FERC Order 1920 (before 1920 A&B) Regional Transmission Planning Process Requirements

Transmission Providers must participate in long-term planning that includes:

- 20-year planning horizon
- 7 Required factors (inputs)
- Multiple scenarios
- 7 minimum benefit categories
- Transparent selection criteria
- Ex-ante cost allocation
- Evaluation of network upgrades needed for generation interconnection
- Consideration of alternative transmission technologies
- Local/reliability transmission transparency
- Right-sizing: Improved coordination between regional and local transmission
- Inter-regional coordination



FERC Order 1920A&B Updates

Greater role for states:

- Transmission providers must file a state agreement
- Time added for state consultation

Cost allocation approach suggested and encouraged:

- 1. Evaluate what is needed for economics and reliability before public policy
- 2. Separately evaluate incremental needs for public policy
- Charge the delta in net benefits between scenarios 1&2



NASUCA comments in planning NOPR	Outcome in FERC Order 1920 (Same in 1920A&B)	
Proactively plan for future gen and load	✓	
Holistic-multi purpose/benefit	✓	
Beneficiary pays cost allocation	✓	
Reasonable, "not overbroad" list of benefits	✓	
Open, transparent process	✓	
Consumer advocate direct participation	Not specifically. (PP528-537)	
Severe weather scenarios	✓	
Use existing corridors, GETs first	✓	
Minimize cost	✓	
Eliminate bad incentives	Improved with right-sizing	
EJ-recognize historic injustice, incorp in planning	Not specifically (P960)	
Regional variation/flexibility	✓	
Preserve competitive transmission	✓	
Independent transmission monitor	No	
Eliminate CWIP (constr. wk in progress)	No	
Coordinate with streamlined federal land permitting	Not in 1920. But DOE doing a lot.	

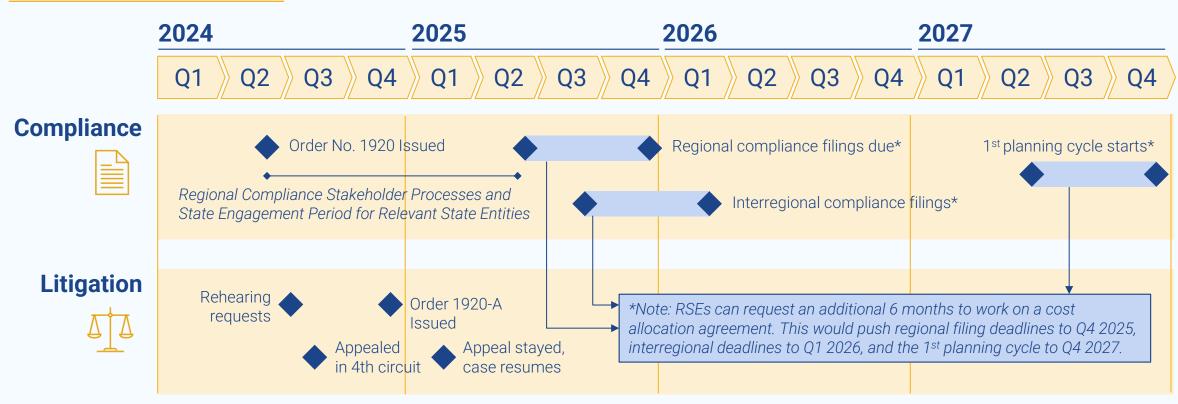


FERC Order 2023: Generator Interconnection Process Reform

- Replace sequential with cluster approach
- Generator obligations increased
 - Replace 1st come 1st served with 1st ready 1st served
 - Readiness, site control
 - Higher deposits
- Transmission Provider obligations increased
 - Penalties for missed deadlines
- Renewable tech reliability standards (requires "ride-through" capability)
- Advanced Transmission Technologies



FERC Order 1920: Compliance timeline



NOTE: Planning cycles take 5 years, but project selection happens 3 years into the cycle, so **projects do not have to be selected until the end of 2030**. States then have an additional 6 months to use a State Agreement Approach before the transmission provider's cost allocation approach is used (1920A P 15). Five-year planning cycles mean the second long-term regional planning cycle is not required to start until the end of 2032.



FERC Order No. 1920 planning cycle

Scenario development using 7 factors

State consultation & add'I scenarios

Identification of needs & facilities

Benefits calculations

Project selection

>= 3 "plausible and diverse" longterm (>=20-year) scenarios considering 7 planning factors.

on scenario development, analyze reasonable scenarios suggested by states.

Include state input Identify both long- Quantify >= 7 term transmission reliability and needs and candidate facilities.

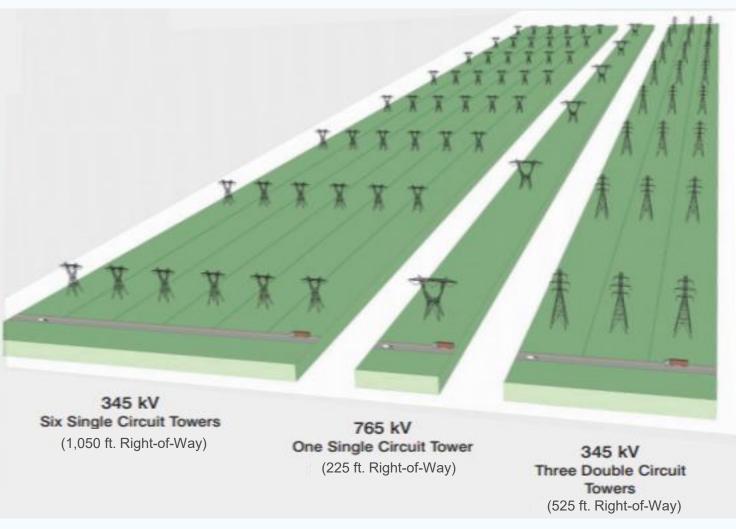
economic benefits for all candidate facilities or the portfolio as a whole.

Transparent project selection. Encourages maximizing net benefits.



Economies of scale Plan ahead to consume less \$ and land

Transmission Voltage (kV)	Cost per Mile (\$/mile)	Capacity (MW)	Cost per Unit of Capacity (\$/MW-Mile)
230	\$2.047 million	657	\$3,115
345	\$3.273 million	1792	\$1,827
500	\$4.080 million	2598	\$1,574
765	\$5.120 million	6625	\$773



p. 37, 39, 45 https://cdn.misoenergy.org/20220208%20PSC%20Item%2005c%20Transmission%20Cost%20Estimation%20Guide%20for%20MTEP22_Draft622733.pdf

