

# Regional Transmission Expansion Planning

RETI Regional Transmission Working Group

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Dave Olsen



[www.westerngrid.net](http://www.westerngrid.net)

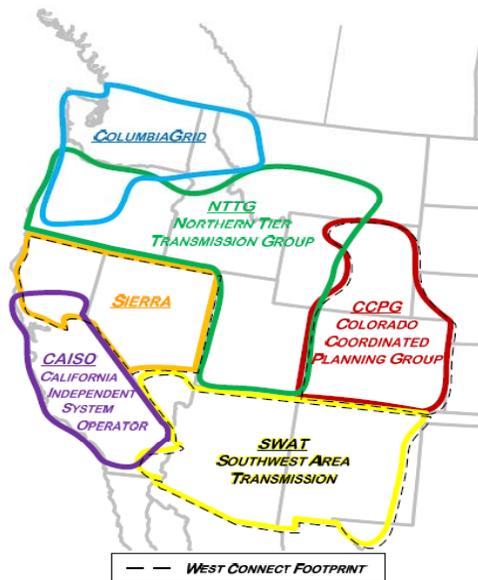
## About Western Grid Group

- 200 years state regulatory, policy experience
  - Former chairmen, staff of 8 western PSCs
  - Key developers of IRP
- 50 years experience as wind, solar, geothermal, hydroelectric power developers
- Non-profit NGO, formed 2003; works with Governors, utilities, regulators, agencies, advocates
- Policy products: Conditional-Firm service; renewables-first transmission; stakeholder-led planning

## WGG Focus

- Clean-first resource policies
  - EE/DR; DG; CHP; electric transportation; renewables, in ecosystem context
  - New utility business models, regulatory framework
- Support for Joint Initiatives (WestConnect, ColumbiaGrid, NTTG); WECC Efficient Dispatch
- Expanded utilization of existing grid
- Integration of renewables
- RTEP-Regional Transmission Expansion Planning

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WECC  
Sub-Regional  
Coordination Group  
(SCG) Members

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## RTEP Background

- First-ever interconnection-wide plans, in Western, Eastern, ERCOT interconnects
- DOE ARRA funding
  - \$14.5 million to WECC; includes funding to involve stakeholders
  - \$16 million to Western Governors Association
  - Grants awarded December 2009
- 10-year plan to DOE: September 2011
- 20-year plan to DOE: September 2013

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## RTEP Goals

- Understand infrastructure requirements for transition to a low carbon future
- Strengthen, expand inter-utility and sub-regional planning coordination
- Incorporate stakeholder input; build understanding of infrastructure need and design issues
- Identify commercial transmission projects

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## RTEP Structure

### Scenario Planning Steering Group (SPSG)

- Recommends scenarios TEPPC to model, key assumptions, modeling tools
- Environmental Data, other task forces

### State-Provincial Steering Committee (SPSC)

- Organizes state input, support for scenarios
- 2 members from every state
- DSM, Grid Utilization, Scenario work groups

TEPPC conducts planning studies to understand 2020, 2030 infrastructure needs

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## SPSG Members

- 8 Utility, WECC Board members
- 9 State-Provincial members
  - CA: Dian Grueneich, CPUC; Grace Anderson, CEC
- 2 DOE members, ex-officio
- 9 Stakeholder members: energy efficiency, solar, wind, geothermal; IPPs; lands; wildlife; independent transcos; tribes

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## Scenario Inputs

Loads: SPSC consensus DSM forecast

Resources: Build on WREZ, RETI, other state RE zone work

- Resource planner preference for closer to load
- Environmental evaluation challenges

Incorporate lands, wildlife, water constraints

Transmission: Build on sub-regional planning

- Including CA import assumptions

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## For More Information

DOE Interconnection-wide Planning

Western:

[www.wecc.biz/Planning/TransmissionExpansion/RTEP/Pages/default.aspx](http://www.wecc.biz/Planning/TransmissionExpansion/RTEP/Pages/default.aspx)

Eastern: [www.eipconline.com/](http://www.eipconline.com/)

RTEP-TEPPC Planning Process and Timeline

[www.wecc.biz/committees/BOD/TEPPC/SPSG/09172010?InstanceID=1](http://www.wecc.biz/committees/BOD/TEPPC/SPSG/09172010?InstanceID=1)

SCG Major Projects List

<http://www.wecc.biz/committees/BOD/TEPPC/SCG/Shared%20Documents/Forms/AllItems.aspx>

SCG Foundational Transmission Projects List Report

<http://www.wecc.biz/committees/BOD/TEPPC/SCG/Shared%20Documents/SCG%20Foundational%20Transmission%20Project%20List%20Report.pdf>

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