

Western Area Power Administration Southline Transmission Project Introduction



November 19, 2012

- Background
- Overview
 - Maps
 - Need
 - Potential Benefits
 - Routing Approach
- Project Update
- PDP Customer Input Process
- Contacts

- Replacement of the 115-kV wood-pole system south of Phoenix has been part of the Ten-Year Capital Program for several years
- Capital from traditional sources (appropriations/alternative financing) has not been available causing these wood-pole replacement projects to continually be postponed
- Southline is providing the development capital for the project under an Advanced Funding Agreement (AFA). During the AFA, Western is evaluating the extent it will participate in the project and the potential use of TIP borrowing authority--one option to provide needed capital funding and to accelerate required replacement work
- Remaining-capital funding (appropriations/alternative financing) would then be available for other Western needs

“South of Phoenix” 115-kV Wood Poles Requiring Replacement

Desert Southwest Wood Pole Transmission System



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Source: Western DSW FY 2012 10YCP

- Southline Transmission, L.L.C., a subsidiary of Hunt Power L.P., is the Project Sponsor
 - Hunt Power, L.P. is part of a larger privately-owned group of entities managed by the Ray L. Hunt family that engages in oil and gas exploration and production, refining, power, real estate, ranching, and private equity
 - Hunt Power, L.P. develops and invests in large scale entrepreneurial electric and gas utility opportunities, and has played a major role in numerous innovative projects within the energy industry, including large-scale domestic and international electric and natural gas infrastructure projects to completion
- Black Forest Partners L.P. serves as the Project Manager for Southline Transmission, L.L.C.
 - Black Forest is a private investment and development firm focused on the electric infrastructure space including transmission, efficiency and storage
- The Southline Transmission Project has been identified by Western for further review, evaluation, and consideration of participation

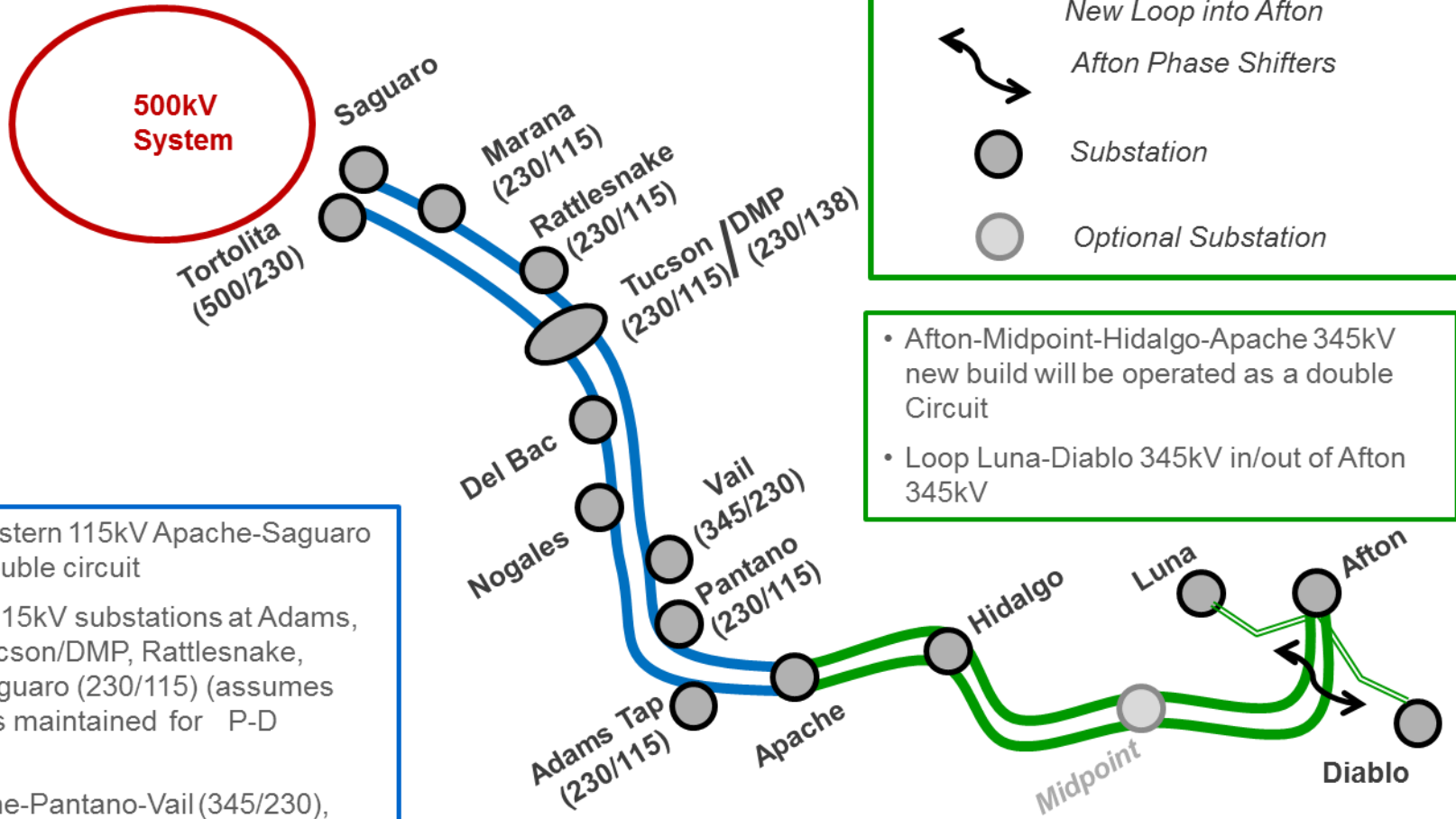
Overview – Map



The Southline Transmission Project consists of two segments:

- New ~ 240-mile, 345-kV double-circuit line between the existing Afton (NM) and Apache (AZ) substations
- Upgrades to ~ 120 miles of existing lines between the existing Apache (AZ) and Saguaro (AZ) substations

Overview – Technical Sketch



- Rebuild Western 115kV Apache-Saguaro to 230kV double circuit
- Ckt 1: 230/115kV substations at Adams, Del Bac, Tucson/DMP, Rattlesnake, Marana, Saguaro (230/115) (assumes 115kV paths maintained for P-D system)
- Ckt2: Apache-Pantano-Vail (345/230), Tucson/DMP (230/138), Tortolita (500/230)

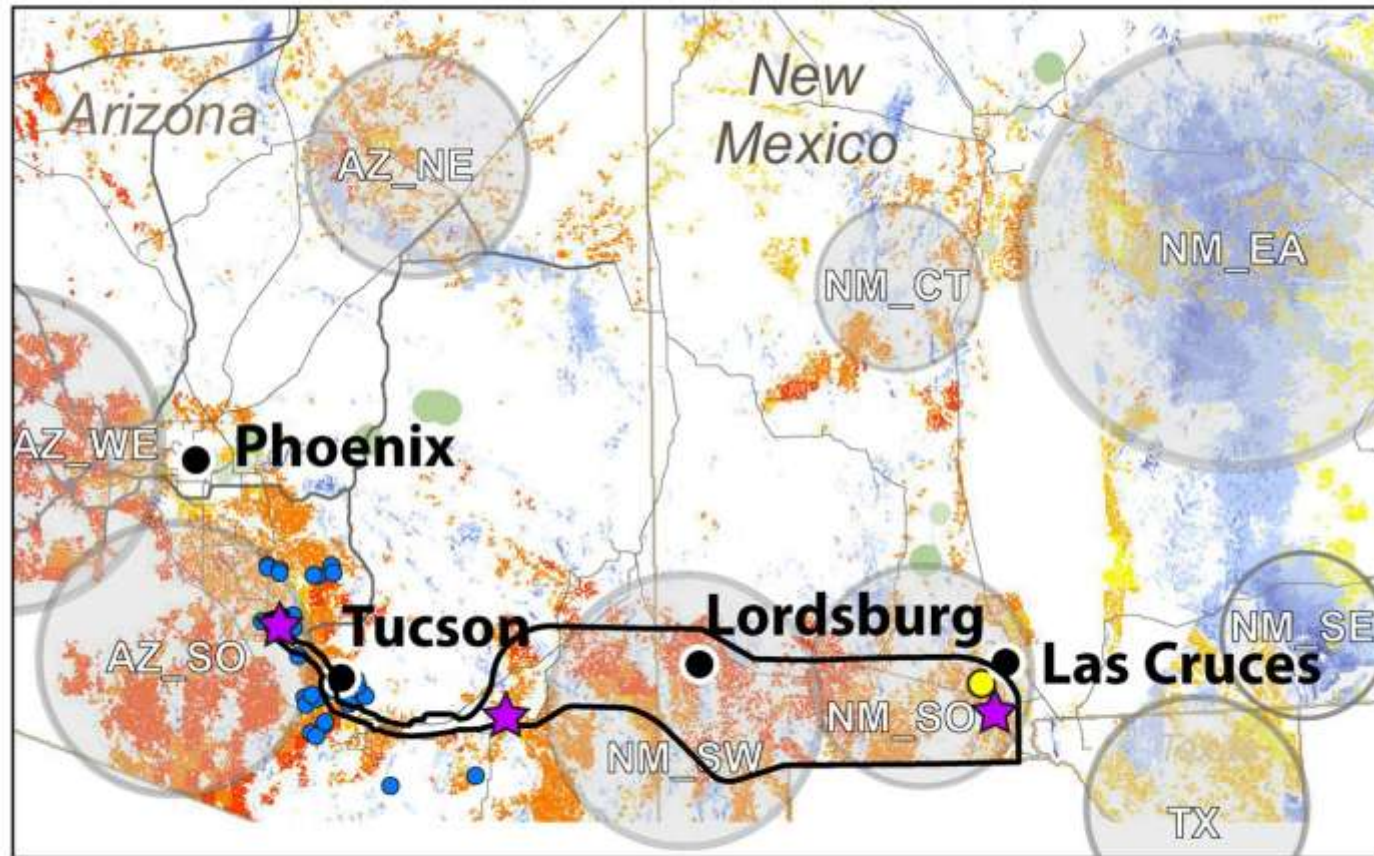
- 230kV Upgrade of 115kV
- 345kV Double Ckt New Build
- 345 kV Existing but with New Loop into Afton
- ↔ Afton Phase Shifters
- Substation
- Optional Substation

- Afton-Midpoint-Hidalgo-Apache 345kV new build will be operated as a double Circuit
- Loop Luna-Diablo 345kV in/out of Afton 345kV

EL PASO

- Improve Reliability
- Relieve Congestion
- Sustain and Support Growth
- Facilitate Access to Renewable Energy Resources

Facilitate Access to Renewable Energy Resources



Overview – Potential Benefits

Strengthen System

Improve Voltage Limitations

Increase Import Capability

Reduce Curtailment Responsibility

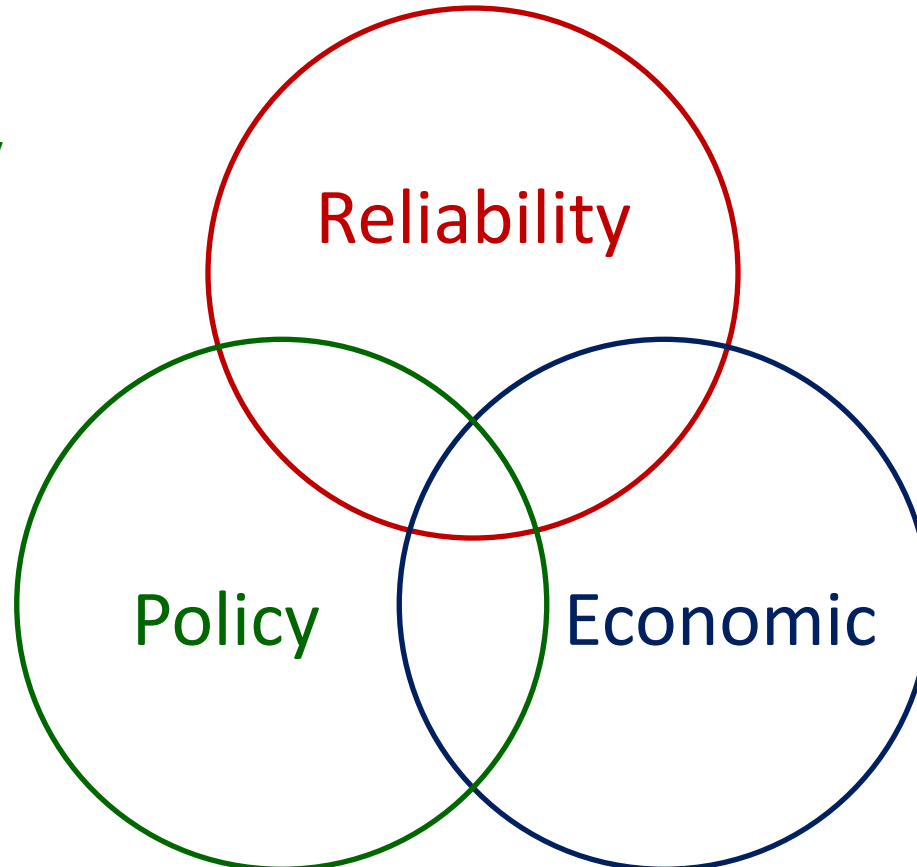
Allow Maintenance Flexibility

Enhance ability to meet State and Federal policy goals

Support local economic development efforts

Consistent with environmental and military stakeholder interests

Provide flexibility in managing future rate impacts



Increase access to existing and low cost generation sources

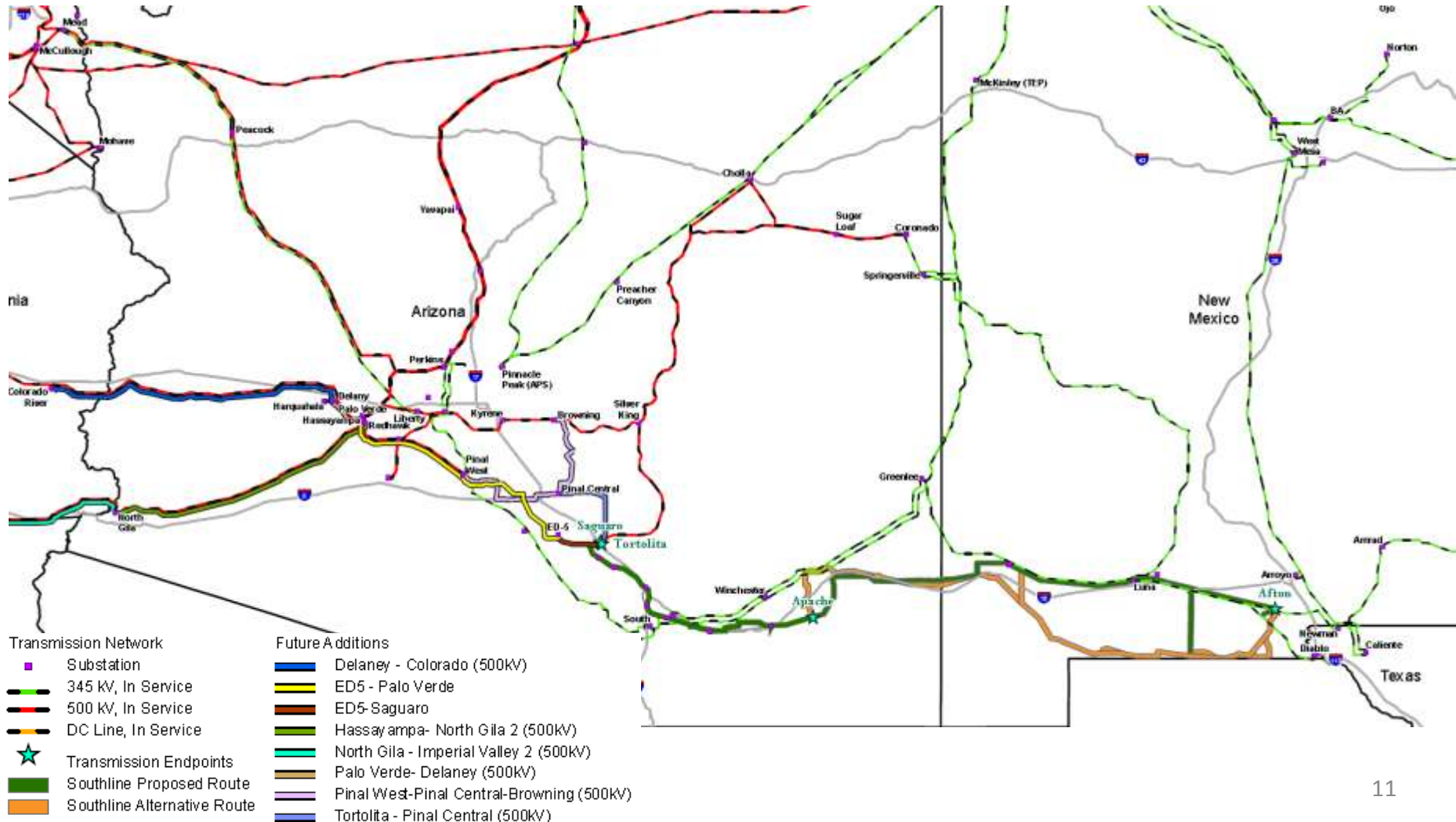
Provide resource procurement options

Capital budgeting flexibility

Enhance ability to meet region's growth

Overview – System Map

Southern Arizona & New Mexico EHV Transmission System, Southline & Selected Future Utility Sponsored Additions



Overview – Routing Approach

- Use existing rights of way where possible
- Minimize visual impact
- Avoid Wilderness Study Areas and other sensitive habitats
- Avoid cultural sites
- Address potential Department of Defense land use conflicts
- Facilitate development of future renewable energy projects
- Minimize miles of transmission required to meet needs
- Respect local knowledge and community feedback

Extensive Stakeholder Outreach

Proposed Route Mileage

Federal Corridor 24 miles

Implied Corridor 18 miles

Parallel existing 149 miles

Upgrade existing 120 miles

"New Corridor" 51 miles

Proposed Route 362 miles

Less than 15% of Proposed Route would be New Corridor

2009-2011

- Regional Planning (SWAT, SATS, WestConnect)
- WECC Project Coordination Review Group
- Extensive Pre-NEPA Stakeholder Outreach

2012-2013

- WECC Phase 1
- EIS Notice of Intent
- NEPA Public Scoping
- Preliminary Facilities Design Study
- WECC Phase 2
- DEIS

2014-2016

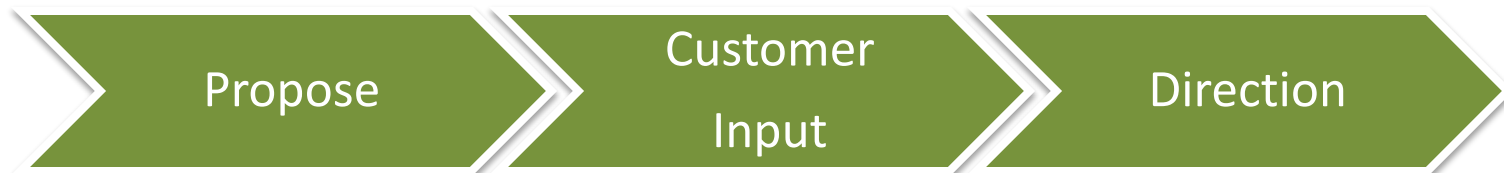
- ROD
- Commercial Contracts
- Financial Close
- Construction
- In Service

Western & Southline Signed Advanced Funding Agreement, March 2012

- Southline will cover Western's development period costs for its support as the Joint-Lead agency in NEPA process, obtaining a project rating under the WECC Rating process, facilitating the submittal and processing of interconnection agreements, and other project development activities.
- Western is evaluating to what extent it will participate in the ownership of proposed project.

Input from PDP transmission customers will be extremely important in defining if and how Western participates in this project

- November 2012.....Customer meeting to introduce project to customers
- Winter 2012.....Receive preliminary input/interest from customers
- Spring 2013.....Formulate project proposal
- Early Summer 2013.....Customer meeting to present proposal to customers
- Late Summer 2013.....Receive input/interest from customers on proposal
- Winter 2013.....Decision on PDP/Western participation
 - *Western may revise proposals and seek additional input at this time depending on customer feedback received



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For more information visit:

Western Southline website

<http://ww2.wapa.gov/sites/western/transmission/infrastruct/Pages/Southline.aspx>

Southline Project website

www.southlinetransmissionproject.com