



## **Northern Tier Transmission Group**

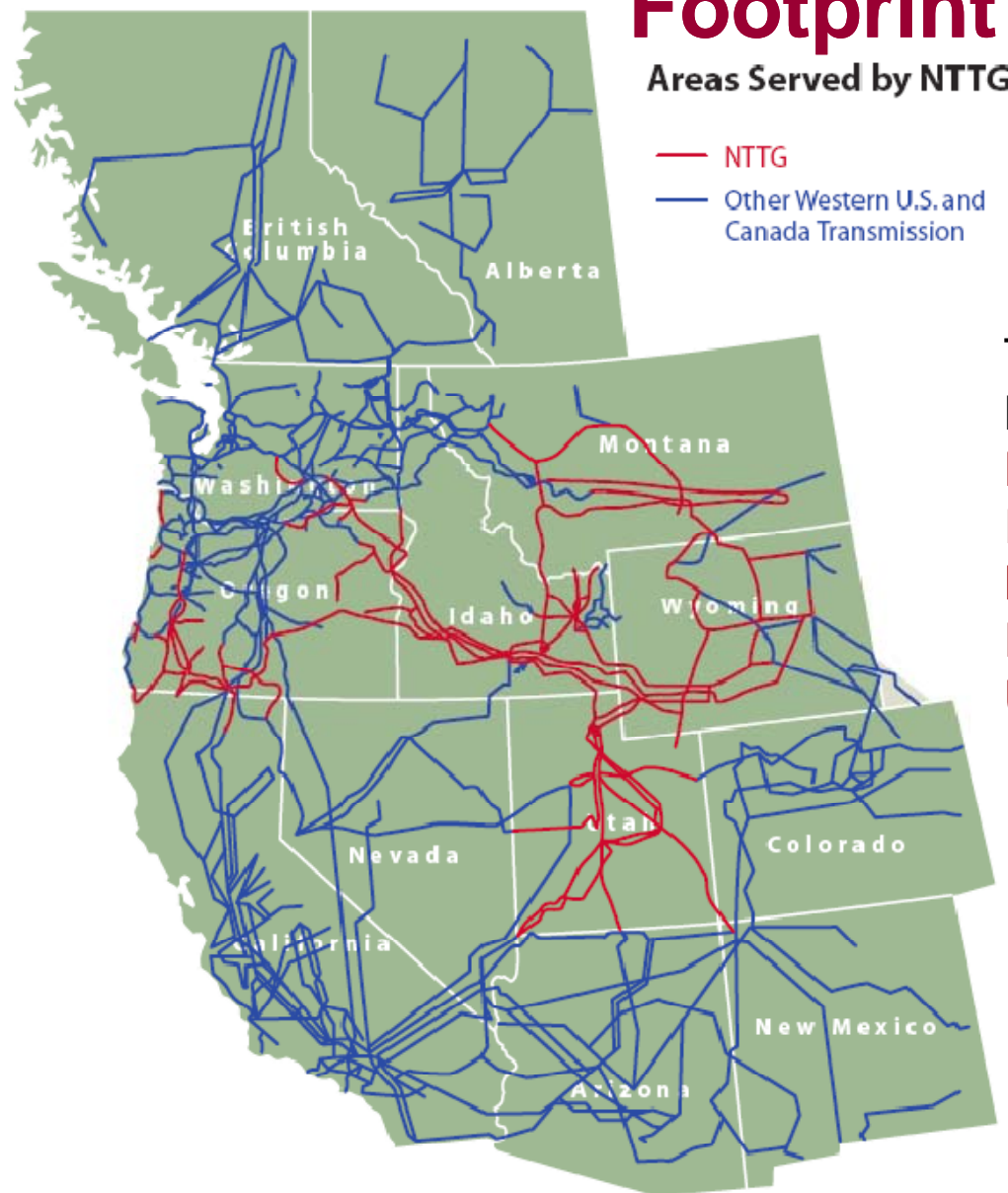
**Utah Association of Energy Users**

Salt Lake City October 19, 2007

“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 Footprint

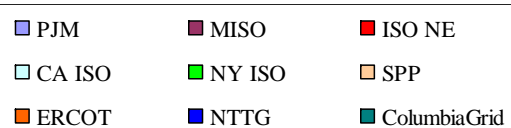
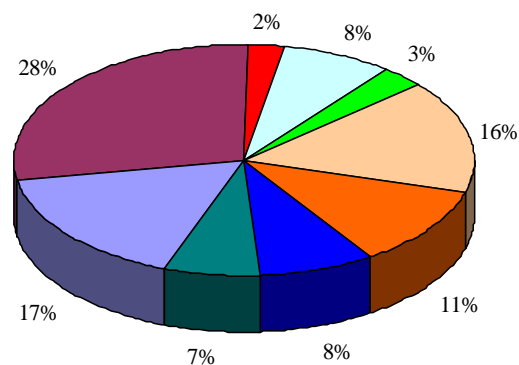


Transmission  
Members:  
Deseret Power  
Idaho Power  
Northwestern Energy  
PacifiCorp  
UAMPS

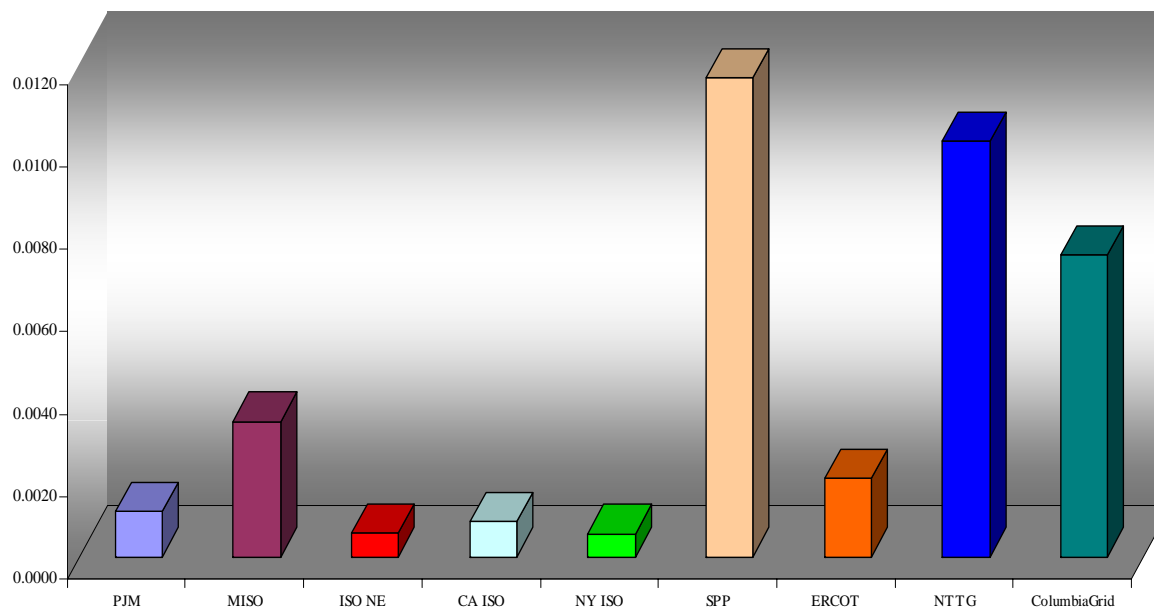


# Miles of Transmission

Miles of Transmission Lines



Transmission Miles Per Customer



|               |        |
|---------------|--------|
| NWE           | 7,000  |
| Idaho Power   | 4,691  |
| PacifiCorp    | 15,580 |
| Deseret Power | 287    |
| UAMPS*        | 0      |
| NTTG Total    | 27,558 |



# Northern Tier Transmission Group

## – Status of Organization

- NTTG organization was established after Grid West (and prior to 890) to carry forward beneficial initiatives
  - Combined member Transmission Planning
  - Area Control Error Diversity Interchange (ADI)
  - Transmission Use and ATC
- Concept is to evolve the organization as required
  - Get initiatives accomplished –results first
  - Not get bogged down in structure debate
  - Use existing organizations and structure - avoid duplication
- Status
  - Approved: Planning Agreement, Steering Committee Charter, Cost Allocation Committee Charter, Use Committee Charter, Dispute Resolution Process
  - For approval in November: Planning Committee Charter, ADI Group charter



# Northern Tier Transmission Group

## **NTTG Focus remains on completing initiatives:**

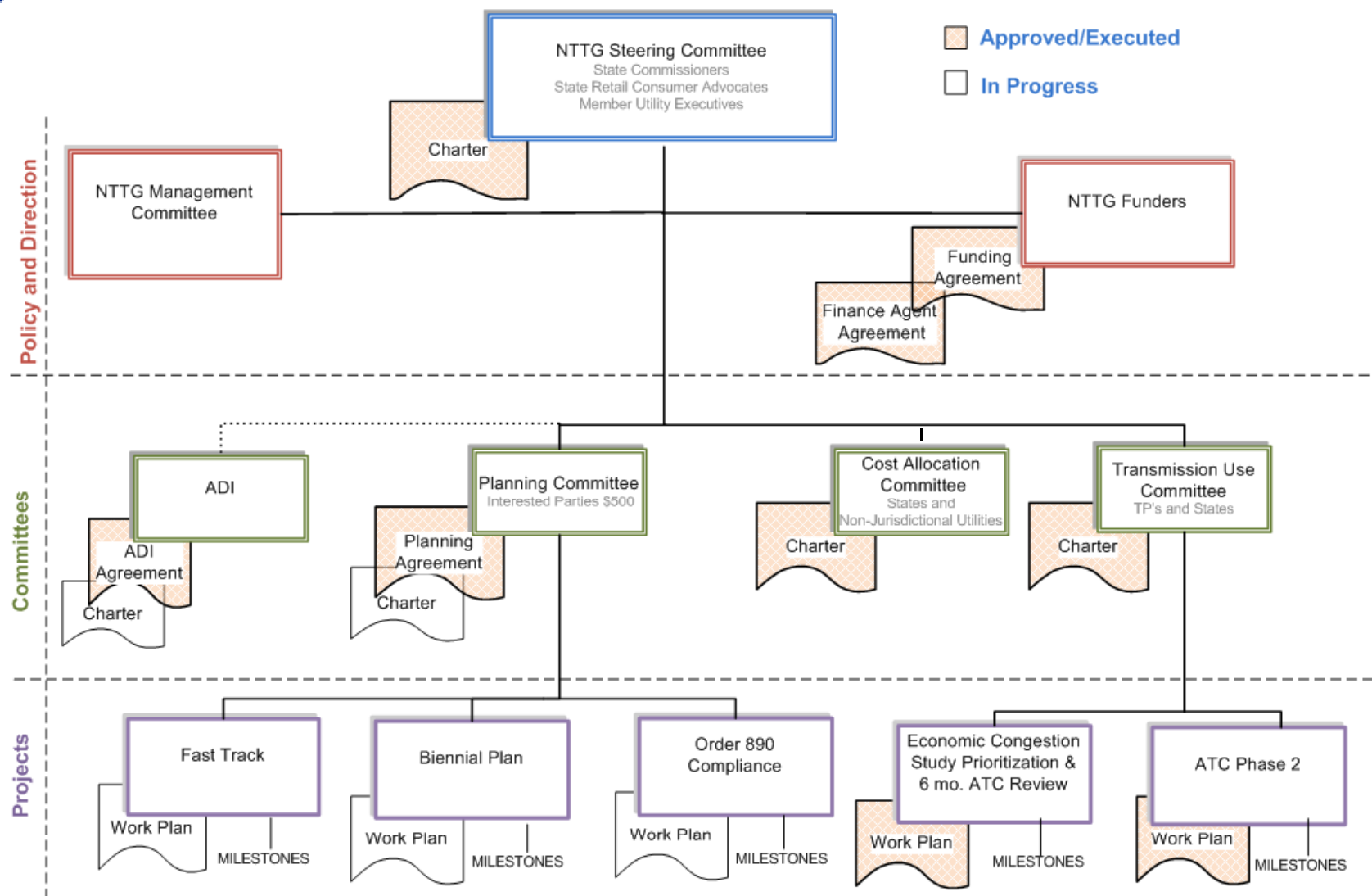
- Finalizing Biennial Planning Process
  - Consistent with 890 Attachment K
  - Synchronized with WECC Regional Planning
  - Includes Cost Allocation Committee and Process
- Implementing Sponsored (aka Fast Track) Transmission Projects
  - Projects resulting from Planning Process
- Area Control Error Diversity Interchange (ADI)
  - Initial Pilot implemented
  - Expansion
- Transmission Use Initiatives
  - “English” definitions of OASIS paths implemented
  - Review of ATC values and forum for prioritizing economic and congestion studies
  - Route map of OASIS paths
  - Coordination with Planning Initiatives to assist development of transmission plans

## **Methods**

- All with open stakeholder involvement
- Complying with FERC requirements



# Northern Tier Transmission Group Organization



v3.0 October 2007



# NTTG Structure

Northern Tier consists of:

- Steering Committee
  - State commissioners and government representatives
  - Member utility executives
- Working Committees
  - Cost Allocation – estimates cost allocation for new transmission projects
  - Transmission Planning – “fast track” and long term planning
  - Transmission Use – “voice of customer” and issues pertaining to the use of the existing transmission system
- Task forces
  - Order 890 planning Attachment K
  - Targeted administrative issues as required



# NTTG Transmission Planning Process

- Planning Goals
  - Provide customers with way to input their long range transmission needs and concepts ahead of formal OATT processes.
    - To determine if they wish to proceed with formal OATT Transmission Service Requests
    - To determine if it economical for them to proceed and in essence be a transmission project sponsor
  - Provide a forum and process for collaboration in open and transparent basis
  - Provide all parties planning data and information needed for their individual decisions
  - Provide a level of certainty on project related transmission costs, timing, and rights
- Ultimately it is the project sponsors that decide to fund transmission





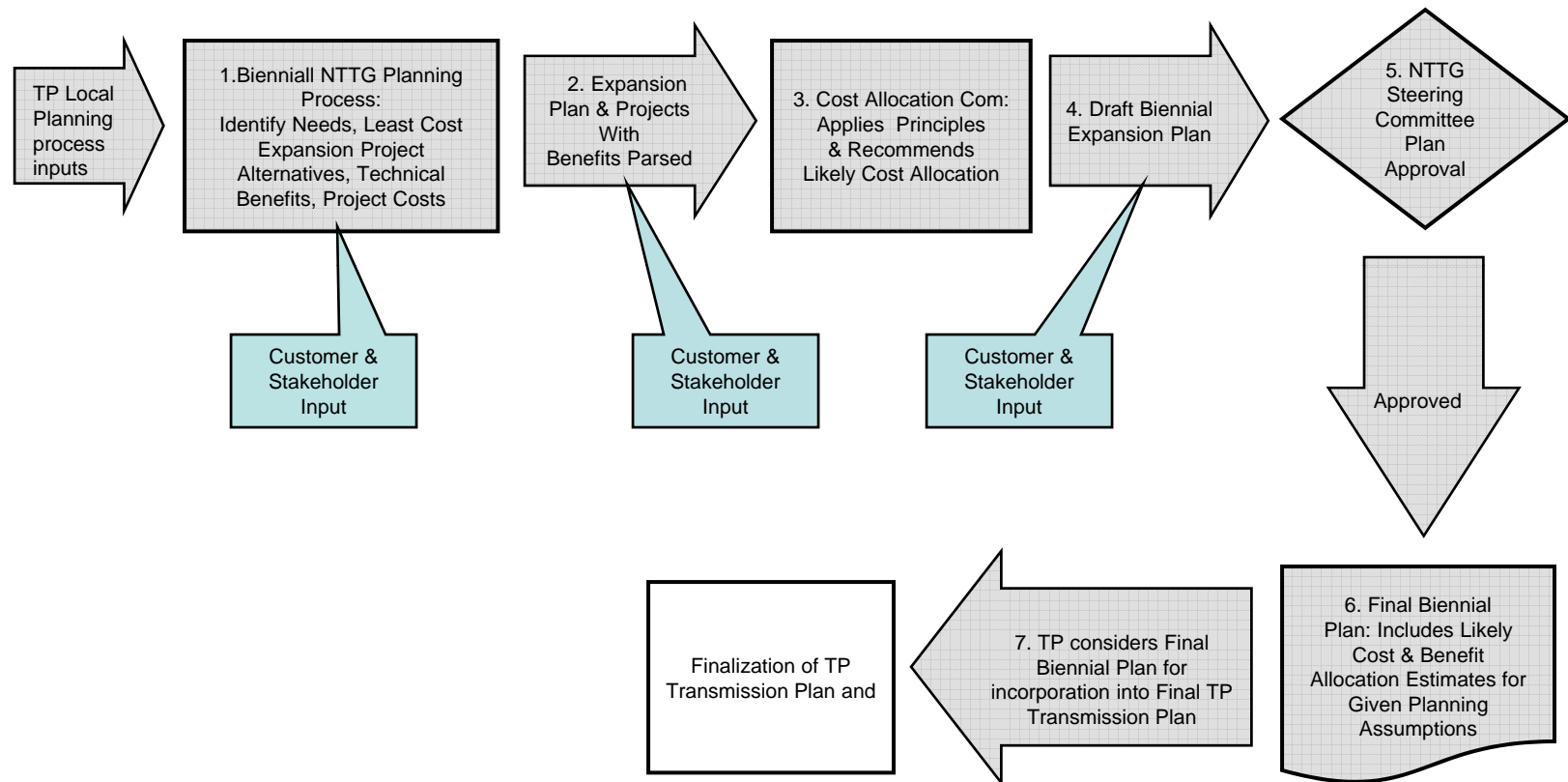
# NTTG Planning Process

## Planning Committee

- Consists of member reps and elected Chair
- Eligible members:
  - Parties that purchase or sell transmission services & signatories to Planning Agreement
  - Regulators & other state agencies in footprint states
- Members represent their respective Customers and Stakeholders
- Customers submit needs, study requests, and concepts to the TP
  - TP consolidates and brings to the PC
- Open meetings to all Members, Eligible Customers, Stakeholders, and Interested Parties
  - All can comment on planning criteria, assumptions and results either through their Member or directly in participation with NTTG
- NTTG PC will conduct biennial planning process to identify transmission needs, least cost expansion project alternatives, technical benefits, and project costs
  - On Plans and Planning issues that effect more than a single TP
  - Biennial Bulk Transmission 10 Year Plan considering 20 year planning horizon
  - Eight quarter synchronized planning cycle
  - Economic and Reliability considerations
  - Will conduct congestion studies on existing and planned system
- NTTG will select beneficial sub-regional projects and Cost Allocation Committee will recommend cost allocation among participating Transmission Providers



# NTTG Planning Process





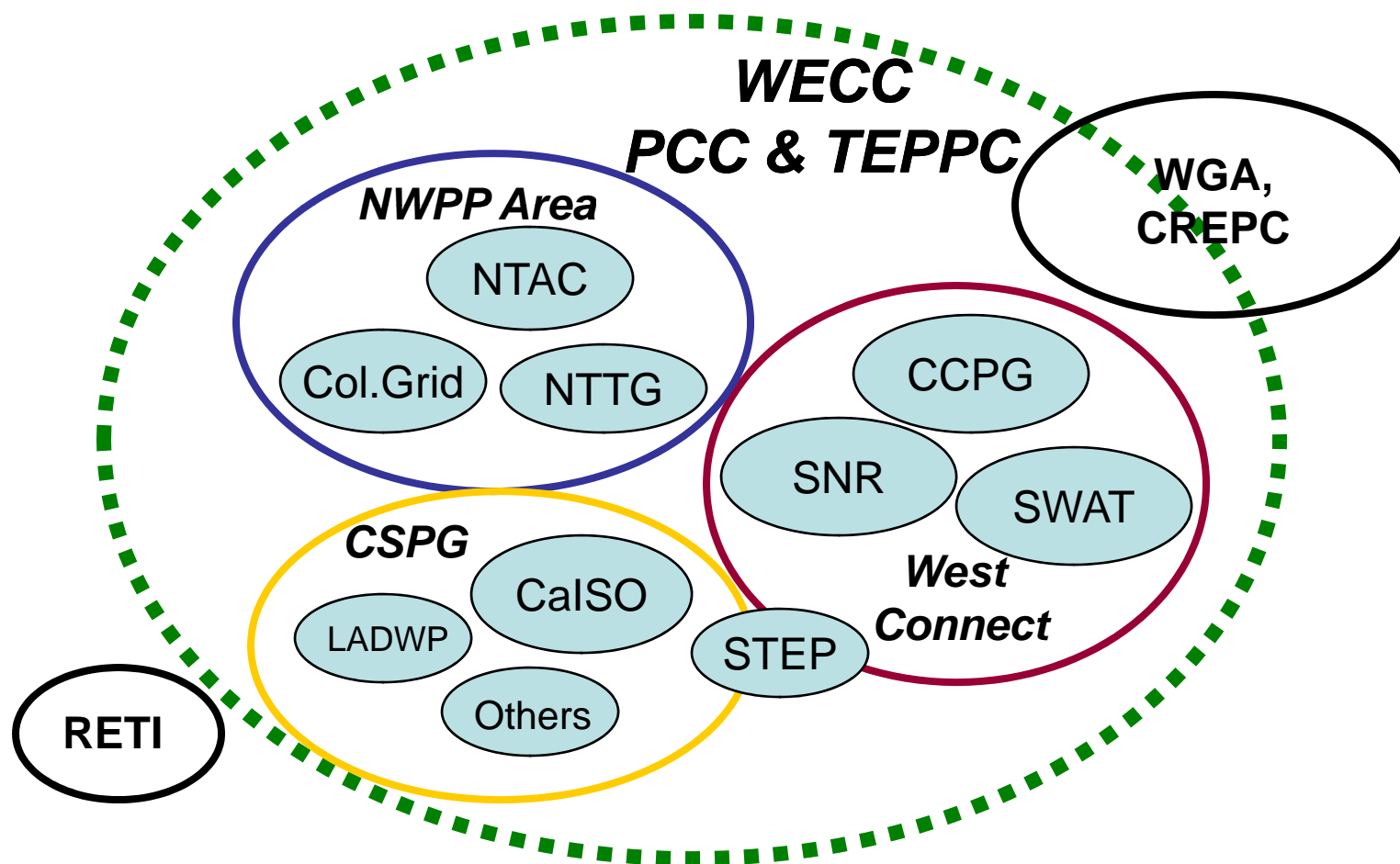
# FERC Order 890 Attachment K Planning Principles

1. Coordination
2. Openness
3. Transparency
4. Information Exchange
5. Comparability
6. Dispute Resolution
7. Regional Participation
8. Economic Studies
9. Cost Allocation



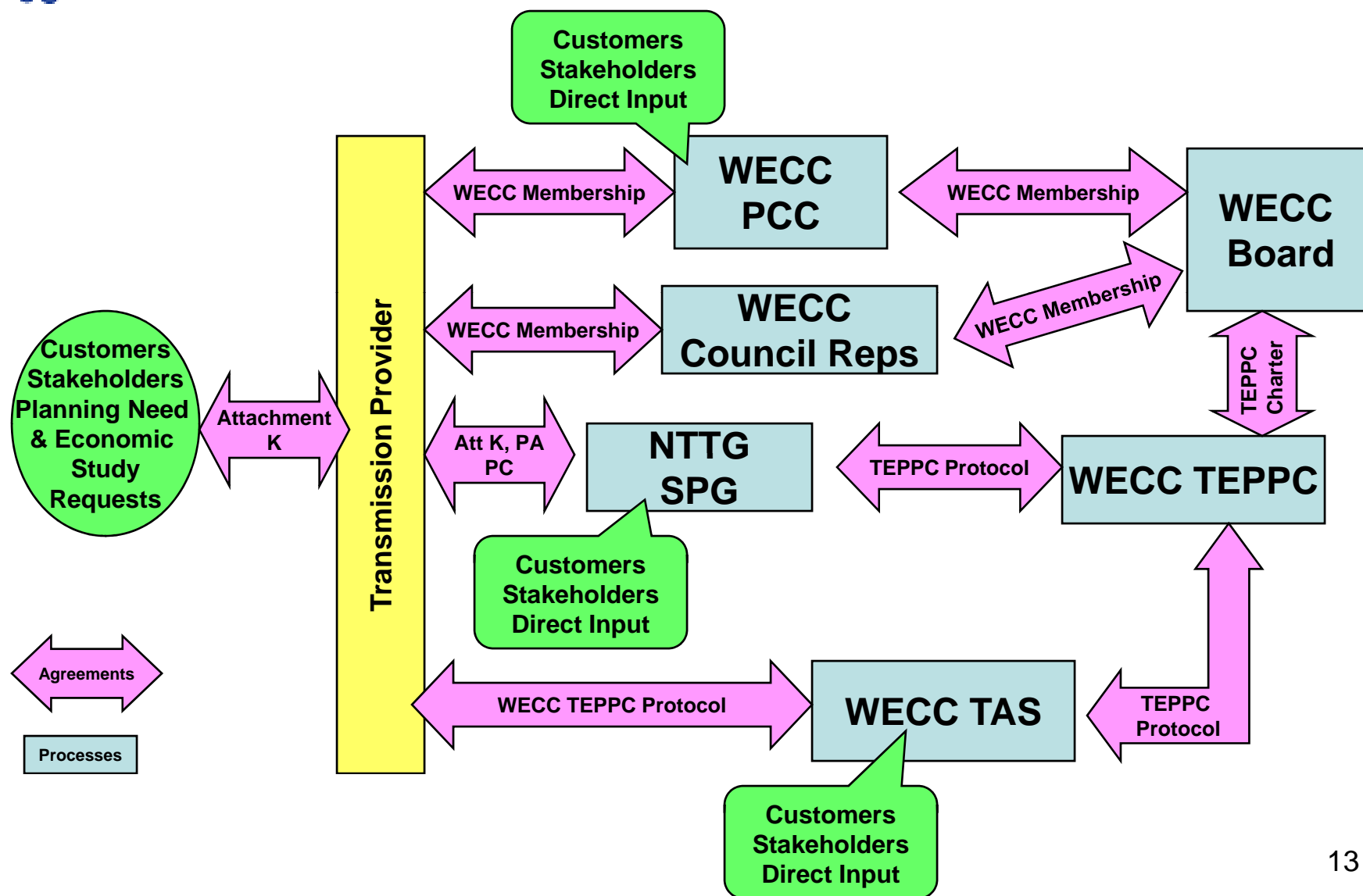
# Regional Coordination

Western Interconnection Transmission Planning Groups





# How Planning is Linked to Customer Needs





## **WECC PCC and TEPPC Process Provide:**

- Coordinated & exchanged planning information
- A synchronized planning process that produces planning information and plans considering:
  - local, sub-regional, and regional levels
- Open, streamlined & publicized process, meetings, & calendars
  - Open and inclusive, informative
  - Eliminate duplication
- Consideration of other's plans that overlap, are interdependent, or interact
- “Best effort” to:
  - Perform studies requested by TP's or customers
  - Facilitate formation of joint study teams with other transmission groups & perform analysis for projects that are interdependent or interacting
- Provide timely status reports



# Cost Allocation Committee

- History
  - Committee on Regional Electric Power Cooperation (CREPC) White Paper – 2005
  - CREPC formed the Transmission Regulatory Principles Work Group (TREG) to respond to recommendations in the Rocky Mountain Area Transmission Study (RMATS) Phase I report
    - To examine transmission regulatory issues and
    - To make recommendations on potential common regional regulatory principles and procedures
- Cost Allocation Committee
  - Reports to Steering Committee
  - Develops Cost Allocation Principles
  - Manages Cost Allocation Process in Synch with Planning
  - Applies Principles and recommends cost allocation to project sponsors
  - Appointed by state agency and publicly and consumer-owned NTTG members
- Initial Cost Allocation Process Test on Fast Tract Projects



# Transmission Use Committee

## Transmission Use Committee Goals:

- Provide full transparency into ATC, including building blocks
  - Ensure customers' commercial privacy is maintained
  - Description of why ATC components are set at the quantities shown
- Develop a common place to see ATC components in a common format
  - To be able to see ATC for high level understanding without becoming a registered customer





# Area Control Area Diversity Interchange (ADI)

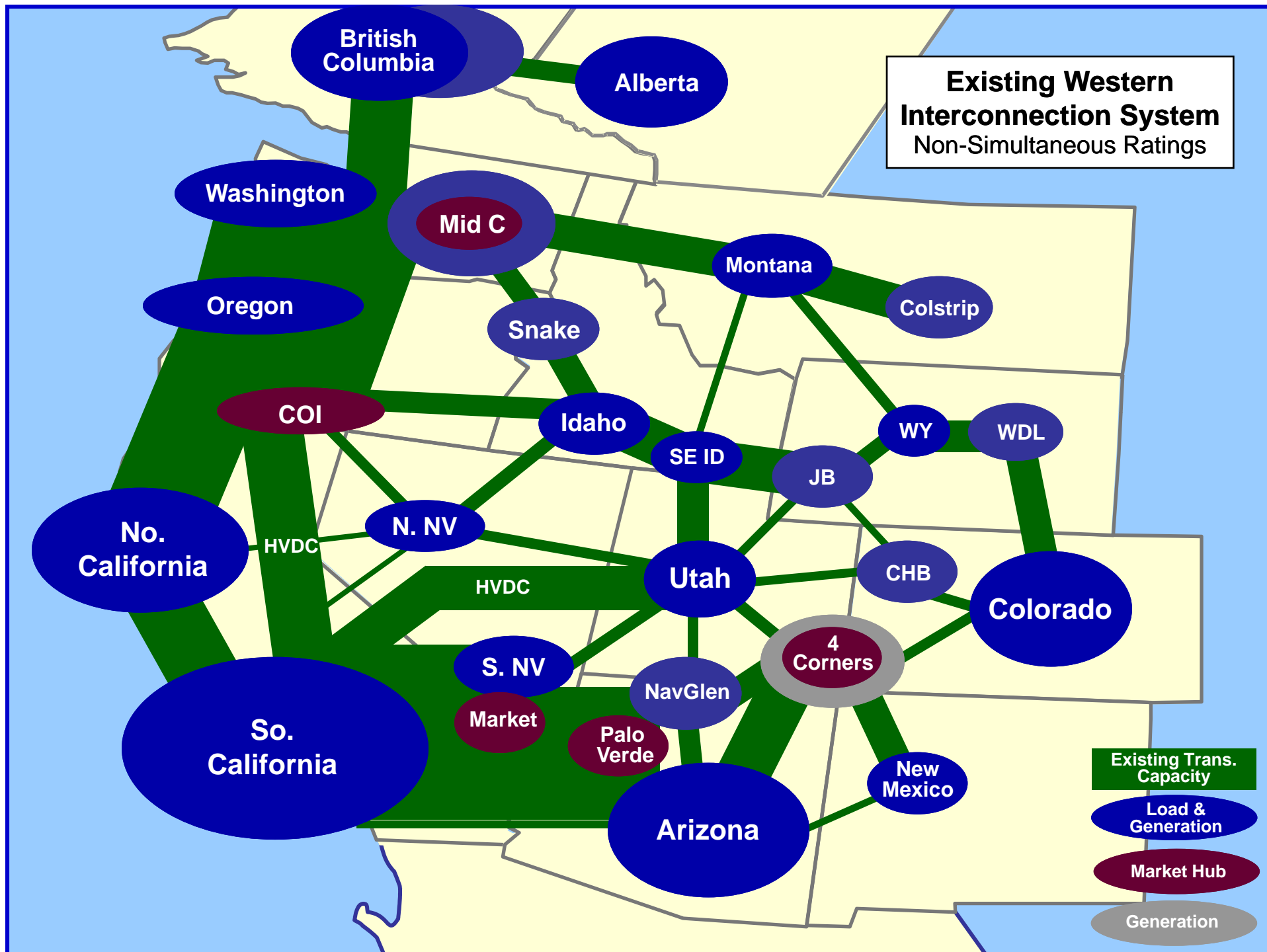
## What is ACE Diversity Interchange or ADI?

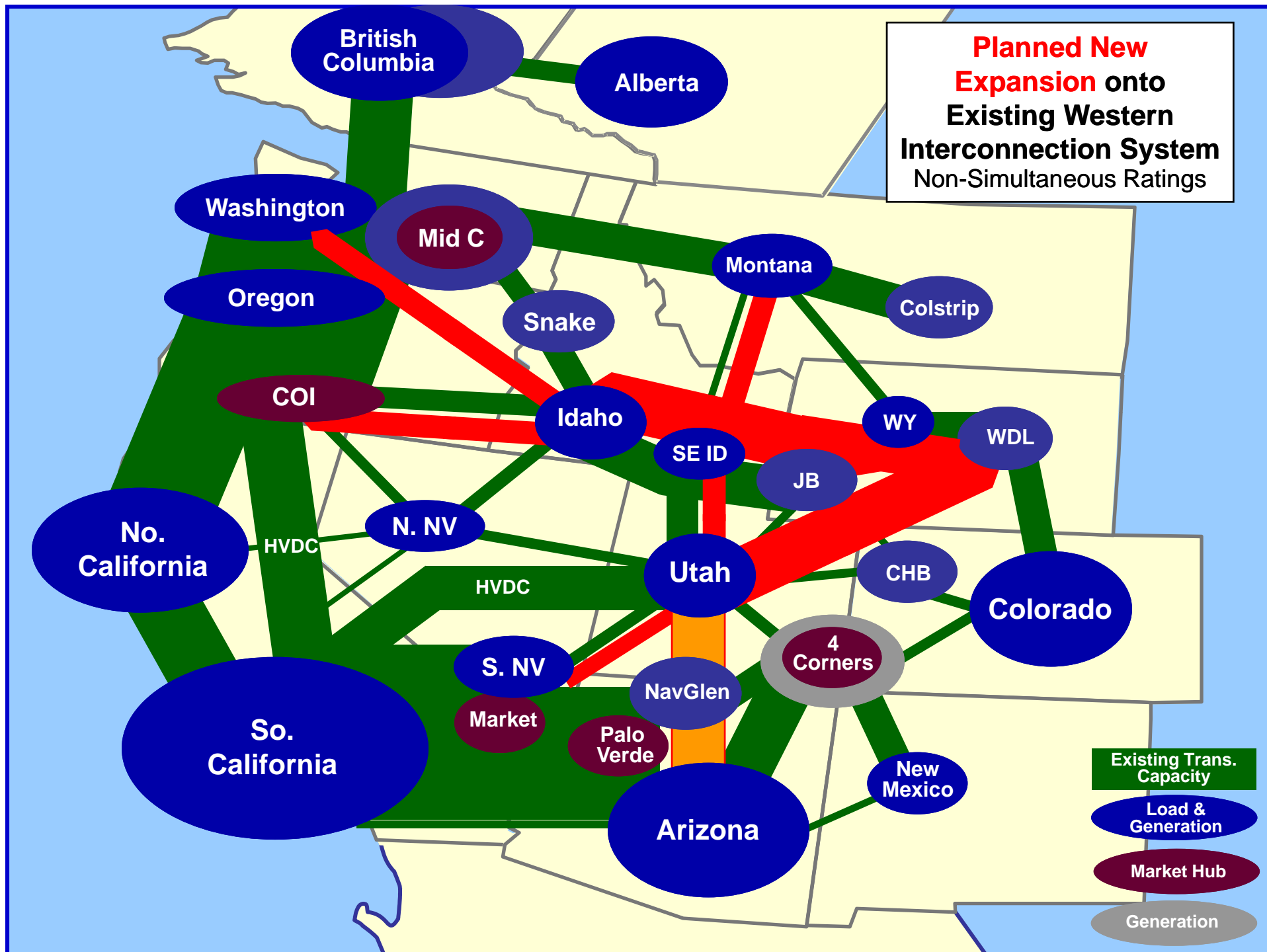
- ADI is the pooling of individual Area Control Errors (ACE) to take advantage of control error diversity (momentary imbalances of generation and load) .
- By pooling ACE the participants will be able to:
  - Reduce control burden on individual control areas;
  - Reduce sensitivity to resources with potentially volatile output such as wind projects; and,
  - Reduce unnecessary generator control movement.
- Participants in ADI should also realize compliance improvements in Control Performance Standards.



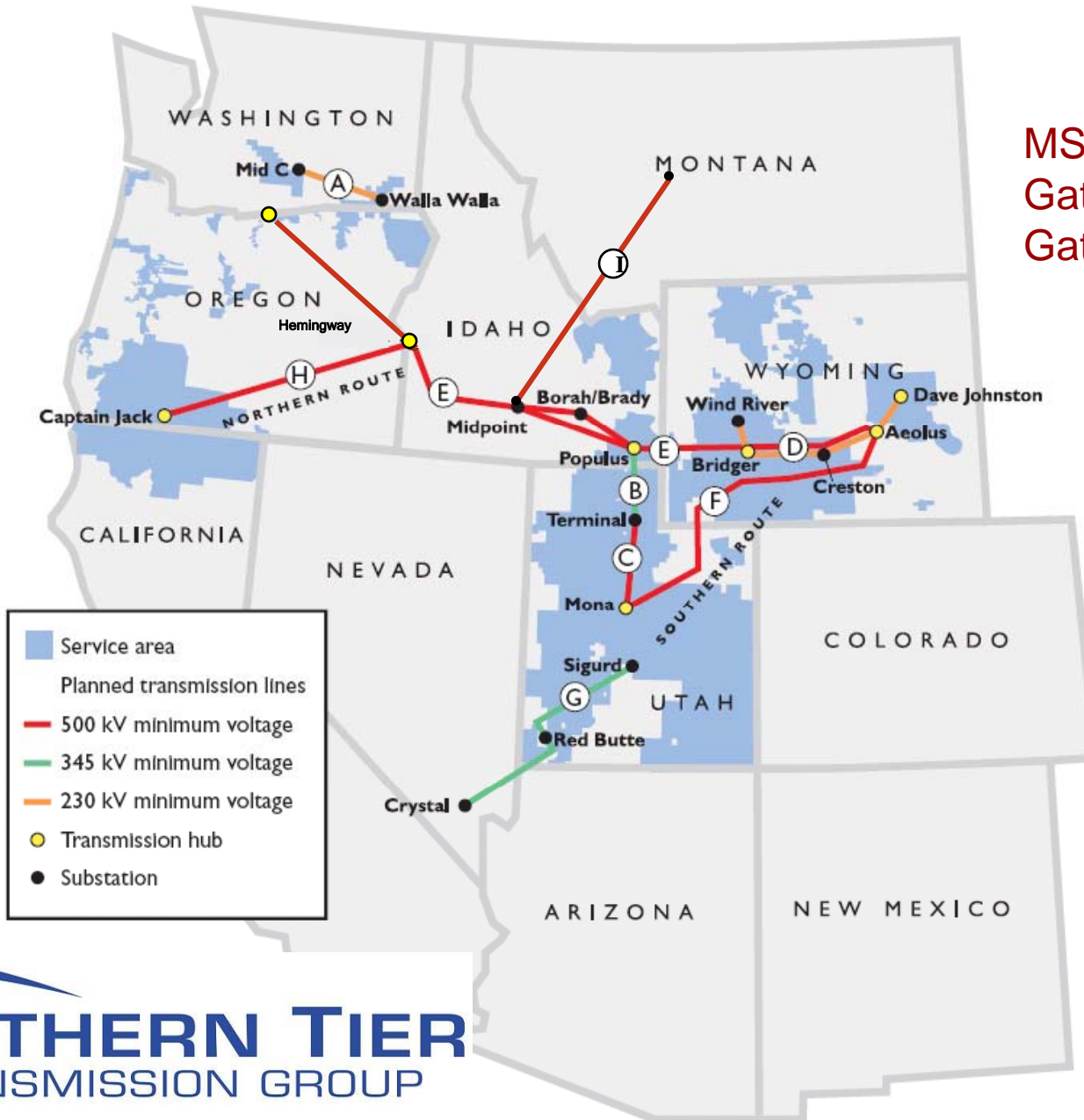
# NTTG Planning & Fast Track

1. Identified fast track transmission projects - June 30, 2007
2. Establish Order 890 planning process which provides for coordinated transmission plans
  - Tech Conference Oct 23-24 Denver
  - Filing Attachment K and related Agreements December 7, 2007



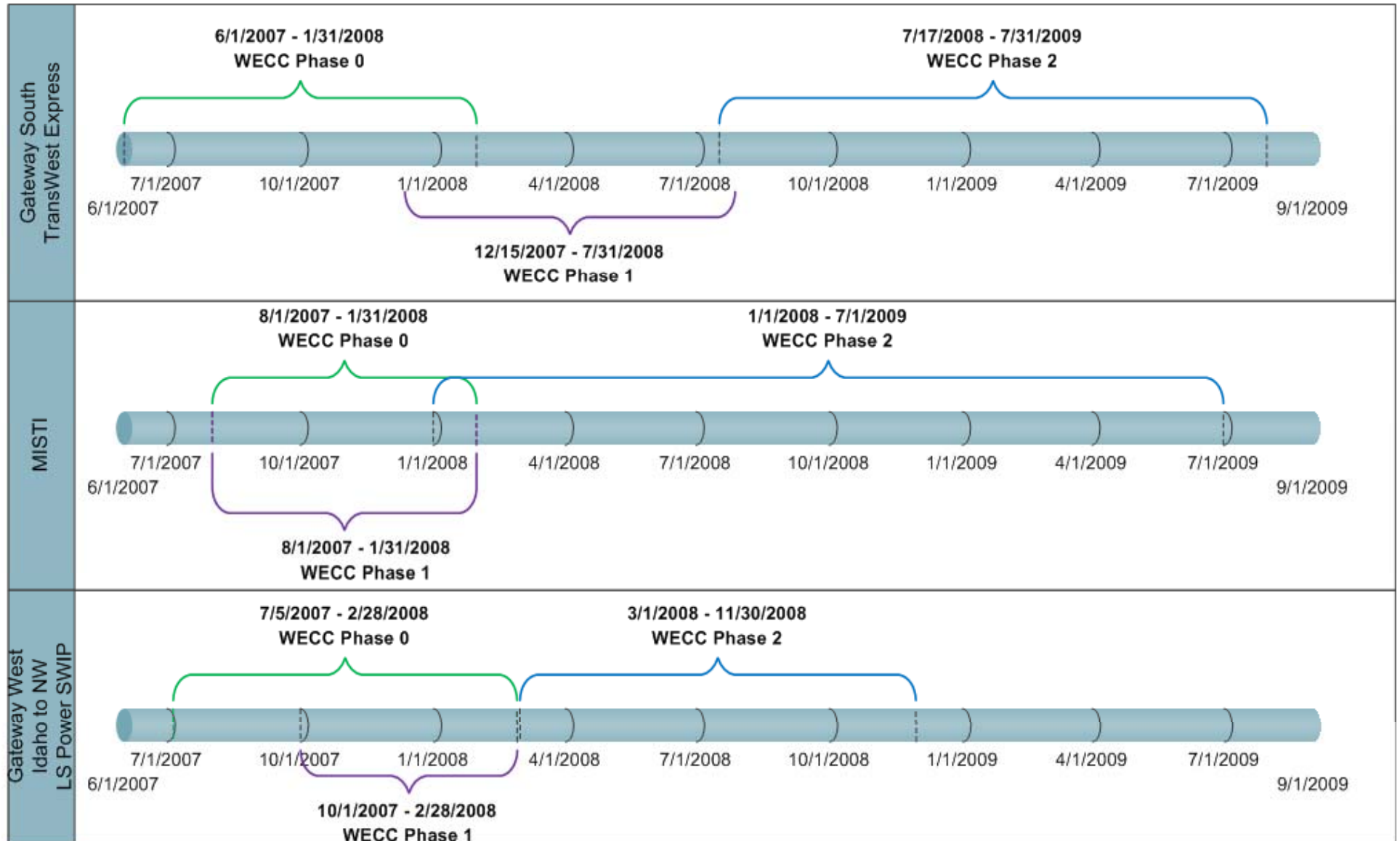


## Updated Transmission Expansion Plan



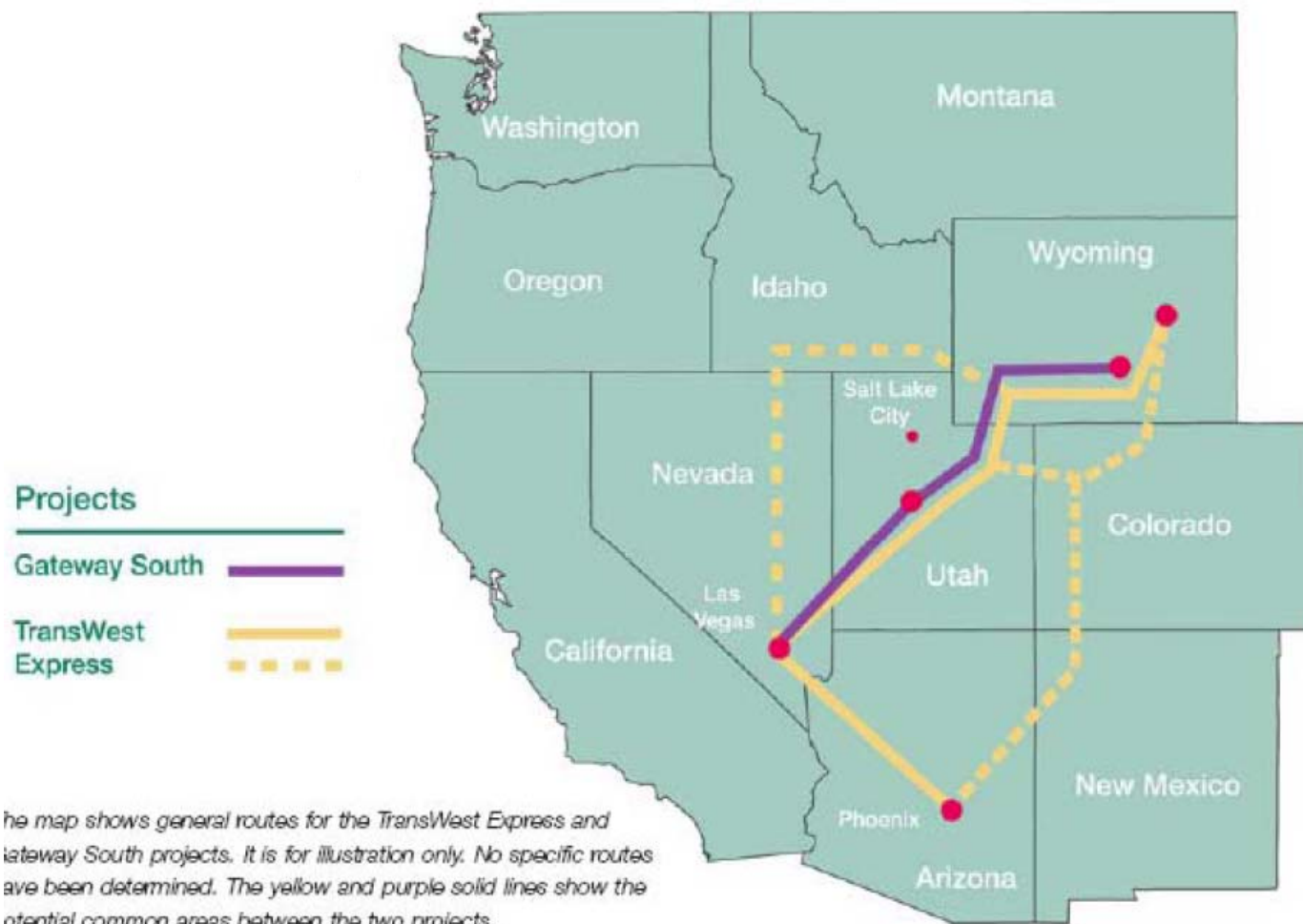
MSTI  
Gateway West  
Gateway South

# REGIONAL DEVELOPMENT PLAN





# Gateway South & TransWest Express



**PACIFICORP**  
A MIDAMERICAN ENERGY HOLDINGS COMPANY

**nationalgrid**





# NTTG KEY DATES AND MILESTONES AS OF 10.12.07

# 2007/2008

## ORDER 890

DATE\*

|  |                      |
|--|----------------------|
| TP's post draft Attach K;              | 09.14.07             |
| WECC posts Planning Protocol           | 09.14.07             |
| NTTG mtg. w/FERC staff                 | 09.25.07             |
| FERC Technical Conference – Denver, CO | 10.23.07<br>10.24.07 |
| Attachment K's Filed with FERC         | 12.07.07             |

## PLANNING COMMITTEE

DATE\*

|  |                                  |
|--|----------------------------------|
| Establish Planning Committee/Chair                                       | 09.10.07<br>09.26.07<br>10.03.07 |
| Stakeholder Web Conference to review Common Base Case Assumptions        | 10.22.07                         |
| Stakeholder Meeting – Boise, ID<br>Initial Study Plans Reviewed          | 10.16.07<br>10.31.07<br>11.13.07 |
| Initiate Coordination w/Cost Allocation Process - CA                     | DEC 07                           |
| Stakeholder Meeting – SLC, UT<br>Draft Comprehensive Study Plan Reviewed | 12.11.07                         |
| WECC Phase 0 Study Plan Completed and reviewed with Stakeholders         | 01.15.08                         |

## COST ALLOCATION

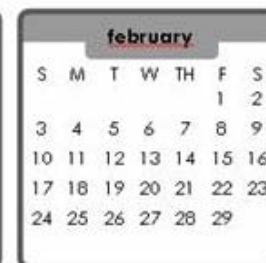
DATE\*

|   |          |
|---|----------|
| Charter Approval – October Steering                         | 10.01.07 |
| Establish CA Committee Chair                                | 10.31.07 |
| Initiate Cost Allocation Processes for "Sponsored Projects" | DEC. 07  |

## ADI

DATE\*

|                        |         |
|------------------------|---------|
| ADI Charter Approval   | NOV. 07 |
| ADI Work Plan Approval | NOV. 07 |



## TRANSMISSION USE COMMITTEE

DATE\*

|   |                      |
|---|----------------------|
| Establish TU Committee/Chair  | 09.04.07             |
| Establish a standardized form and procedure to request economic congestion studies  | 11.09.07<br>11.20.07 |
| Gather data required to complete analysis on unchanging monthly and yearly ATC values where paths have 0 ATC and where there is >10% change | 12.03.07             |
| Develop report summarizing results of analysis on paths w/zero ATC that don't change and paths with >10% change                             | 12.31.07             |
| Provide forum for public selection and prioritization of economic congestion study areas  | 01.15.07             |

## STEERING & JOINT COMMITTEE MEETINGS

DATE\*

|  |          |
|--|----------|
| November NTTG Steering Committee Meeting | 11.01.07 |
| NTTG Joint Committee Stakeholder Meeting | 1.15.08  |

\*Date Legend:

|          |           |         |
|----------|-----------|---------|
| Complete | On Target | At Risk |
|----------|-----------|---------|