NORTHERN TIER
TRANSMISSION GROUP

Planning Stakeholder Meeting

October 22, 2007
Teleconference and Web Session

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

NTTG Standard of Conduct Policy

"It is the policy of the Northern Tier Transmission Group ("Northern Tier") not to facilitate the improper distribution of non-public transmission information. In furtherance of this policy, no participant in any Northern Tier meeting shall discuss non-public transmission information unless Northern Tier's Standards of Conduct Safeguards are satisfied."

NTTG Standard of Anti-Trust Policy

It is the policy of the Northern Tier Transmission Group to fully comply with federal and state antitrust laws. Participants shall be mindful that an essential objective of NTTG is promoting or enhancing competition. Discussions in the following areas in particular can be very problematic and in some cases prohibited, and require careful attention for antitrust compliance:

- your company's prices for products or services;
- prices charged by your competitors;
- allocating markets, customers, or products;
- limiting production; and
- excluding dealings with other companies

Agenda

- Review selection of the basecases
- Review Fast Track Projects included in the basecase
- WECC Phase 2 projects status (modeled or not)
- Resources
- Loads
- Approval

NORTHERN TIER TRANSMISSION GROUP

Coordinated Database Update

Dave Angell

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

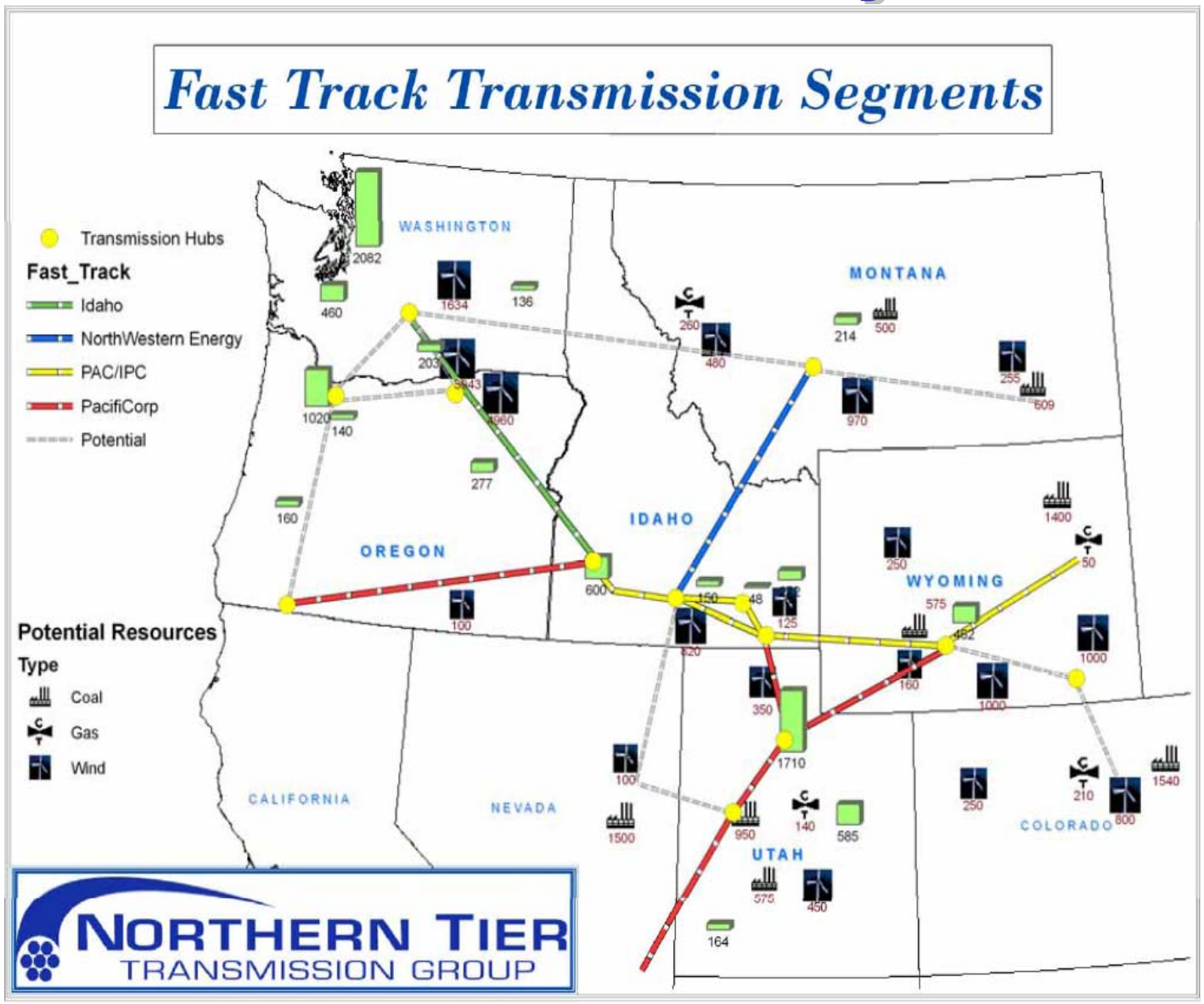
WECC 2010LA Basecase

- WECC Case Description
  - To represent anticipated operating conditions with high flows from California/Montana to the Northwest
- Fast Track Project Expectations
  - Low load conditions in Idaho, Montana and Utah
  - Low hydro conditions in the northwest
  - Large east to west power transfers

WECC 2015HS Basecase

- WECC Case Description
  - To represent maximum achievable flows on the East of River/West of River with heavy future IPP generation in California and the Desert Southwest
- Fast Track Project Expectations
  - High load conditions in Idaho and Utah
  - Import into Idaho and Utah
  - Export from Montana

Fast Track Projects



Gateway South

- APS, National Grid, PacifiCorp and WIA
- Eastern Wyoming to central Utah and southern Nevada
- 700 Miles
- 2-500 kV circuits Wyoming to Utah
- 3000 MW (WY to UT)
- 1-345 kV circuit Utah to southern Nevada
- 600 MW (UT to NV)
- 2014 in-service

TransWest Express

- APS, National Grid, PacifiCorp and WIA
- Eastern Wyoming to southern Nevada and Arizona
- 1200 Miles
- 1-500 kV DC circuit
- 3000 MW
- 2015 in-service

Gateway West

- Idaho Power and PacifiCorp
- Eastern Wyoming to Southwestern Idaho
- 650 miles
- 2- 500 kV AC circuits
- 3000 MW East to West
- 2012 in-service

Idaho to Northwest

- Idaho Power
- Southwestern Idaho to Northeastern Oregon
- 230 miles
- 1-500 kV circuit
- 1000 MW bi-directional
- 2012 in-service

MSTI

- Northwestern Energy
- Townsend, Montana to Midpoint or Borah, Idaho
- 350-390 miles
- 1-500 kV circuit
- 1500 MW North to South
- 2013 in-service

SWIP North

- Sponsor LS Power
- Ely, Nevada to Midpoint, Idaho
- 230 miles
- 1-500 kV circuit
- 2000 MW bi-directional
- 2012 in-service

WECC Phase 2 Projects

Project Name	Status
Sea Breeze Juan de Fuca	Not modeled
Path 54 Uprate Palo Verde Devers 2	Modeled
Navajo Transmission Project Segment 1	Not modeled
Ely Energy Center Robinson Summit – Harry Allen 500 kV	Modeled
Great Basin Transmission Project	Modeled
Intermountain Southern Transmission System DC Line	Not modeled
Imperial Valley to San Felipe 500 kV Project	Not modeled
Sunrise Powerlink Project	Not modeled
Miracle Mile – Ault 230 kV Transmission line (TOT3)	Modeled
Indian Hills-Upland Project	Not modeled
Montana Alberta Tie Project	Modeled
Midpoint-Summer Lake 500kV Line Rating	Modeled

Montana Resource Additions

Resource Type	Capacity (MW)
Hydro	60
Thermal (Coal)	870
Thermal (Gas)	280
Wind	770
Total	**1980**

Wyoming Resource Additions

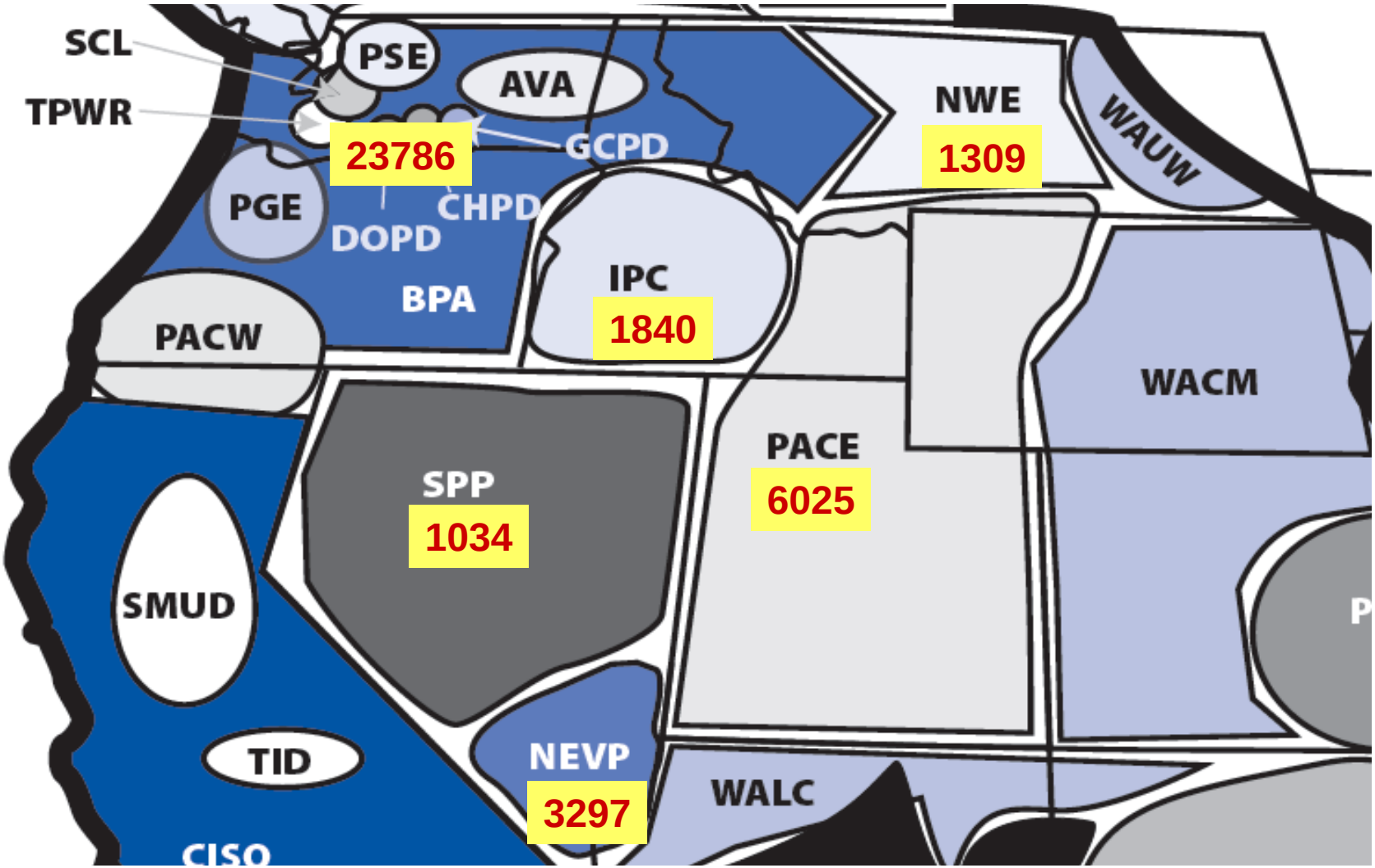
Area	Resource Type	Capacity
Jim Bridger	Thermal (Coal)	1,581
Miners/Aeolus	Wind	1,086
Dave Johnston	Thermal (Coal)	1,856*
Dave Johnston	Wind	1,086*
Upper Green River	Thermal (Gas)	548
	Total	**6,157***

*An additional 3000 MW of resources will be added for the TransWest Express project in the Dave Johnston Area

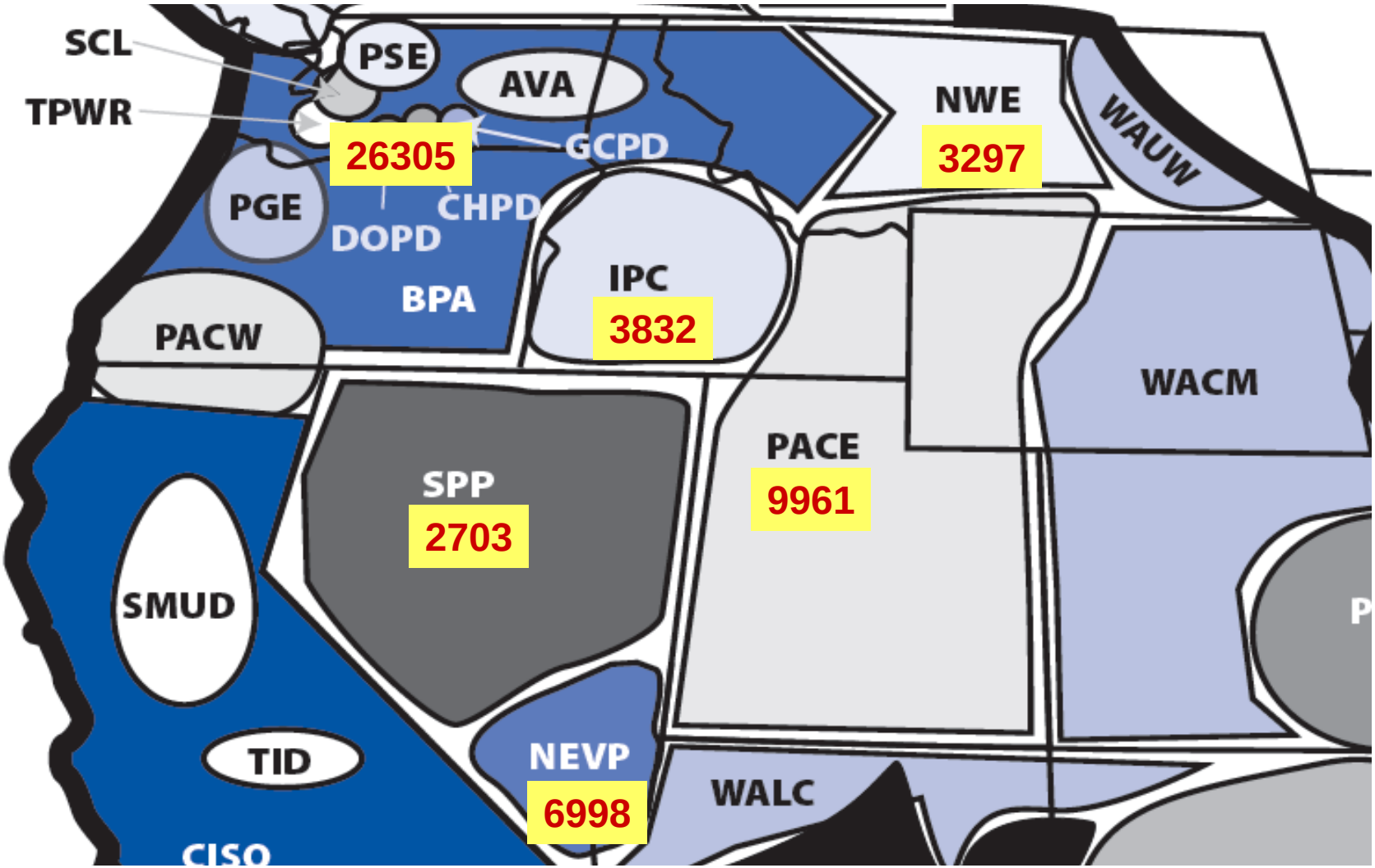
Nevada Resource Additions

Resource Type	Capacity
Thermal (Coal)	1500
Wind	250
Total	**1750**

2010LA Control Area Loads



2015HS Control Area Loads



Basecase Approval

- Stakeholder Approval of the basecase
  - Projects modeled
  - Modeled WECC Projects
  - Resources
  - Loads

Next Meeting

- Topic – Fast Track Project Update
- Date - November 13
- Start time 10:00
- Location – Boise
  - Red Lion Downtowner
  - 1800 Fairview Avenue
  - (208) 344-7691
  - Bitter Root/Sawtooth Room

Next Meeting

- Teleconference
  - Phone Number: (303) 346-9752, toll free number (866) 427-0083
  - Meeting Room Number: *5458467*
- Web conferencing
  - Qwest Webconference
    - (click on link to connect)
  - Meeting Room Number: 5458467