Transmission Use Committee

Available Transfer Capability
Phase 1

Portland, OR
July 10, 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. "

Introductions

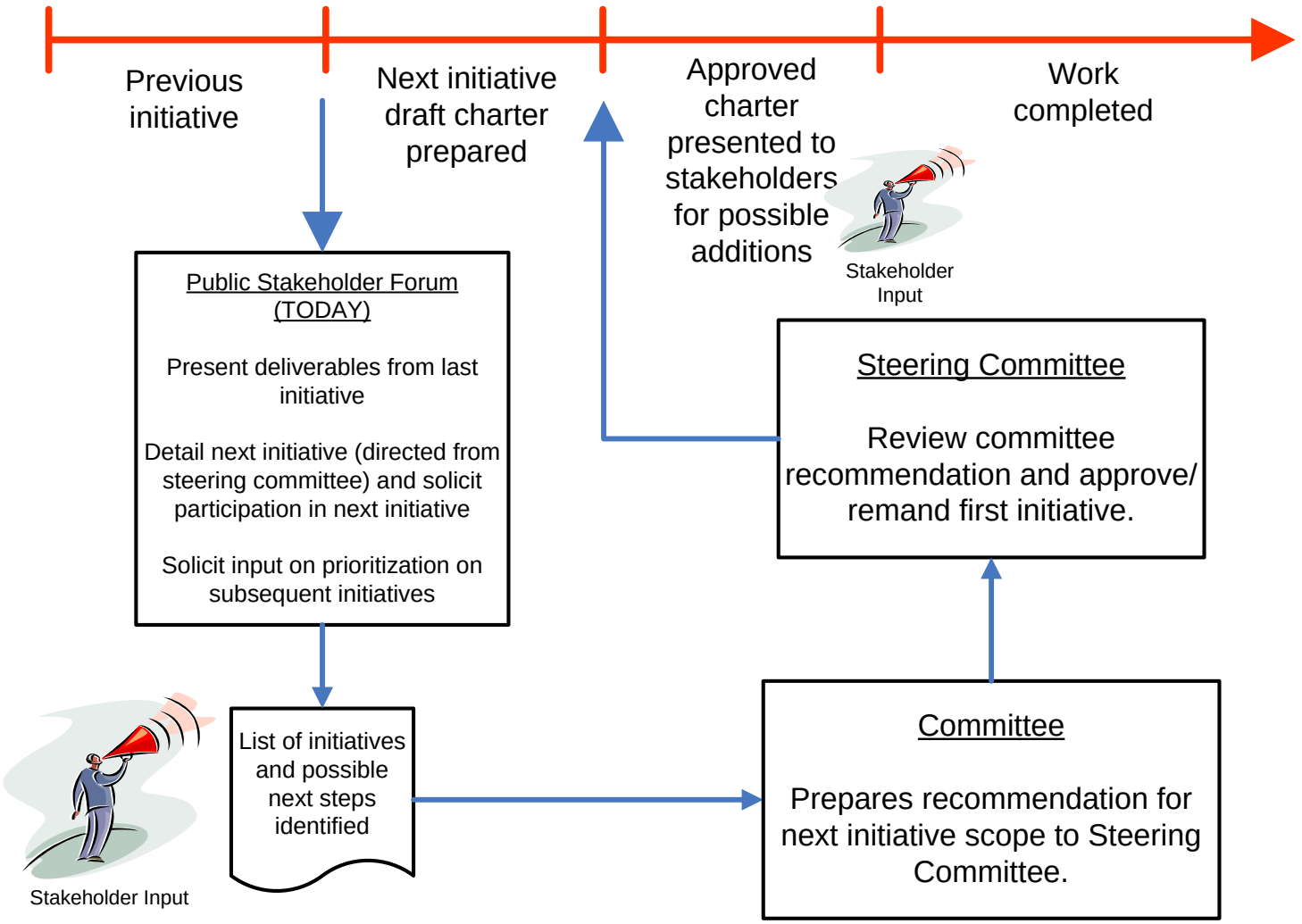
Brian Weber, PacifiCorp (Chair)

Jim Tucker, Deseret Power Electric Cooperative

John Canavan, NorthWestern Energy

Pat Monson, Idaho Power Company

Overview of Northern Tier project charter process



Overview of Northern Tier

- Steering Committee representatives
  - State commissioners and government representatives
    - **Commissioner Marsha Smith** - Co-Chair, Idaho Public Utilities Commission
    - **Commissioner Lee Beyer** - Oregon Public Utility Commission
    - **Commissioner Doug Mood** - Montana Public Service Commission
    - **Larry Nordell** - Montana Consumer Counsel
    - **Commissioner Steve Oxley** - Wyoming Public Service Commission
    - **Commissioner Ric Campbell** - Utah Public Service Commission
  - Utility executives
    - **John Cupparo** - Co-Chair, PacifiCorp
    - **Curt Winterfeld** - Deseret Power Electric Cooperative
    - **Lisa Grow** - Idaho Power Company
    - **Ray Brush** - NorthWestern Energy
    - **Doug Hunter** – Utah Associated Municipal Power Systems (UAMPS)

Phase 1 Charter Review

- Posting a map on the NTTG website that identifies the transmission paths of NTTG participants, along with the following information:
  - Various Points of Delivery/Receipt, along with the OASIS schedule for designated paths,
  - Associated transmission provider, and
  - Long-term firm annual TTC and ATC
- An agreed to process and schedule for maintaining this data once it has been posted.
- Providing a map legend containing locational definition of Points of Delivery (PODs) and Points of Receipt (PORs) used to schedule paths on each OASeS
- Providing a definition of each building block of ATC provided in the ATC transparency initiative
- Adding disclaimer to the information provided to ensure that customers ultimately rely on the each OASeS for the latest ATC data
- Providing instructions on how to get to each provider's ATC data on their respective OASeS
- Establish a schedule for updating the ATC information provided.

Review of ATC

- Available Transfer Capability (ATC)*
  - A measure of the transfer capability remaining in the physical transmission network for further commercial activity over and above already committed uses

$$ATC = TTC – TRM – CBM – ETC$$

* Subject to change from ongoing NERC/NAESB processes

TTC and ETC

- Total Transfer Capability (TTC)*
  - The amount of electric power that can be transferred over the interconnected transmission network in a reliable manner while meeting all of a specific set of defined pre- and post-contingency system conditions.

- Existing Transmission Commitments (ETC)*
  - Reservations of transmission capacity by network and point-to-point customers.

* Subject to change from ongoing NERC/NAESB processes

Review of TRM / CBM

- Transmission Reliability Margin (TRM)*
  - The amount of transmission transfer capability to provide a reasonable level of assurance that the interconnected transmission network will be secure

- Capacity Benefit Margin (CBM)*
  - The amount of firm transmission transfer capability preserved for Load Serving Entities (LSEs) on the host transmission system where their load is located, to enable access to generation from interconnected systems to meet generation reliability requirements

* Subject to change from ongoing NERC/NAESB processes

Disclaimer

All ATC (Available Transmission Capacity) related information, including any information used to calculate ATC, contained on

(1) the Northern Tier Transmission Group (NTTG) Website,

(2) the NTTG section of any individual transmission provider's Open Access Same-time Information System (OASIS) website, or

(3) in any NTTG related electronic or paper documentation

represents information at a specific point in time and therefore, because of the dynamic nature of ATC, should not be relied on as current ATC. Current ATC numbers are contained on the Desert Power Electric Cooperative, Idaho Power Company, PacifiCorp and NorthWestern Energy OASIS sites. Desert Power Electric Cooperative, Idaho Power Company, PacifiCorp and NorthWestern Energy expressly state that the ATC information on the (1) NTTG Website, (2) the NTTG section of any transmission provider's OASIS website, or (3) in any other non-OASIS documentation is only informational in nature and shall not be honored in conducting transmission business. All transmission business shall be conducted on the individual OASIS sites using the ATC information posted on those sites.

Review of TRM / CBM

- Company specific TRM and CBM discussion

- Supporting documentation posted on NTTG website and individual transmission providers' websites

Idaho Power Company

- Pat Monson
  - Idaho Power Company existing scheduled paths
  - Idaho – Northwest joint facilities

Idaho Power Company

- Pat Monson
  - Idaho Power Company existing scheduled paths
    - PATH 16 – Idaho to Sierra (POR/POD is M345)

      Scheduling capability based on Sierra's (SPPC) system import and export limits and the flows on their other tie lines.

      North to South

      Year round rating of 500 MW

      Year round OTC/TTC of 500 MW

      South to North

      Year round rating of 360 MW

      Year round OTC/TTC of 262 MW

Idaho Power Company

- PATH 17 – Borah West (POR/POD is BOBR)

  TTC based on thermal limitations of the Path

  East to West

  Year round rating of 2557 MW

  Year round OTC/TTC of 2557 MW

  West to East

  Capacity not defined

Idaho Power Company

- Idaho – Northwest joint facilities

  PATH 14 – Idaho to Northwest

  OTC/TTC based on thermal limitations of the Path

  West to East (POR/POD of LaGrande/ENPR/LOLO)

  Summer rating and breakdown (June thru October)

BPA to IPC interconnection	350 MW
PacifiCorp to IPC interconnection	400 MW
AVA to IPC interconnection	340 MW
Total	----------
	1090 MW

  Summer OTC/TTC of 1090 MW

Idaho Power Company

Spring rating and breakdown (April thru May)

BPA to IPC interconnection	350 MW
PacifiCorp to IPC interconnection	400 MW
AVA to IPC interconnection	400 MW
Total	----------
	1150 MW

Spring OTC/TTC of 1150 MW

Idaho Power Company

Winter rating and breakdown (November thru March)

BPA to IPC interconnection	350 MW
PacifiCorp to IPC interconnection	400 MW
AVA to IPC interconnection	450 MW
Total	----------
	1200 MW

Winter OTC/TTC of 1200 MW

Idaho Power Company

PATH 14 – Idaho to Northwest

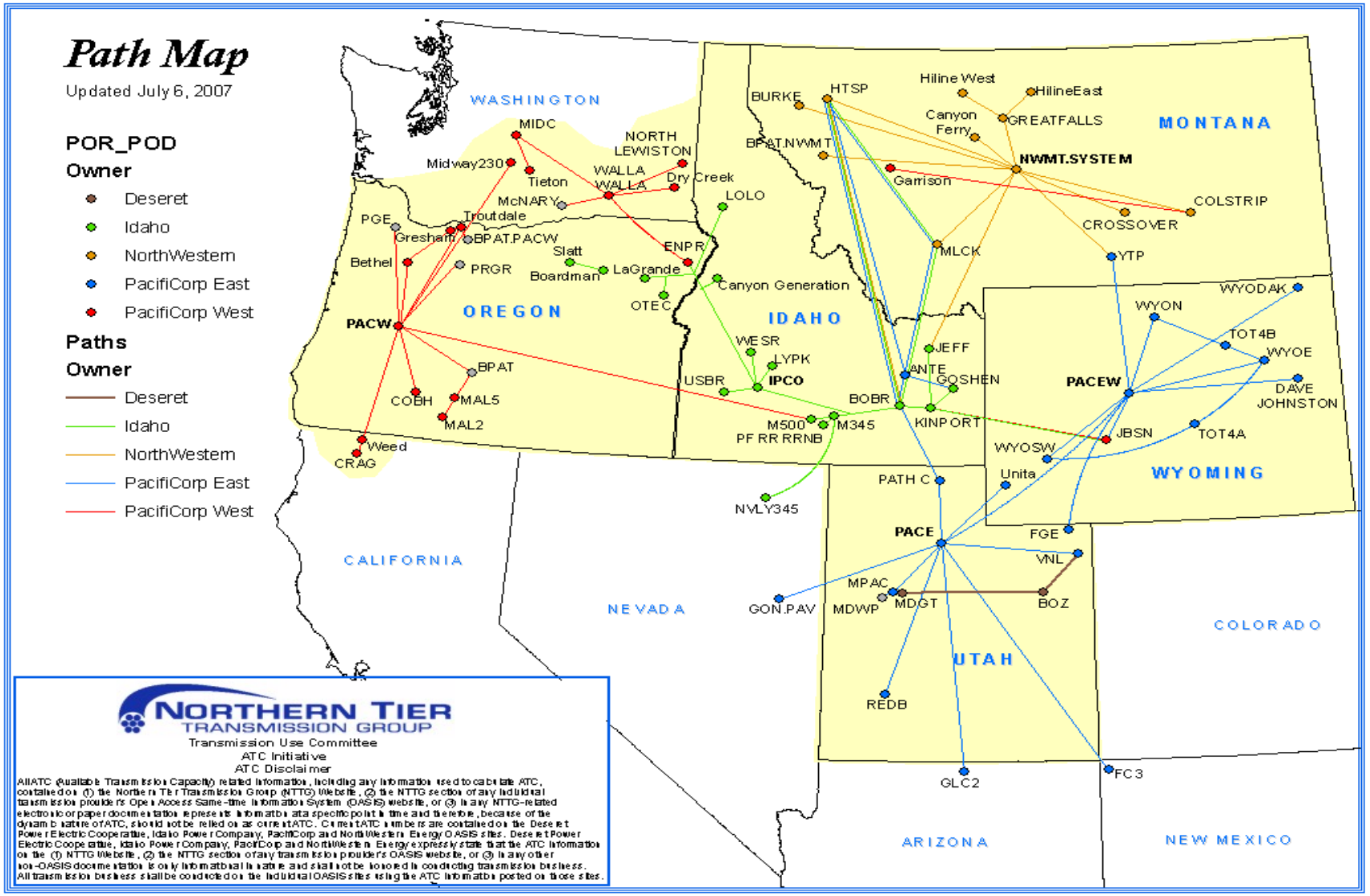
East to West (POR/POD of LaGrande/ENPR/LOLO & POD M500)

Year round rating and breakdown

IPC to PacifiCorp interconnection	1587 MW
IPC to BPA interconnection	413 MW
IPC to AVA interconnection	400 MW
Total	2400 MW

Year round OTC/TTC of 2304 MW

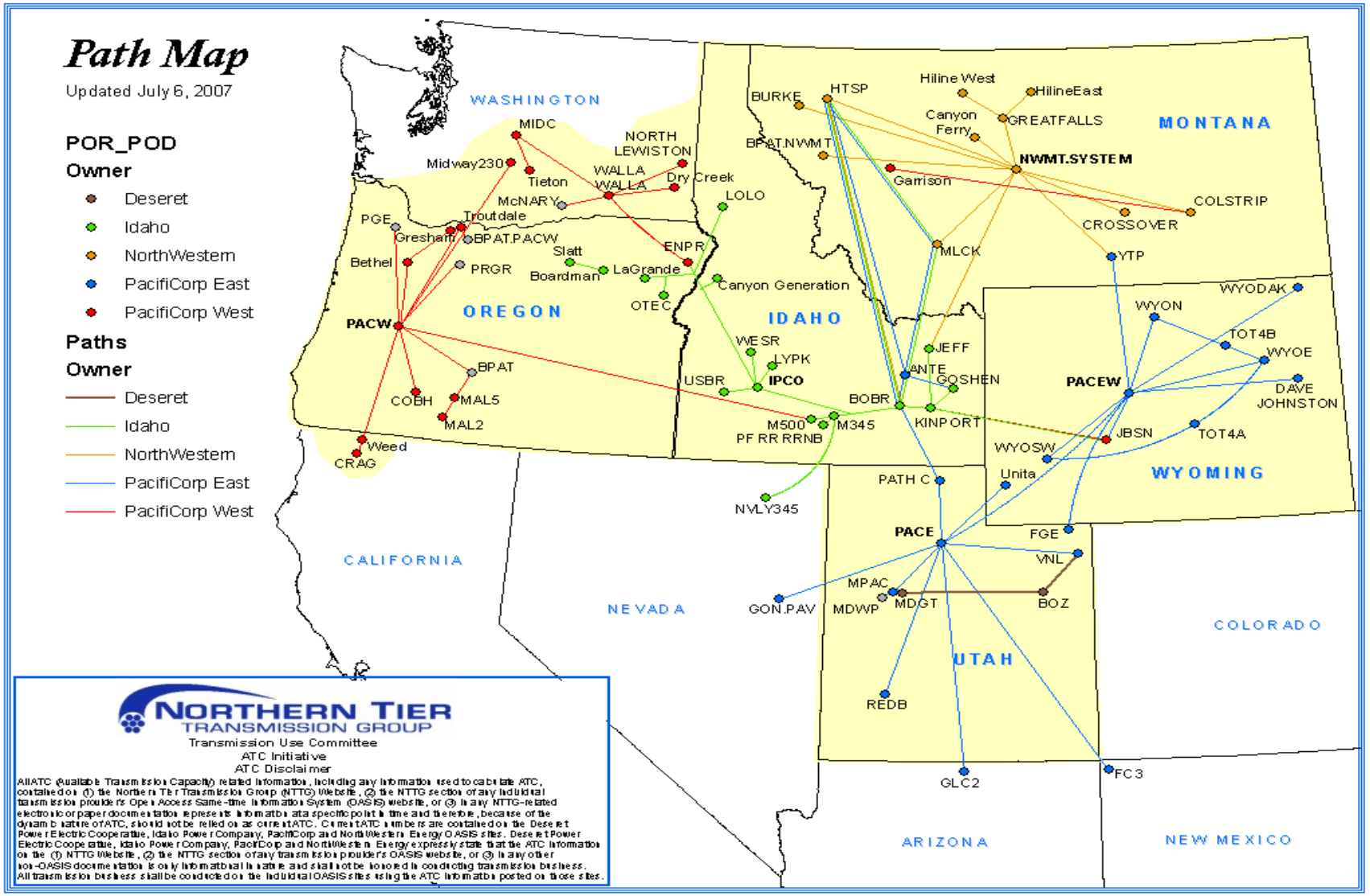
Idaho Power Company



NorthWestern Energy

- NorthWestern Energy Company
  - NorthWestern Energy Company existing scheduled paths
  - AMPS (Hot Springs to Borah/Brady) joint facilities

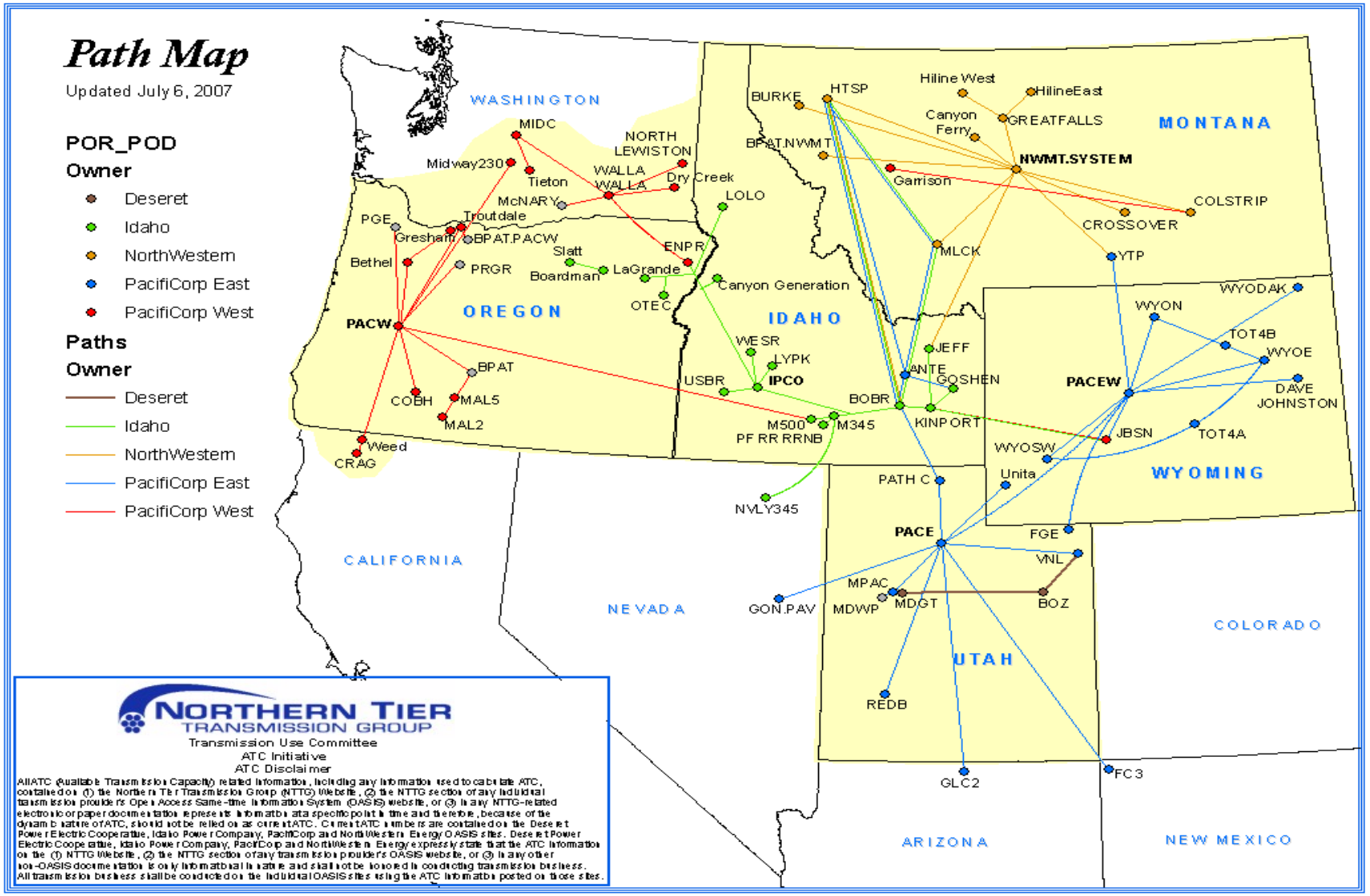
NorthWestern Energy



PacifiCorp

- Brian Weber
  - PacifiCorp (East and West) existing scheduled paths
  - Bridger West joint facilities

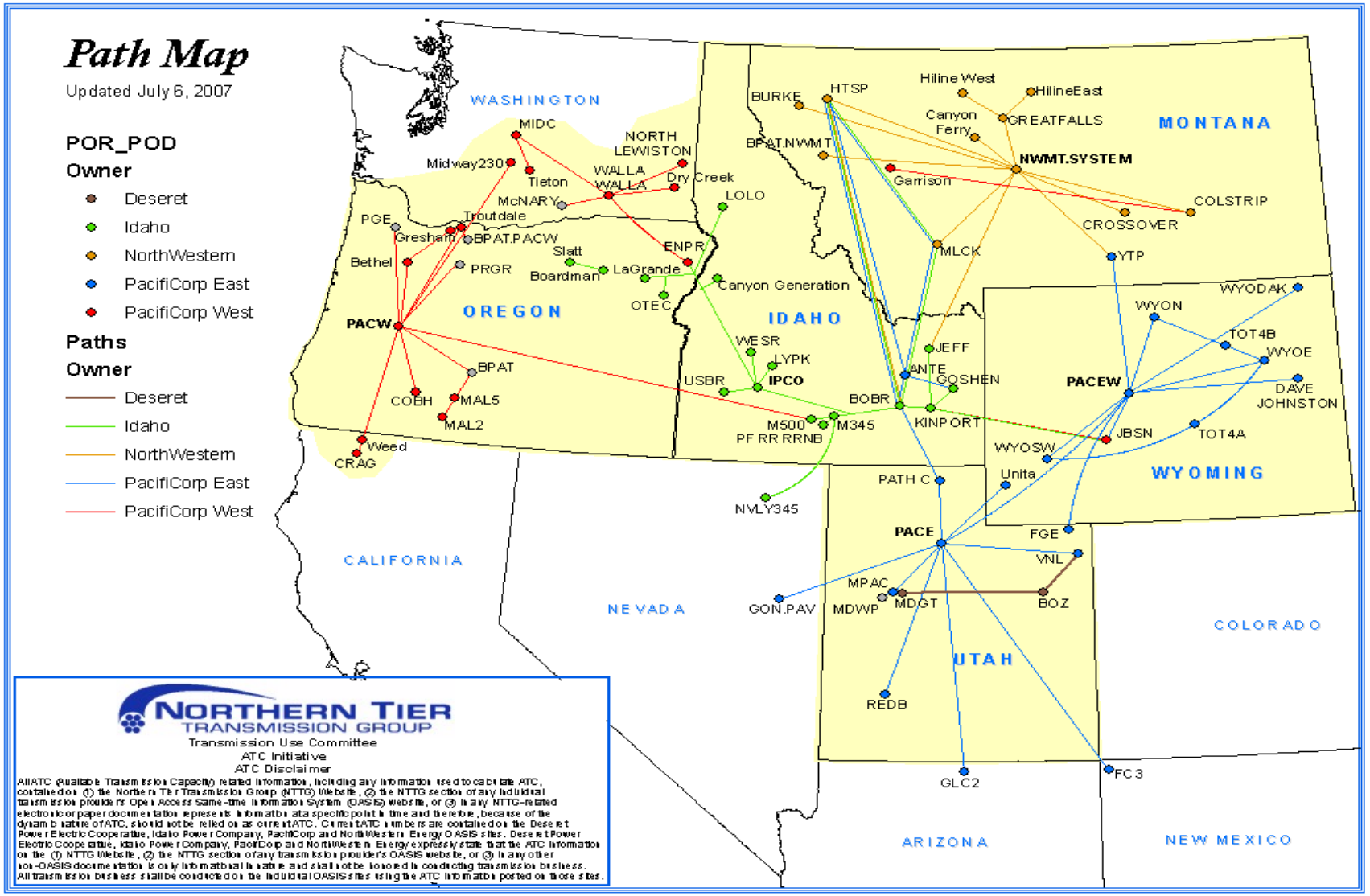
PacifiCorp


Path Map
Updated July 6, 2007
POR_POD
Owner
Deseret
Idaho
NorthWestern
PacifiCorp East
PacifiCorp West
Paths
Owner
Deseret
Idaho
NorthWestern
PacifiCorp East
PacifiCorp West
WASHINGTON
OREGON
CALIFORNIA
NEVADA
IDAHO
MONTANA
WYOMING
UTAH
COLORADO
ARIZONA
NEW MEXICO
MIDC
Midway230
Tieton
NORTH LEWISTON
WALLA WALLA
Dry Creek
McNARY
LOLO
PGE
Troutdale
Gresham
BPAT.PACW
Bethel
PRGR
Slatt
Boardman
LaGrande
ENPR
OTEC
Canyon Generation
PACW
BPAT
COBH
MAL5
MAL2
Weed
CRAG
WESR
LYPK
USBR
IPCO
M500
M345
PF RR RRNB
NVLY345
BURKE
HTSP
Hiline West
HilineEast
Canyon Ferry
GREATFALLS
BPAT.NWMT
NWMT.SYSTEM
Garrison
COLSTRIP
CROSSOVER
MLCK
YTP
JEFF
ANTE
GOSHEN
BOBR
KINPORT
WYODAK
WYON
TOT4B
WYOE
PACEW
DAVE JOHNSTON
JBSN
TOT4A
WYOSW
Unita
PATH C
PACE
FGE
VNL
MPAC
MDWP
MDGT
BOZ
GON.PAV
REDB
GLC2
FC3
NORTHERN TIER TRANSMISSION GROUP
Transmission Use Committee
ATC Initiative
ATC Disclaimer
All ATC (Available Transmission Capacity) related information, including any information used to calculate ATC, contained on (1) the Northern Tier Transmission Group (NTTG) Website, (2) the NTTG section of any individual transmission provider's Open Access Same-time Information System (OASIS) website, or (3) in any NTTG-related electronic or paper documentation represents information at a specific point in time and therefore, because of the dynamic nature of ATC, should not be relied on as current ATC. Current ATC numbers are contained on the Deseret Power Electric Cooperative, Idaho Power Company, PacifiCorp and NorthWestern Energy OASIS sites. Deseret Power Electric Cooperative, Idaho Power Company, PacifiCorp and NorthWestern Energy expressly state that the ATC information on the (1) NTTG Website, (2) the NTTG section of any transmission provider's OASIS website, or (3) in any other non-OASIS documentation is only informational in nature and shall not be honored in conducting transmission business. All transmission business shall be conducted on the individual OASIS sites using the ATC information posted on those sites.

Deseret Power Electric Cooperative

- Jim Tucker
  - Deseret Power Electric Cooperative existing scheduled paths

Deseret Power Electric Cooperative



Phase 2 Charter

- Posting narratives for all scheduled paths meeting the requirements of Order 890 on the NTTG website,
- Discussing reasons for unchanging monthly and yearly ATC values on paths currently having a value of zero ATC,
- Discussing reasons for monthly and yearly ATC values changing more than 10%,
- Providing a regular forum for public selection and prioritization of economic congestion study areas based on ATC values presented, and
- Establishing a 6 month recurring schedule for ATC review and customer input through NTTG.

Phase 2 Charter


Stakeholder Input

- Your input needed!
- Schedule for recurring ATC and narratives
  - Before summer/winter? -> When?
- Depth of narratives for ATC
  - High level costs?
  - Constraining segments?
  - Specific equipment/facilities?
  - How to make sure Critical Energy Infrastructure Information (CEII) is secure?

Phase 2 Charter


Stakeholder Input

- Your input needed!

- Economic congestion studies
  - Potentially overlapping and duplicate requests
  - Limited resources to study requests
  - Best value for the most customers
  - Defined as only high level value of resource “nodes” -> Reference WECC/TEPPC work

  - Voting via public forums is suggested approach to prioritize

Phase 3 Charter

Stakeholder Input

- **Your input needed!**

- **Possible next initiatives (from previous meetings)**
  1) Transparency into the derivations of ATC building blocks, and specifically TTC, including assumptions for load, transfers, and generation utilization
  2) Standardization of the calculation method for ATC building blocks, including TTC, TRM, and CBM across NTTG footprint
  3) Standardization of the assumptions used in the derivation of ATC, including load, transfers and generation utilization
  4) Regular forum for updates on the projected current year/season short term availability and impacts of scheduled outages or other irregularities
  5) Public forum for customer input into the ATC study schedule
  6) Public schedule based on customer input for ATC re-evaluation on scheduled paths
  7) Tracking transmission queue request quantities to identify interest in congestion relief
  8) Establish a public forum to review transmission usage and path utilization factor compared to ATC

Phase 3 Charter

Stakeholder Input

- **Your input needed!**

- **Possible next initiatives (from previous meetings) (continued)**
  9) Development of a linked spreadsheet to the map that identifies Total Transmission Capacity (TTC) being decremented by various uses and network requirements including subscribed obligations
  10) Dynamic linked alignment with specific providers OASIS data and service requests mechanism and the NTTG website data and map
  11) ATC estimates for integration of non traditional OATT “firm like” products, such as a possible conditional firm product
  12) Addition of discussions and posting for ATC on outbound or inbound paths to adjacent footprints
  13) Combination of individual ATCs into “multiple path” ATCs across multiple control areas
  14) Providing historical non-firm ATC derived from actual schedule data, by hourly increments, for certain paths
  15) Historical summary of the amount of time TRM reserves are called upon
  16) Establishing new scheduled internal paths based on stakeholder input

Phase 3 Charter

Stakeholder Input

- OTHERS?

Conclusion

- Phase 1 deliverable complete
- Phase 2 - charter revision and meeting schedule
  - Incorporate reasonable additions and changes, subject to Steering Committee approval
- Phase 3 – Will post charter for review at next public meeting with recommended next step
- Thank you!