



Transmission Barriers for Wind

Wind Powering America

State Summit 2011

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Bob Anderson



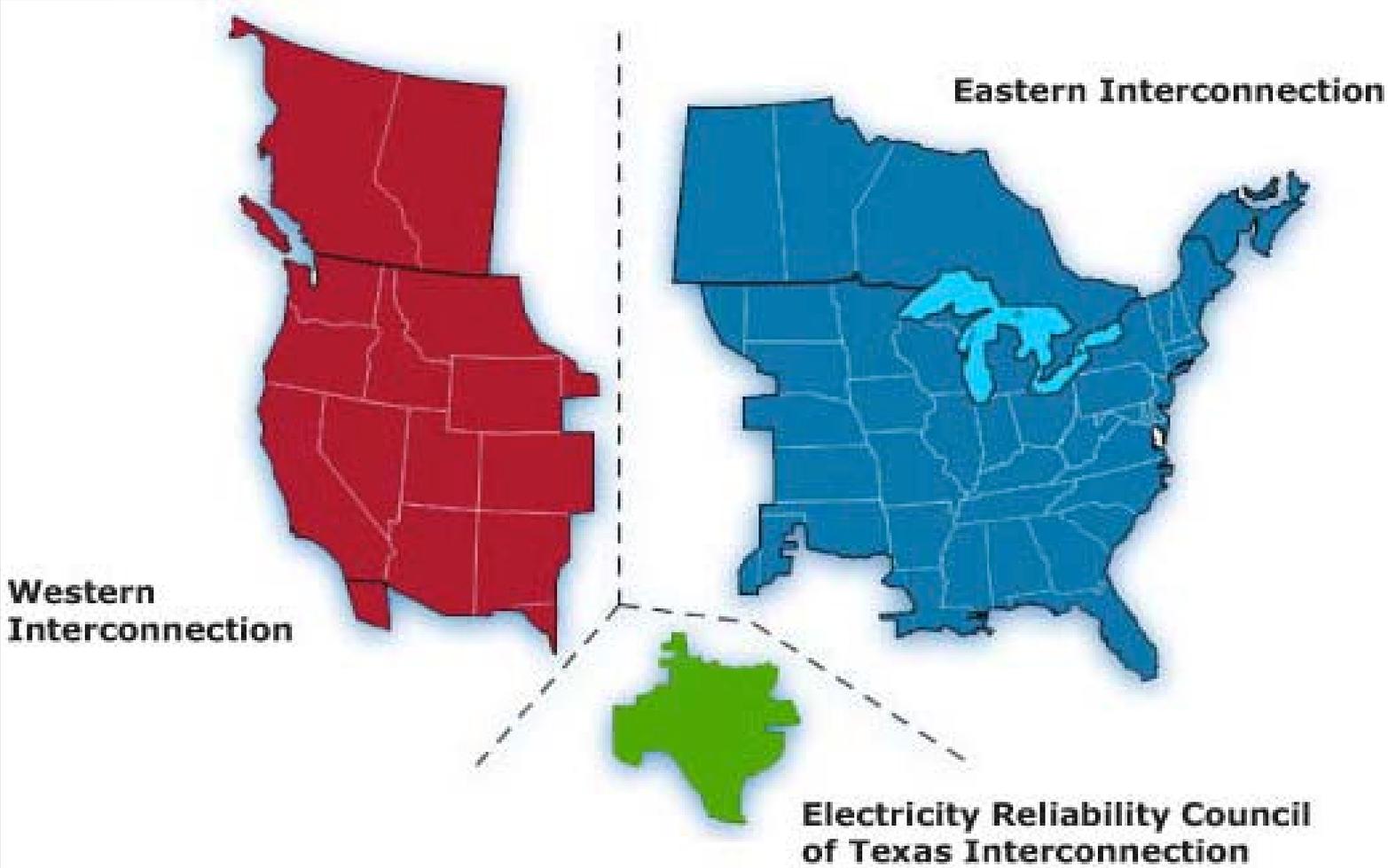
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Why transmission is important

- **Reliability**
 - Balancing loads and generation
- **Markets**
 - Meeting loads
 - Economic development
- **Policy goals**



Western Interconnection



Barriers

- Planning
- Finance
 - Cost allocation
- Permitting
 - Siting



Transmission planning

- Who does it
 - Owner/operators
 - Merchants
 - RTOs
 - Subregions
 - WECC



Eastern Interconnection--EIPC

- Not needed
- A mess
- No value added
- Waste of ARRA funds



WECC's RTEP



- First interconnection-wide planning in West
- Funded with DOE stimulus funds
- 2011
 - First 10-year plan
 - Mostly based on planned projects
- 2013
 - First 20-year plan
 - Based on scenarios of future
 - Second 10-year plan

WECCs RTEP—a good start

- Study process
 - High priority to needs of states/provinces
 - More cases being studied
 - Improved load info
 - Improvements in modeling techniques
 - New 20-year modeling tool
- Beginning to move from studies to plans



Limitations of interconnection-wide planning in the West

- WECC lacks
 - responsibility
 - authority
- Plans informative only

There 's no there there.
Gertrude Stein



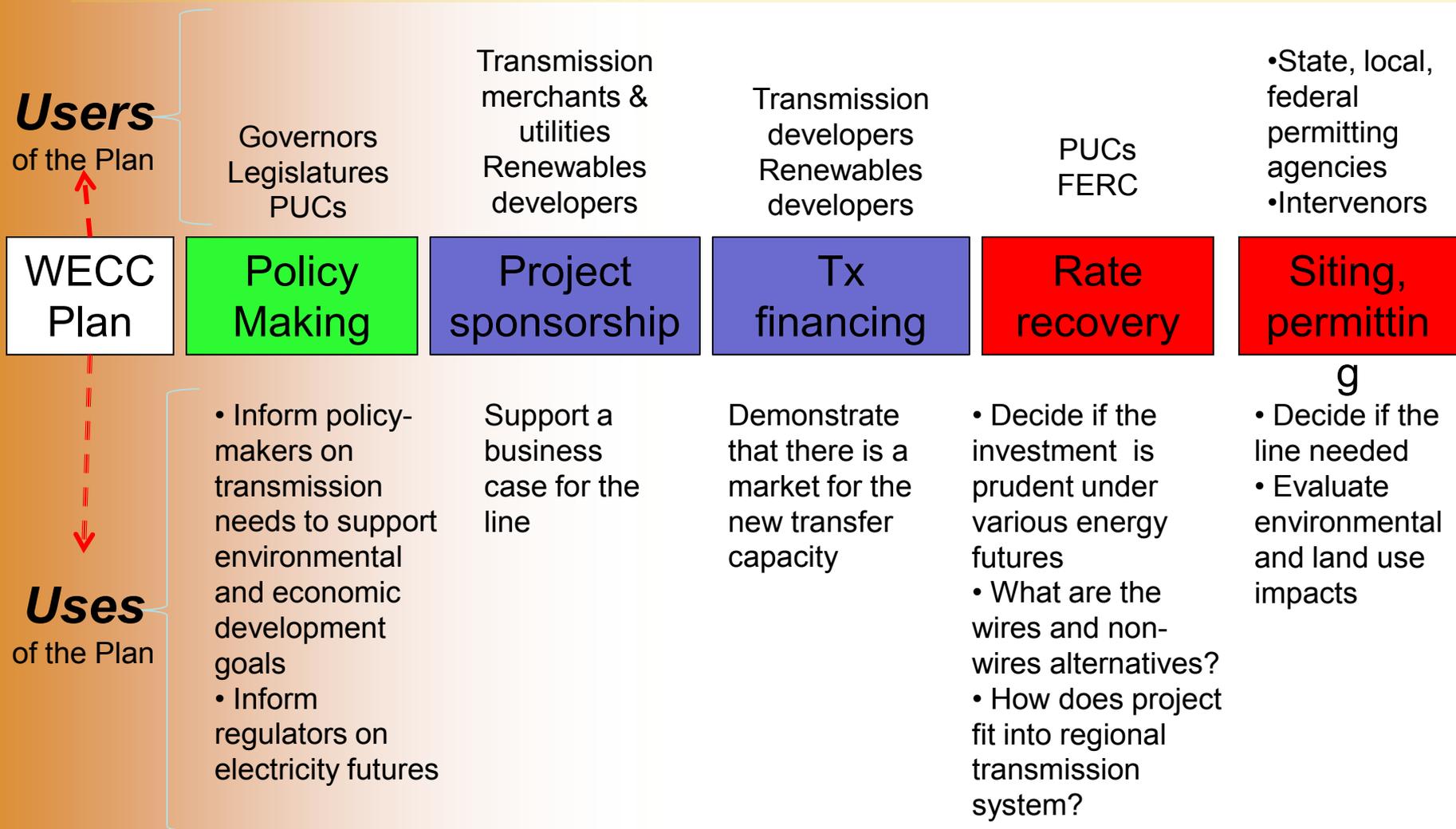
Strengths of interconnection-wide planning

- Plans informative
 - Tx developers
 - Investors
 - Regulators
- Process valuable
 - NGOs included
- WECC—only regional entity with analytical capability

In preparing for battle, plans are useless, but planning is indispensable.
Dwight Eisenhower



Users and Uses of a WECC Plan



Next generation—transmission planning

- IRP principles & processes
 - Standard practice for generation
- Integrate Gen/Tx planning
- Stakeholder engagement
- Authority/responsibility
 - Could only be granted by FERC



Financing

- Business (project) plan
- Cost allocation
- Investment



Cost allocation

- FERC approved
 - Tariff
- Participant funding
- Network funding
- FERC NOPR
- Corker amendment
 - Quantify direct benefits



Siting

- Most difficult problem
- Paradox
 - Transmission is everywhere, accepted
 - New lines opposed
- State jurisdictional





Bob Anderson

Director

Western Grid Group

PO Box 12105

Zephyr Cove, NV 89448

775-588-8740

bob@westerngrid.net

www.westerngrid.net/