New York ISO
Independent System Operator

Order No. 1920 Long-Term Regional Transmission Planning

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Goals

1. Update on NYISO addressing Order No. 1920 requirements
2. Refresh on Order No. 1920 requirements
3. Provide updated preliminary process proposal

Agenda

- Background on Order No. 1920
- Updated Preliminary Proposal
- Next Steps
- Appendix

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Previous Presentations

- **August 6, 2024, TPAS/ESPWG (Presentation)**
  - Preliminary schedule and Order No. 1920 requirement review
- **January 21, 2025, ESPWG/TPAS (Presentation)**
  - Update to include Order No. 1920A reforms
- **February 12, 2025, ESPWG/TPAS (Presentation)**
  - Notification of extensions for compliance filings to address regional requirements to 4/30/2026 and interregional requirements to 6/14/2027

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NYISO's Targeted Order No. 1920 Compliance Development Schedule

- **January 2025 – March 2026:** Develop and refine compliance straw proposal and prepare tariff
- **April 30, 2026:** Submit compliance filing on regional planning requirements
- **June 14, 2027:** Submit compliance filing on interregional planning requirements

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Background on Order No. 1920

Order Nos. 1920 & 1920-A - 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."
- On November 21, 2024, FERC issued Order No. 1920-A. While Order No. 1920-A largely leaves the original rule intact, it enhances the role of Relevant State Entities in the Long-Term Regional Transmission Planning process through the incorporation of state input on scenarios and requires the filing of any ex ante cost allocation method agreed to by the Relevant State Entities.
- On April 11, 2025, FERC issued Order No. 1920-B, which did not change the outcomes of the prior orders, but simply provided limited clarifications.
- Throughout the presentation, the NYISO's reference to "Order No. 1920" will refer to Order Nos. 1920, 1920-A, and 1920-B interchangeably, unless specifically noted.

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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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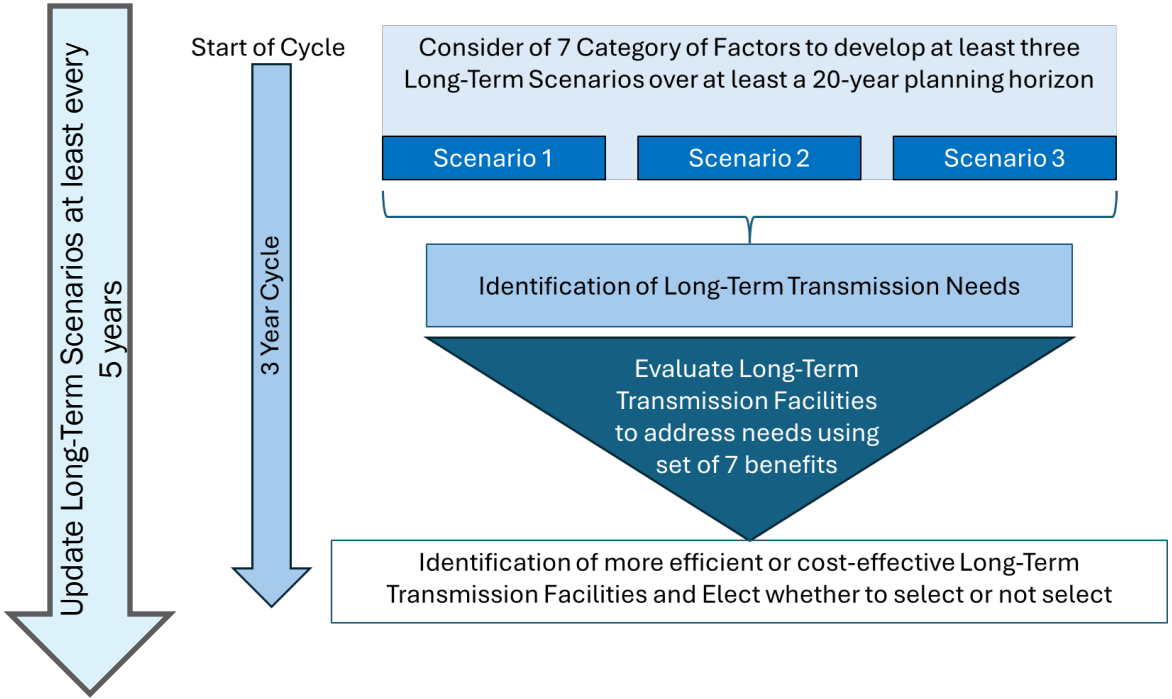
General Flow of Order No. 1920 Long-Term Regional Transmission Planning Rules



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Updated Preliminary Proposal

Key Updates to the Proposal

- Continued coordination with the DPS staff to identify where the new process can align with the state's Coordinated Grid Planning Process with the aim of reducing duplicative or overlapping work and processes.
- NY PSC made sole entity responsible for declaring Long-Term Transmission Need(s)
- Added that DPS will be responsible for one of the three Long-Term Scenarios and related sensitivities (i.e., State Scenario) and clarified DPS's role in providing input for the development of all of the scenarios and sensitivities
- Added step for NYISO consultation with DPS prior to publication of draft NYISO report identifying bulk needs
  - Eliminated conceptual bulk solution development as part of the identification of transmission needs

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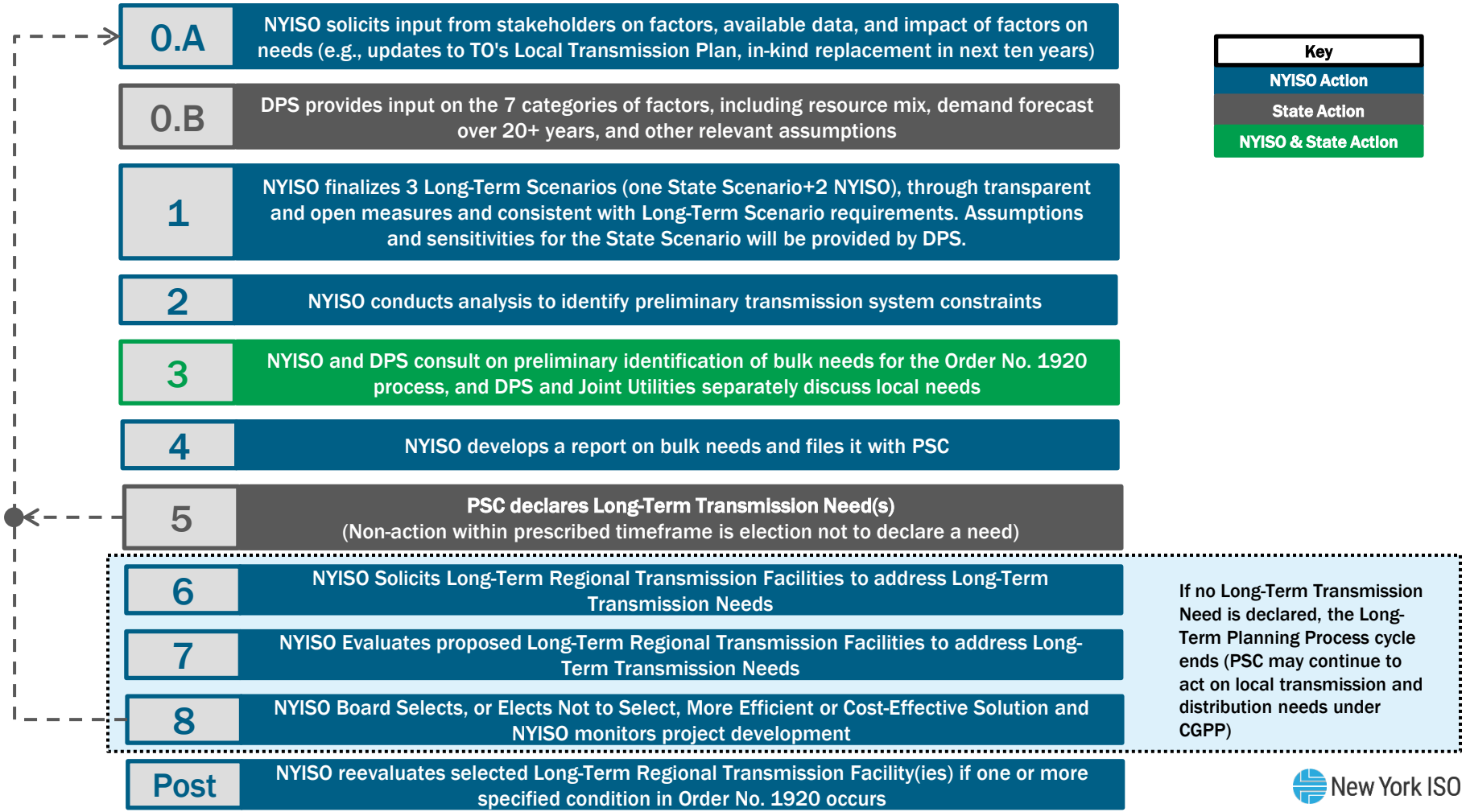

Order No. 1920 Process Timing

- Transmission Provider (i.e., NYISO) is required to complete the Long-Term Process within three years. This three-year period begins with creation of the Long-Term Scenarios and ends with a determination by the transmission provider to select or not select a Long-Term Regional Transmission Facility.
- The interval between the development of Long-Term Scenarios must be no later than five years.
- NYISO is still considering the timing of its proposed process steps within these three-year and five-year timeframes.

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NYISO Order No. 1920 Step 0.A

0.A	NYISO solicits input from stakeholders on factors, available data, and impact of factors on needs (e.g., updates to TO's Local Transmission Plan, in-kind replacement in next ten years)

- Step 0.A occurs prior to the official initiation of the 3-year period set by Order No. 1920
- In this step the NYISO solicits input from stakeholders on the factors that may affect Long Term Transmission Need(s):
  - NYISO, in collaboration with stakeholders and Relevant State Entities, would solicit factors that may affect Long Term Transmission Need(s).
  - These factors are likely to be key assumptions in the Long-Term Scenarios analyzed (e.g., load forecast, firm generation/transmission projects, etc.).
  - Details on the driving factors are included in the Appendix (slide 31)
- This step is like the current System & Resource Outlook reference case development process

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NYISO Order No. 1920 Step 0.B

0.B	DPS provides input on the 7 categories of factors, including resource mix, demand forecast over 20+ years, and other relevant assumptions

- Step 0.B occurs prior to the official initiation of the 3-year period set by Order No. 1920
- Details on 7 categories of factors included in Appendix (slides 32-33)

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NYISO Order No. 1920 Step 1

1	NYISO finalizes 3 Long-Term Scenarios (one State Scenario+2 NYISO), through transparent and open measures and consistent with Long-Term Scenario requirements. Assumptions and sensitivities for the State Scenario will be provided by DPS.

- This step starts the 3-year period to satisfy the requirements by Order No. 1920
- This would assess various factors that are likely to affect Long-Term Transmission Needs and then determine the final scenarios used for need identification
- NYISO proposes to include a State Scenario and associated sensitivities to align with CGPP. The assumptions will be provided by DPS.
- NYISO will develop two other scenario and associated sensitivities considering stakeholder inputs
- Details on Scenario and Sensitivity development is included in the Appendix (slides 34-35)

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NYISO Order No. 1920 Step 2

2 NYISO conducts analysis to identify preliminary transmission system constraints

- The methodologies for analysis under consideration include, but are not limited to, capacity expansion simulations, resource adequacy, production cost simulations, and transmission security analysis
- The extent of technical analysis would be similar to NYISO's existing process in the Outlook with the likely addition of power flow analysis (*i.e.*, more akin to Public Policy Process evaluations) to gain additional understanding of system conditions and potential transmission expansion opportunities.
- The simulations and analyses stated above would provide NYISO with a deeper technical understanding of future system conditions for each of the scenarios to enable recommendations on potential transmission investment opportunities.

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NYISO Order No. 1920 Step 2 (cont.)

2 NYISO conducts analysis to identify preliminary transmission system constraints

- **Potential approach to identify the bulk transmission expansion opportunities:**
  - Identify the significant and persistent areas that may result in transmission constraints across multiple Long-Term Scenarios, such as generation pockets/interfaces, and the leading cause that forms the pocket/interface
  - Identify the leading cause that forms the pocket/interface or if a transmission constraint severely impedes meeting a specific scenario objective
  - Key findings of this step would be similar to today's transmission expansion opportunities in the 2023-2042 System & Resource Outlook report, such as additional dynamic voltage support for Central East and further transmission opportunities in western and northern New York.

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NYISO Order No. 1920 Step 3

3	NYISO and DPS consult on preliminary identification of bulk needs for the Order No. 1920 process, and DPS and Joint Utilities separately discuss local needs

- In this step the NYISO provides preliminary results and findings from the Long-Term Scenarios and Sensitivities to the DPS
- Using the analytical findings, NYISO consults with the DPS on potential bulk transmission needs
- The identification of potential local transmission needs from the analysis will be discussed separately by the DPS and Joint Utilities
- This step would provide early engagement opportunities for the DPS prior to the NYISO focusing on the bulk system and identifying the potential Long-Term Transmission Needs.

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NYISO Order No. 1920 Step 4

4	NYISO develops a report on bulk needs and files it with PSC

- **In this step the NYISO develops a public report and includes potential Long-Term Transmission Need(s)**
- **Similar to today's Outlook report, NYISO is considering to:**
  - Solicit feedback through its stakeholder working groups forum
  - Seek NYISO committee input (*e.g.*, advisory votes)
  - Seek approval of the report by the Board of Directors
  - Submit the approved report to the NYPSC

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NYISO Order No. 1920 Step 5

5	**PSC declares Long-Term Transmission Need(s)** (Non-action within prescribed timeframe is election not to declare a need)

- This step would provide for the identification of Long-Term Transmission Needs through the issuance of an order by the NYPSC
- There is not a requirement for the NYPSC to identify a Long-Term Transmission Need(s) and any non-action would be treated as an election not to declare a need
- This is consistent with the existing Public Policy Process

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NYISO Order No. 1920 Step 6

6 NYISO Solicits Long-Term Regional Transmission Facilities to address Long-Term Transmission Needs

- Following the identification of a Long-Term Transmission Need via a PSC Order, NYISO will solicit Long-Term Regional Transmission Solutions.
- This is consistent with the existing Public Policy Process

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NYISO Order No. 1920 Step 7

7	NYISO Evaluates proposed Long-Term Regional Transmission Facilities to address Long-Term Transmission Needs

- **This step would be generally consistent with the current Public Policy Process with the notable difference that there would not be an explicit viability and sufficiency assessment.**
  - NYISO would assess the viability and sufficiency of the proposed solutions as part of the evaluation.
  - The benefits for evaluation and selection are addressed in the Appendix (slides 36-37)

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NYISO Order No. 1920 Step 8

8 NYISO Board Selects, or Elects Not to Select, More Efficient or Cost-Effective Solution and NYISO monitors project development

- NYISO staff would recommend a transmission solution as the more efficient or cost-effective solution to a Long-Term Transmission Need to the NYISO Board.
- NYISO staff's recommendation would be subject to similar review by stakeholders as in Public Policy Process
- NYISO Board of Directors would determine whether or not to select a Long-Term Regional Transmission Facility.
  - The Board's action in selecting or not selecting a Long-Term Regional Transmission Facility would conclude the 3-year process.

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NYISO Order No. 1920 Post Selection

Post — NYISO reevaluates selected Long-Term Regional Transmission Facility(ies) if one or more specified condition in Order No. 1920 occurs

- This step occurs after the conclusion of the 3-year period set by Order No. 1920
- Per Order No. 1920, the NYISO will be required to reevaluate a selected transmission solution due to project delays that could jeopardize reliability, a significant increase in actual or project costs, or significant changes in law and regulations that create reasonable concern that the project may not longer meet the selection criteria.
- Order No. 1920 establishes certain limitations on the reevaluations to ensure that a developer has adequate certainty that it can proceed with the project (e.g., establishing in the OATT a point after which the selected solution will no longer be subject to reevaluation, such as once the project has secured all relevant permits and authorizations).

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Next Steps

Topics for Further Discussion

- 3-Year Timing Requirement
  - NYISO collaborating with NY DPS to determine timing
- Consideration of interconnection-related transmission upgrades
- Reforms to the Local Transmission Planning
- Right sizing replacement infrastructure and associated right of first refusal
- Reevaluation of selected Long-Term Regional Transmission Facilities
- Anticipated timeline for the first cycle
- Coordination with other planning processes
- Addressing interregional requirements
- End-to-end process

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Preliminary Next Steps

- **September 2025 – November 2025:** Continue to discuss requirements of Order No. 1920 and receive comments from stakeholders. Develop straw proposal to comply with requirements of Order No. 1920
- **November 2025 – March 2026:** Develop tariff and refine compliance straw proposal, as appliable
- **April 30, 2026:** Submit compliance filing on regional planning requirements
- **June 14, 2027:** Submit compliance filing on interregional planning requirements

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Appendix

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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Driving Factors

- Transmission providers have the flexibility to develop different Long-Term Scenarios specific to their transmission planning region and develop assumptions based on the categories of factors but do not have flexibility to choose which of the proposed categories of factors to incorporate into Long-Term Scenarios.
- Transmission providers cannot exclude some of the proposed categories of factors from being incorporated in the development of Long-Term Scenarios.
- Where factors may have overlapping effects on the planning assumptions, Transmission providers must avoid double counting the effect of those factors on assumptions used to develop Long-Term Scenarios.

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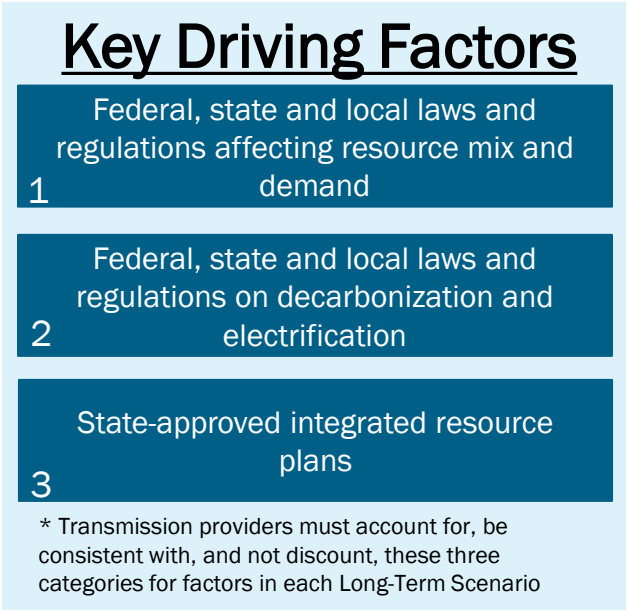
Key Driving Factors 1, 2 and 3



- **Factors 1 and 2:**
  - Work with Relevant State Entities to ensure that the identified state laws and regulations are incorporated into Long-Term Scenarios in a way reflect the state's preferred implementation of those laws and regulations
  - "Laws and regulations" are namely "enacted statutes (i.e., passed by the legislature and signed by the executive) and regulations promulgated by a relevant jurisdiction" at the federal, federally-recognized Tribal, state, and local levels
- **Factor 3: State-approved integrated resource plans broadly include any resource plan developed and reviewed through a retail commission proceeding and submitted to the relevant transmission provider for use in a Long-Term Regional Transmission Planning**

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Factors 4, 5, 6, and 7

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, 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

- **Factor 5: Transmission providers must account for likely resource retirements beyond those that have been publicly announced**
  - Example methods: generating facility's age, its emissions profile, its projected costs and revenues, and any applicable laws and regulations that may affect a generating facility's continued operation over the transmission planning horizon
- **Factor 6: Transmission providers have discretion and can also account for uncertainty by discounting or putting more weight on the anticipated effects on Long-Term Transmission Needs**
- **Factor 7: Transmission providers have discretion and can account for the uncertainty associated with the achievement of these commitments and goals**
  - Order No. 1920-A set aside the requirement to incorporate corporate commitments

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Scenario Development

- **Scenarios:**
  - Minimum three, all must follow Order No. 1920 requirements
  - Plausible and diverse
  - Use “best available data inputs”
- **Sensitivities:**
  - Each Long-Term Scenario would have a sensitivity to account for uncertain operational outcomes that determine the benefits of and/or need for transmission facilities during multiple concurrent and sustained generation and/or transmission outages due to an extreme weather event across a wide area

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Stakeholder Input on Scenario Development

- **Order No. 1920 requires transmission providers to afford a meaningful opportunity to provide timely input on how to account for specific factors, including additional categories of factors, in the Long-Term Scenarios development.**
- **To facilitate such feedback, Order No. 1920 requires transmission providers to publish on the public portion of an OASIS or other public website the following:**
  - the list of the factors in each of the categories of factors that they will account for in their Long-Term Scenarios;
  - a description of each factor that they will account for in their Long-Term Scenarios;
  - a general statement explaining how they will account each of the factors in their Long-Term Scenarios;
  - a description of the extent to which they will discount any factors in Factor Categories 4 through 7 in each Long-Term Scenario or additional category of factors; and
  - a list of the factors that they considered but did not incorporate in each category of factors in their Long- Term Scenarios.

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Benefits 1 through 5

Benefits	Name	FERC Description
1	Avoided or deferred reliability transmission facilities and aging infrastructure replacement	Reduced costs due to avoided or delayed transmission investment otherwise required to address reliability needs or replace aging transmission facilities.
2	Benefit that can be characterized and measured as either reduced loss of load probability or reduced planning reserve margin	Benefit 2(a) measures reduced loss of load probability for resource adequacy planning
		Benefit 2(b) is the reduction in capital costs of generation needed to meet resource adequacy requirements (i.e., planning reserve margins) while holding loss of load probability constant
3	Production cost savings	Savings in fuel and other variable operating costs of power generation that are realized when transmission facilities allow for displacement of higher-cost supplies through the increased dispatch of suppliers that have lower incremental costs of production, as well as a reduction in market prices as lower-cost suppliers set market clearing prices.
4	Reduced transmission energy losses	Reduced total energy necessary to meet demand stemming from reduced energy losses incurred in transmittal of power from generation to loads.
5	Reduced congestion due to transmission outages	Reduced production costs resulting from avoided congestion during transmission outages

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Benefits: 6, 7 and Others

Benefits	Name	FERC Description
6	Mitigation of extreme weather events and unexpected system conditions	Reduced production costs and reduced loss of load (or emergency procurements necessary to support the system), including due to increased Interregional Transfer Capability, during extreme weather events and unexpected system conditions, such as unusual weather conditions or fuel shortages that result in multiple concurrent and sustained generation and/or transmission outages.
7	capacity cost benefits from reduced peak energy losses	One potential way is to calculate the present value of capital cost savings associated with the reduction in installed generation requirements. To arrive at the value of capital cost savings, the estimated net cost of new entry could be multiplied by the reduction in installed generation capacity requirements. The resulting value would represent the avoided cost of procuring more generation to cover transmission system losses during peak-load conditions, savings that would be passed on to customers via lowered generation capacity costs.
	Other benefits	TPs may measure and use additional benefits beyond those included in the required set of benefits in Long-Term Regional Transmission Planning, including on a transmission facility or plan-specific basis, subject to the requirement that they do so in a manner that is consistent with their obligations under Order No. 890 and Order No. 1000 transmission planning principles to be open and transparent as to their transmission planning processes.

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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?