

Status of Effort to Increase Capacity on Path 26

Work Completed to Date:

- A stakeholder process has been completed that evaluated various approaches to increasing the capability on path 26. That process resulted in the development of various transmission expansion plans as shown in Attachment 1.

Work to be completed:

- The PTO's need to develop cost estimates for the transmission options.
- We need to complete additional studies to determine if the Path 26 rating increase would be able support a simultaneous increase in the SCIT (Southern California Import Transmission) level or if the increase would only support a non-simultaneous rating increase.
- We need to organize the study results into a Comprehensive Progress Report that would be reviewed by all interested WSCC members and would form the foundation to obtain WSCC approval of the Path rating increase. At this point, the WSCC process has not been started.

Attachment 1: Upgrade Options for Path 26

Short-term Options (250MW to 400 MW Increase)

Option 1: Path 26 @ 3250 MW (+250 MW): (this increase would eliminate approximately 31% of existing historical congestion)

- Install a Special Protection Scheme to curtail 1,000 MW of generation at Midway (i.e., La Paloma, or a combination of La Paloma and Texaco Sunrise). Curtailment of this generation would only occur following contingency conditions which have a very low probability (probably less than once every 10 years).
- In order to implement the Special Protection Scheme two options are available for monitoring the loading on the Midway-Vincent Lines: 1) install monitoring devices at Midway Substation; or 2) utilize existing monitoring devices at Vincent Sub.
- In order to implement the Special Protection Scheme it is necessary to install fiber optics communication between Midway and Vincent Substations.

Option 2: Path 26 @ 3400 MW (+400 MW): (this increase would eliminate approximately 50% of existing historical congestion)

- Complete the work identified in 1 above.
- Include in the Special Protection Scheme a bypass of the series capacitors on the Midway – Vincent 500 kV #3 line at the Midway end.

Long-term Options (1000 MW Increase)

Both of the following options would increase Path 26 capability to 4000 MW (+1000 MW). This increase would eliminate approximately 77% of existing historical congestion.

Alternative #1: Facility additions without an SPS

- Install an additional 550/230 kV transformer at Vincent Substation.
- Replace the series capacitors on both ends of the Midway-Vincent 500 kV #3 line with 5000 amp series capacitors.
- Replace the wave traps at Midway and Vincent with 5000 amp wave traps.
- Replace the wave traps on the Mesa Cal – Vincent 230 kV line with higher rated wave traps.
- Re-conductor or re-rate the PG&E-owned portion of the Midway-Vincent 500 kV #3 line (to 4500 A or above).

Alternative #2: Combination of new facilities and an SPS

- Install an additional 550/230 kV transformer at Vincent Substation.
- Install an SPS to curtail up to 1,000 MW of generation in the Midway area.
- Replace the series capacitors at both ends of the Midway-Vincent 500 kV #3 line with 4000 amp series capacitors.
- Replace the wave traps on the Mesa Cal – Vincent 230 kV line with higher rated wave traps.
- Re-conductor or re-rate PG&E-owned portion of the Midway-Vincent 500 kV #3 line (to 4000 A or above).