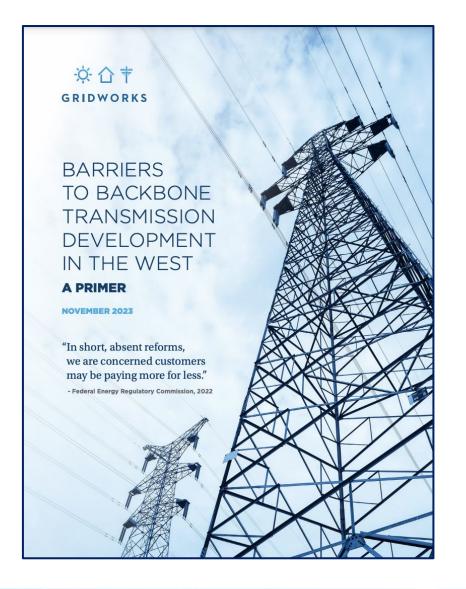


Barriers to Backbone Transmission Development in the West

February 8, 2024 | 10-11am PT Webinar Gridworks is a non-profit that convenes, educates, and empowers stakeholders working to decarbonize our economy.





INTRODUCTIONS



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Questions to listen for:

- What is backbone transmission?
- What is FERC Order 1000? How is it working in the West?
- Name three barriers to transmission development in the West



Backbone Transmission

U.S. Power Grid



Regional Entities

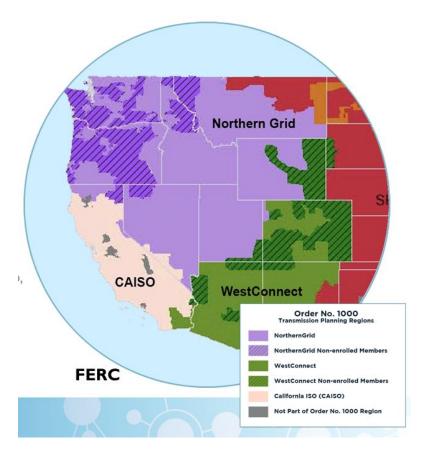


Sources: <u>https://www.epa.gov/green-power-markets/us-electricity-grid-markets;</u> <u>https://www.epa.gov/green-power-markets/us-grid-regions</u>



FERC's current rules for backbone **transmission planning** and **cost allocation**

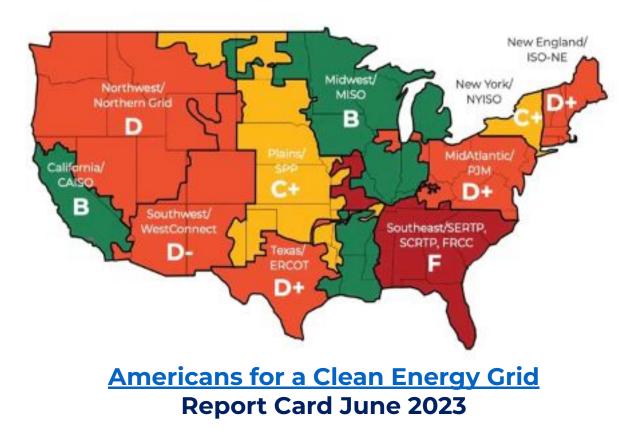
Western Planning Regions



Source: https://www.ferc.gov/media/regions-map-printable-version-order-no-1000



HOW IS FERC ORDER 1000 WORKING?



Source: <u>https://cleanenergygrid.org/aceg-releases-transmission-planning-development-report-card/</u>



SHORTCOMINGS IN REGIONAL PLANNING

- Focus on single, not multi-benefit projects
- Bottoms up planning approach
- Planning window short term and static
- Data limitations
- Inconsistent consideration of grid emerging technologies

"We preliminarily find that the failure of existing regional transmission planning and cost allocation processes to perform this type of transmission planning and cost allocation is resulting in unjust, unreasonable, unduly discriminatory, and preferential Commission-jurisdictional rates."
FERC, 2022

Source: FERC, Notice of Proposed Rulemaking Addressing Planning. Cost Allocation, April 2022, p. 29.



PROJECT COST ALLOCATION IS UNCLEAR

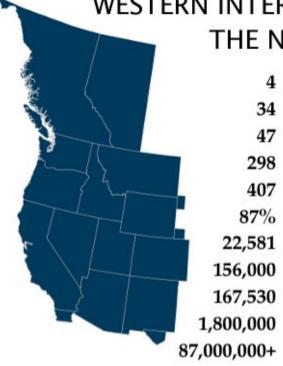
Legal standard: costs must be "roughly commensurate" with benefits

- Regional benefits are hard to capture
- Few utilities can finance a backbone project on their own
- Public power utility participation is optional
- Local transmission solutions become the default





SITING DIFFICULTIES



WESTERN INTERCONNECTION BY THE NUMBERS

- **Reliability Coordinators** 4
- **Balancing Authorities** 34
- Transmission Operators 47
- Generator Owners 298
- **Registered Entities** 407
- Public or protected land 87%
- Wildfires in 2022 22,581
- 156,000 Miles of transmission
- 167,530 MW Peak Demand
 - Square miles
- 87,000,000+ People

- Diverse state energy policies
- Large portion of public lands
- Maze of permitting and siting venues

Source: https://www.wecc.org/Administrative/State%20of%20the%20Interconnection.pdf



COMPREHENSION CHECK

• What is backbone transmission?

- High voltage, long-distance electric lines that serve multi-state or inter-regional needs and support regional reliability
- What is FERC Order 1000? How is it working in the West?
 - FERC's regional planning and cost allocation rules. No backbone projects in the Pacific Northwest or Southwest since Order 1000 issued.
- Name three barriers to transmission development in the West.
 - regional planning piecemeal, check the box exercises
 - cost allocation unclear responsibility and optional public power participation
 - siting difficulties a fragmented interconnection with many permitting venues

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INTERESTED IN LEARNING MORE?

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