



January 18, 2018

Re: Sempra Renewables' Comments on the CAISO's 230 kV IID S Line Upgrade Proposal

Sempra Renewables appreciates the opportunity to comment on the CAISO's proposal to participate in upgrading the IID S Line. The proposal would upgrade the current 18.1 mile line from IID's El Centro substation to SDG&E's Imperial Valley substation by replacing the 230 kV single circuit wood pole construction with a 230 kV double circuit steel tower construction, along with the required termination equipment. The CAISO believes the upgrades will provide significant economic benefits, including reducing the combined San Diego - Imperial Valley local capacity requirements by 250 - 500 MW, and reducing approximately \$6M in annual congestion on the ISO system. In addition to these economic benefits, the upgrade may increase deliverability from the Imperial area.

The IID S line proposal comes at the tail end of the 2017-2018 Transmission Planning Process – a process that began more than thirteen months ago, and that will substantively conclude in a few weeks with the publication of the draft transmission plan in early February. Given the timing relative to the overall planning process, and the request for expedited approval, Sempra has the following questions/requests in order to better assess the proposal:

- Did the CAISO consider any alternatives, including non-wires alternatives, that could achieve the same or similar economic benefits at a comparable cost? If not, will there be an opportunity to explore alternatives prior to a final decision?
- Will the S-Line upgrade potentially require additional upgrades within the IID system to achieve the desired economic benefits? That is, are there potential weak points downstream of the S-Line upgrade that will need to be addressed to realize the fully stated S-Line's economic benefits? Have these upgrade costs been considered or factored into the S-Line proposal's cost estimates?
- With the S-Line rating increased and CFE's use of a phase-shifter (installed to eliminate unscheduled flows on its system for loss of IV-North Gila 500-kV, Delany-Colorado River 500-kV, IV-Miguel 500-kV or Sunrise 500-kV line(s)), it seems as if there will be impacts on IID's underlying voltage systems (i.e., 161-kV, 92-kV). Assuming this to be the case, will they be mitigated as part of the S-Line project, by IID or be assigned to new generators through "Affected System Studies"?
- Will the CAISO share the load flow study results underlying the proposal?
- Will the CAISO share the Grid View economic study results?

- Will the proposed upgrade require the WECC Path 46 (“West-of-River) rating to be modified since the S-Line expansion would no longer be a “net zero” contribution to the path flow?
- Who will be responsible for permitting and interconnecting the project?