Comments of Southern California Edison

2015-2016 Transmission Planning Process

Submitted by		Company	Date Submitted
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Southern California Edison (SCE) appreciates the opportunity to provide comments in response to the information presented at CAISO's 2015-2016 Transmission Planning Process (TPP) stakeholder meetings which were held on September 21-22, 2015. SCE's comments are focused on the Buck Blvd Generation Tie Loop-In Project (Proposed Project).

SCE supports CAISO's findings¹ which demonstrate that although the Proposed Project provides some reliability benefits, it also creates additional problems requiring subsequent mitigation. One problem caused by the Proposed Project is a thermal overload of the Colorado River AA Bank under normal operating conditions and divergence under N-1 conditions². This was identified in the CAISO Policy-driven case containing heavy renewable output. The Proposed Project would result in increased curtailment of resources in the area and accelerate the need for an additional AA bank at Colorado River to address this overload.

Another problem caused by the Proposed Project is the introduction of a voltage deviation violation under simultaneous loss of the Devers – Red Bluff No.1& 2 500kV transmission lines³. Addressing this contingency would require a new RAS and modification to existing area Remedial Action Schemes (RAS) adding complexity and additional curtailment exposure. The Devers – Red Bluff N-2 contingency would first trigger the Colorado River Corridor (CRC) RAS tripping 1400 MW of generation. Next, the new RAS which the Project Sponsor is seeking to implement, would open circuit breakers and return the system to its existing configuration. An overload would remain on the Julian Hinds – Mirage 230 kV line following these actions. Then the existing Blythe RAS, which protects the Julian Hinds – Mirage 230 kV line, would be triggered tripping additional generation.

Due to the number of generation projects in the CAISO process requesting interconnection to the Colorado River and Red Bluff substations, recent studies identified a limitation on the number of arming points available in the CRC RAS. Modifications required by the Proposed Project would include a need for additional arming points to monitor the new line created by the Proposed Project and to add generation at Buck Blvd into the RAS. This may adversely impact those generation projects seeking interconnection in the region.

Furthermore, the Proposed Project is intended to address numerous N-1-1 contingencies involving the Julian Hind – Mirage 230 kV transmission line. These contingencies are currently being addressed by a combination of Operating Procedures and the existing Blythe RAS⁴. Although the Proposed Project does provide increased voltage support and stability under normal operating conditions, the Blythe RAS as well as Operating Procedure 119 would still be required to address additional N-1-1 contingencies not mitigated by the proposed project.

SCE thanks the CAISO for the opportunity to file these comments.

¹ CAISO Stakeholder Presentation: "Buck Blvd Generation Tie Loop-In Project" Slide 19

² *Id.* Slide 10

³ *Id.* Slide 12

⁴ *Id.* Slide 19