



Overview of Electric Transmission in the West

Planning · Siting · Issues

February 7, 2012

Presentation Content

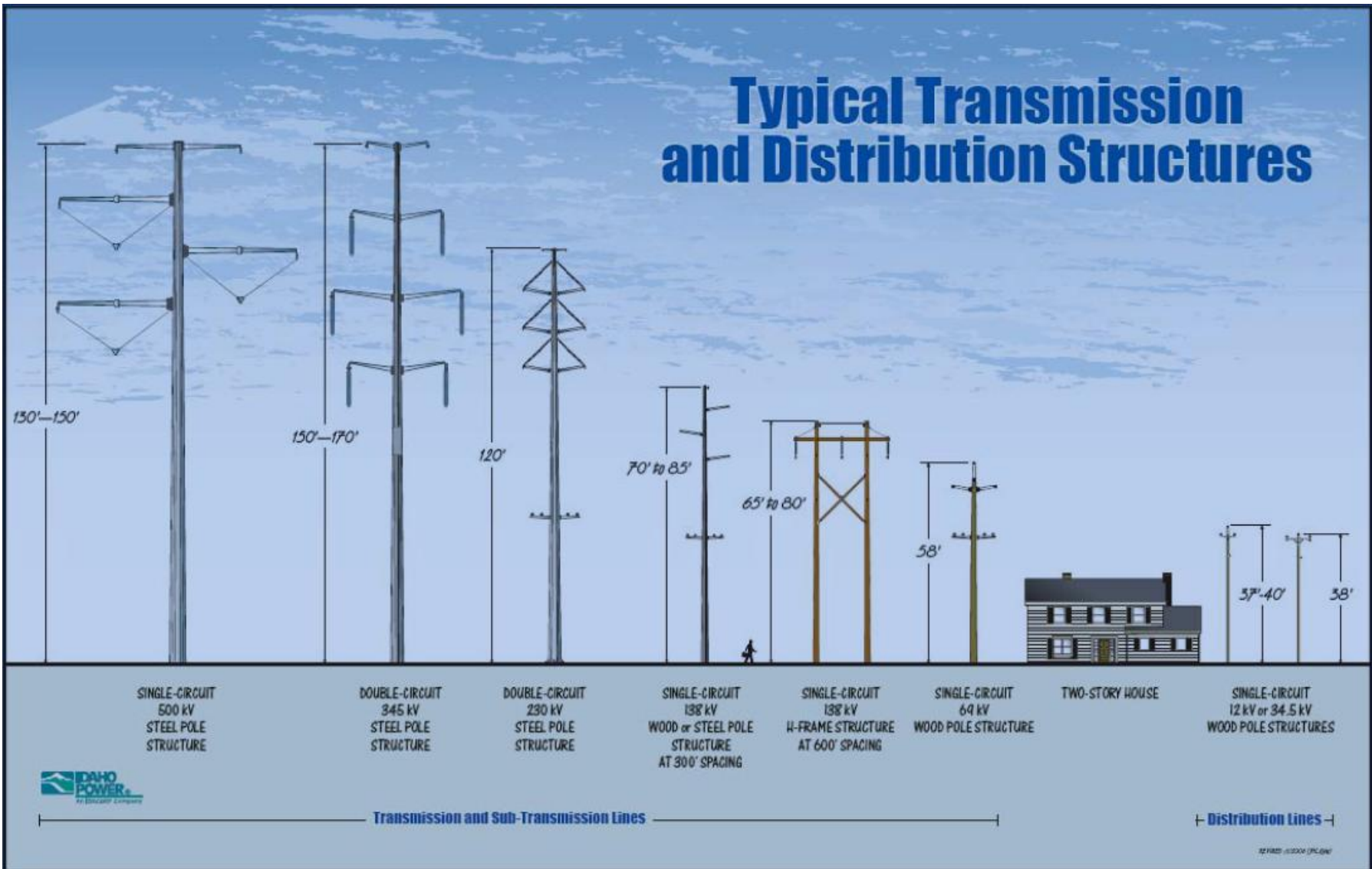


- What does Transmission Look Like?
- Why is Transmission Important?
- Transmission Planning
- Transmission Siting
- Select Transmission Issues
- References

What does Transmission Look Like?



Typical Transmission and Distribution Structures

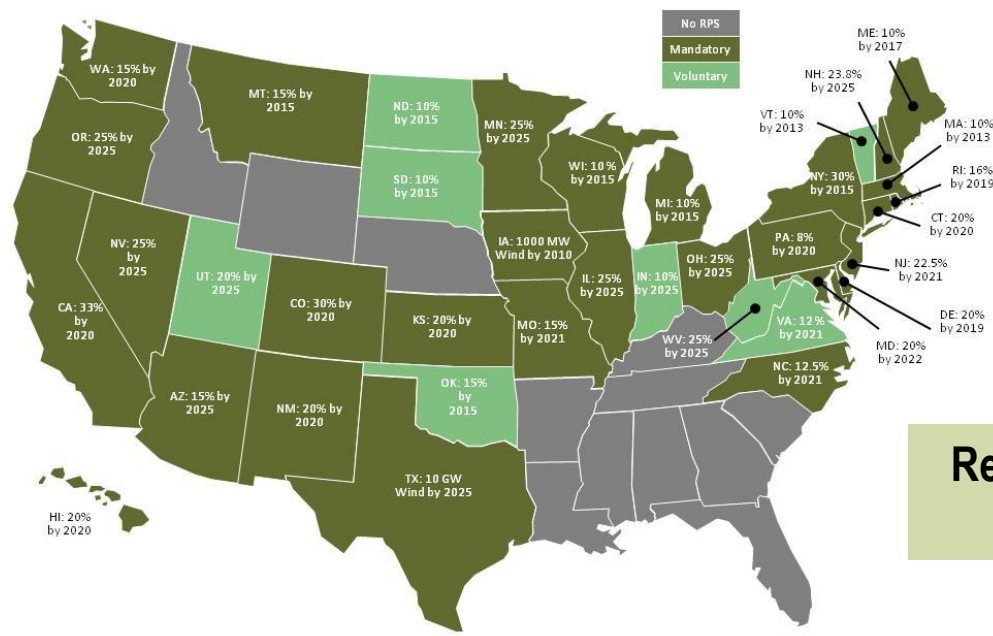


Transmission and Sub-Transmission Lines

Distribution Lines

Why is Transmission Important?

- Provide affordable/reliable electricity
- Implement public policies
 - *Renewable energy (RPS, PTC, ITC)*



Renewable Portfolio Standards

Transmission Planning



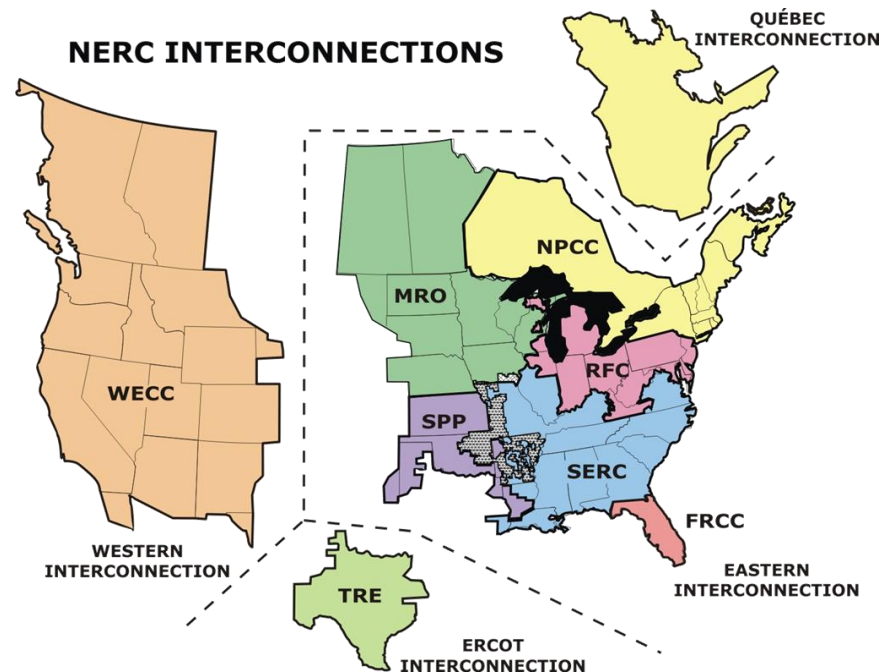
REGIONAL
PLANNING



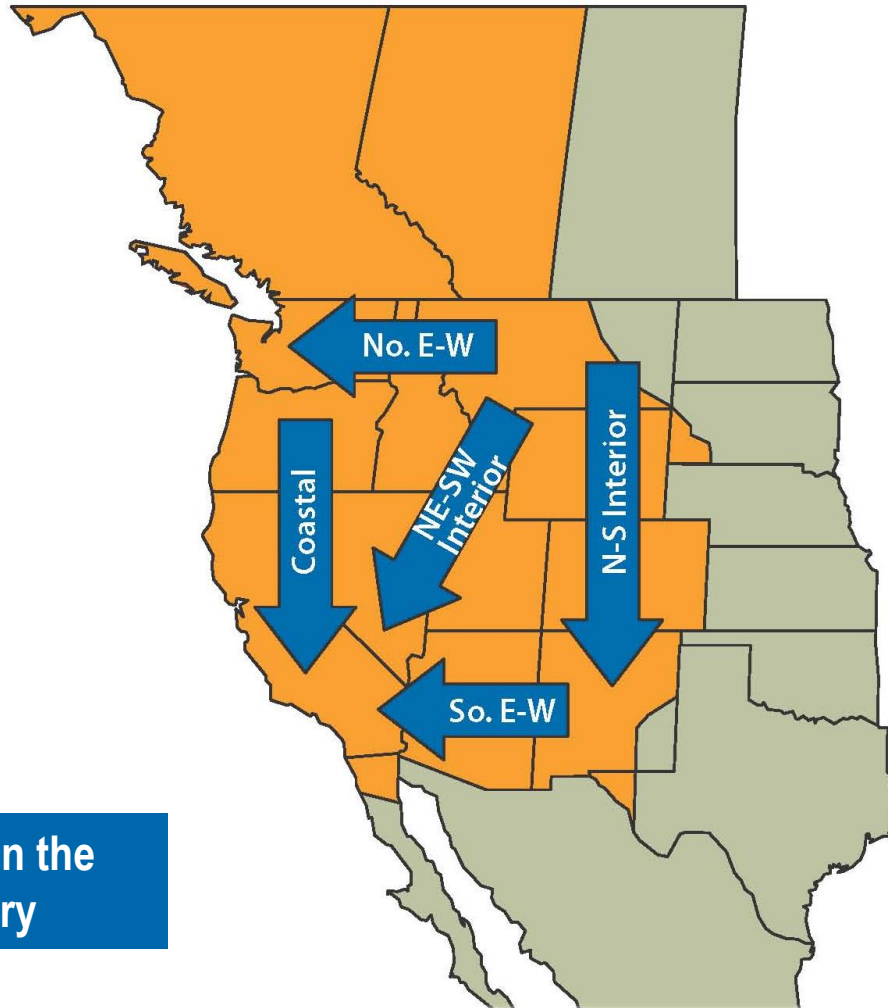
SUBREGIONAL
PLANNING

Transmission Planning (West)

- Regional (WECC)
- Subregional (Subregional Planning Groups)
- Local (Transmission Providers)



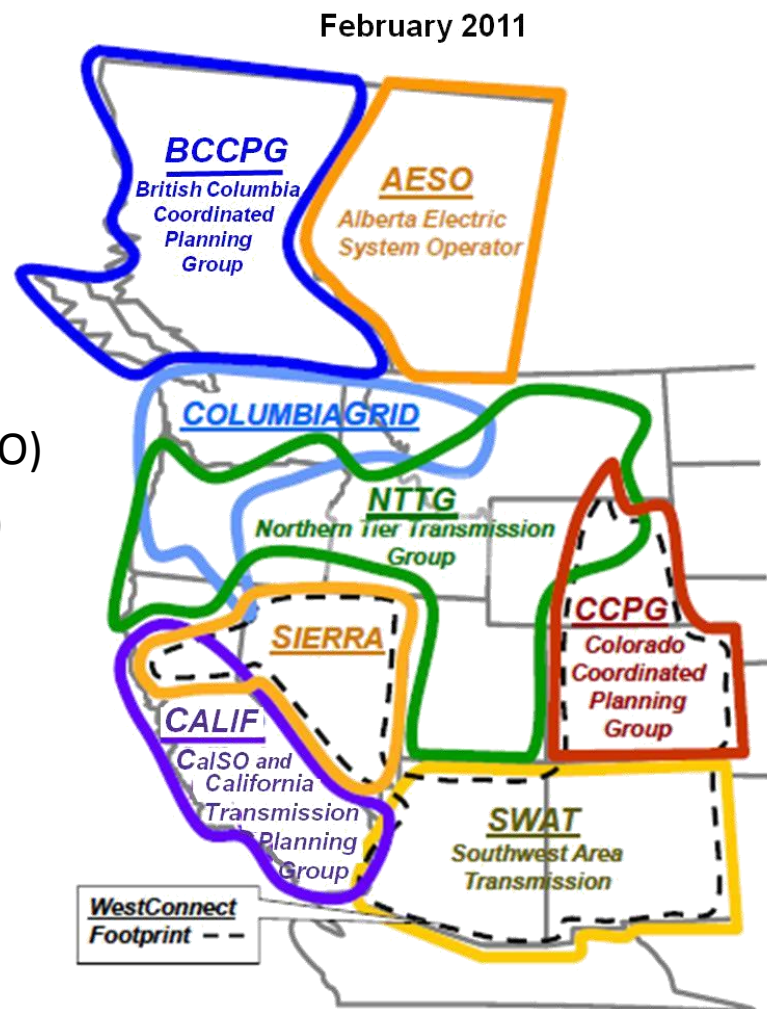
Regional Transmission Planning



Path Groups within the WECC Boundary

Subregional Planning Groups (SPGs)

- Alberta Electric System Operator (AESO)
- BC Coordinated Planning Group (BCCPG)
- ColumbiaGrid
- California Independent System Operator (CAISO)
- California Transmission Planning Group (CTPG)
- Colorado Coordinated Planning Group (CCPG)
- Northern Tier Transmission Group (NTTG)
- Sierra Subregional Planning Group (SIERRA)
- Southwest Area Transmission (SWAT)



Transmission Siting

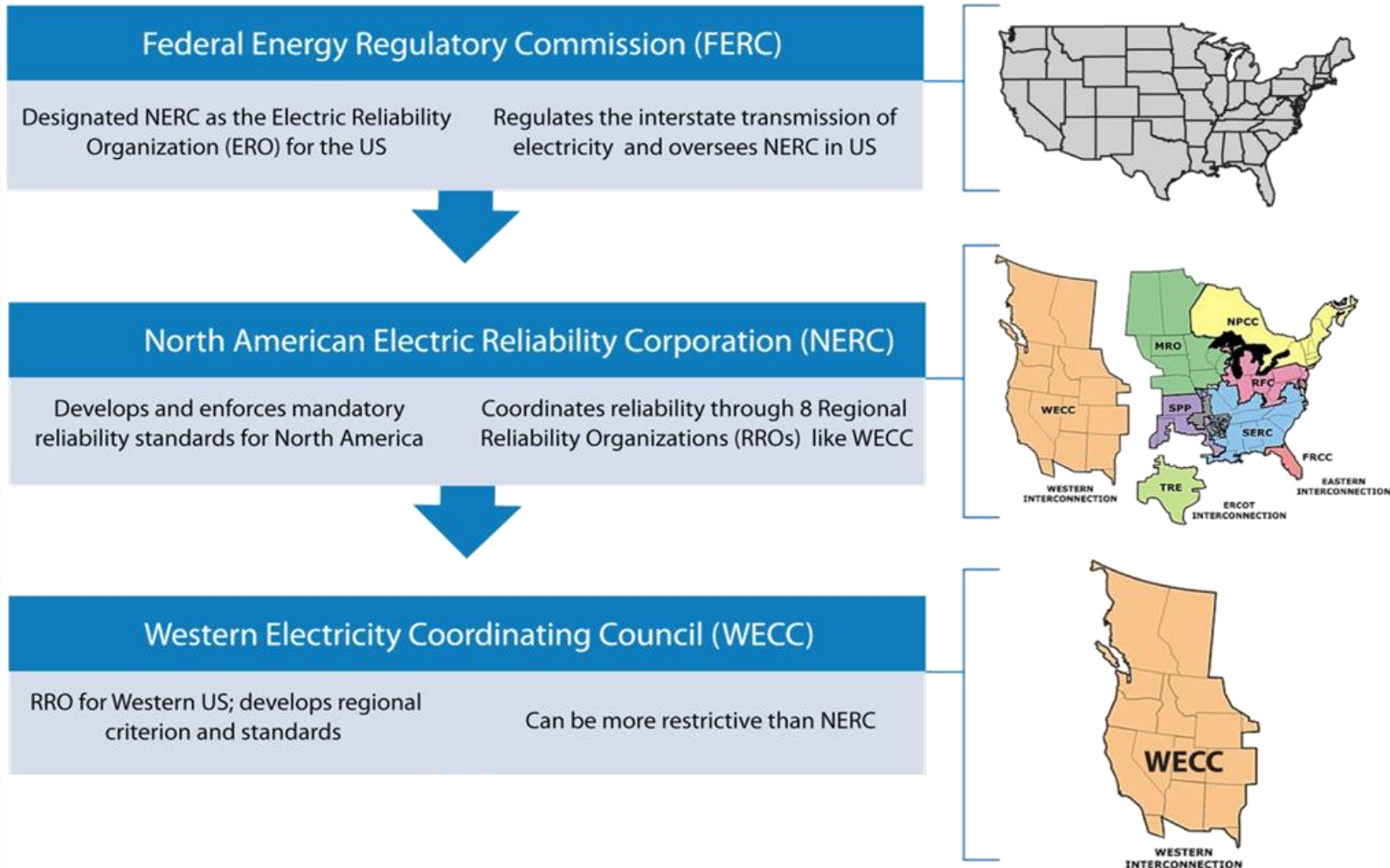


Select Transmission Issues



- Reliability
- Environment
- Cultural

Reliability



Reliability



Environment



Cultural



References



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- 2011 Federal Energy Regulatory Commission Order No. 1000 – Transmission Planning and Cost Allocation
<http://ferc.gov/industries/electric/indus-act/trans-plan.asp>
- 2012 National Electric Transmission Congestion Study
<http://energy.gov/oe/services/electricity-policy-coordination-and-Implementation/transmission-planning/2012-national>

Thank You!



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