

**Preliminary SPPR Group
“Three Terminal Plan”
For Pinal County Sites**

As shown on the attached map, SPPR is considering developing transmission facilities (the “Three Terminal Plan”) for delivery of project power from either the Empire or the Randolph site. The transmission facilities will consist of a new three terminal 230 kV network that interconnects the plant to the Western/APS Test Track/Santa Rosa Substation, the SWTCO Marana Substation and the jointly owned Pinal South¹ substation. The plan includes a new 230 kV switching station at or adjacent to Western’s existing ED5 substation. Additionally, a number of modifications to several planned and existing substations are included in the plan as describe below.

The Three Terminal Plan provides the following benefits:

- Deliveries of Project power without additional wheeling charges² to all SPPR members who have expressed an interest in participating in the Project.
- An exceptionally strong transmission infrastructure which not only provides support for the Project and inter-participant exchanges but also provides significant reliability enhancement for the region as a whole.
- Access to regional markets by directly interconnecting the Project to all the major transmission providers in the region.
- Additional generation expansion opportunities in the future.
- Adaptable solutions for delivering Project power to TEP (and others) at multiple locations (e.g., Pinal South and Saguaro).

A key feature of the Three Terminal Option involves upgrading several of Western’s existing single circuit 115 kV facilities to double circuit 230 kV construction as described below. By utilizing Western’s existing right-of-way, SPPR will be able to avoid the State process for siting transmission lines. SPPR would own and operate the additional circuit at 230 kV while Western’s existing circuit would be rebuilt to 230 kV standards but continue to operate at 115 kV.

Transmission Upgrades:

The upgrades consist of the following three circuits:

Circuit 1:

The 230 kV circuit from Test Track/Santa Rosa 230 kV bus to the new ED5 230 kV Switching Station would consist of two contiguous segments. From Test Track/Santa Rosa to Thornton Road, SPPR would construct and own the 230 kV circuit on the SEV 500 kV line; and, from Thornton Road to the new ED5 230 kV Switching Station, SPPR would convert a portion of Western’s Casa Grande to Empire to Saguaro 115 kV line to a double circuit 230 kV line.

¹ SRP is considering renaming this planned future substation to Pinal Central.

² Delivery to WMIDD assumes a transmission exchange arrangement that would deliver its share of Project power to Palo Verde.

Circuit 2:

From the new ED5 230 kV Switching Station to Pinal South, SPPR would convert the Western 115 kV line from ED5 to ED4 to ED2 to a double circuit 230 kV line.

Circuit 3:

From the new ED5 230 kV Switching Station to SWTCo's Marana Substation, SPPR would convert the remaining portion of the Western 115 kV line from Empire to Saguaro and the Western 115 kV line from Saguaro to Marana Tap to a double circuit 230 kV line.

Substation Additions/Modifications:

Pinal South Substation: SPPR would install a second 500/230 kV 600 MVA transformer and a 230/115 kV 200 MVA transformer connecting the Pinal South 230 kV bus to Western 115 kV bus at ED2.

Test Track/Santa Rosa Substation: SPPR would install a 500/230 kV 600 MVA transformer (connecting the Santa Rosa 500 kV bus to the shared ED3/Western/APS 230 kV bus) as part of the development of the Santa Rosa 500 kV Station.

Marana Substation: SPPR would develop a 230 kV bus at the existing SWTCo Marana Substation and install a 230/115 kV 200 MVA transformer.

ED5 Switching Station: SPPR would construct a new 230 kV switching station adjacent to the existing Western ED5 115 kV Substation, which would provide interconnection and switching capabilities among the Project's three 230 kV interconnection terminals.

Generation Substation: SPPR would construct a new 230 kV station at the generation site (either Empire or Randolph) with a minimum of two 230 kV transmission line interconnections. If SPPR develops the Randolph site, additional transmission would have to be sited and constructed from the plant site to Pinal South.

