## WESTERN STATES TRANSMISSION INITIATIVE

A partnership between Gridworks and CREPC responding to transmission needs in the West





Gridworks is a non-profit that convenes, educates, and empowers stakeholders working to decarbonize our economy.

We are the facilitator and organizer of the Western States Transmission Initiative (WSTI).







## The Western States Transmission Initiative Process

Process of refining stakeholder recommendations and insights into actionable steps CREPC may pursue to achieve its transmission goals

### What is the Western States Transmission Initiative?

- Partnership between Gridworks and CREPC
- Focus on transmission planning and cost allocation
  - Is the current approach to transmission planning and cost allocation sufficient in the West?
  - What changes might be helpful?
  - What is the appropriate role for state/provincial regulators and energy officials?

- Interviews with government officials, utilities, NGOs, Tribes, and others throughout the West
- Background webinars to support learning
- Recommendations created by engaging with CREPC leaders
- Presentation and discussion of recommendations with full CREPC today



#### **Gridworks**

CREPC
Recommendations
Development
Process

## Developed a shared problem statement and launched WSTI

April 2023, Spring CREPC

## CREPC members invited to join in Western States Transmission Initiative

May – June 2023, Spring WCPSC and Western NASEO

## Gathered dozens of recommendations and insights through interviewing more than 40 organizations

June - August 2023

## Participating CREPC leaders considered, evaluated, and prioritized recommendations over 3 meetings

August - September 2023

#### **Recommendations finalized for full CREPC consideration**

September 2023

#### **Recommendations shared with full CREPC membership**

October 2023



## Recommendation Development Convenings

#### **OBJECTIVE**

Develop a set of recommendations CREPC may pursue to advance its charter goals related to transmission, including approaches to regional coordination.

#### WHO AND WHEN

Gridworks engaged ~18 CREPC leaders over the course of three meetings.

#### **AUGUST 9**

#### **Kick-Off Meeting**

3 hours

Presentation of stakeholder interview findings; scope and problem statement development

#### August 30

#### Deep-dive

3.5 hours

Presentation and discussion of synthesized recommendations for Western coordination

#### September 13

#### Deep-dive

3.5 hours

Finalization of recommendations to bring before full CREPC body at October meeting

#### **OUTCOME**

Today's presentation and discussion of recommendations for continued West-wide coordination on transmission planning and build-out.





# The West's Transmission Landscape

A brief introduction to the state of transmission in the Western Interconnect

## **Voltage Class** + 500 KV DC 500 KV 345 KV - 360 KV 230 KV - 287 KV Lower Voltages **WECC** GRIDWORKS

## Western Transmission Grid

The Western Interconnect stretches 1.8 million square miles of land

136,000 miles of transmission:

- Long, high-voltage lines connect remote generation resources with population centers
- Interties between the Northwest, California, and the Southwest enable substantial exports and imports responding to diverse conditions within the Interconnect

### Transmission Benefits

- Enhanced grid reliability and resilience
  - Transmission helps alleviate impacts of extreme weather on demand and grid operations
  - Imports reduce loss of load probability
  - Better prepared to address ongoing load and supply changes
- Capture advantages of regional diversity
  - Different seasonal peaks
  - Weather/fuel availability at different times
  - Time zones impact both demand and supply
- Reduced congestion/power costs
- Economic development for power exporters and importers
- Helps states achieve policy goals





## Increased Focus on Transmission

#### Nationally

- FERC rulemakings
- NERC interregional transfer capacity study
- Federal siting coordination
- Proposed permitting reform legislation
- DOF transmission studies

#### The West

- WPP/BPA transmission planning initiative
- WECC assessments
- Connected West study
- RMI Regional Transmission Planning Initiative
- WSTI





## Barriers to Transmission Development

#### **Transmission planning**

- Not sufficiently long-term and anticipatory
- Minimal levels of regional planning outside of California and no meaningful interregional planning

#### **Cost allocation**

- New transmission requires substantial investments
- Some utilities don't have the resources to finance major projects
- Free rider problem

#### Siting

- The siting process can be extremely lengthy
- Significant amount of federal land in the West
- States may not take benefits to other states into account





## How is Transmission Planned in the West?

#### **Utility projects**

Planning consistent with integrated resource plans

#### Two or more utilities jointly planning projects

#### **Federal government**

- BPA (75% of high voltage transmission in the Northwest)
- WAPA (10% of the transmission grid in the Western Interconnect)

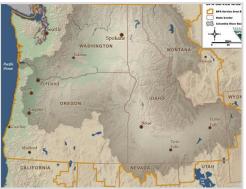
#### FERC Order No. 1000 regional planning

- This process has not led to any projects outside of California
- Primarily a bottoms-up approach

#### **Merchant transmission**

 Independent companies take on the risk to develop, build, and sell the transmission capacity for their projects

#### **BPA Footprint**



**WAPA Footprint** 





## Western Transmission Planning Regions

#### **CAISO**

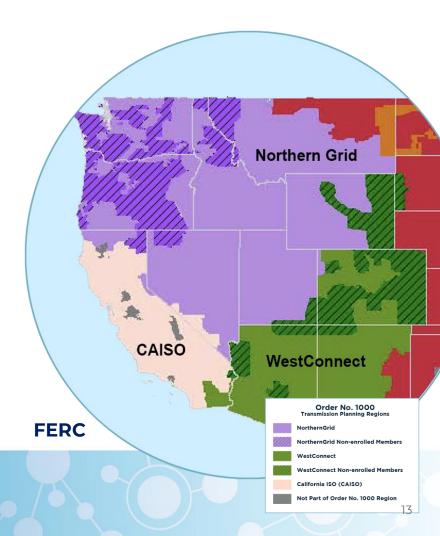
Plans for and manages the flow of electricity for about 80 percent of California and a small part of Nevada

#### **Northern Grid**

Facilitates regional transmission planning across the Pacific Northwest and Intermountain West. Members include Bonneville Power Administration and investor-owned utilities and consumerowned utilities located in California, Idaho, Montana, Oregon, Utah, Washington, Nevada, and Wyoming

#### WestConnect

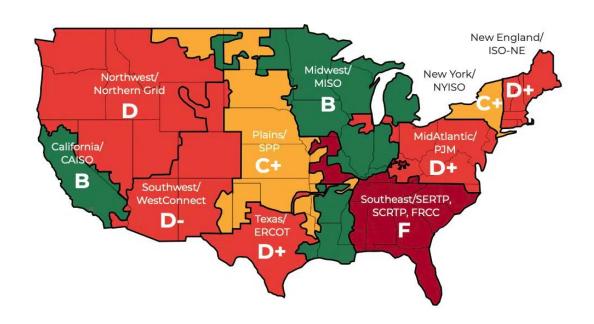
Conducts regional transmission planning for Southwestern and Interior West states, including Arizona, California, Colorado, New Mexico, South Dakota, Wyoming, and Utah





## Regional Transmission Planning Efforts, Ranked

Americans For a Clean Energy Grid recently ranked transmission planning efforts nation wide.





## Moving beyond barriers together...







### Transmission Cost Allocation

- Who pays? Who benefits?
- State ratemaking for utility-built projects outside of RTO
- Utility agreements on jointly developed projects
- Merchant projects rely on the subscription model
- Order No. 1000 process
  - Approved cost allocation methodologies for regionally planned projects
  - Costs must be allocated "roughly commensurate" with benefits
  - FERC will defer to "state agreements" allocating costs
  - MISO-negotiated cost allocation considered a good model
- FERC NOPR defers to states to agree on cost allocation



## Reaching agreement through foundational facts...







## Stakeholder Interviews

Insights gained from 40 stakeholder interviews on the state of transmission planning and cost allocation in the West

## Key Takeaways From Stakeholder Interviews

- The current pace of transmission development is insufficient
- Regional transmission planning widely panned outside of California
- There is very little meaningful interregional or interconnection-wide planning
- Cost allocation is a major impediment to transmission development
- Most utilities lack resources to build big projects on their own
- Merchant transmission has both benefits and limits.
- State/provincial coordination can play an important role in transmission development but more resources are needed
- The federal utilities have an important role to play





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Which of these stakeholder takeaways

resonates most with you?





## WSTI Recommendations for CREPC Consideration

Actionable items CREPC could undertake today to achieve positive movement for transmission development in the West

## Form a CREPC Transmission Working Group

- Seek funding to hire staff and consultants
- Focus on state of Western transmission grid and potential cost allocation approaches
- Identify interregional transmission projects
  - Hire transmission planning firm
  - Investment-grade analysis of significant Western transmission needs
  - · Identify potential major multi-state projects
  - Possible designation as NIETCs
- Facilitate state transmission cost allocation coordination
- Host a Western transmission conference
  - Multiple stakeholders including provincial and state government
  - Examine state of Western transmission grid



### Other Potential Actions

- Improve regional and interregional transmission planning processes
  - Encourage independent planning processes
  - Promote forward looking and inclusive planning
  - Monitor FERC planning and cost allocation rulemaking and participate in compliance proceedings
  - Participate in other regional efforts, such as the WPP/BPA process
- Encourage additional federal transmission investments



## Proposed Process Ahead

#### **OCTOBER 2023**

- Presentation of WSTI recommendations to CREPC
- CREPC body provides feedback to the CREPC Co-chairs regarding interest in pursuing the recommendations at a virtual webinar planned for October 25 or 27
- Co-chairs determine whether to move forward

#### November 2023

- CREPC's willing members signal an intent to move forward (if determined) by:
  - Announcing the formation of a CREPC Transmission Working Group
  - Launching efforts to request DOE's technical assistance in identifying important transmission corridors in the West
  - Leveraging CREPC consultants to support and enact action items





## Questions?

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