Alberhill System Project Data Gap Set #14 REVISED 09/02/11

DG#	Resource Area / Topic	Source / PEA Page	Data Gap Question	Request Date	Reply Date	Status	Notes
			Data Request #14				
8.1.2	Alternatives	DG 8.1.1	The response to Data Gap Request 8.1.1 indicates that to make the output from an additional transformer at Valley Substation for the Valley South System useful, an approximately 20-mile 115-kV subtransmission line would need to be constructed from Valley Substation to Pauba Substation.	08/22/11			
			Explain why construction of a 20-mile line to Pauba Substation is relevant to an alternative that would install an additional transformer at Valley Substation to meet demand projected in proximity to the proposed Alberhill Substation site. Provide the assumptions and calculations that lead to the conclusion that a new 115-kV line to Pauba Substation would be required due to construction of the proposed Alberhill System Project or confirm that the need for the new line to Pauba Substation exists regardless of approval to construct the proposed Alberhill System Project.				
14.1	Alternatives	Ch. 2	 If a modified system were constructed for an ultimate build out of two transformers and a spare at a site located north of Canyon Lake as shown in Attachment A or just north of the proposed 115-kV Segment 8 (see Attachment A), describe the changes, additions, and improvements to existing 115-kV systems that would be required to make the output from these transformers useful in meeting projected demand in a reliable and flexible manner. Assume that site improvements (e.g., grading) and acquisition feasibility would be comparable to the proposed site. Additional assumptions would be similar to those used to respond to Data Gap Request 8.1.1. This modified system alternative assumes that a smaller overall project would be constructed and operated to serve a reduced Alberhill 115-kV service area. The reduced Alberhill 115-kV service area may include Scenario A: Ivyglen, Fogarty (proposed), and Elsinore substations; Scenario C: another combination of substations that would be sufficient to relieve load from the Valley South 115-kV System through the planning period (through 2020) if a new 500/115-kV substation were constructed for an ultimate build out of only two transformers and 	08/22/11			See attached figure.

Alberhill System Project Data Gap Set #14 REVISED 09/02/11

DG#	Resource Area / Topic	Source / PEA Page	Data Gap Question	Request Date	Reply Date	Status	Notes
			 one spare. In addition, instead of de-energizing (or keeping energized but not serving load) an approximately 10-mile segment of the existing 115-kV Valley–Elsinore–Ivyglen Line as proposed, discuss the feasibility of using this line along with the pending 115-kV Valley–Ivyglen Line to transmit electricity from a 500/115-kV substation constructed at one of the substation site alternatives shown in Attachment A. If a reduced Alberhill 115-kV system were to be constructed, at what point in time would additional reinforcements be required assuming the scenarios described above (Scenarios A, B, and C)? See also outstanding Data Gap Request 12.1.1 regarding when a third transformer is projected to be required at the proposed Alberhill Substation. 				
14.2	Alternatives	Ch. 2	 Review of the proposed Lee Lake GIS substation described in the Proponent's Environmental Assessment (PEA) for the Talega-Escondido/Valley-Serrano 500-kV Interconnect (TE/VS) Project is seen as capable of meeting the objectives of the proposed Alberhill System Project. Describe the extent to which SCE currently uses, stocks, and maintains similar GIS equipment at the 500-kV and 115-kV levels as well as the impact that the addition of a GIS substation at Lee Lake may have on existing SCE systems. The latest TE/VS PEA can be downloaded from: http://www.cpuc.ca.gov/Environment/info/aspen/nevadahyd ro/talega_escondido_valley_serrano.htm The structures for the pending Valley–Ivyglen 115-kV subtransmission line will have an available second circuit from the proposed Alberhill Substation site southeast toward Elsinore Substation. How far north of the proposed Alberhill Substation) will the pending Valley–Ivyglen 115-kV subtransmission line have an available second circuit? In comparison to the proposed Alberhill System Project 115-kV improvements, describe the changes, additions, and improvements to existing 115-kV systems that would be required to make output from a GIS substation at Lee Lake site useful in meeting projected demand in a reliable and flexible manner. 	08/22/11			
<u>14.3</u>	<u>Alternatives</u>	<u>Ch. 2</u>	If the proposed substation (in full) were constructed at a site located just north of the proposed 115-kV Segment 8 (see Attachment A), describe the changes, additions, and improvements to existing 115-kV systems that would be	<u>09/02/11</u>			

Alberhill System Project Data Gap Set #14 REVISED 09/02/11

DG#	Resource Area / Topic	Source / PEA Page	Data Gap Question	Request Date	Reply Date	Status	Notes
			 required to make the output from these transformers useful in meeting projected demand in a reliable and flexible manner. Assume that site improvements (e.g., grading) and acquisition feasibility would be comparable to the proposed site. Additional assumptions would be similar to those used to respond to Data Gap Request 8.1.1. In addition, instead of de-energizing (or keeping energized but not serving load) an approximately 10-mile segment of the existing 115-kV Valley–Elsinore–Ivyglen Line as proposed, discuss the feasibility of using this line along with the pending 115-kV Valley–Ivyglen Line to transmit electricity from a the proposed 500/115-kV substation were it constructed at one of the substation site alternatives shown in Attachment A. 				
14.4	Alternatives	<u>Ch. 2</u>	 If the proposed Alberhill Substation was modified to include an additional 500-kV bus position and a 230-kV switchyard consisting of one 500/230-kV transformer and one 230-kV line position, estimate how many additional acres would likely be required to construct the substation. The addition would be used to originate a 230-kV transmission line as part of the TE/VS Project. At present, the estimate for the proposed substation is 34 acres. Provide the total amount of additional acreage under two scenarios: all GIS for the 500/230-kV equipment and all open-air switchgear for the substation would not change from what is proposed other than what would be essential to accommodate the addition of a 500/230-kV transformer and 230-kV line. 	<u>09/02/11</u>			