



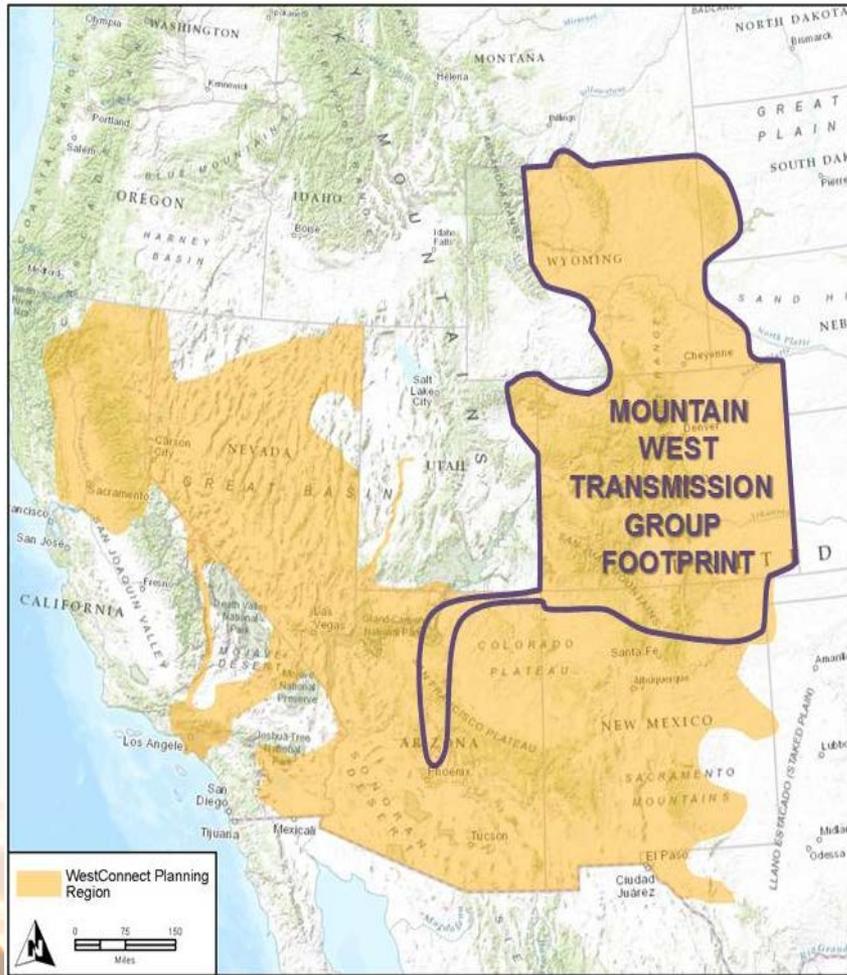
Mountain West Transmission Group

**WAPA Markets Meeting
June 30, 2016
Joe Taylor, Xcel Energy**

Participating Transmission Owners

- Basin Electric Power Cooperative (BEPC)
- Black Hills Corporation (BHC) including its three affiliates,
 - Black Hills Power, Inc. (BHP), Black Hills Colorado Electric Utility Company, LP (BHCE) and Cheyenne Light Fuel & Power Company (Cheyenne)
- Colorado Springs Utilities (CSU)
- Platte River Power Authority (PRPA)
- Public Service Company of Colorado (PSCo)
- Tri-State Generation and Transmission Association, Inc. (Tri-State)
- Western Area Power Administration
 - Loveland Area Projects (LAP) and Colorado River Storage Project (CRSP)

MWTG Footprint



- Goal – Create a single multi-company transmission tariff and explore “Day 2” market alternatives
- MWTG TSPs include: two IOUs, two municipals; two G&T Cooperatives; two Federal PMA projects
- MWTG members are a sub-set of the WestConnect planning region and are the Colorado Coordinated Planning Group (CCPG) footprint
- Currently includes seven parties with nine transmission tariffs

History of MWTG Development

- 2013: WAPA/PSCo/Tri-State start discussions on removal of pancakes, single tariff
 - Perform preliminary rate design analyses
- 2014: Invite BH, BEPC, PRPA, CSU to the effort and hire rate consultant
- 2014-15: Rate design; negotiate zones and cost shift mitigation
- 2016: Execute MOU, issue RFI

MWTG 2013 Statistics

Transmission Owner	Gross Transmission Plant (\$)	Net Transmission Plant (\$)	Annual Transmission Revenue Requirement (\$)	Miles of Transmission
Basin Electric Power Cooperative Westside	52,126,841	19,108,267	4,535,874	209
Cheyenne Light Fuel & Power	41,027,108	35,981,808	6,848,030	45
Black Hills Colorado Electric Utility	333,880,142	146,938,581	12,452,172	581
City of Colorado Springs Utilities	140,898,577	67,284,691	21,957,844	232
Common Use System (BEPC & BHC)	243,548,935	185,304,004	29,846,727	983
Platte River Power Authority	348,969,285	266,337,678	38,277,136	370
Western CRSP	651,271,471	391,945,017	58,386,041	2,325
Western LAP	550,045,450	286,761,337	61,866,058	2,508
Tri-State Generation and Transmission Association	766,276,122	431,085,996	96,781,507	4,660
Public Service Company of Colorado	1,616,197,083	1,265,799,495	208,498,664	3,782
Total	\$ 4,744,241,013	\$ 3,096,546,874	\$539,450,053	15,694

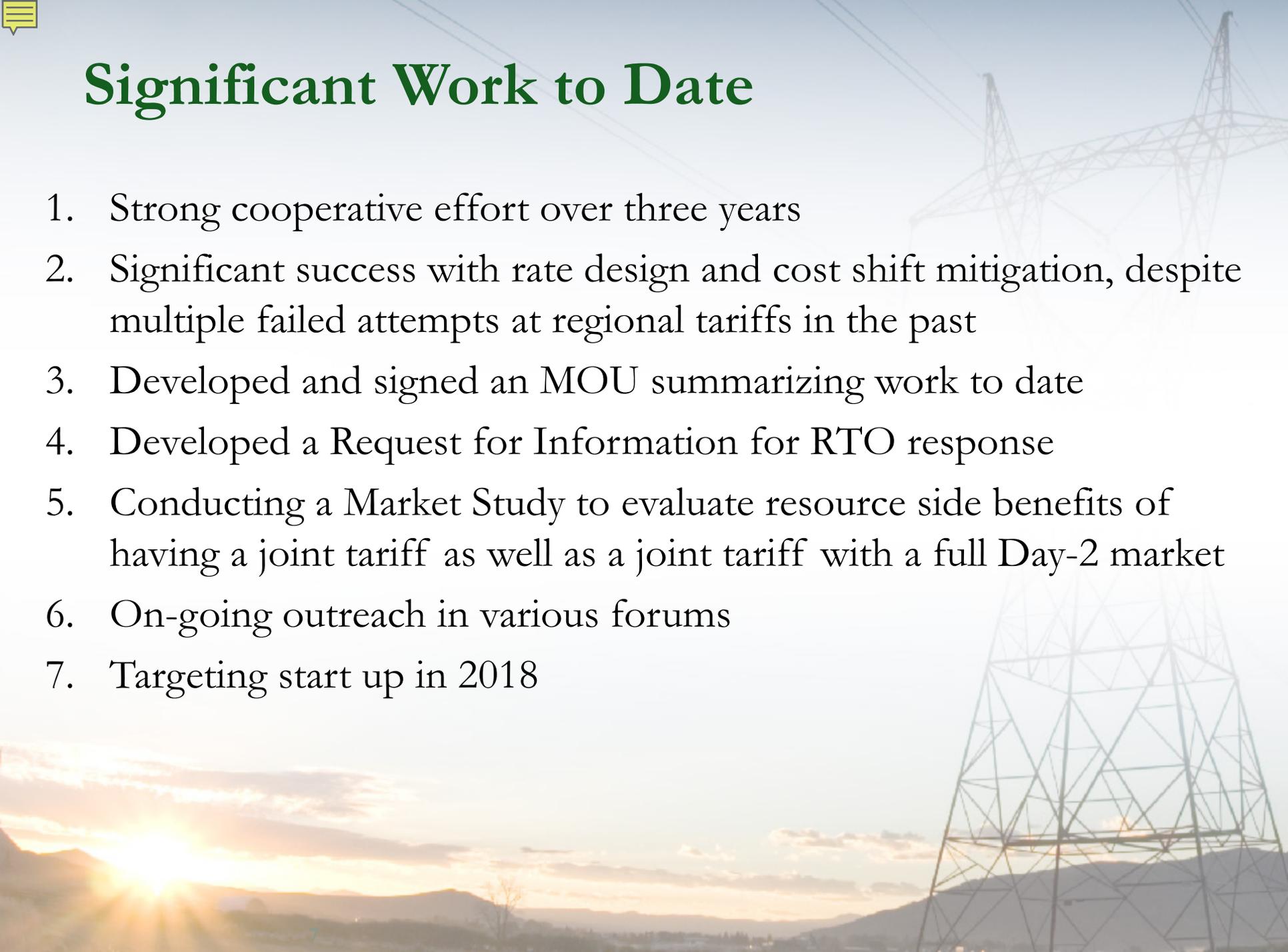


Mountain West Benefits

- One transmission provider
 - De-pancaking of transmission charges
 - Foundation for an organized market
 - All load is network load of MWTG
 - Single determination of ATC/AFC
 - Transition away from contract path to flow-based
 - Improved transmission planning and interconnection processes
 - Will comply with Order No. 1000
 - Avoid duplication of facility investments
 - One point of contact for system interconnections
 - Additional siting opportunities for new resources
 - May assist in addressing future resource issues



Significant Work to Date

1. Strong cooperative effort over three years
 2. Significant success with rate design and cost shift mitigation, despite multiple failed attempts at regional tariffs in the past
 3. Developed and signed an MOU summarizing work to date
 4. Developed a Request for Information for RTO response
 5. Conducting a Market Study to evaluate resource side benefits of having a joint tariff as well as a joint tariff with a full Day-2 market
 6. On-going outreach in various forums
 7. Targeting start up in 2018
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Rate Design

- Network Customers pay the zonal rate in which their load sinks
 - Owners in zone retain revenue for zonal network load
- 8 Zones
 - Each transmission owner is a zone, except Tri-State and Cheyenne
 - Tri-State load and facilities are split between Western LAP and PSCo zones
- Single Regional Through and Out Rate (RTOR) applied to PTP
 - $RTOR = \text{Total MWTG ATRR} \div \text{Total MWTG load}$
 - Revenues allocated based off of ATRR and MW-Mile split, after mitigation
- Cost shifts largely mitigated (see following slides)



General Cost Shift Issues

- Defined as transmission cost impact to Owner's load
- Regional tariff design changes transmission costs for Owner's load due to:
 - Loss of pancaked rates (both loss of payment, and loss of revenue)
 - Multi-owner zones & RTOR with weighted average rates, causing additional cost shift
- Group estimated the cost shifts using 2013/14 data

CRSP-Specific Cost Shift Issues

- 1. Rate design requires network service for all internal load**
 - There is very little network load on the CRSP system, thus a network rate with no point to point (P2P) in the rate denominator results in a very high zonal rate ($\sim 130\text{MW}$ recovering $\sim \$60\text{M}$)
 - CRSP uses 100% P2P and no network service. Some can be converted to network, but not all due to statutory obligations and contractual terms that presume P2P approach
- 2. Rate design requires RTOR for all P2P service**
 - Most CRSP load is external to MWTG, the system was built to export generation beyond the CRSP system
 - CRSP P2P rate is lowest among 9 tariffs, RTOR rate is weighted average of 9 tariffs, so using RTOR would triple the cost to CRSP



Solving the Cost Shift Issues

Two methods used to resolve cost shift:

- **Indefinite CRSP Federal Service Provision (FSP)**
 - Allows CRSP to continue using P2P as today:
 - Both P2P and Network part of CRSP Zone rate denominator
 - Revenue from P2P continues to go to CRSP zone
 - FSP limited to CRSP use for Statutory Service obligations
 - Anticipate grandfathering 3rd party CRSP P2P to be comparable
 - CRSP plans to convert as much P2P as possible to Network, but will continue to have significant P2P
- **Cost shift mitigation for the first seven year period**
 - Allocates RTOR revenues first to entities with increased costs
 - If RTOR revenue is sufficient, 100% mitigation the first 4 years, then decreasing mitigation 25% per year during last 3 years



Allocation of Future Facility Costs

- Filed tariff will be compliant with Order 1000
- Agreement not yet reached on cost allocation for future facilities
 - May be dependent on implementation plan, for instance:
 - If group joins a RTO, cost allocation may reflect RTO process, with some changes for the MWTG region
 - If a standalone tariff, MWTG may borrow from a currently approved Order 1000 process or develop its own
- Plan to develop a Federal Service Exemption (“FSE”) for Western
 - Exempts Western’s Statutory Service from some regional cost allocation
 - Will be dependent on the final regional cost allocation proposal



Request for Information

- Issued May 6 to CAISO, MISO, PJM, SPP
- Obtain information and cost estimates from the RTOs
 - Asking entities to provide information on a wide range of services from Transmission Tariff Administrator to Full Market/RTO membership
 - TSP services
 - Ancillary services, losses, and other provisions
 - Interconnection processes
 - Planning concepts
 - Market operator
- Proposals due July 15
- RFI is one of multiple sources of information to assist the group in consideration of path forward



Markets Study

- Brattle Group is performing a MWTG Markets Study
- Study Current Year 2016 (Phase I)
 - Status quo with nine tariffs
 - Remove pancaked transmission charges to simulate a joint tariff
 - Add full Day-Ahead market structure
 - Results show positive benefits to both scenarios
- Future Year 2024 (Parties scoping particulars of a future year)
 - Similar scope as Phase I, but still in development



Outreach (Started and Ongoing)

- State Regulatory Authorities
- WAPA outreach to its customers
- Each party's outreach to its constituents
- Other stakeholder organizations
- RTOs
- FERC



Thank you!

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