

**A.13-09-014 SDG&E 11/14/14 Partial Response
Salt Creek Substation Project PTC
Energy Division Request #20 on 11/3/14
ED-SDGE-020**

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DUE NOVEMBER 14TH

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1.	DR 16.2-1	<p>Please specify a location for the potential 230/12-kV loop-in and clarify whether or not this alternative is technically feasible.</p> <p>The response to DR 16.2, item #1 did not specify a potential location for a 230/12-kV underground loop-in. The response also indicates that an underground loop-in is likely possible and that additional engineering would be needed to confirm the feasibility. Please clarify whether or not an underground loop-in is feasible.</p>	
2.	DR 16.2-1	<p>Define the height of the transition poles if an overhead loop-in were used. Provide the location of the potential overhead loop-in.</p>	
3.	DR 16.2-1	<p>Provide a visual simulation for the 230/12-kV substation from KOP 7, KOP 8, and the requested Greenbelt KOPB.</p> <p>The visual simulations are needed to fully characterize the visual impacts of the 230/12-kV substation relative to the proposed project.</p>	
4.	DR 16.2-1	<p>Provide estimates for daily and peak annual emissions from construction of the 230/12-kV substation.</p>	
5.	DR 16.2-1	<p>Provide estimates of annual SF6 emissions from the 230/12kV substations switchgear.</p>	The 230kV circuit breakers are typically certified by manufacturers to have a maximum SF6 leak rate of 0.5%

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			<p>relative to their nameplate capacity. The California Air Resources Board’s SF6 regulations require that the leak rate from SDG&E’s entire system not exceed 1% relative to the system’s total nameplate capacity by 2020. SDG&E’s system-wide leak rate already complies with the 1% requirement for 2020.</p> <p>The quantity of SF6 in a 230 kV circuit breaker is approximately 161 lbs; there would be 6 breakers for a total estimated quantity of 966 lbs equating to an estimated maximum emissions of 4.8 lbs annually. For the Proposed Project, each 69kV circuit breaker contains approximately 33 lbs of SF6.</p>
6.	DR 16.2-1	Provide the volume of mineral oil that would be required to fill the 230/12-kV transformers. Would any other or additional hazardous materials be required to construct or operate a 230/12-kV substation relative to the proposed project?	Approximately 10,000 gallons of mineral oil will be required for each 230 kV transformers equating to 30,000 gallons total (two transformers plus the spare). The quantities of SF6 in breakers will increase due to the bigger size of equipment (reference question 5 above).
7.	DR 16.2-1	Identify any additional equipment that would be required to construct the 230/12kV substation relative to the proposed project	Additional truck trips will be required due to the increased site development. Larger cranes will be needed to install the taller A-frames and a bigger hauler will be needed to transport the 230/12kV transformers.

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8.	DR 16.2-1	Identify any additional maintenance requirements for a 230/12-kV substation relative to the proposed project.	<p>Maintenance of a 230/12kV substation will require more time and more resources due to the larger quantity of oil in the transformer and SF6 gas in the breakers.</p> <p>Maintaining a 230/12kV substation will be a challenge due to the uniqueness of the 230/12kV transformer. There is no portable transformer to use when taking this equipment out for service. To do maintenance on a transformer, it requires offloading the circuits and putting them onto the other transformer. This is a reliability issue when all of the circuits are being fed off of one transformer.</p> <p>Furthermore SDGE would like to reiterate that there would be additional cost for this option due to fact that 230 kV transformers are more expensive and a spare transformer would need to be purchased since these would be unique to the system (reference question 2 of Data Request 16.2 for the cost estimate).</p> <p>Finally, in the event that a transformer does go out of service permanently, the lead time to replace it would be 18-24 months (estimated) as it would need to be procured and manufactured (no additional spares due to the uniqueness of a 230/12 kV transformer in the SDGE system).</p>

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9.	DR 16.2-1	<p>Define the approximate size of the detention basin for the 230/12-kV substation.</p> <p>Will a larger detention basin be required relative to the proposed project?</p>	
10.	DR 16.2-3	<p>Provide additional information on the underground alternative within Hunte Parkway, Proctor Valley Road, and Mt. Miguel Road.</p> <p>Additional information is needed to fully describe and analyze the underground alternative in public ROW in the EIR. Please provide the following details:</p> <ol style="list-style-type: none"> 1. Are there utility conflicts that could affect the feasibility of this alternative? 2. What is the width of the work area? 3. What is the trench width and depth for the underground cable? 4. Where would the underground cable be located within the road and would the work area be located in a single lane? 5. Where would vaults be located? 6. What is the estimated duration and timing for 	

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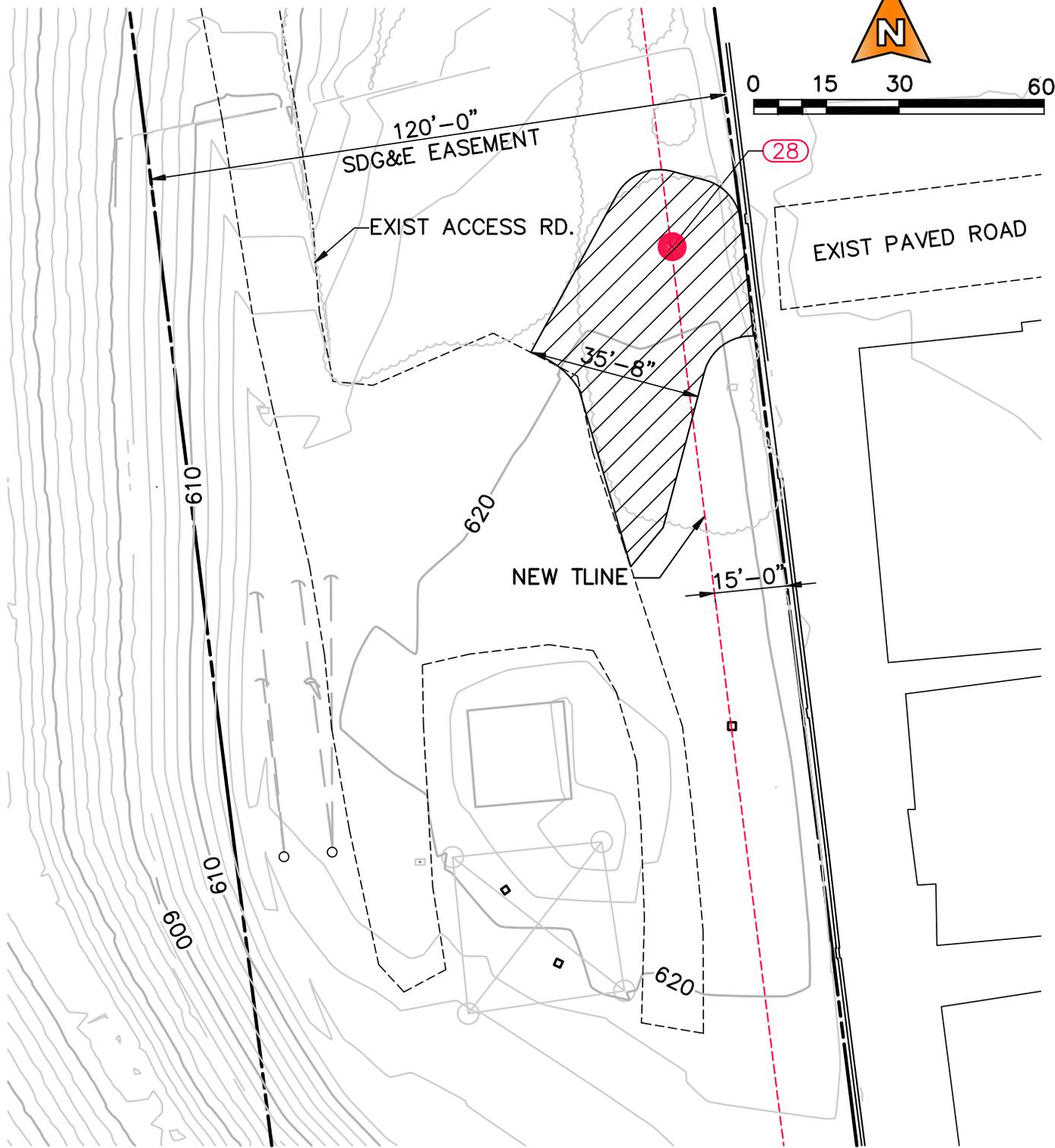
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		<p style="text-align: center;">construction?</p> <p>7. Would the underground cable installation require removal of trees in the median?</p> <p>8. Provide the peak daily emissions from underground construction. AECOM</p> <p>9. Provide the estimated noise levels from construction. AECOM</p>	
11.	DR 16.2-4	<p>Provide details on the work area and pole height for a Pole 28 relocation alternative.</p> <p>Additional details are required to analyze the pole relocation alternative in the EIR. Please provide the work area configuration and pole height for comparison with the project.</p>	<p>See attachment DR20.11-1 for estimated work area configuration. The pole height for the alternate location is anticipated to be approximately 107.5 feet above ground (105 foot pole plus a 2.5 foot reveal).</p>
12.	DR.18-1	<p>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.</p>	

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		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.	
13.	Phone call with CPUC & Panorama on 11/12/14	Provide GIS polygons of 230/12 kV alternate showing permanent and temporary impact areas.	



STR. 28

SCALE: 1" = 30'

CLEAR AND GRUB

DISTURBED AREA: 1,975 S.F. (PERM.)

PRELIMINARY NOT FOR CONSTRUCTION