

**Southern California Edison
MESA PTC A.15-03-003**

DATA REQUEST SET A1503003 ED-SCE-Deficiency Letter-01

**To: ENERGY DIVISION
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Title: Substation Construction Project Manager
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Question PD-01:

To clarify the phasing of the proposed project, the CPUC requests that SCE clearly identify project phases, particularly for construction of the substation site area. Phases should include decommissioning of the existing Mesa Substation, and be consistent with the phases used to determine the air emission calculations. Assumptions associated with each phase, particularly expected quantities of cut and fill (and associated import/export), peak truck trips, and the anticipated maximum number of employees should be clarified for each phase

Response to Question PD-01:

SCE Response:

As described in Section 3.4 Proposed Project of the Proponent's Environmental Assessment (PEA) in Chapter 3 Project Description, construction of the proposed Mesa Substation would require phasing to accommodate the continued operation of the facility during construction. Construction of the proposed Mesa Substation would occur in three phases, as shown in the attached figure entitled Mesa 500 kV Substation Project Grading Phases. The use of the "initial phase" and "final phase" terminology in the PEA refers to grading Phases 1 and 3, respectively. Minimal grading would be required during Phase 2. A description of the activities that would take place in each phase follows.

Phase 1 involves preliminary activities, such as relocation of the Metropolitan Water District of Southern California water pipeline, vegetation removal, removal of some equipment stored on site, and installation of temporary fencing. This phase includes all construction associated with the following:

- the first eight 220 kV switchrack positions,
- the entire 66 kV and 16 kV switchracks,
- two 220/66 kV transformer banks,

- two 66/16 kV transformer banks,
- two 66 kV capacitor banks,
- two 16 kV capacitor banks, and
- the necessary underground and overhead facilities to connect the relocated circuits (of all three voltage levels).

This phase also includes, but is not limited to, activities such as mass grading; access road construction, including retaining walls; construction of the senior and junior Mechanical and Electrical Equipment Rooms; assembly and erection of various transmission and subtransmission overhead structures; and possibly the construction of the Operations Building and the Test and Maintenance Building. This phase involves the import of approximately 100,000 cubic yards (CY) of fill to develop the western portion of the proposed Mesa Substation site. Phase 1 would generally occur between the second quarter of 2016 and the fourth quarter of 2018.

Phase 2 involves the extension of the new 220 kV switchrack, one 220/66 kV transformer bank, one 66 kV capacitor bank, and the necessary underground and overhead facilities to connect the relocated circuits (of both voltage levels). This would include, but is not limited to, activities such as decommissioning and removal of the western portion of the existing 220 kV switchrack; grading and civil improvements, including the detention basin and other drainage improvements; construction of the southern portion of the new 220 kV switchrack; and assembly and erection of various transmission and subtransmission overhead structures. This phase would generally occur between the second quarter of 2018 and the first quarter of 2019.

Phase 3 includes decommissioning and demolition of the balance of the existing substation, construction of the new 500 kV switchrack on the eastern portion of the site, and connecting the transmission lines. This phase would include, but is not limited to, activities such as structural and civil demolition and access road construction, including retaining walls; installation of foundations and piping for three 500/220 kV transformer banks, including Spill Prevention, Control and Countermeasure Plan facilities; and assembly and erection of various transmission overhead switchracks and transmission towers. This phase would generally take place between the first quarter of 2019 and the fourth quarter of 2020. However, post-construction testing after the substation is operational will occur through the second quarter of 2021.

The Proposed Project is in the civil engineering phase; therefore, import and export quantities and truck trips associated with each phase continue to be refined. As requested in Question PD-01, Table 1: Grading Quantities, Workforce, and Vehicle Trips by Construction Phase at Mesa Substation details the expected quantities of cut and fill (and associated import/export), the maximum trips per day, and the anticipated maximum number of employees for each phase based on civil engineering calculations that have been refined since the submittal of the PEA.

Table 1: Grading Quantities, Workforce, and Vehicle Trips by Construction Phase at Mesa Substation

Phase	Fill Quantity (CY)	Cut Quantity (CY)	Import/Export Quantity (CY)	Source/Destination	Maximum Number of Construction Workers	Maximum Number of Trips per Day		
						Grading Trips	Other Truck Trips	Personal Vehicle Trips
1	250,000	150,000	100,000	Quarry within 45 miles of the site	242	100	430	242
2	5,000	70,000	(65,000)	Stockpile for Phase 3	84	--	125	84
3	325,000	375,000	(50,000)	Landfill within 45 miles of the site	155	100	196	155
Total	580,000	595,000	--	--	--	--	--	---

Notes: Export values in Phase 2 are included in the cut values in Phase 3. Phase 3 raw cut volume is 310,000 CY. "--" indicates "not applicable."



Mesa Grading Phases (04-23-15S).pdf



Revised Noise Levels Construction Equipment (04-23-15S).docx



Updated Construction Equipment List (04-23-15S).docx