

Summary of FERC's April 2022 NOPR on Transmission Planning, Cost Allocation, and Generator Interconnection

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On April 21, the Federal Energy Regulatory Commission (FERC or Commission) released its Notice of Proposed Rulemaking (NOPR) to reform its policies regarding Regional Transmission Planning and Cost Allocation. The NOPR follows from an Advanced Notice of Proposed Rulemaking (ANOPR) on these reforms, which FERC issued in July 2021. Representing FERC's most significant action on transmission planning and cost allocation in more than a decade, the NOPR outlines six major proposals:

- **Regional Transmission Planning:** The NOPR proposes to require transmission planning processes to engage in long-term planning and evaluate transmission needs-driven changing resources and demands.
- **Dynamic Line Ratings and Advanced Power Flows Devices:** The NOPR proposes to require that regional transmission planning processes consider dynamic line ratings and advanced power flows.
- **Transmission Cost Allocation and State Participation/Agreement:** The NOPR proposes to require transmission providers to seek agreement regarding cost allocation from relevant state entities within the applicable transmission planning region and include in their Open Access Transmission Tariffs (OATTs): (1) an *ex ante* regional cost allocation method; (2) a *ex post* process for achieving state agreement for a particular planned facility; or (3) some combination thereof. The NOPR also proposes to require transmission providers to seek state agreement on which of these three options to use. The NOPR also proposes to have transmission providers file state-agreed cost allocations for specific projects with FERC under Section 205.
- **Construction Work in Progress (CWIP) Incentive:** The NOPR proposes to prohibit the CWIP incentive for transmission facilities selected in regional plans for purposes of cost allocation.
- **Federal Right of First Refusal (ROFR):** The NOPR proposes to permit incumbent transmission providers the use of a federal ROFR in regional plans for purposes of cost allocation on the condition that the facilities be jointly owned.
- **Transparency and Coordination:** The NOPR proposes enhanced transparency and coordination requirements within, and between, regional and local transmission planning processes so as to "right-size" replacement transmission facilities.

A copy of the order can be found [here](#). Comments on the proposed reforms, which are discussed further below, are due within 75 days of the date that the NOPR is published in the *Federal Register*.

A. Regional Transmission Planning

The NOPR's core planning reforms address Long-Term Regional Transmission Planning, as well as consideration of dynamic line ratings and advanced power flow control devices in the planning process.

1. Long-Term Regional Transmission Planning

The NOPR proposes to require transmission providers to conduct regional transmission planning on a long-term (at least 20 years), forward-looking basis, utilizing multiple factors to identify and plan for transmission needs driven by changes in resources and demand — what is referred to as “Long-Term Regional Transmission Planning” throughout the NOPR. As FERC explains, Long-Term Regional Transmission Planning will enable public utility transmission providers to identify and meet transmission needs in an efficient and cost-effective manner.

a. Planning Horizon and Frequency: 20 Years, Revised Every Three Years

The NOPR proposes the use of a 20-year planning horizon for the development of Long-Term Scenarios, with a reassessment and revision of those scenarios at least once every three years.^[1] The Commission explained that the planning horizon should extend far enough into the future that transmission providers can identify transmission needs that could be met with more efficient or cost-effective facilities. According to FERC, these scenarios should be revisited and revised every three years to reflect updated data inputs.

b. Factors to Consider for Long-Term Scenarios

Next, the NOPR proposes to require that transmission providers incorporate certain categories of factors into their Long-Term Scenarios that may affect transmission needs. These factors include: (1) federal, state, and local laws and regulations that affect the future resource mix and demand; (2) federal, state, and local laws and regulations on decarbonization and electrification; (3) state-approved utility integrated resource plans and expected supply obligations for load-serving entities; (4) trends in technology and fuel costs; (5) resource retirements; (6) generator interconnection requests and withdrawals; and (7) utility and corporate commitments and federal, state, and local goals affecting resource mix and demand.

c. At Least Four Distinct Long-Term Scenarios

FERC also proposes that transmission providers be required to develop a “plausible and diverse” set of at least four Long-Term Scenarios and provide public disclosure of the information and inputs used to create each.^[2] At least one of these scenarios must account for uncertain operational outcomes that determine the benefits of or need for transmission facilities during high-impact, low-frequency events, such as extreme weather events or cyberattacks.

d. At Least “Best Available Data” To Be Used

The NOPR also proposes to require that transmission providers use “best available data inputs” when developing Long-Term Scenarios,^[3] which the Commission defines as data that are timely, developed using diverse and expert perspectives, adopted via a process that uses the transparency planning principle,^[4] and that reflect the list of factors discussed above that are likely to affect transmission planning.

e. Use of Geographic Zones

The NOPR also proposes to require that transmission providers consider whether to identify geographic zones with the potential for significant new generation, including an assessment of generation developers' commercial interest in developing generation within each zone. FERC proposes to require that transmission providers incorporate designated zones and any identified commercial interest in each into their Long-Term Scenarios. The Commission explains that this requirement would assist transmission providers and developers to better coordinate with generation developers to identify transmission needs in certain geographic zones with the potential for new generation.

f. Evaluating Benefits of Regional Transmission Facilities

Once the public utility transmission providers in a transmission planning region have identified the region's transmission needs, FERC proposes to require evaluation of Long-Term benefits. These can include: (1) avoided or deferred reliability transmission projects and aging infrastructure replacement; (2) either reduced loss of load probability or reduced planning reserve margin; (3) production cost savings; (4) reduced transmission energy losses; (5) reduced congestion due to transmission outages; (6) mitigation of extreme events and system contingencies; (7) mitigation of weather and load uncertainty; (8) capacity cost benefits from reduced peak energy losses; (9) deferred generation capacity investments; (10) access to lower cost generation; (11) increased competition; and (12) increased market liquidity.^[5]

g. Long-Term Planning-Related OATT Provisions

Further, the NOPR proposes that transmission providers include in their OATTs various criteria to facilitate the selection of transmission solutions driven by changing resources and demands without over building the system. In addition, FERC proposes that transmission providers incorporate processes to coordinate with the relevant state entities in developing such criteria.^[6]

2. Dynamic Line Rating and Advanced Power Flow Technologies

The NOPR also proposes that transmission providers more fully consider dynamic line ratings and advanced power flow control devices in regional transmission planning processes.^[7] The Commission stated that by "selecting transmission facilities that incorporate dynamic line ratings or advanced power flow control devices in the regional transmission plan for purposes of cost allocation may offer a more efficient or cost-effective alternative to other regional transmission facilities in certain instances."^[8] The Commission proposes to require public utility transmission providers in each transmission planning region to consider for each identified regional transmission need whether selecting transmission facilities in the regional transmission plan for purposes of cost allocation that incorporate dynamic line ratings or advanced power flow control devices would be more efficient or cost effective than transmission facilities that do not incorporate these technologies.

3. Requested Comments

With regard to transmission planning, the Commission seeks comments on:

- The proposed requirement for public utility transmission providers to participate in a regional transmission planning process that includes Long-Term Regional Transmission Planning;[\[9\]](#)
- The requirements identified for development of Long-Term Scenarios include:
 - The appropriateness of a 20-year transmission planning horizon and three-year frequency requirement for reassessment;
 - Whether four Long-Term Scenarios will provide transmission providers with enough information to identify transmission needs;
 - The proposed definition of “best available data inputs”;
 - Whether and how the categories of factors identified in the NOPR adequately capture factors expected to drive changes in the resource mix and demand;[\[10\]](#) and
 - How public utility transmission providers in multistate planning regions might reconcile or account for differences in energy policies, interest, or preferences in implementing the proposed geographic zone identification process in the NOPR;
- How to ensure that each of the Long-Term Regional Transmission Benefits discussed above[\[11\]](#) are distinct and do not “double count” benefits;[\[12\]](#)
- The application of the Long-Term Regional Transmission Benefits in non-RTO/ISO regions;[\[13\]](#)
- Whether public utility transmission providers should be required to use some or all the Long-Term Regional Transmission Benefits as a minimum set of benefits for their Long-Term Regional Transmission Planning process;[\[14\]](#)
- Whether relevant state entities should have the opportunity to voluntarily fund the cost of, or a portion of the cost of, a Long-Term Regional Transmission Facility, and if so, whether the Commission’s final rule in this proceeding should include requirements to facilitate such an opportunity for the relevant state entities;[\[15\]](#)
- What stage in the regional transmission planning process is the most appropriate for relevant state entities and whether such opportunity should be limited to relevant state entities or should be expanded to include interconnection customers;[\[16\]](#)
- The requirements of public utility transmission providers to consider dynamic line ratings and advanced power flow control devices in regional transmission planning processes;
- Whether there are other transmission technologies that should be considered in regional transmission planning and cost allocation processes; and
- Whether non-RTO/ISO transmission planning regions should be required to update their energy management systems or make other similar changes.[\[17\]](#)

B. Regional Transmission Cost Allocation and State Participation/Agreement

1. Background and Proposed Reform

In the NOPR, FERC expressed concern that the “increased complexity” of the NOPR’s planning-related reforms “could make cost allocation decisions more contentious, which may risk undermining the development of more efficient or cost-effective regional transmission facilities”[\[18\]](#) Consequently, FERC proposes to require that public utility transmission providers in each transmission planning region seek the agreement of relevant state entities within the transmission planning region regarding the cost allocation method or methods that will apply to transmission facilities selected in the regional transmission plan.

Specifically, to enhance the critical role of states in transmission planning, FERC proposes to require that public utility transmission providers in each transmission planning region revise their OATTs to include either:

1. An *ex ante* Long-Term Regional Transmission Cost Allocation Method to allocate the costs of Long-Term Regional Transmission Facilities,[\[19\]](#) or

2. An *ex post* “State Agreement Process”^[20] by which one or more relevant state entities^[21] may voluntarily agree to a cost allocation method, or
3. A “combination thereof” and that the included process “comply with the existing six Order No. 1000 regional cost allocation principles.”^[22]

The key difference between the *ex ante* cost allocation method and the *ex post* State Agreement Process is that the former locks in the cost allocation method ahead of time — *i.e.*, before the projects are planned — whereas the State Agreement Process creates only a procedural framework for cost allocation agreements, and the allocation of specific projects is negotiated through the state process *after* the project has been planned.

FERC further proposes that public utility transmission providers seek state agreement as to which of the three options to use.^[23]

FERC additionally proposes to require that public utility transmission providers add to their OATTs provisions that describe a time period for state involvement — FERC proposes 90 days — for consideration of transmission facilities selected in Long-Term Regional Transmission Planning.^[24]

2. Requested Comments

In addition to the comment requested on the proposals discussed above, FERC seeks comment on the following cost allocation-related items:

- Whether the proposed definition of relevant state entities is appropriate;
- The proposal to afford relevant states entities the flexibility to define agreement among relevant state entities, or whether it is preferable for the Commission to adopt a specific definition of such agreement;
- The appropriate outcome when the relevant state entities fail to agree on a cost allocation method;
- The timing and duration of any time period for state-negotiated cost allocation;
- Whether there should be a requirement for a time period for state involvement in regional cost allocation for transmission facilities selected in existing near-term reliability and economic regional transmission planning processes; and
- Whether the Commission should require that public utility transmission providers account for the full list of benefits described in the Evaluation of the Benefits of Regional Transmission Facilities section above in Long-Term Regional Transmission Planning, or whether no change to the benefits currently used in existing regional transmission planning processes is needed.

C. Limitation of CWIP Incentive

1. Background and Proposed Reform

For the last several decades, FERC considered the recovery of 100% of the Construction Work in Progress Incentive (CWIP Incentive) as a rate incentive to encourage the construction of new transmission facilities.^[25]

In the NOPR, FERC proposes to no longer permit public utility transmission providers to take advantage of the CWIP Incentive for regional transmission facilities selected for purposes of cost allocation through Long-Term Regional Transmission Planning. FERC argues that during construction, ratepayers are directly financing

construction of regional transmission facilities without receiving simultaneous benefits from the projects. Accordingly, FERC argues the CWIP Incentive may shift too much risk to customers and result in unjust and unreasonable rates. Under FERC's proposal, utilities would still be able to book costs incurred during construction (as Allowance for Funds Used During Construction (AFUDC)) but would only recover those costs after the project is placed in service. FERC acknowledged its proposal may introduce increased regulatory uncertainty in long-term planning but reasoned that its proposal strikes a better balance between the risks of over and under investment in regional transmission planning.

Even if this proposal is adopted, FERC proposes to maintain the availability of a 50% CWIP ratemaking approach in certain circumstances.

2. Requested Comments

FERC seeks comments on whether to make regional transmission facilities ineligible for the CWIP Incentive.

D. Creation of Federal Right of First Refusal for Jointly Owned Projects

1. Background and Proposed Reform

In Order No. 1000, the Commission eliminated the use of federal rights of first refusal (ROFR) for an incumbent transmission provider (*i.e.*, an entity that develops a transmission facility within its own retail distribution service territory or footprint) with respect to entirely new transmission facilities selected in a regional transmission plan for purposes of cost allocation. However, in the NOPR, FERC concludes that the elimination of all federal ROFRs was overly broad and may be discouraging investment.

The NOPR proposes to permit the exercise of federal ROFRs for transmission facilities selected in a regional transmission plan for purposes of cost allocation, *conditioned on the incumbent transmission provider with the federal ROFR establishing joint ownership of the transmission facilities*. Specifically, the Commission proposes that an incumbent transmission provider may establish qualifying joint ownership structures with unaffiliated, nonincumbent transmission developers or with another unaffiliated entity, including unaffiliated public power entities; load-serving entities, such as transmission-dependent municipally-owned utilities or electric cooperatives; or another incumbent transmission provider.[\[26\]](#)

The Commission found that a qualifying joint ownership arrangement would be presumptively just and reasonable and not unduly discriminatory or preferential.[\[27\]](#) However, the Commission stated that a joint ownership arrangement would not qualify for the presumption if the incumbent transmission developer partners with an affiliated entity or structures the joint ownership arrangement such that unaffiliated entities were offered less than a meaningful level of participation and investment in the proposed regional transmission facility.[\[28\]](#)

2. Requested Comments

In relation to the ROFR proposal, FERC seeks comment on the following questions:

- How the proposed conditional ROFR aligns with or advances the goals of Order No. 1000's reforms, or otherwise ensures just and reasonable Commission jurisdictional rates and limits opportunities for undue

discrimination by transmission providers.

- The administrability of and implementation challenges with the establishment and exercise of joint ownership-focused, conditional ROFRs.
- Whether limiting the conditional ROFR to proposals that form or expand an inclusive transmission-only company or shared-system arrangement is necessary to ensure just and reasonable rates and limit opportunities for undue discrimination by transmission providers.
- Whether all transmission-dependent utilities or load-serving entities in a particular transmission provider's service territory where a proposed regional transmission facility would be located should be given the opportunity to participate in a joint ownership arrangement that allows such entities to supply up to their fair share (e.g., load-ratio share) of capital for certain regional transmission facilities.
- The standards, such as ownership share percentages or load-ratio share offer requirements, that should govern whether particular joint ownership arrangements qualify for the presumption.
- Whether any additional requirements would be necessary to prevent undue influence over the transmission development process or joint ownership arrangement by any project entity, avoid greater risks of project cancellation or abandonment, or otherwise protect customer interests.
- Eligibility and participation criteria related to jointly owned transmission facilities and partners that should be permitted to qualify for the presumption and any transparency, informational, or screening processes that may be required.
- Whether the Commission should pursue broader reform to its federal ROFR rules and regulations.

E. Enhanced Transparency of Local Transmission Planning Inputs in Regional Transmission Planning Process and Opportunities to Right-Size Replacements

1. Background and Proposed Reform

In the NOPR, FERC expressed concern that local transmission planning processes lack adequate provisions for transparency and meaningful input from stakeholders and that regional transmission planning processes may not adequately coordinate with local transmission planning processes.^[29] In particular, FERC noted that transmission providers may be replacing aging transmission infrastructure without evaluating whether the replacement facilities could be modified to address regional transmission needs more efficiently or cost effectively.^[30] FERC stated that absent reform, the lack of coordination between regional transmission planning processes and in-kind facility replacements may result in duplicative or unnecessary transmission facilities that increase costs and potentially render FERC jurisdictional rates unjust and unreasonable.^[31]

To address the Commission's transparency concerns, the NOPR outlined two proposals: (1) an iterative stakeholder meeting process, and (2) a separate "right-sizing" process.

a. Iterative Stakeholder Meeting Process

FERC proposes to require transmission providers to convene collectively, and as part of the regional transmission planning process, at least three stakeholder meetings before each transmission provider's local transmission plan is incorporated into the region's planning models.^[32] FERC outlined the three stakeholder meetings as follows:^[33]

- **Assumptions Meeting** held prior to the submission of local transmission planning information for inclusion in the regional transmission planning process to review criteria, assumptions, and models related to each transmission provider's local planning.

- **Needs Meeting** held no fewer than 25 calendar days after the Assumptions Meeting to review identified reliability criteria and other transmission needs that drive the need for local transmission planning.
- **Solutions Meeting** held no fewer than 25 calendar days after the Needs Meeting to review potential solutions to the identified reliability criteria violations and other transmission needs.

FERC preliminarily found that this proposed process will result in needed additional transparency in the local transmission planning process; better facilitate the identification of regional transmission facilities that may be more efficient or cost effective than proposed local transmission facilities; and enable stakeholders to evaluate or replicate the findings of transmission providers and therefore reduce after-the-fact disputes on local transmission planning.[\[34\]](#)

b. Right-Sizing

FERC proposes to require that as part of each Long-Term Regional Transmission Planning cycle, transmission providers evaluate whether there are any 230 kV or above transmission facilities anticipated to be replaced in-kind during the next 10 years that can be “right-sized” to address a need identified in Long-Term Regional Transmission Planning. FERC explained that “right-sizing” is the process of modifying the in-kind replacement of an existing transmission facility to increase that facility’s transfer capability. This could include increasing a facility’s voltage level, adding circuits to the towers, or incorporating advanced technologies.[\[35\]](#) If a right-sized facility addresses a transmission provider’s need to replace an existing facility; meets all the applicable selection criteria, included in Long-Term Regional Transmission Planning; and is found to be the more efficient or cost-effective solution, then the right-sized facility may be selected in the regional transmission plan for purposes of cost allocation.[\[36\]](#)

If a right-sized replacement transmission facility is selected in the regional transmission plan, FERC would require the establishment of a federal ROFR for the transmission provider that included the in-kind facility in its replacement estimates.[\[37\]](#) This ROFR would extend to any portion of such a transmission facility located within the applicable transmission provider’s retail distribution service territory.[\[38\]](#)

FERC also proposes that if a right-sized replacement facility is selected in the regional transmission plan for purposes of cost allocation, only the incremental costs of right-sizing the facility will be eligible to use the applicable Long-Term Regional Transmission Cost Allocation Method. FERC proposed that the costs the incumbent transmission provider would have otherwise incurred to construct the in-kind replacement facility be allocated in a manner consistent with the allocation that would have otherwise occurred for the in-kind replacement.[\[39\]](#) FERC clarified that nothing in the proposed reforms would alter the transmission responsibility to maintain its system and replace facilities as needed.

2. Requested Comments

FERC seeks comment on:

- The proposed transparency requirements, in particular whether FERC should impose any requirements regarding how the relevant transmission providers would determine incremental costs of right-sizing a transmission facility.[\[40\]](#)
- Whether there is additional information from transmission owners that would help transmission providers identify

whether there are estimated in-kind replacements of an existing transmission facility that could be right-sized to address a transmission need identified in Long-Term Regional Transmission Planning.^[41]

- Whether there is additional information beyond a list of in-kind replacement estimates that a transmission provider needs to calculate such benefits, and if so, how that information could be obtained.^[42]

F. Interregional Transmission Coordination and Cost Allocation

1. Background and Proposed Reform

Order No. 1000 requires public utility transmission providers in neighboring transmission planning regions to develop and implement procedures to provide for the sharing of information regarding needs and proposed solutions, as well as the identification and joint evaluation of interregional transmission facilities. Order No. 1000 identified six interregional cost allocation principles that apply to, and only to, a cost allocation method for a new interregional transmission facility.^[43]

In the NOPR, FERC proposes to require public utility transmission providers in neighboring transmission planning regions to revise their procedures to allow an entity to propose an interregional transmission facility in the regional process as a potential solution to the needs identified through the proposed Long-Term Regional Transmission Planning process. FERC reasoned that doing so would provide an opportunity to consider more cost-effective proposals and help ensure just and reasonable rates.

2. Requested Comments

FERC seeks comment on the proposal.

^[1] NOPR at PP 92-93.

^[2] *Id.* at PP 121-125.

^[3] *Id.* at PP 130-131.

^[4] See NOPR at n. 226: The transparency transmission planning principle requires public utility transmission providers to reduce to writing and make available the basic methodology, criteria, and processes used to develop transmission plans.

^[5] NOPR at P 185.

^[6] NOPR at P 241.

^[7] NOPR at P 272.

[8] NOPR at P 272.

[9] NOPR at P 77.

[10] NOPR at P 112.

[11] NOPR at P 187.

[12] NOPR at P 187.

[13] NOPR at P 187.

[14] NOPR at P 188.

[15] NOPR at P 252.

[16] NOPR at P 252.

[17] NOPR at P 277.

[18] NOPR at P 298.

[19] FERC proposed “to define a Long-Term Regional Transmission Cost Allocation Method as an *ex ante* regional cost allocation method that would be included in each public utility transmission provider’s OATT as part of Long-Term Regional Transmission Planning.” NOPR at n.508.

[20] FERC proposed “to define a State Agreement Process as an *ex post* cost allocation process that would be included in each public utility transmission provider’s OATT as part of Long-Term Regional Transmission Planning, which may apply to an individual Long-Term Regional Transmission Facility or a portfolio of such Facilities grouped together for purposes of cost allocation.” NOPR at n.509.

[21] FERC proposed “to define relevant state entities for purposes of the Long-Term Regional Transmission Planning cost allocation requirements as any state entity responsible for 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 as may be designated for that purpose by the law of such state.” NOPR at P 304.

[22] NOPR at P 302.

[23] NOPR at P 303.

[24] NOPR at P 322.

[25] Order No. 679, 116 FERC ¶ 61,057, a P 9 (2006).

[26] NOPR at PP 365.

[27] *Id.*

[28] *Id.* at P 371.

[29] NOPR at P 398.

[30] NOPR at P 399.

[31] NOPR at P 399.

[32] NOPR at P 400.

[33] NOPR at P 401.

[34] NOPR at P 402.

[35] NOPR at P 403.

[36] NOPR at P 407.

[37] NOPR at P 409.

[38] NOPR at P 409.

[39] NOPR at P 410.

[40] NOPR at P 414.

[41] NOPR at P 415.

[42] NOPR at P 415.

[43] Order No. 1000, 136 FERC ¶ 61,051 at P 603 (2011).

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