

DOCKETED

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Cross-Tie Transmission Line

RETI 2.0 Western Outreach

Portland

August 12, 2016



TRANSCANYON

Who We Are

TransCanyon is an independent developer of electric transmission infrastructure for the western United States

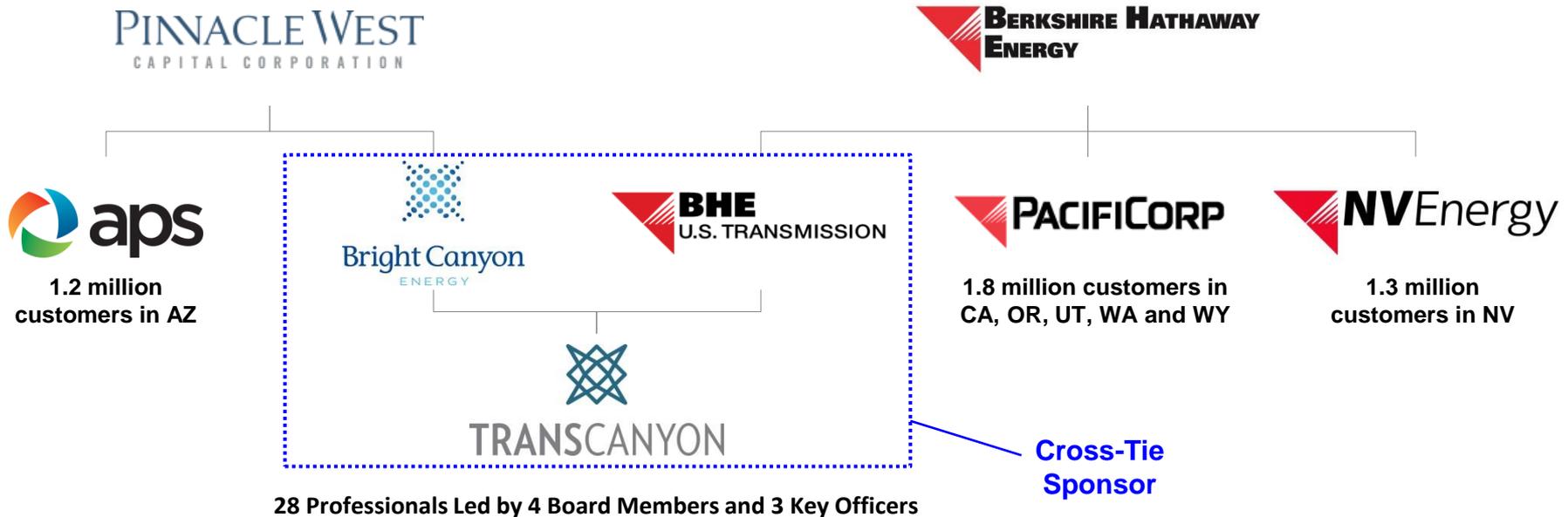
- Independent well-positioned to drive creative solutions
- Leverage the combined energy expertise and financial strength of Berkshire Hathaway Energy and Pinnacle West
- Focused on all phases – development through ongoing operation
- Long-term stewards of the environment
- Value collaboration to achieve success
- Strategic alliance with PG&E on CAISO competitive projects



Deep Experience in the West



Our team builds on the skills, resources and experience of its parent companies and utility affiliates across the western United States



Board Members	Key Officers		
<p>Mark Schiavoni Bright Canyon Energy</p> <p>Jason Smith Bright Canyon Energy</p> <p>John Cupparo BHE U.S. Transmission</p> <p>Doug Kusyk BHE U.S. Transmission</p>	 JASON SMITH President	 BOB SMITH Vice President, Transmission Planning & Development	 TODD JENSEN Vice President, Project Delivery

Full Range of Expertise & Capabilities



Experienced team has completed 1,050 miles and \$3.7B of transmission investment in the western United States



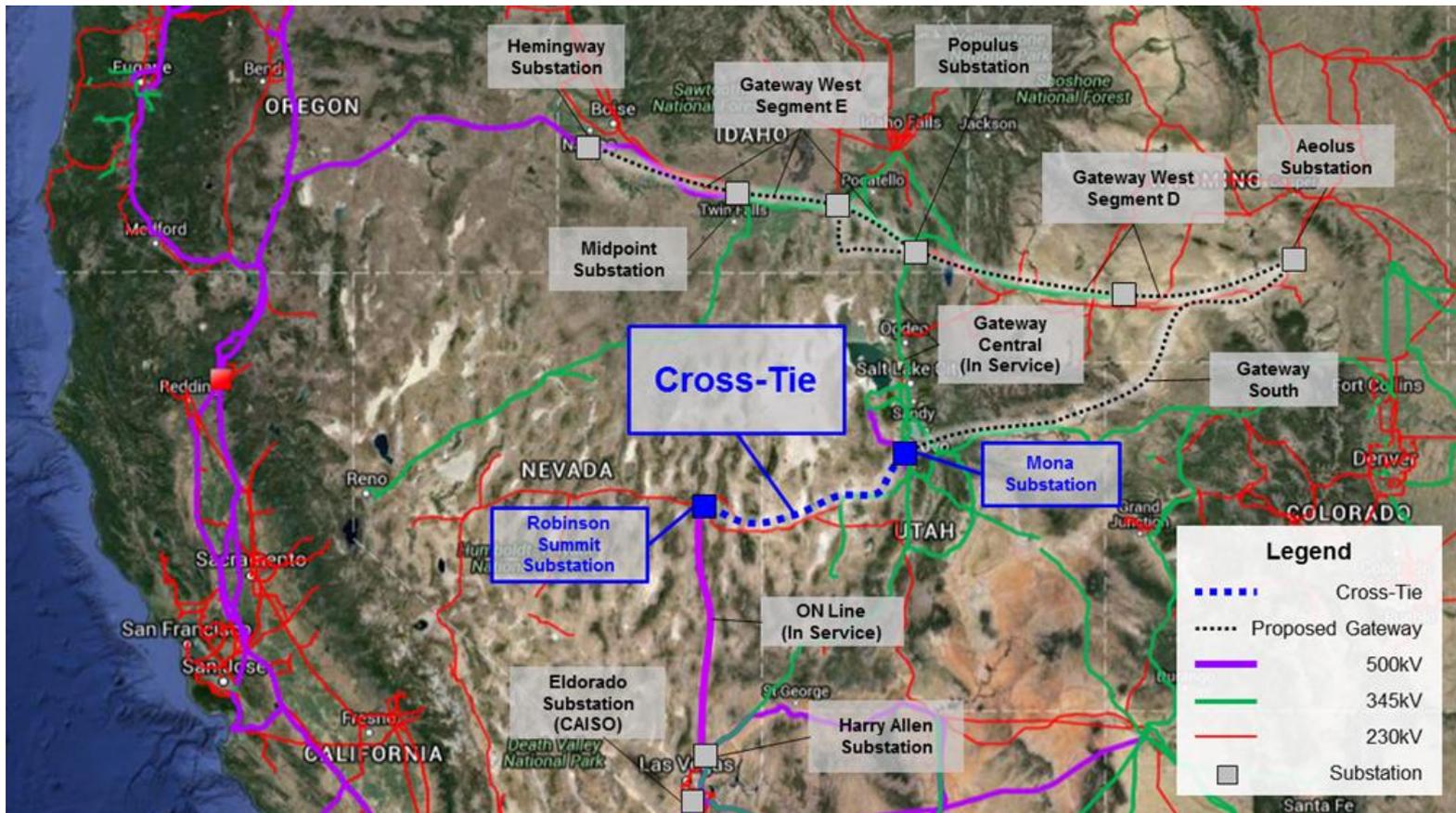
- 2,400 miles of permitting experience in western U.S.
- Twelve WECC path ratings
- WestConnect Planning Management Committee and prior Order 1000 Implementation Committee
- NTTG Planning Committee member

- Constructed and energized 10 major transmission projects since 2009
- Extensive engineering, design and construction experience
- All components of transmission (i.e., lines and substations)

- APS operates and maintains 2,651 miles of high-voltage lines
- PacifiCorp operates and maintains 2,005 miles of high-voltage lines
- Financial strength of Berkshire Hathaway Energy (A3/A) and Pinnacle West (A3/A-)

Project Description

- ~213-mile, 500kV AC transmission line from central UT to east-central NV, anticipated in-service in Q4 2024
- Estimated capital cost of ~\$667mm including upgrades at Robinson Summit



Regional Benefits

- **Macro Benefits:** Important benefits to the regional transmission system
 - Immediate policy, reliability and economic benefits with Cross-Tie connection to existing system (Gateway Central to the east and One Nevada to the west) providing over 700MW of capacity
 - Benefits further enhanced to over 1600MW of capacity when paired with either Gateway South or portions of Gateway West in the future
 - Cross-Tie will increase transmission capacity between the PacifiCorp, NV Energy, CAISO and Idaho Power Balancing Areas
 - AC solution that reduces EHV load and resource interconnection costs and provides flexibility to move wind and solar to diverse load centers throughout the West
- **Policy Benefits:** Provides access to renewables to meet RPS and GHG goals of western states – enables lower cost way to meet policy objectives by tapping the best resources in the West and sharing those resources across the region

RPS	
California	50% RPS by 2030
Oregon	50% RPS by 2040
Nevada	25% RPS by 2025
Utah	20% RPS by 2025
Washington	15% RPS by 2020
Arizona	15% RPS by 2025

GHG	
California	40% below 1990 levels by 2030
Oregon	80% below 1990 levels by 2050
Washington	75% below 1990 levels by 2050
Washington	50% below 1990 levels by 2050

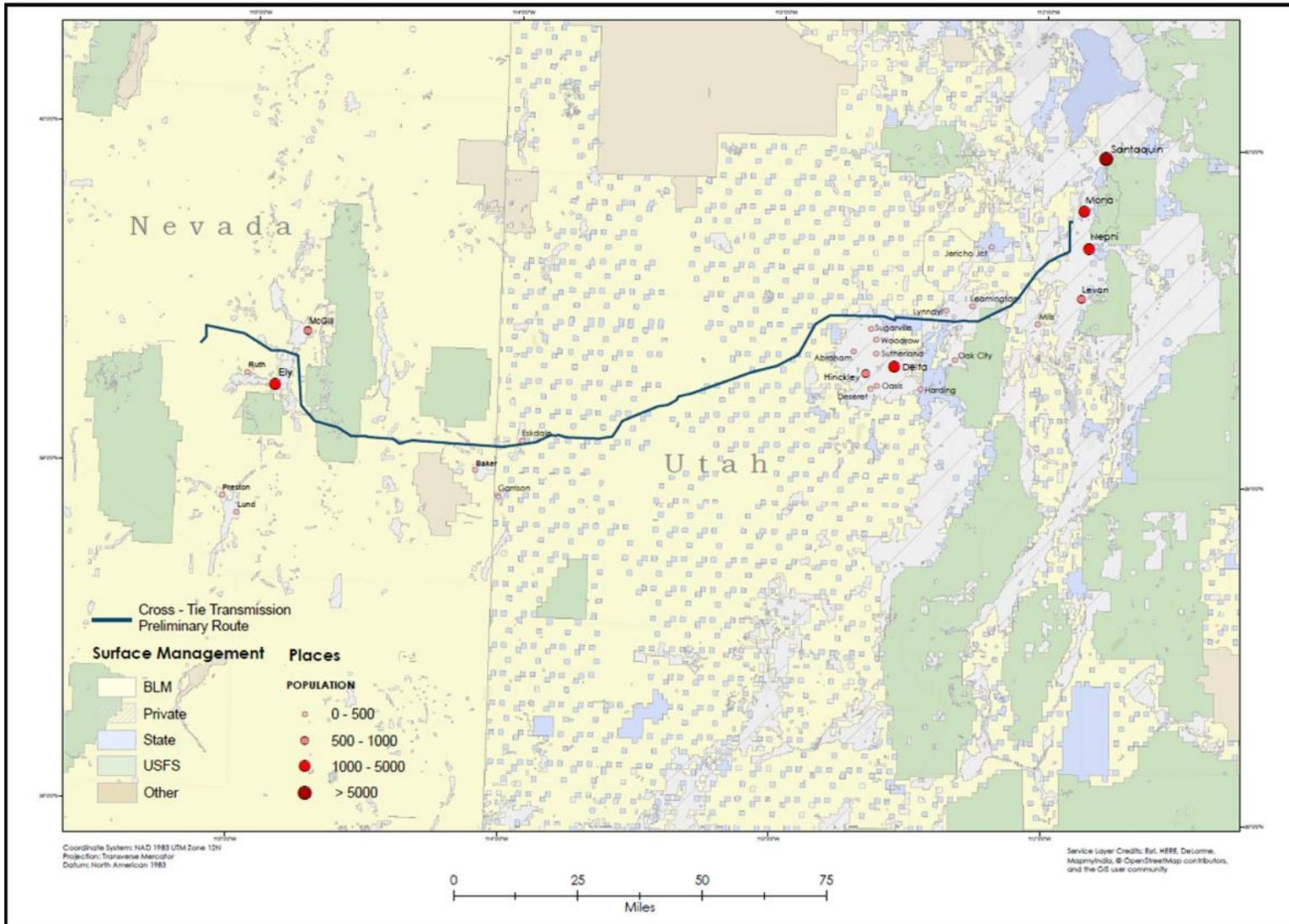
Regional Benefits (cont.)

- Reliability Benefits:
 - Low-cost investment to leverage existing system and increase regional reliability benefits to the Western Interconnection
 - Improves system reliability during system disturbances and forced outages (weather, fire, natural disasters)
- Economic Benefits:
 - Regional economic benefits from more efficient resource procurement and dispatch
 - Relieves congestion on the California-Oregon Intertie by providing flow relief and alternate transmission paths
 - Substantially Interconnects Berkshire Hathaway Energy's two largest load and generation centers (BAs) in the west (PacifiCorp East and NV Energy)
 - EIM participants enjoy benefits of more transmission capacity to bid resources into neighboring markets (current planned participants include CAISO, PacifiCorp, NV Energy, Arizona Public Service, Puget Sound Energy, Portland General and Idaho Power)
 - Benefits increase further with expanded RTO

Cross-Tie Proposed Route



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Project Timeline



- ✓ TransCanyon submitted Cross-Tie to CAISO, NTTG and WestConnect Transmission Planning Regions
- ✓ TransCanyon filed Advisory Notice to PUCN and SF-299 to BLM

