A.13-09-014 SDG&E 1/22/14 Response
Salt Creek Substation Project PTC
Energy Division Request #20
ED-SDGE-020

sf#	Data Request #	Request	SDG&E Response
12.	DR.18-1	Provide a project description and analysis of constructing a double-circuit 69-kV power line on the western side of the ROW using a shorter span than the current 69-kV power line (TL 6910)? This approach could eliminate the need for taller poles and associated easement conflicts with residences and commercial buildings under a double-circuit alternative. Please provide the locations of the poles and work areas and define whether the construction schedule would be the same for a double-circuit alternative. Please provide supporting evidence if shorter spans are not feasible.	A preliminary analysis was performed evaluating the requested double circuit option. Such a design would require installing all new poles replacing the existing TL6910 69 kV structures (poles and H-frames) to accommodate the additional loading and limit the westerly blowout. Relative to the proposed TL6965 single circuit design, this double circuit option would require more engineered poles installed on foundations. Reference Attachment AD.20-12-1 for the conceptual layout. Identifying work areas would have required additional time; we respectfully ask for confirmation that this is still a request after this response has been reviewed. At a high level, construction would consist of installing the new double circuit foundations and poles, transferring the existing TL6910 conductor to the new poles (to allow the line to be put back into service during construction), removing the existing TL6910 structures, and stringing the new TL6965 conductor, and reconductoring TL6910 as necessary. Lengthy outages on TL6910, which could cause generation load curtailment, will be necessary to install this double circuit design. Project delays will likely result due to outage constraints in order to prevent overloading other 69 kV circuits in the area. Installation of this double circuit alternative will take longer than the proposed single circuit TL 6965 design. Factors that increase installation time and schedule variability include, but are not limited to, the additional steps of transferring/removing/replacing the existing TL6910 conductor and structures, installing additional double-circuit poles and foundations, and construction delays when outages are not possible (e.g. during high load conditions). This arrangement would mitigate the risk of a NERC Cat. B overload on

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			TL649 for loss of one Salt Creek-Miguel 69 kV line and would provide a third 69 kV source to Salt Creek, therefore it is superior to a simple loop-in of TL6910 without installing TL6965. However, post-construction impacts of such a double circuit design could limit system flexibility in that during maintenance or repair it is likely that both of the TL6910/6965 circuits would need to be de-energized. This could result in generation curtailment and radializing of the Salt Creek and Border substations thus leaving both the Border generation and load served by these substations at risk for loss of TL649.