

The Evolving Transmission Grid

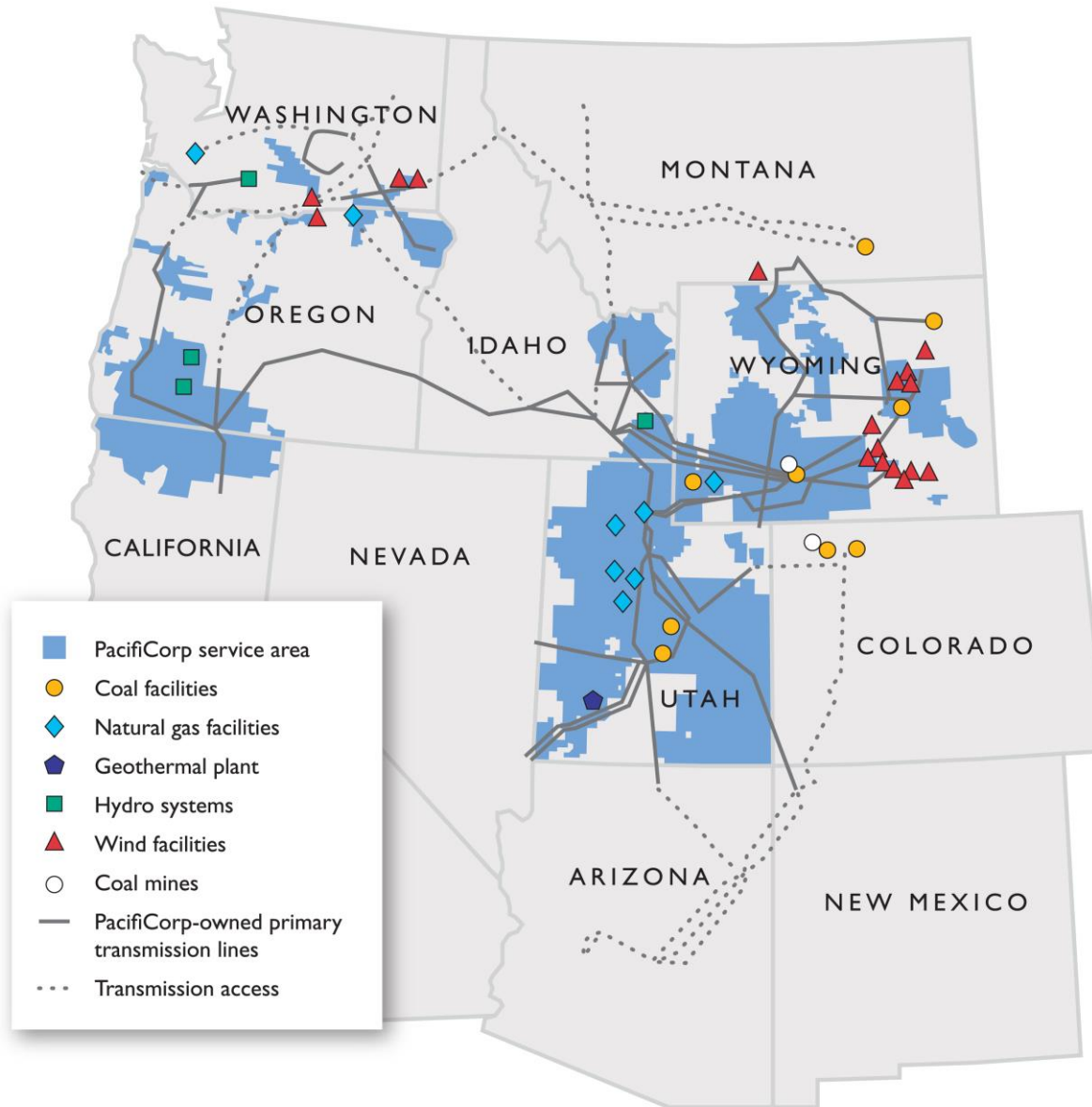
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Vice President, Transmission

Oregon Senate Committee on Energy and Environment
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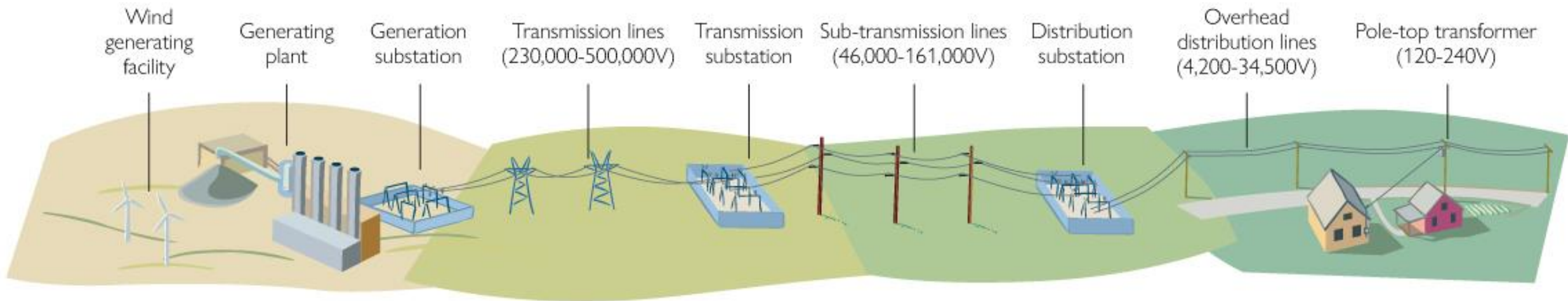


PacifiCorp



- Serves 2 million customers in Oregon, Washington and California as Pacific Power, and in Idaho, Utah and Wyoming as Rocky Mountain Power
- Service area covers 141,500 square miles
- Owns 11,668 MW of generation
- Owns and operates 17,780 miles of transmission lines in 10 states
- Owns and operates 64,700 miles of distribution lines

How Transmission Works



Transmission Planning

- Local
- Regional
- Interregional
- Western Interconnect
- Generation Interconnection
- Transmission Service
- Integrated Resource Plan



Integrated Resource Plan

- Completed every two years with updates in off years
- Evaluates need for new resources
- Evaluation based on customer need, planned resources retirements and state and federal legislation
- Can include associated transmission
- If new resource need is identified, can drive requests for proposals



- **North American Reliability Corporation (NERC):**
 - Must comply with transmission planning standards
 - Standards ensure safe and reliable transmission system
- **Western Electricity Coordinating Council** is the compliance enforcer
- **Federal Energy Regulatory Commission (FERC) Interconnection Rules:**
 - Applicability:
 - Large generators (over 20 MW)
 - Small generators (up to 20 MW)
 - Generator interconnection reform
 - FERC Order No. 2023



Oregon-Specific Developer Requests

Generation Type	Number of Requests	Total Size of Requests (megawatts)
Battery Storage	15	2,610
Biomass	1	30
Geothermal	1	10
Pump Storage	1	416
Solar	14	1,277
Solar & Battery Storage	51	9,077
Wind	4	619
Grand Total	87	14,038

Powering the Future

- Evolution
 - Prepare for increased electrification
 - Optimize deliverability of renewable energy resources
 - Leverage technology for efficient service
- Resilience
 - Grid resilience for extreme weather
 - Resource adequacy to leverage all generation assets
 - Transmission asset investment
- Value
 - Maximize efficiency of grid and technologies
 - Flexible interconnection products to diversify generation portfolio
 - Economic and efficient delivery of energy to customers



Questions?

