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Regional Transmission Expansion Planning (RTEP)  
DOE EAC Meeting  
October 20, 2011

# *Regional Transmission Expansion Planning*

## *What have we been asked to do?*

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### **Regional Transmission Expansion Planning (RTEP)**

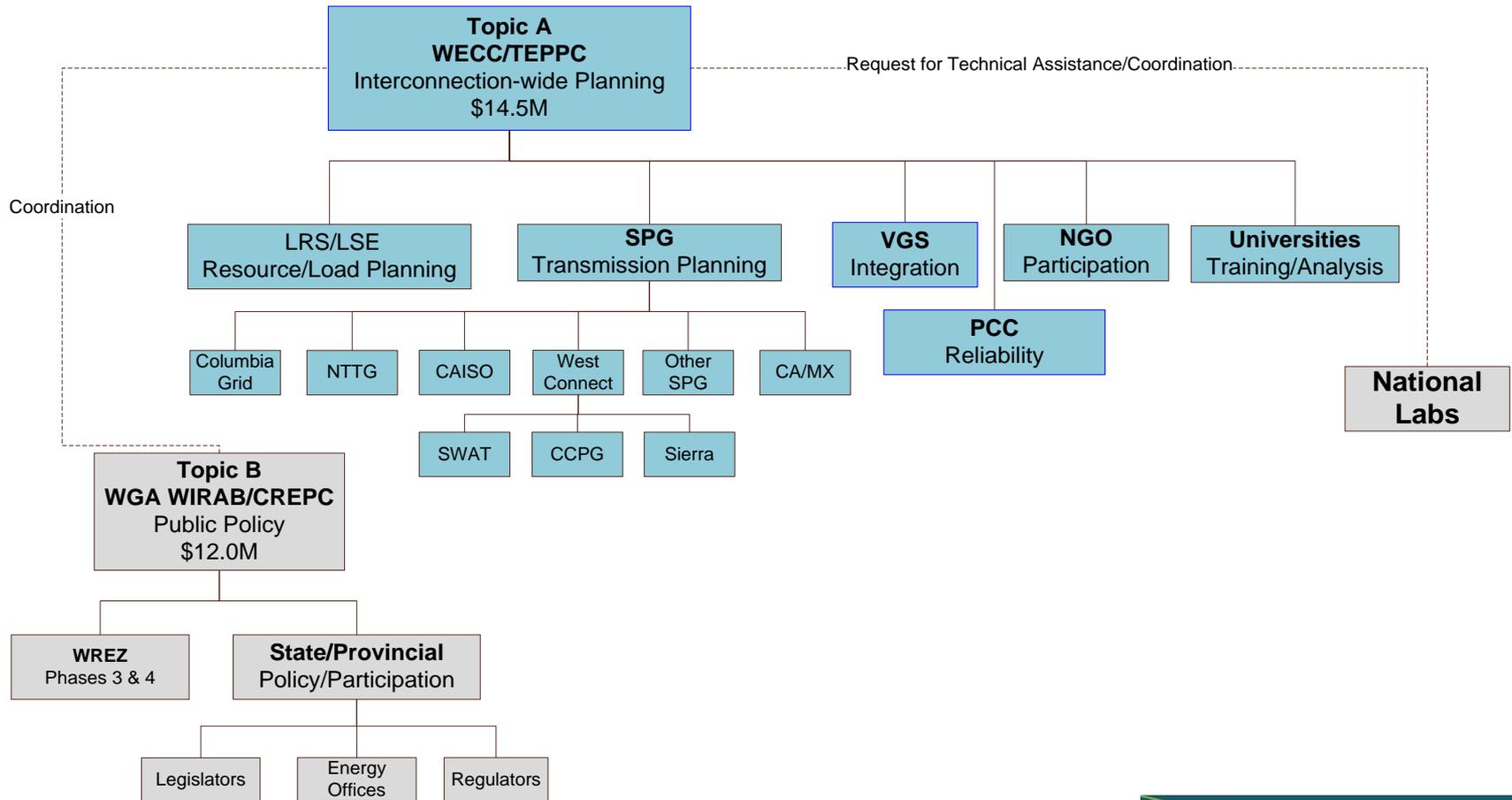
Expand the breadth and depth of WECC's existing regional transmission planning processes.

- Expand stakeholder participation
- Increase the understanding of the connection between reliability, cost, and environment
- Produce credible, publically available data and models



# RTEP

## Organizational Funding Diagram



# *RTEP*

## *Deliverables*

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- 2011 Deliverables
  - Create a multi-constituency Steering Group
  - 10-Year Regional Transmission Plan
  - Create new long-term planning tools
  - Create educational materials
- 2013 Deliverables
  - 10-Year Regional Transmission Plan
  - 10-Year Regional Transmission Plan

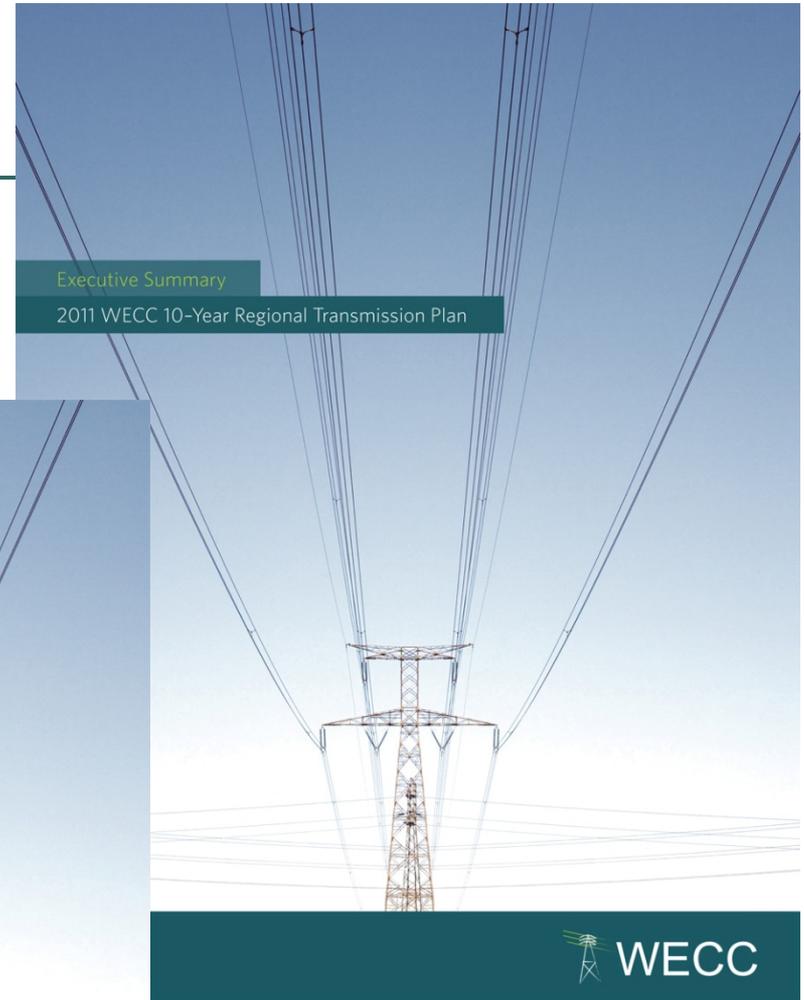
# *RTEP*

## *Value Propositions*

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- Interconnection-wide
- Diverse process leadership
- Federal funds highly leveraged
- Known path for perpetual funding
- Used and useful
  - State processes
  - Obama Grid Modernization Pilot

# 10-Year Regional Transmission Plan



[www.wecc.biz/10yrplan](http://www.wecc.biz/10yrplan)

# *10-Year Regional Transmission Plan Observations & Recommendations*

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1. Cost-effective remote renewable resources
2. Montana to Northwest (Path 8)
3. Pacific Tie Paths (Paths 65, 66)
4. Operational impacts of variable generation
5. Planning cooperation
6. Environmental and cultural considerations in future transmission planning processes
7. Water resource impacts on the future generation mix
8. Gaps in regional transmission planning processes

# *RTEP*

## *What to expect next*

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- Process Enhancements
  - Long-term capital planning tools
  - Scenario-driven planning
  - Inclusion of water & environmental factors
  - Operational and reliability impacts
- Educational modules
- 10- and 20-Year Transmission Plans in 2013

# *For EAC Consideration*

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- Use the Plan to support DOE work
- Continue to support WECC-led analyses
- Continue DOE participation in WECC activities
- Help WECC continue to leverage other DOE-funded activities

# Questions

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All information on the WECC 10-Year Regional Transmission Plan may be found at <http://www.wecc.biz/10yrPlan>.

# Glossary

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- ECC** – Enhanced Curtailment Calculator
- EDTTRS** – Efficient Dispatch Toolkit Technical Review Subcommittee
- EIM** – Energy Imbalance Market
- EDT** – Efficient Dispatch Toolkit
- FERC** – Federal Energy Regulatory Commission
- IRP** – Integrated Resource Plan
- FOA** – Funding Opportunity Announcement
- MIC** – Market Interface Committee
- NERC** – North American Electric Reliability Corporation
- NGO** – non-profit, Non-governmental Organization
- RPS** – Renewable Portfolio Standard
- RTEP** – Regional Transmission Expansion Planning Project (activities funded by the DOE grant)
- SCED** – Security Constrained Economic Dispatch
- SCG** – Subregional Coordination Group (group of SPGs)
- SPG** – Subregional Planning Group
- SPSG** – Scenario Planning Steering Group (WECC multi-constituency steering group)
- SPSC** – State and Provincial Steering Committee (State steering group)
- TEPPC** – Transmission Expansion Planning and Policy Committee
- TSS** – WECC Technical Studies Subcommittee
- VGS** – Variable Generation Subcommittee
- WGA** – Western Governors’ Association
- WIEB** – Western Interstate Energy Board
- WREZ** – Western Renewable Energy Zone