New York ISO
Independent System Operator

Order No. 1920 Long-Term Regional Transmission Planning

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Agenda

- NYISO's Order No. 1920 Compliance Development Schedule
- Overview of Order No. 1920 Reforms

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Preliminary Compliance Development Timeline

NYISO's Order No. 1920 Compliance Development Schedule

- **August – September 2024**: Continue to discuss requirements of Order No. 1920 and receive comments from stakeholders
- **October 2024 – December 2024**: Develop straw proposal to comply with requirements of Order No. 1920
- **January 2025 – June 2025**: Develop tariff and refine compliance straw proposal, as appliable
- **June 12, 2025**: Submit compliance filing on regional planning requirements
- **August 12, 2025**: Submit compliance filing on interregional planning requirements

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Order No. 1920 Reforms

Order No. 1920 - Overview

- On May 13, 2024, FERC issued Order No. 1920 – a final rule in its Building for the Future Through Electric Regional Transmission Planning and Cost Allocation proceeding (Docket No. RM21-17-000)
- Order No. 1920 builds on FERC's Order Nos. 890 and 1000 and represents the most significant reform to the FERC's transmission planning requirements in over a decade
- The primary focus of the reforms is the adoption of a new Long-Term Regional Transmission Planning process to establish "sufficiently long-term, forward-looking, and comprehensive transmission planning requirements"

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Order No. 1920 – Key Reforms

- Development of a Long-Term Regional Transmission Planning process
- Development of *ex ante* cost allocation methodologies to allocate the costs of selected transmission projects for addressing Long-Term Transmission Needs
- Consider use of grid enhancing technologies as transmission solutions in the Long-Term Regional Transmission Planning and existing planning processes
- Consider transmission facilities to address interconnection-related needs identified multiple times in the interconnection process but not built
- Enhance the stakeholder process for reviewing local transmission planning
- Provide for the potential opportunity to "right size" certain transmission facilities that the transmission owner anticipates replacing with an in-kind replacement transmission facility and establish a federal right of first refusal for the transmission owner to develop such right-sized replacement transmission facilities

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Long-Term Regional Transmission Planning

General Requirements

- **Order No. 1920 establishes requirements for transmission providers to adopt a new Long-Term Regional Transmission Planning process to:**
  - Develop at least three Long-Term Scenarios that cover at least a 20-year planning horizon based on factors drawn from seven prescribed categories of factors
  - Identify Long-Term Transmission Needs using the Long-Term Scenarios
  - Evaluate Long-Term Regional Transmission Facilities to address any identified Long-Term Transmission Needs using and measuring, at a minimum, a set of seven benefits over a time horizon that covers, at a minimum, 20 years starting from the estimated in-service date of each transmission facility and any selection criteria developed in collaboration with the states and other stakeholders
  - Determine the more efficient or cost-effective Long-Term Regional Transmission Facilities to meet the identified Long-Term Transmission Needs
  - Elect whether to select or not select a transmission solution and detail for stakeholders why a particular transmission facility was selected or not selected

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Long-Term Scenarios

- **Requirements for identifying Long-Term Transmission Needs**
  - Using best available data inputs, develop and apply at least three distinct Long-Term Scenarios using no less than a 20-year transmission planning horizon to identify Long-Term Transmission Needs and to evaluate potential transmission solutions to those needs
  - Develop the scenarios using factors that are likely to drive Long-Term Transmission Needs drawn from seven categories (described on the next slide), which scenarios must be "plausible and diverse"
  - Develop and apply a sensitivity for high-impact and low-frequency events for use with each Long-Term Scenario
- **When incorporating the categories of factors, the transmission provider, in coordination with stakeholders, will determine which factors within each category is likely to affect Long-Term Transmission Needs and, therefore, should be accounted for in the Long-Term Scenarios**

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Categories of Factors

Key Driving Factors

1. Federal, state and local laws and regulations affecting resource mix and demand
2. Federal, state and local laws and regulations on decarbonization and electrification
3. State-approved integrated resource plans

* Transmission providers must account for, be consistent with, and not discount, these three categories for factors in each Long-Term Scenario

Other Driving Factors

4. Trends in fuel costs and in the cost, performance, and availability of generation, electric storage resources, and building and transportation electrification technologies
5. Resource retirements
6. Generator interconnection requests and withdrawals
7. Utility and corporate commitments and federal, federally recognized Tribal, state, and local policy goals that affect Long-Term Transmission Needs

** Transmission providers have greater flexibility and can assess the likelihood that the factors will be achieved and can discount or place more weight on certain factors

Long-Term Scenarios

¥ Numbering is only to be used as a reference in the event of discussion and is not intended not suggest any priority of the factors other than what is specified in Order No. 1920.

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Evaluation of Long-Term Regional Transmission Facilities

- **The transmission provider must use and measure, at a minimum, the seven specified benefits to evaluate Long-Term Regional Transmission Facilities**
- **The benefits must be measured over a time horizon that covers, at a minimum, 20 years starting from the estimated in-service date of the Long-Term Regional Transmission Facilities**

1. Avoided or deferred reliability transmission facilities and aging infrastructure replacement
2. Benefit that can be characterized and measured as 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 weather events and unexpected system conditions
7. Capacity cost benefits from reduced peak energy losses

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Selection of Long-Term Regional Transmission Facilities

- Transmission providers must include criteria for selecting the more efficient or cost-effective transmission facility that seek to maximize benefits accounting for costs over time without over-building transmission facilities
  - Nothing in Order No. 1920 requires the use of any particular approach
- The transmission provider must designate a point in the process to select or not select a transmission facility to address Long-Term Transmission Needs for purposes of cost allocation under the OATT
  - The designated point in the evaluation process must be no later than three years following the beginning of the cycle
  - Order No. 1920 does not require transmission providers to select a project, even if it meets the selection criteria
- The process must culminate in a determination that is sufficiently detailed for stakeholders to identify why a particular Long-Term Regional Transmission Facility was selected or not selected

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Reevaluation of Long-Term Regional Transmission Facilities

- **Transmission providers must include a reevaluation process to reassess, with certain exceptions, the selected transmission facilities in the event of:**

Delays in the development that would jeopardize the transmission provider's ability to meet its reliability needs or reliability-related service obligations
Actual or projected costs significantly exceed cost estimates used in the selection of the Long-Term Regional Transmission Facility
Significant changes in federal, federally recognized Tribal, state or local laws or regulations cause reasonable concern that a previously selected Long-Term Regional Transmission Facility may no longer meet the selection criteria

- **Order No. 1920 imposes a limitation for reevaluating based on a significant change to federal, federally recognized Tribal, state, or local laws or regulations unless during the Long-Term Regional Transmission Planning cycle in which the transmission provider selected the Long-Term Regional Transmission Facility, the Long-Term Regional Transmission Facility's targeted in-service date was in the latter half of the 20-year transmission planning horizon**

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Reevaluation of Long-Term Regional Transmission Facilities

- Transmission providers must also include specific criteria in their OATTs that will be used to determine when one of the three situations occurs to trigger reevaluation, as well as a designated point after which all selected Long-Term Regional Transmission Facilities will no longer be subject to reevaluation

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Cost Allocation for Long-Term Regional Transmission Facilities

Cost Allocation Methodologies

- Order No. 1920 requires a transmission provider to establish in its OATT one or more *ex ante* cost allocation methodologies for Long-Term Regional Transmission Facilities that it selects for purposes of cost allocation
- The proposed methodologies must generally satisfy FERC's existing cost allocation principles
- The transmission provider is permitted to include a "State Agreement Process" through which relevant state entities may agree to a cost allocation method either before or not later than six months after the selection of a transmission facility
  - Adoption of a "State Agreement Process" methodology does not eliminate the need to include a default cost allocation methodology in the OATT
- A transmission provider must establish a six-month engagement period with the Relevant State Entities prior to its compliance filing to provide a forum for negotiating a cost allocation methodology or State Agreement Process for cost allocation
  - The transmission provider is, however, ultimately responsible for determining the cost allocation method for inclusion in its OATT

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Voluntary Funding

- The transmission provider must also provide Relevant State Entities and interconnection customers with the opportunity to voluntarily fund the cost of, or a portion of the costs of, a Long-Term Regional Transmission Facility that otherwise does not meet the transmission provider's selection criteria
- Order No. 1920 affords transmission providers flexibility in developing a process for such voluntary funding opportunity, provided that it is transparent, meets the criteria specified in the rule, and is not unduly discriminatory or preferential

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Grid Enhancing Technologies

Grid Enhancing Technologies

- Order No. 1920 requires that a transmission provider evaluate in connection with each identified transmission need in both its Long-Term Transmission Planning Process and its existing regional transmission processes the following grid enhancing technologies:
  - dynamic line ratings
  - advanced power flow control devices
  - advanced conductors
  - transmission switching

- Transmission providers must consider whether regional transmission facilities that incorporate, or solely consist of, any of the four grid enhancing technologies would be more efficient or cost-effective than selecting new transmission facilities or upgrades to existing transmission facilities that do no incorporate these technologies

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Interconnection-Related Transmission Upgrades

Interconnection-Related Transmission Upgrades

- Order No. 1920 requires transmission providers to revise their *existing* regional transmission planning processes in their OATTs to evaluate for selection transmission facilities that address interconnection-related transmission needs associated with certain interconnection-related network upgrades originally identified through the generator interconnection process
- An interconnection-related network upgrade is one that:
  1. has been identified in at least two interconnection cycles in the preceding five year with a voltage of at least 200 kV and an estimated cost of at least $30 million, and
  2. has not been developed as the interconnection request driving the need has been withdrawn and such upgrade is not identified in an interconnection agreement

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Interconnection-Related Transmission Upgrades

- This Order No. 1920 reform is intended to address the situation where interconnection-related network upgrades (as the term is used by FERC in the generator interconnection process) are repeatedly identified but not constructed and instances when regional transmission solutions that would have been addressed by those interconnection-related network upgrades would provide widespread transmission benefits that extend beyond the interconnection customer
- FERC acknowledged that this reform was not addressed in Order No. 2023 but intended to be a complement to Order No. 2023 reforms

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Enhanced Transparency of Local Transmission Planning Process

Local Transmission Planning Reforms

- **Order No. 1920 requires transmission providers to revise their local transmission planning requirements to increase transparency and to provide for meaningful input from stakeholders by:**
  1. Making information relevant to assumptions, needs, and local and regional solutions publicly available,
  2. Establishing three separate stakeholder meetings with prescribed posting and timing requirements to review specific aspects of the local transmission plans, and
  3. Creating an iterative process for stakeholder feedback on the local transmission plans throughout the regional planning process

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Right-Sizing Replacement Transmission Facilities

Right-Sizing Replacement Transmission Facilities

- Order No. 1920 requires transmission providers to evaluate whether a Long-Term Transmission Need can be more efficiently or cost-effectively addressed by right-sizing a transmission facility that:
  1. operates above a specified kV threshold that does not exceed 200 kV, and
  2. the individual transmission owner that owns the transmission facility anticipates and plans on replacing that facility in-kind with a new transmission facility during the next 10 years
- The right-sizing replacement transmission facility reform is separated in two parts—(a) in-kind replacement estimates and (b) a right of first refusal for right-sized replacement transmission facilities selected in the Long-Term Regional Transmission Planning process

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Local Transmission Planning Reforms

In-Kind Replacement Estimates

- Transmission owners are required to submit in-kind replacement estimates "sufficiently early" in the Long-Term Regional Transmission Planning cycle for consideration and for the transmission provider to evaluate whether right-sized replacement transmission facilities can more efficiently or cost-effectively address an identified Long-Term Transmission Need
- Right-sized replacement transmission facility would be evaluated in the same manner as other proposed transmission facilities

Right of First Refusal for Selected Right-Sized Replacement Facilities

- If a right-sized replacement transmission facility is selected to address a Long-Term Transmission Need, then the applicable transmission owner seeking to replace its facility in-kind would have a federal right of first refusal for the right-sized replacement transmission facility
- Order No. 1920 found that "permitting a federal right of first refusal for right-sized replacement transmission facilities will encourage transmission providers to provide their best in-kind replacement estimates, because they will have certainty that they will not lose the opportunity to invest in any in-kind replacement transmission facility that is then selected as a right sized replacement transmission facility" (P 1703)
- The federal right of first refusal is an exception to Order No. 1000's general requirement for transmission providers to eliminate federal rights of first refusal for regional transmission facilities selected in a regional transmission plan, and Order No. 1920 did not alter the rights of a Transmission Owner to build, own and recover the costs for upgrades to its existing facilities

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Interregional Requirements

Interregional Requirements

- Order No. 1920 requires transmission providers to revise their interregional transmission coordination procedures to enable developers to propose interregional transmission facilities in the regional process as potential solutions to Long-Term Transmission Needs
- The final rule also required additional sharing of information concerning the assessment of Long-Term Transmission Needs and facilities in the interregional processes

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Compliance Requirements

Interregional Requirements

- Order No. 1920 became effective on August 12, 2024—60 days after its publication in the Federal Register
- The NYISO must submit its compliance filing with the regional planning requirements ten months after the order's effective date (i.e., June 12, 2025).
- The NYISO must submit its compliance filing with the interregional planning requirements twelve months after the order's effective date (i.e., August 12, 2025)

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Appendix:
Order No. 1920 Definitions

Order No. 1920 Definitions

- **The following are relevant defined terms in Order No. 1920**
  - **In-kind replacement transmission facility:** a new transmission facility that (1) would replace an existing transmission facility that a transmission provider has identified in its in-kind replacement estimate as needing to be replaced; (2) would result in no more than an incidental increase in capacity over the existing transmission facility identified as needing to be replaced; and (3) is locate din the same general route as, and/or uses the existing rights-of-way of, the existing transmission facility identified as needing to be replaced
  - **Local transmission facility:** a transmission facility located solely within a transmission provider's retail distribution service territory or footprint that is not selected in the regional transmission plan for purposes of cost allocation
  - **Long-Term Transmission Needs:** transmission needs identified through the Long-Term Regional Transmission Planning by, among other things and as discussed in [Order No. 1920], running scenarios and considering enumerated categories of factors
  - **Long-Term Scenarios**: scenarios that incorporate various assumptions using best available data inputs about the future electric power system over a sufficiently long-term, forward-looking transmission planning horizon to identify Long-Term Transmission Needs and enable the identification and evaluation of transmission facilities to met such transmission needs
  - **Long-Term Regional Transmission Facility**: a regional transmission facility that is identified as part of Long-Term Regional Transmission Planning to address Long-Term Transmission Needs
  - **Best available data inputs**: data inputs that are timely, developed using best practices and diverse and expert perspectives, and adopted via a process that satisfies the transmission planning principles of Order Nos. 890 and 1000, and reflect the list of factors that transmission providers account for in the Long-Term Scenarios

* This should not be considered to be an exhaustive list of the defined terms in Order No. 1920

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Order No. 1920 Definitions

- **The following are relevant defined terms in Order No. 1920 (continued)**
  - **Long-Term Regional Transmission Cost Allocation**: an *ex ante* regional cost allocation method for one or more selected Long-Term Regional Transmission Facilities (or a portfolio of such Facilities) that are selected in the regional transmission plan for purposes of cost allocation
  - **Regional transmission facility**: a transmission facility located entirely in on transmission planning region
  - **Relevant State Entity**: 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 as may be designated for that purpose by the law of such state
  - **Right-sized replacement transmission facility**: a new transmission facility that: (1) would meet the need to replace an existing transmission facility that a transmission provider has identified in its in-kind replacement estimate as one that it plans to replace with an in-kind replacement transmission facility while also addressing a Long-Term Transmission Need; (2) results in more than an incidental increase in the capacity of an existing transmission facility that a transmission provider has identified for replacement in its in-kind replacement estimate; and (3) is located in the same general route as, and/or uses or expands the existing rights-of-way of, the existing transmission facility that a transmission provider has identified for replacement in its in-kind replacement estimate
  - **Right-sizing**: the process of modifying a transmission provider's in-kind replacement of an existing transmission facility to increase the facility's transfer capability
  - **State Agreement Process**: a process by which one or more Relevant State Entities may voluntarily agree to a cost allocation method for Long-Term Regional Transmission Facilities (or a portfolio of such Facilities) before or no later than six months after they are selected

* This should not be considered to be an exhaustive list of the defined terms in Order No. 1920

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Our Mission & Vision

Mission

Ensure power system reliability and competitive markets for New York in a clean energy future

Vision

Working together with stakeholders to build the cleanest, most reliable electric system in the nation

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Questions?