



**NORTHERN TIER  
TRANSMISSION GROUP**

# **Committee on Regional Electric Power Cooperation**

**November 6, 2007**

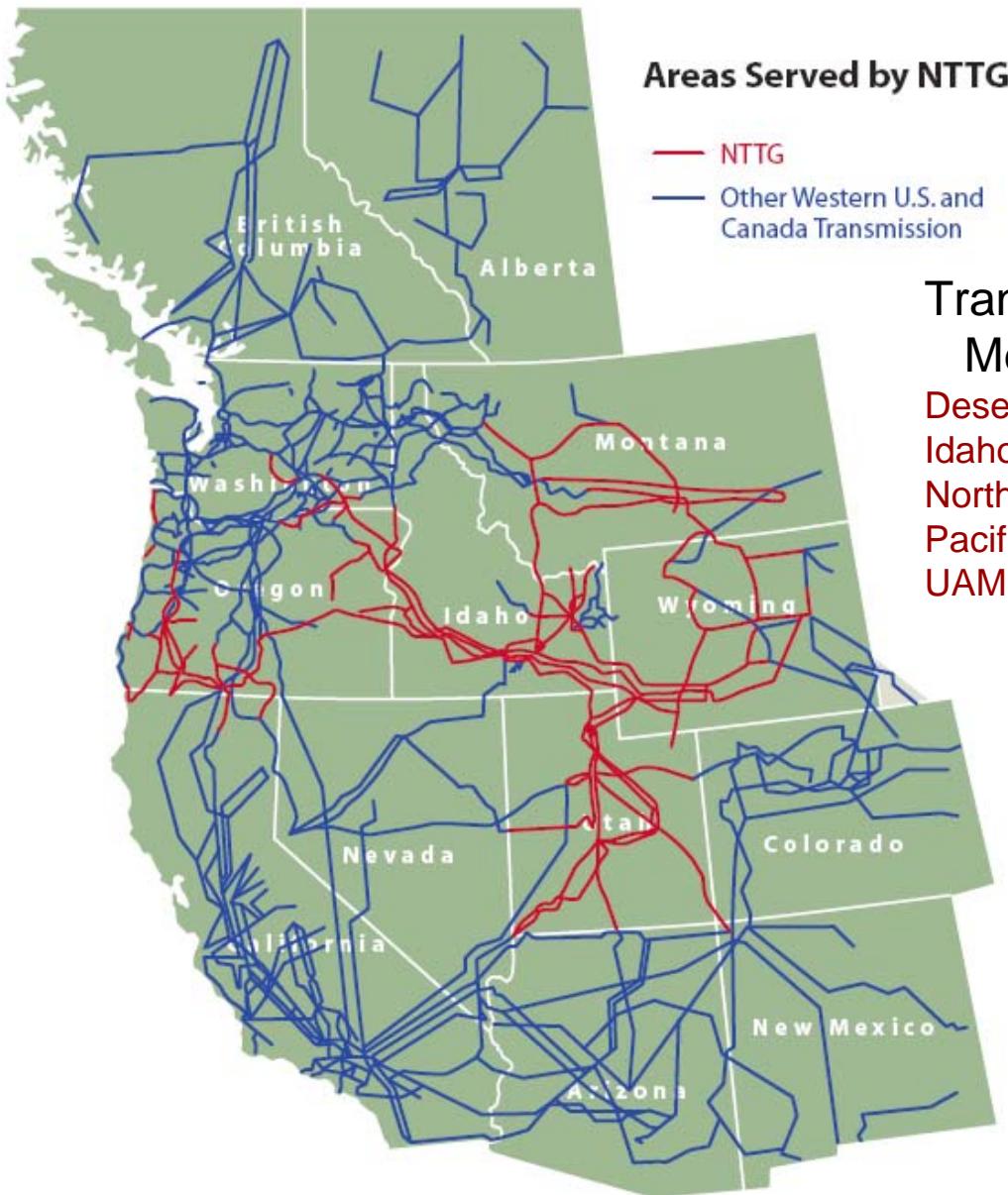
Tucson, Arizona

Kip Sikes – NTTG Planning Committee Chair

“To ensure efficient, effective, coordinated use & expansion  
of the member’s transmission systems in the Western  
Interconnection to best meet the needs of customers &  
stakeholders. “



# Northern Tier Transmission Group



## Transmission Members:

Deseret Power  
Idaho Power  
Northwestern Energy  
PacifiCorp  
UAMPS



# Agenda

- ADI Update
- Update on Transmission Projects
- Review of Planning Processes and Coordination



# ACE Diversity Interchange

- ADI – pooling of Area Control Errors (momentary imbalances of generation and load) to take advantage of diversity
- No harm, no foul – larger group makes more winners, suspend if problems
- Reduce sensitivity to volatile resources/loads
- In operation – expect a number of WestConnect members to join soon

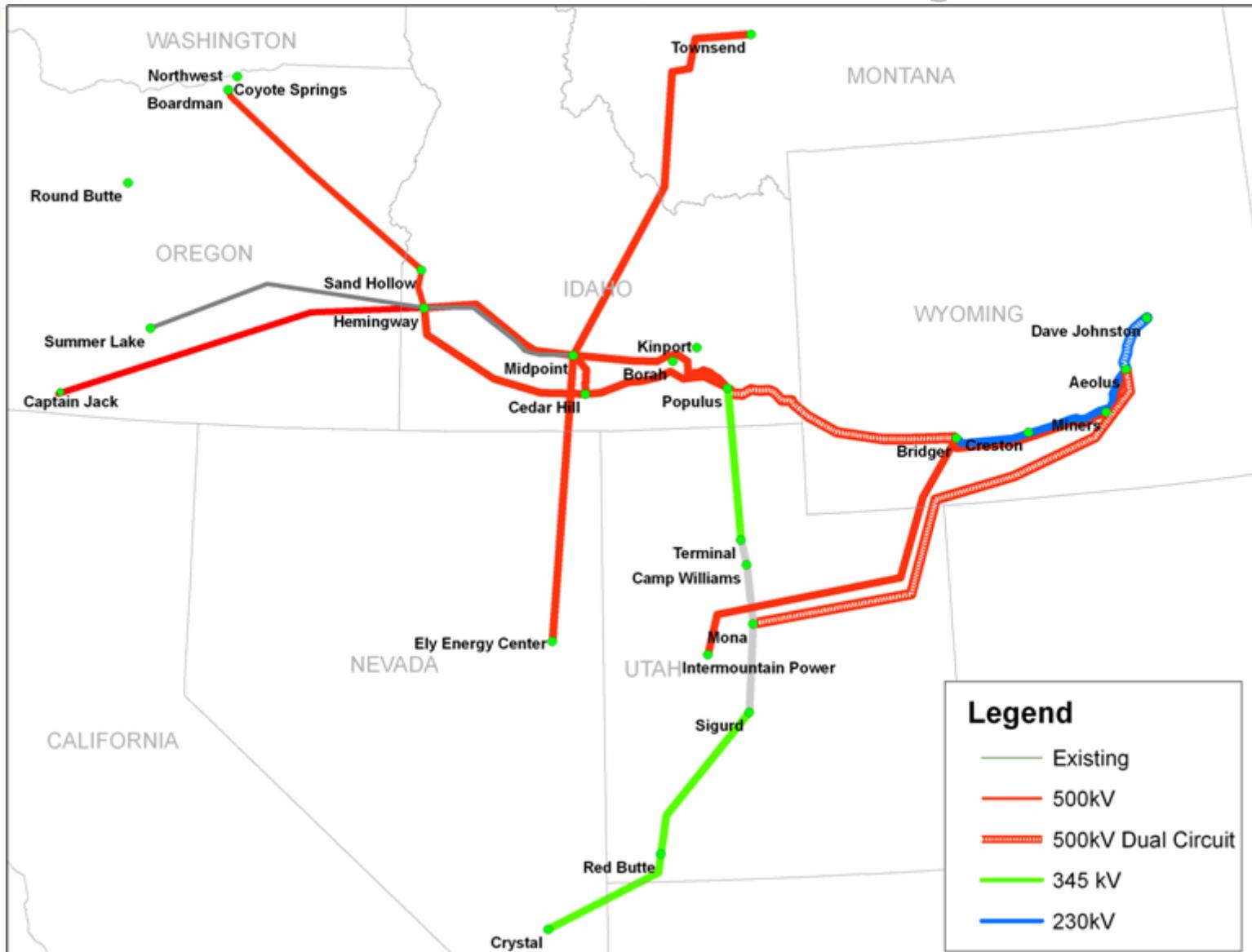


# Transmission Projects

- Gateway West
- Gateway South / TransWest Express / Wyoming West
- Mountain States Transmission Intertie
- Southwest Intertie Project
- Idaho - Northwest

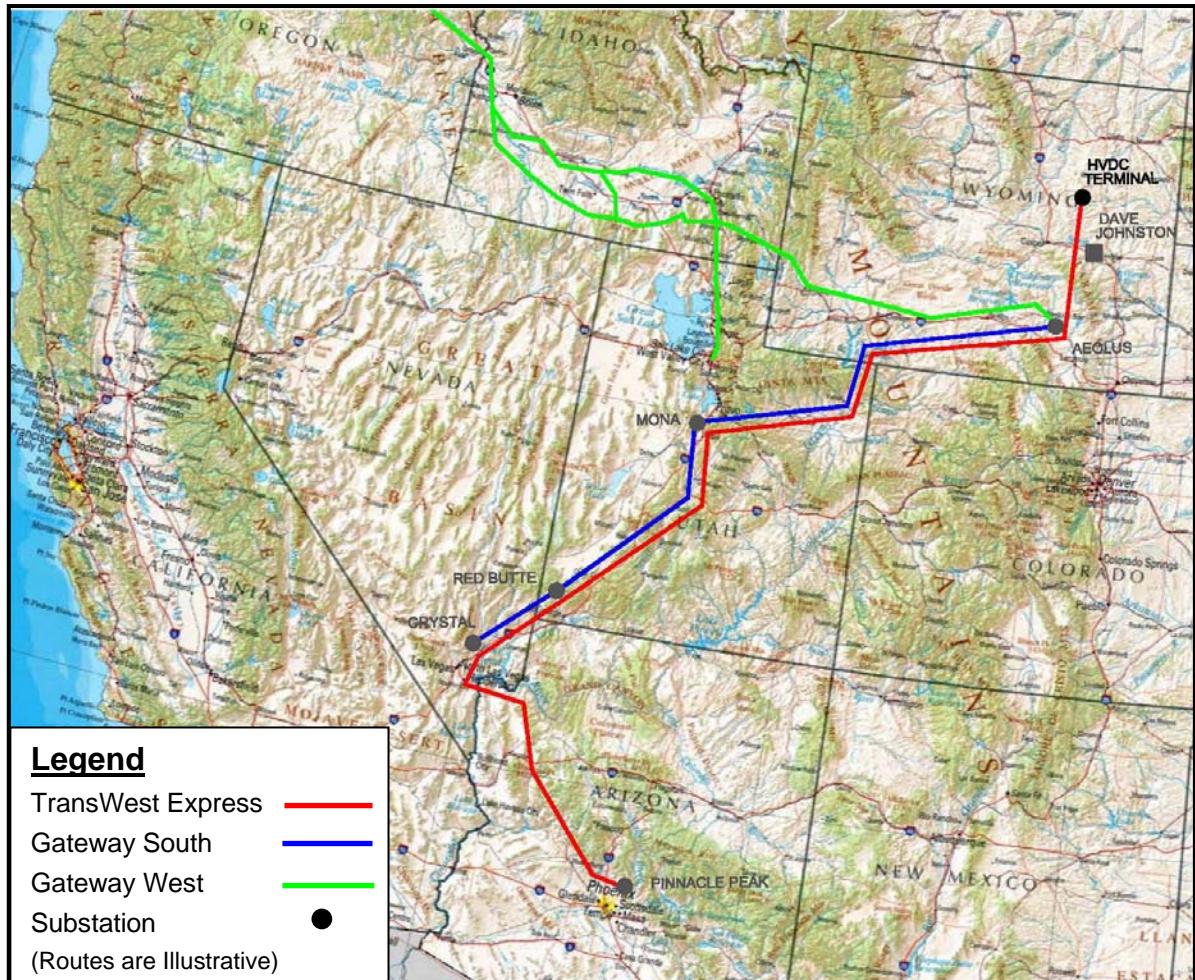


# Transmission Projects



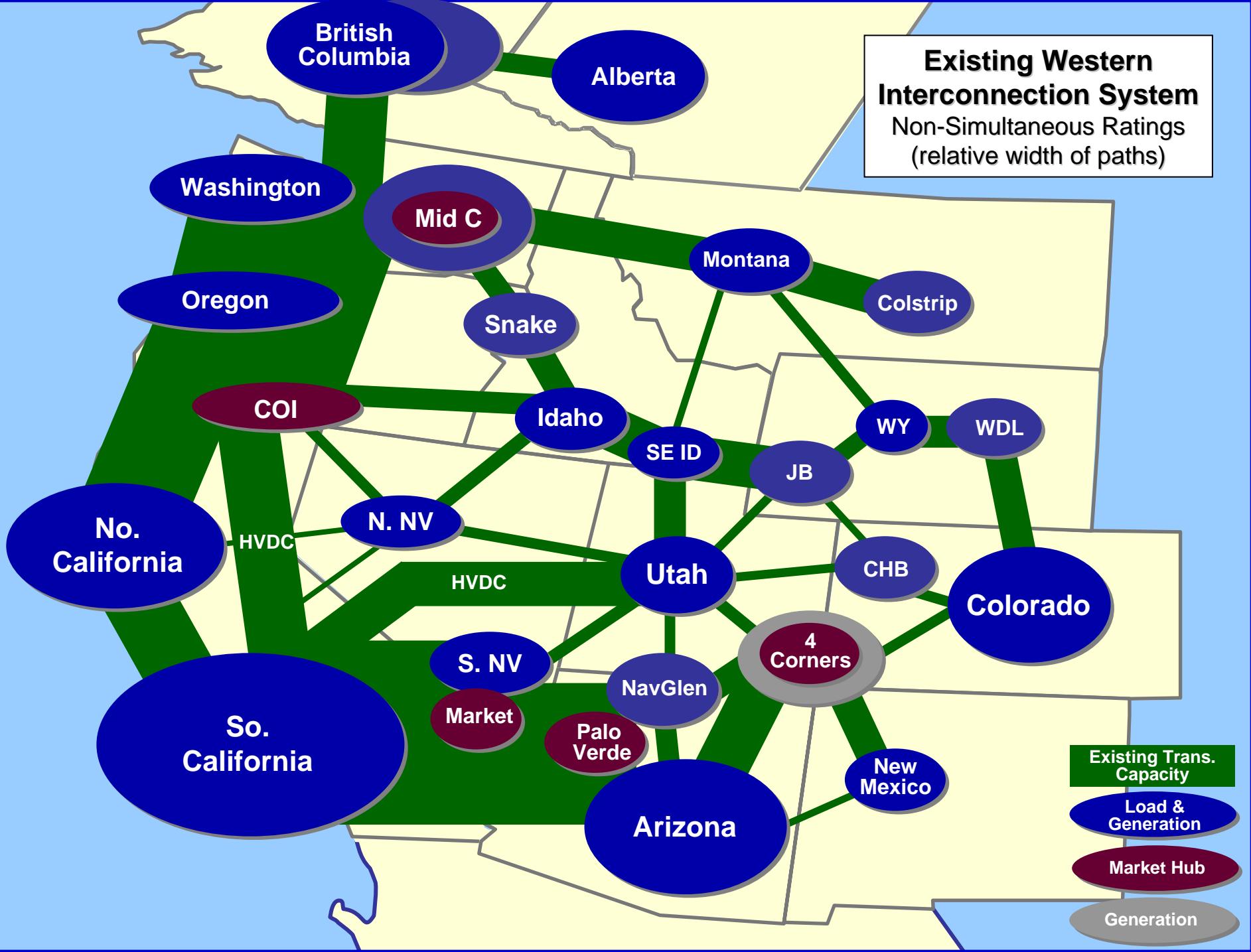
# TransWest Express and Gateway South Potential Design Solutions

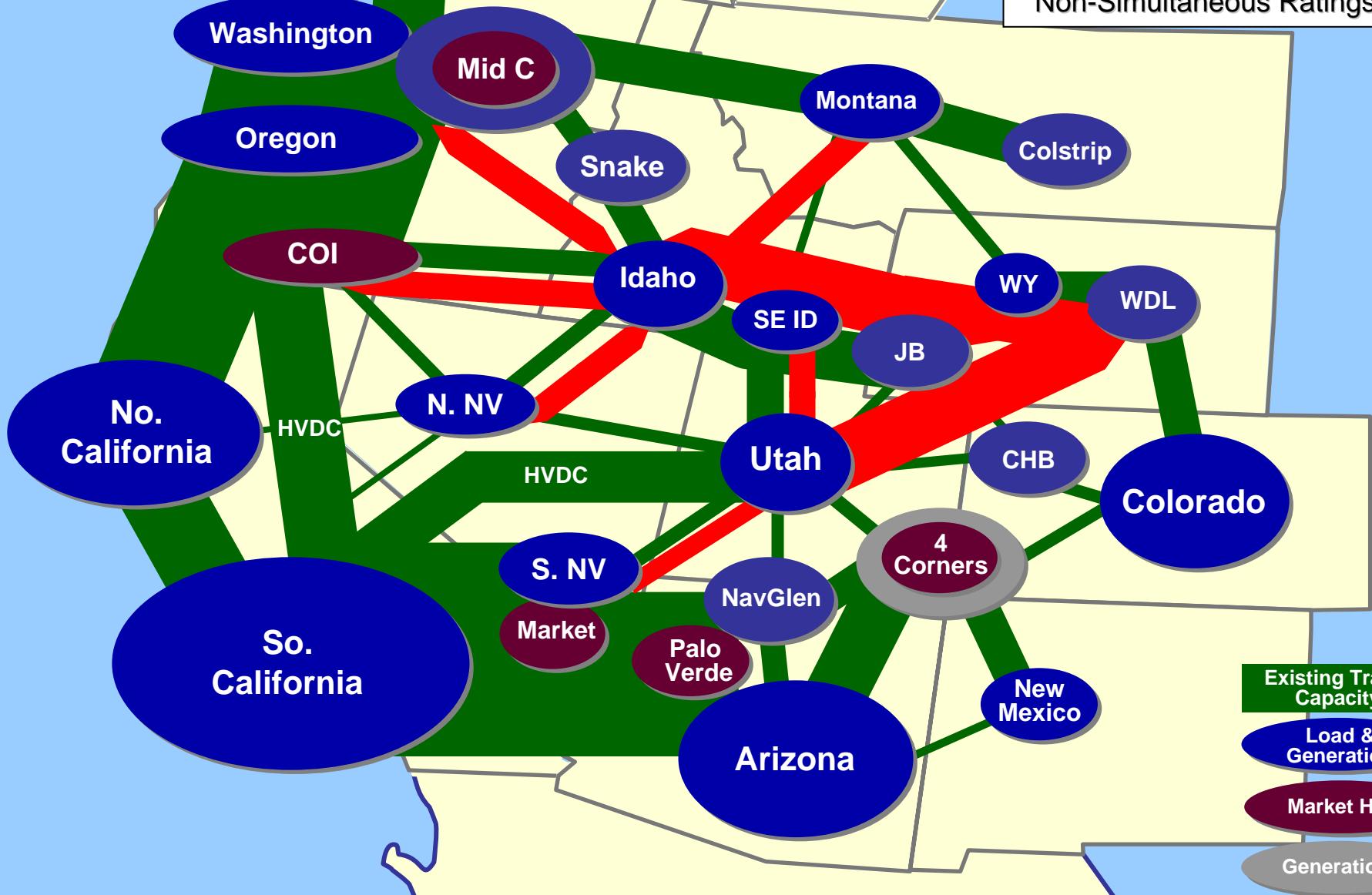
- Size of combined projects dependent on regional and customer needs
- Capacity options are under review from 4,500 to 7,500 MW export from WY
- DC circuit options include 3<sup>rd</sup> terminal or termination in southern Nevada



# Existing Western Interconnection System

## Non-Simultaneous Ratings (relative width of paths)







# Planning Processes

- NTTG Planning Charter
  - Planning Committee
  - Biennial Transmission Plan
    - Load & Resource connections
    - Economic Studies to “test” plan

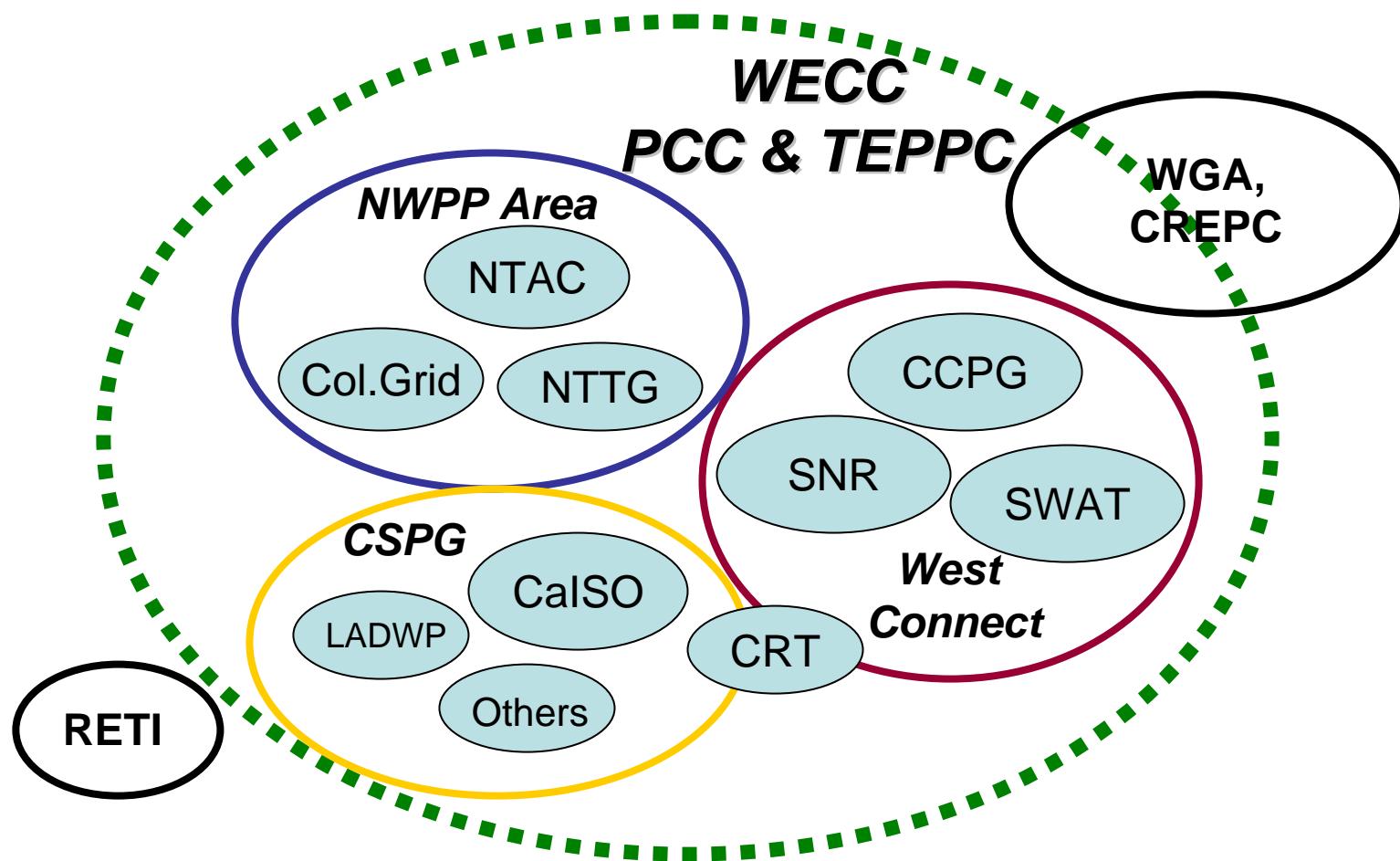


# Coordination

- Sub-Regional
  - Within NTTG – Stakeholders, Sponsors
  - With other SPGs
    - Project Plans and Study Groups
- Regional
  - With other SPGs
  - WECC TEPPC and PCC
    - Project Plans and Project Rating/Implementation

# Regional Coordination

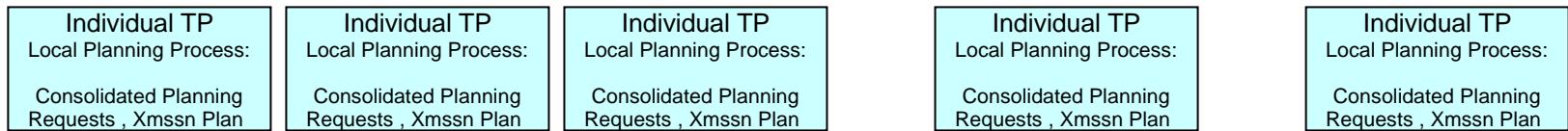
Western Interconnection Transmission Planning Groups





# Three Level Coordinated Planning Process

Level 1  
Local



Level 2  
Sub-Regional



Level 3  
Regional

