate regulation.

Regional Transmission Organizations (RTOs) and Independent System Operators (ISOs): Independent entities made up of participating utilities and energy market participants that operate regional transmission systems and organized wholesale electricity markets. These are the primary entities responsible for carrying out FERC-regulated regional transmission system planning. RTO/ISOs cover roughly two thirds of the country. In regions not served by an RTO/ISO, transmission providers have joined together in specific regional planning entities such as NorthernGrid or WestConnect, but the individual utilities within a region remain responsible for operating the transmission system.

State entities: States regulate integrated resource and other transmission planning processes, retail ratemaking, and siting of transmission. State public

service commissions are responsible for rate regulation, and are also often vested with planning and siting responsibilities, although those may also be vested with specific siting offices and state energy offices.

Individual transmission providers: A transmission provider is an entity that owns or operates transmission infrastructure. Transmission providers are regulated both by FERC and by state entities, and can include:

- Single utilities. Where a transmission provider is a
 utility that serves load and builds transmission solely
 within its own service territory, this is commonly
 referred to as "local" transmission infrastructure.
- Multiple utilities. Multiple individual transmission providers may join together to build transmission across their shared service territories, outside the context of FERC-regulated regional planning. This is called "participant-funded" infrastructure.
- Transmission developers. Some transmission providers do not serve end-use electricity customers. These transmission developers may seek to fund their projects through regional cost allocation mechanisms or through a "merchant" model. In regional cost allocation mechanisms, developers assign costs to other transmission providers across the region, who ultimately recover those costs from end-use consumers. In a "merchant" model, transmission is funded by wholesale customers purchasing capacity or through price arbitrage across the transmission system.



3. Transmission Project Development and Cost Allocation

The Table below summarizes the models of transmission development, including the planning and cost recovery approaches associated with each one. The Table also identifies the entities that defense stakeholders might need to engage with respect to each type of development. More detailed descriptions of the transmission project development considerations are included in the text that follows the Table.

Infrastructure Type	Relevant Transmission Planning Entity(ies)	Cost Recovery	Entities To Engage
Local and "participant funded" transmission	Individual transmission provider(s)	Local	 FERC (primarily on rate issues) State (for planning and in some cases rates) Individual transmission provider
Regional immediate reliability need	Individual transmission provider	Regional	 FERC (primarily on rate issues) RTO/ISO State (potential role in planning) Individual transmission provider
Regionally planned	RTO/ISO or non- RTO regional planning entity. ²	Regional	 FERC RTO/ISO, State (for siting only) Transmission providers
Merchant	Merchant transmission developer	Merchant (pursuant to FERC rules)	 FERC (sets rules for contracting process and cost recovery) State (for siting only) Transmission developer

The manner in which transmission planning is regulated

- including how costs for the projects are allocated
- may depend on the size of the infrastructure proposed, the extent to which it crosses multiple utility service territories, and the pathway pursuant to which it is developed. Four pathways for transmission development are common.

1. Individual transmission provider(s), local costs.

Transmission infrastructure may be planned by an individual utility with costs allocated solely to its own customers. For these "local" transmission projects, FERC sets forth a baseline of planning process rules, but engages in relatively minimal planning oversight, and state jurisdictional planning processes often play a greater role. Importantly, despite the "local" nature of this transmission development, infrastructure planned through this pathway can in some cases be very high voltage or high capacity and thereby impact the broader grid. Individual transmission providers may also enter into voluntary agreements to build shared infrastructure with costs recovered from their respective customers. Such arrangements are known as "participant funding." Engagement with the relevant individual transmission provider(s) is critical to planning outcomes for this type of "local" or "participant funded" infrastructure.

2. Individual transmission provider, regional costs.

Transmission infrastructure may be planned by an individual transmission provider, but have its costs recovered through a regional tariff. This is often the case, for example, with infrastructure built to meet regional reliability criteria, such as the criteria set by a regional entity or NERC.³ For this type of infrastructure, state and federal processes may both be relevant. Again, engagement with the individual transmission provider may be critical to planning outcomes.

 Regional entity, regional costs. Transmission infrastructure may be planned by a regional entity, with costs recovered at the regional level. For this

² In non-RTO regions, individual transmission providers play a significant role in working with the relevant regional planning entity to develop a regional transmission plan. To date, no significant infrastructure has been planned via regional processes in non-RTO regions, although this could potentially change under FERC Order No. 1920.

³ While the regional entity may conduct a competitive solicitation to meet such reliability needs pursuant to FERC Order No. 1000, infrastructure built to address an "immediate reliability need" may be exempted from competition, and in such cases the relevant transmission provider generally plans the infrastructure itself, with that infrastructure then being rolled into the regional plan (rather than being planned by a regional entity in the first instance). See, e.g., PJM Interconnection, L.L.C., 171 FERC 61,212 (2020) (setting forth criteria by which PJM's "immediate reliability need" exemption to competition must be implemented). order on reh'o. 172 FERC 61,292 (2020).

type of infrastructure, FERC's regulation of regional planning provides the governing framework, and the relevant regional entity (e.g., RTOs/ISO) is responsible for designing and implementing the regional planning process. Large infrastructure portfolios have been planned in the SPP, CAISO, and MISO regions using this planning pathway, but it has not historically been used in non-RTO regions.

4. Merchant development model. Transmission infrastructure may be developed on a merchant basis by an independent transmission developer. Rules regarding contracting and potential revenues for this infrastructure are shaped by FERC, but planning decisions are made outside any central planning process. For this type of infrastructure, engagement with the individual transmission developer(s) is most critical, and engagement with FERC may be necessary to secure relevant approvals.

Beyond these four common pathways for development, transmission infrastructure could also theoretically be planned by individual utilities or regional entities with costs recovered interregionally (e.g. from customers across multiple RTOs), but to date no significant infrastructure has been built through this pathway.

4. Regulatory, Planning, and Permitting Processes for Transmission

Each of the sections below provide additional details about the regulatory, planning, and permitting processes that relate to transmission at the federal and state levels. Each section also summarizes pathways for defense-related engagement. In some cases, defense stakeholders can provide input into the process (e.g., state and regional planning). In other cases, the U.S. Department of Defense (DoD) itself is responsible for part of the process (e.g., U.S. Army Corps of Engineers permitting). The largest opportunities to enhance reliability for national defense missions are at the interregional and regional levels, where transmission expansion can simultaneously support geographically dispersed missions. State proceedings may be more important for enhancing the reliability for specific installations communities.

Federal Planning

These include processes where the federal government has a role in planning and rate regulations,

and where defense stakeholders could potentially intervene.

- · Interregional Transmission Planning
- Regional Transmission Planning
- Single Utility Service Territory ("Local" Transmission)
- National Interest Electric Transmission Corridors (NIETCs)

Federal Permitting and Approvals

These include processes where DoD has a say in the transmission permitting and approval process.

- Coordinated Interagency Transmission Authorization and Permits (CITAP)
- Presidential Permits

State Regulation and Permitting

These include processes that may relate to transmission at the state level. The structure of these processes and their relevance to transmission varies state to state.

- Integrated Resource Planning
- Formula Rate Proceedings and Rate Cases
- Permitting

Interregional Transmission Planning

There are significant opportunities for interregional transmission (Section 5.5). The redundancy and geographic diversity afforded by interregional transmission can provide defense installations access to a wide variety of power sources. In addition, interregional transmission can provide a lifeline during extreme events and attacks, allowing system operators to reroute power around affected areas and restore power more quickly. Interregional transmission planning is conducted today on an ad hoc, project-by-project basis. There are no requirements that transmission providers develop or execute interregional transmission plans, but FERC rules also do not bar the development of such plans. Momentum is building in some areas of the country to carry out interregional planning efforts, such as the Western Transmission Expansion Coalition (WestTEC) effort to develop an actionable transmission study that looks at needs across the West, and the Northeast States Collaborative on Interregional Transmission. Further, NERC filed its Interregional Transfer Capability Study (ITCS) with FERC in November 2024, and

FERC has received comments on the study. No later than February 2026, FERC is required to submit a report to Congress on its conclusions, including any recommendations for statutory changes.

Defense engagement. Potential opportunities for defense stakeholders engagement include input into individual voluntary interregional planning efforts, engagement with merchant interregional transmission developers, and engagement at FERC in any inquiry that stems from its examination of the NERC ITCS.

Regional Transmission Planning

Regional Transmission Planning is the process of developing a transmission plan that spans across the service territories of multiple transmission providers within a region. The goal is to identify transmission projects that offer significant regional benefits to many grid users, not just one customer or one utility. FERC Order 1000 established a framework requiring transmission providers to participate in regional planning. FERC Order 1920 built upon this framework by requiring the development of long-term, scenario-based regional plans that identify transmission needs based on a variety of factors most likely to influence those needs. Federal laws and regulations, including DoD's energy and resilience policies, are required to be accounted for as part of this process.

Defense engagement. Transmission providers are required to engage states about how costs are allocated, and transmission providers are also engaging stakeholders more broadly on how plans are developed and benefits of potential regional transmission infrastructure will be measured. Defense stakeholders can engage regional planning entities and state entities to communicate national defense objectives and requirements prior to transmission providers submitting their compliance filings.

Single Utility Service Territory ("Local" Transmission)

Order 1920 also updates FERC rules concerning local transmission planning processes,⁴ as those

processes are ultimately incorporated into long-term regional planning processes. Order 1920 requires that transmission providers host at least three public stakeholder meetings per regional transmission planning cycle as they develop their local transmission plans that will ultimately be incorporated into the regional plans. The meetings must focus on each transmission provider's local planning process. These meetings must be held before each provider's local plan can be incorporated into the region's planning models. Individual states may also set forth local transmission planning requirements and processes, including integrated resource planning processes (described further below).

Defense engagement. Defense stakeholders can participate in the public stakeholder meetings and inform these and related stakeholder processes.

National Interest Electric Transmission Corridors (NIETC)

The FPA authorizes DOE to designate NIETCs to facilitate the development of high-voltage transmission lines that are in the national interest. In determining whether to designate a NIETC, the DOE may consider whether the energy independence or energy security of the United States would be served by the designation, and whether the designation would enhance national defense and homeland security. The most recent NIETC designations did not consider national defense, but future NIETC efforts could identify transmission corridors that have national defense benefits.

NIETC designation is significant because it "can unlock key federal financing and permitting tools to facilitate ... transmission infrastructure." FERC also has backstop siting authority for transmission infrastructure located within the NIETC. But FERC has never exercised this authority, and the scope of its jurisdiction is limited to certain narrowly defined circumstances. 6

Defense engagement. Defense stakeholders can provide comments on the national defense benefits that could be created by proposed NIETCs. The

⁴ Local transmission planning processes, in the context of FERC regulation, mean processes run by individual transmission providers to plan facilities located solely within their respective retail distribution service territories or footprints.

⁵ DOE Grid Deployment Office, <u>Frequently Asked Questions on the National Interest Electric Transmission Corridor Designation Process</u> (last accessed March 2025).

^{6 16} U.S.C. § 824p.

deadline for comments on currently proposed NIETCs is April 15, 2025.⁷

Coordinated Interagency Transmission Authorization and Permits (CITAP)

Transmission that traverses federal land will trigger federal permitting. The level of federal permitting required for infrastructure developed on federal land can vary widely depending on the type and scope of the project and the characteristics of the land through which the proposed project would run. Large-scale infrastructure projects may require multiple permits from various federal agencies, including the Bureau of Land Management, U.S. Forest Service, Army Corps of Engineers, the Environmental Protection Agency, and/or FERC. Under the FPA, DOE is authorized to coordinate the federal authorizations and environmental reviews required to site transmission. This process was formalized in a May 2023 interagency Memorandum of Understanding,8 which allowed the DOE to establish the Coordinated Interagency Transmission Authorization and Permits (CITAP) Program.9 The CITAP Program aims to streamline the permitting process for interstate transmission projects by facilitating interagency coordination and providing a single point of contact for project proponents.

Defense engagement. DoD will have the opportunity to review all proposed transmission projects in the CITAP Program early in the process to identify and manage any military mission conflicts. The DoD Military Aviation and Installation Assurance Siting Clearinghouse, for example, may review projects during the pre-application. DoD may also be asked to function as a co-lead agency if proposed transmission projects cross DoD-administered land. DoD's early notification and coordination may also create opportunities to encourage transmission development that supports defense objectives.

Presidential Permits

Transmission development that crosses international borders requires issuance of a Presidential Permit. Under Executive Order 12038 and section 202(e) of the FPA, the process of obtaining a presidential permit is overseen by DOE, which is authorized to recommend issuance of a permit if DOE determines that the permit is in the public interest. The DOE will review the application and make a recommendation to the President. The President has the final authority to issue or deny a presidential permit.

Defense engagement. The <u>Presidential Permit Process</u> requires the DOE to contact the DoD to request for a recommendation prior to issuance of the permit.

Integrated Resource Planning

A majority of states require their electric utilities to file an Integrated Resource Plan (IRP) every 2-4 years.¹⁰ An IRP is a long-term (20-30 year) plan that electric utilities develop to meet their customers' electricity needs while considering factors such as cost, reliability, and environmental impact. It is typically reviewed by state public utility commissions or other regulatory bodies. The IRP process involves forecasting electricity demand, evaluating resource options, and developing a plan to meet future needs in a cost-effective and reliable manner. IRPs are increasingly including more detailed analysis of transmission as a means to increase system reliability.11 Combining generation, transmission, and distribution planning into the IRP is an emerging best practice called "Integrated System Planning.¹²" Regulators are also asking their utilities to evaluate whether new regional transmission planning processes offer opportunities to capture more value for customers than a "go it alone" strategy.

Defense engagement. In most cases, the IRP process is public and allows for comment, including from defense stakeholders. Effective engagement typically involves independent plan analysis, which can be done

⁷ DOE, National Interest Electric Transmission Corridor Designation Process (last accessed March 2025).

⁸ DOE et al., Memorandum of Understanding Regarding Facilitating Federal Authorizations for Electric Transmission Facilities, May 2023.

⁹ DOE, <u>Coordinated Interagency Transmission Authorization and Permits (CITAP) Program</u>, February 2025.

¹⁰ LBNL, <u>Best Practices in Integrated Resource Planning: A Guide for Planners Developing the Electricity Resource Mix of the Future</u>, December 2024,

¹¹ Salt River Project, <u>2023 Integrated System Plan</u>, 2023; HECO, <u>Integrated Grid Plan</u>, May 2023.

¹² ESIG, <u>Integrated System Planning Forum</u>, November 2024.

and submitted on the public record. However, in many jurisdictions simply outlining the needs of defense installations, defense communities, and/or defense industries and the need for grid upgrades would be an incremental improvement over current practice. IRP testimony and documentation can usually be submitted confidentially, if required for information security purposes, depending on the jurisdiction.

Formula Rate Proceedings and Rate Cases

Rate proceedings for transmission infrastructure vary by jurisdiction. While all transmission providers must have a rate on file with FERC, FERC did not require utilities to unbundle retail transmission from generation where they are included together in a utility's retail rate base.¹³ As such, in states where utilities remain vertically integrated, states oversee rate cases with respect to the retail customers of transmission infrastructure, which may account for a large majority of the overall revenue requirement (with FERCjurisdictional transmission rates accounting for the remaining portion).14 Accordingly, defense stakeholders wishing to engage on transmission rate issues may need to engage at both the state and federal level, with state rate proceedings potentially being more important in vertically integrated settings.

Most utilities elect to file a "formula rate" at FERC rather than engage in individual rate proceedings, with the formula setting forth a general method for recovering transmission costs across the utility's portfolio of assets. The purpose of formula rate proceedings or rate cases are to determine the rates that a utility or transmission owner can charge its customers based on the "cost of service" (as derived from the costs of building, operating, and maintaining transmission facilities). The goal of rate proceedings is to ensure that the rates charged are just and reasonable. While the principal concern in FERC rate proceedings is the appropriate level of cost recovery for transmission infrastructure (and not the planning decisions regarding

what infrastructure to build), state proceedings may examine whether planning decisions were prudent.

Defense engagement. Defense stakeholders should determine whether to engage in transmission rate proceedings based on the individual state context and the priorities at issue. The more important venue to weigh in on planning decisions may be a FERC-jurisdictional regional planning process (for regional infrastructure), a local transmission planning process, and/or an integrated resource planning process (for local infrastructure). Defense stakeholders may intervene in rate cases but would typically not do so to advocate for transmission expansion or national defense objectives.¹⁵

Permitting

The acquisition of right-of-way and jurisdictional permitting are typically the last phases before transmission project construction can begin. Permitting processes vary according to state law. State agencies are generally the primary regulator responsible for authorizing the routing of new transmission infrastructure, but local jurisdictions, such as city and county governments, can also play a significant role. Permitting transmission projects often occurs at the conclusion of the planning phase, lacking adequate community engagement and subsequently creating resistance to development. Proactive collaboration between state and local leaders and utility companies to establish long-term infrastructure plans has been shown to be an effective practice.

Defense engagement. Defense stakeholders can be an important voice in routing and state and local permitting discussions.

^{13 &}lt;u>Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities,</u> Order No. 888, 61 Fed. Reg. 21,540, 21,577-78 (1996).

¹⁴ See, for example, Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, Order No. 1000, 126 FERC¶ 61,051, at P 527 (2011) ("Southern Companies assert that they recover only approximately 15 percent of their transmission revenue requirements under a federal [tariff], with the remaining 85 percent being recovered in state-regulated bundled rates.").

¹⁵ The Military Departments are delegated authority by the General Services Administration to intervene on behalf of the federal government in state-level rate cases and other proceedings. See NARUC, Regulatory Considerations for Utility Investments in Defense Energy Resilience, October 2021.

¹⁶ See NCSL, <u>Electric Transmission Planning: Primer for State Legislatures</u>, December 2023, which describes the state siting processes: "[i]n 32 states, Public Utility Commissions] are the entity responsible for siting and construction of transmission facilities," while other states vest responsibility with another state agency or, in rarer cases, have a decentralized process that local jurisdictions are responsible for.