



FERC Order No. 1920 Overview

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Scenario Analysis & Special Studies

Special TEAC – Order 1920

August 8, 2024

- Long-Term Regional Transmission Planning
- Interconnection Process and Order No. 1000 Planning
- Alternative Transmission Technologies
- Local Transmission Planning Inputs in Regional Planning
- Interregional Coordination



Must Complete Cycle Within 3 Years

Can Select Additional Projects

Must Start New Cycle At Least Every 5 Years

- At least 3 scenarios
 - At least 20-year horizon (from LTRTP cycle start)
 - At least one extreme weather sensitivity per scenario
 - Scenarios must be plausible and diverse
 - Must use best-available data

Required Factor Categories

1. Laws and regulations affecting future resource mix and demand
2. Laws and regulations on decarbonization and electrification
3. Integrated Resource Plans and expected supply obligations for LSEs
4. Trends in technology and fuel costs within and outside of the electricity supply industry, including shifts toward electrification of buildings and transportation
5. Retirements
6. Generation interconnection requests and withdrawals
7. Utility and corporate commitments and other public policy goals

Required Benefits

1. Avoided or deferred reliability transmission facilities and aging transmission infrastructure replacement
2. a) Reduced loss of load probability *or* b) 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

- Calculate benefits over at least 20 years from estimated in-service date

- Evaluation process and selection criteria, some Order No. 1920 provisions:
 - Must maximize benefits without over-building
 - Can include other qualitative considerations
 - No requirement to select any projects
 - Must provide voluntary funding opportunity
- Require to consult with and seek support of Relevant State Entities
- Required reevaluation in certain circumstances
 1. Development delays which raise reliability concerns
 2. Significant cost increases
 3. Changes in policies and regulations such that facility may fail selection criteria

- Evaluate for selection in existing Order No. 1000 processes solutions to certain generation-interconnection needs
 1. Upgrade identified in at least two cycles over the previous 5 years
 2. At least 200kV *and* \$30 million
 3. Not currently developed
 4. Not part of an executed GIA
- Transmission Provider does not need to select a solution

- Require to consider in LTRTP and Order No. 1000:
 1. Dynamic line ratings
 2. Advanced power flow control devices
 3. Advanced conductors
 4. Transmission switching

- Enhanced transparency of local transmission planning process
 - FERC mandates a process akin to the PJM Transmission Owner's Att. M-3
- Evaluate in LTRTP right-sizing of existing facilities that need replacing
 - TOs submit in-kind replacement estimates for use in LTRTP
 - Facility above a certain threshold (no greater than 200kV)
 - 10 years out from LTRTP cycle start
- Order No. 1920 establishes ROFR for right-sized replacement facilities

- Extends Order No. 1000 interregional requirements to LTT Needs
 1. Requires sharing with neighboring transmission providers of information on LTT Needs and LTRT facilities
 2. Identification and joint evaluation of more efficient and cost effective interregional solutions to LTT Needs

- PJM will provide detailed education on Order No. 1920 in the August 27 special TEAC
 - Morning: Long-Term Regional Transmission Planning (section III)
 - Afternoon: other PJM compliance related topics

Presenter:

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