Western Area Power Administration
Southline Transmission Project Introduction

November 19, 2012
Agenda

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

- 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.
Background

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

Desert Southwest Wood Pole Transmission System

Source: Western DSW FY 2012 10YCP
Background

• 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
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)

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

• Improve Reliability
• Relieve Congestion
• Sustain and Support Growth
• Facilitate Access to Renewable Energy Resources
Overview – Project Need

Facilitate Access to Renewable Energy Resources
Overview – Potential Benefits

Strengthen System

- 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

Improve Voltage Limitations

Increase Import Capability

- Increase access to existing and low cost generation sources
- Provide resource procurement options
- Capital budgeting flexibility
- Enhance ability to meet region’s growth

Reduce Curtailment Responsibility

Allow Maintenance Flexibility

Reliability

Policy

Economic
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

**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

**Extensive Stakeholder Outreach**
Project Update

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

Propose → Customer Input → Direction
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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