

SPPR Group Proposal

June 23, 2010

Agenda

- › Purpose of Meeting
- › Presenters
- › Background Information
 - Three Terminal Plan & Market Access
 - Business Case
 - Transmission Infrastructure Program
- › ED5-Palo Verde Project
- › Potential Rate Impacts
- › Discussion / Comments

Purpose of Meeting

- › Provide background information
- › Share the SPPR Group's current proposal and how it might affect Parker-Davis Project (P-DP) customers
- › Obtain your feedback on the proposal

Presenters

- › Background Information – Todd Rhoades
- › ED5-PV Project Description – Todd Rhoades
- › Project Marketability – John Steward
- › Project Cost & Financing – Jack Murray
- › Potential Rate Impacts – Jack Murray
- › Next Steps – Todd Rhoades

Business Case

The Three Terminal Plan (TTP) submitted to Western included:

- › Transmission line and substation work from Test Track, south to Marana and north to Pinal Central
- › New segments between Palo Verde and Test Track, not part of Western's system – Southeast Valley Project
- › SWTCO, on behalf of the SPPR Group, submitted a request for 500 MW of bi-directional transmission service from:
 - Palo Verde to Pinal West
 - Palo Verde to Pinal Central
 - Palo Verde to Topock

Three Terminal Plan

- › Benefits identified include:
 - Upgrades part of the transmission system south of Phoenix
 - Earlier wood pole replacement with steel poles
 - Provides need funding for construction, which has been drastically reduced in the past
 - Enhances reliability and improves safety
 - Ability to make additional sales to moderate the rate impact
 - Creates additional market access
- › Issues identified include: Likely to raise the transmission rate

Business Case

Alternatives Analyzed

- › Alternative #1 – APA financing; incremental transmission sales of 1,000 MW (500 MW bi-directional)
- › Alternative #2 – APA financing; incremental transmission sales of 800 MW (400 MW bi-directional)
- › Alternative #3 – APA financing; incremental transmission sales of 1000 (500 MW bi-directional), no participation in SEV
- › Alternative #4 – Appropriations/Prepayment Funding; upgrade Western's system through Ten-Year Plan activities

Business Case

	Estimated Costs (in millions)		
	Construction	Financing	Total
Alternative #1 (1000 MW, with SEV)	\$329.2	\$629.1	\$958.3
Alternative #2 (800 MW, with SEV)	\$329.2	\$629.1	\$958.3
Alternative #3 (800 MW, w/o SEV)	\$280.3	\$536.6	\$816.9
Alternative #4 (P-DP portion of the TTP)	\$154.6	\$152.9	\$307.5

- › The total cost of Alternative #4 is significantly more economical for Western and the P-DP customers

Business Case Recommendation

- › Work with the SPPR Group on Alternative #4
 - Provides for upgrades to Western's system, as envisioned in the original TTP
 - Holds rate as low as possible
 - System elements become projects of the TYP
 - Lowest overall risk as parties work cooperatively to optimize system planning and development
- › Continue to work with APA involvement; funding option remains viable if needed

Business Need Changes

- › While working with the SPPR Group, the proposal continued to evolve
 - Total demand for transmission in the area has temporarily diminished due to the economic downturn
 - SWTCO decided to accept SPPR deliveries at Pinal West 345-kV bus, which further reduced need for transmission
- › However, the SPPR Group's transmission needs remain, which leads us to their current proposal

Current Proposal

- › SPPR Group submitted a Statement of Interest (SOI) for a Renewable Energy Transmission Project
- › ED5-Palo Verde Project
- › Joint project between Western's TIP and P-DP
- › Western's TIP can provide project financing via borrowings from Treasury

Transmission Infrastructure Program

- › Western's Implementation of Section 402 of the American Recovery and Reinvestment Act
- › Borrowing authority of \$3.25 billion
- › Identify, prioritize and participate in the study, facilitation, financing, planning, operating, maintaining, and construction of new or upgraded transmission facilities

TIP Project Evaluation

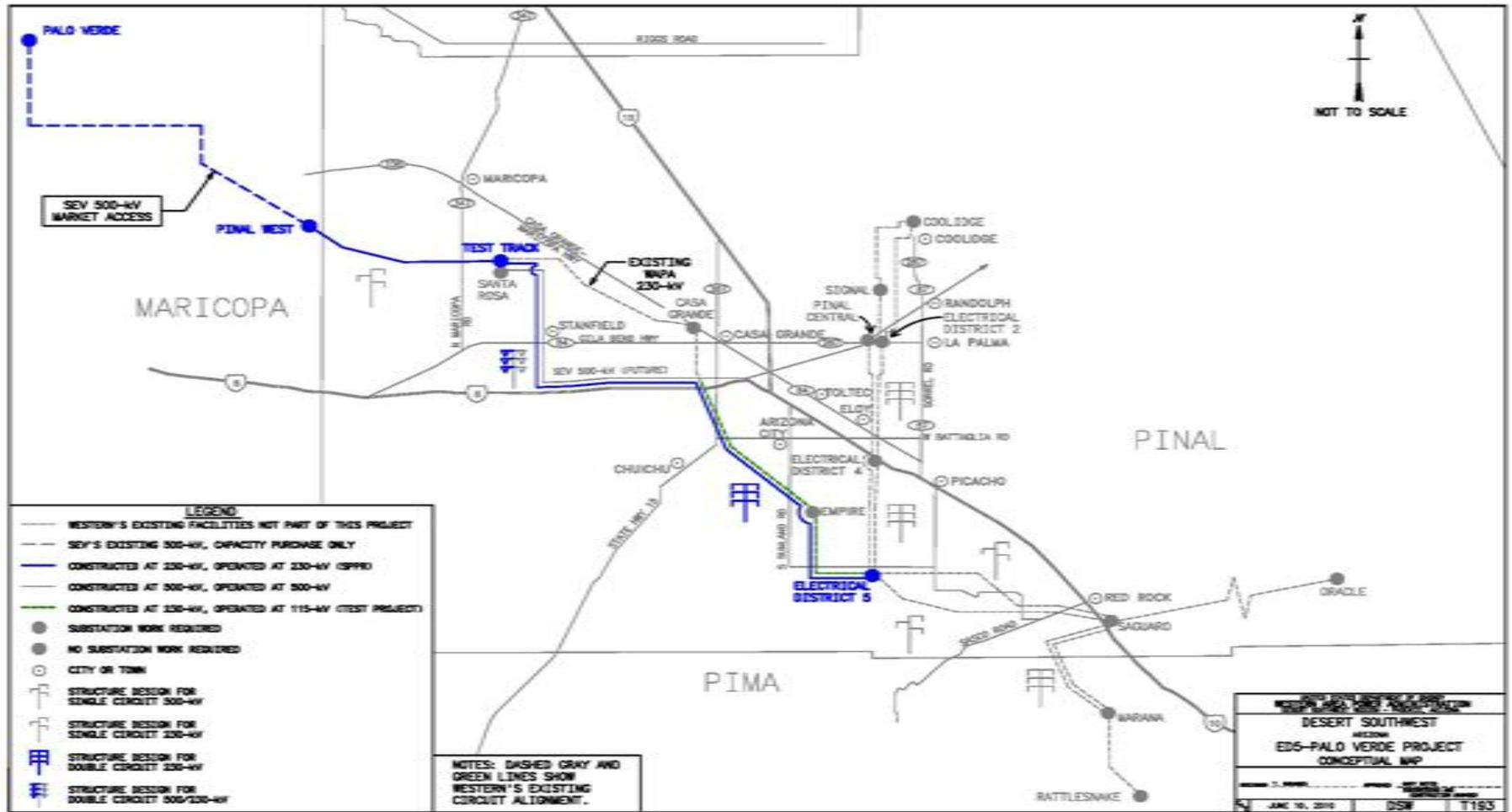
- › Facilitate delivery of renewable energy to market
- › Public interest
- › No adverse impact to system reliability
- › Services offered will generate revenue to repay costs
- › At least one terminus in Western's territory
- › Economic benefits, including jobs
- › Satisfies Western's OATT
- › Technically feasible
- › Partners' financial stability and capability
- › Project readiness
- › Participation in region-wide and/or interconnection-wide transmission planning

ED5-Palo Verde Project

Includes two distinct elements:

- › Test Track to Palo Verde – 500-kV
 - Transmission Rights on the Southeast Valley Project
 - 500/230-kV Transformer at Santa Rosa/Test Track
- › ED5 to Test Track – New 230-kV Line
 - Test Track to Thornton Rd – Double circuit with SEV Santa Rosa-Pinal Central 500-kV line
 - Thornton Rd to ED5 – Double circuit with Western’s Casa Grande-ED5 115-kV line
 - New 230-kV Yard and 230/115-kV Transformer at ED5

ED5-Palo Verde Project



ED5-Palo Verde Project Marketability

- › Benefits include new transmission rights
 - Palo Verde to Test Track – 156 MW; requested by SPPR
 - Test Track to Palo Verde – 300 MW; available and provides access to major market hub
- › Facilitates development of renewable energy
- › New capacity may lure Generation Interconnection customers to purchase transmission service

ED5-Palo Verde Project Marketability

- › P-DP customers will have access to the Palo Verde hub
- › May create additional transmission services requests
- › Load serving utilities may be able to purchase resources from the Palo Verde hub
- › Western can market the unscheduled firm capacity as non-firm service

ED5-Palo Verde Project Cost & Financing

Estimated Costs (in millions)	
Test Track to Palo Verde (500-kV element)	\$29.2
ED5 to Test Track (230-kV element)	\$51.2
Capitalized Interest During Construction	\$5.4
Total	\$85.8
Level Annual Debt Service	\$5.4

Assumptions

- › During the construction phase, the interest rate for financing is 3%
- › During the commercial operations phase, the interest rate and period for long-term financing is 6% and 50 years, respectively
- › Level annual debt service begins in FY 2015

ED5-Palo Verde Project Cost & Financing

- › Western's TIP will finance projects only when a reasonable expectation for cost recovery exists
- › Project costs could be rolled into the P-DP rate base, even though TIP funded
- › This approach provides the necessary expectation for cost recovery

Parker-Davis Project

Projected Rates w/o ED5-PV Project

Firm Transmission Rate		
Fiscal Year	\$/kW-Yr	Δ
2011	12.96	0.0%
2012	14.16	9.3%
2013	15.72	11.0%
2014	16.80	6.9%
2015	18.00	7.1%

Parker-Davis Project Projected Rates with ED5-PV Project

Firm Transmission Rate		
Fiscal Year	\$/kW-Yr	Δ w/o
2011	12.96	0.0%
2012	14.64	3.4%
2013	16.08	2.3%
2014	17.40	3.6%
2015	18.48	2.7%

Parker-Davis Project Rates Summary

- › To offset the potential rate impacts of the ED5-PV Project, reservation levels would need to increase by 297 MW starting in FY 2015
- › The SPPR Group has requested 156 MW
- › Additional reservations above 141 MW could potentially reduce the projected rates w/o the ED5-Palo Verde Project

Next Steps

- › Evaluate Alternatives
 - Upgrade Casa Grande-EMP-ED5 Line Segments to 230-kV
 - Upgrades beyond Ten-Year Plan to 115-kV system to enhance transfer capability

- › Transmission Planning Technical Study Work
 - Determine Path Rating
 - Peer Review Process

Next Steps

- › Solicit interest in transmission capacity for renewable energy between ED5 and the Palo Verde hub
 - Federal Register Notice RFI
 - Solar Development Workshop held June 17th
- › Evaluate SOI/Alternatives, consider customer comments and develop recommendation
- › Refine Project Plan supporting Request for TIP Funding

Discussion / Comments

- › Please submit your comments by July 9, 2010
- › E-mail address: DSWFPP@wapa.gov

- › POC Information:
 - Project Management: Todd Rhoades
 - Construction: Gary Bates
 - Planning & Technical Studies: Josh Johnston
 - Transmission Marketability: John Steward
 - Finance and Rates: Todd Statler