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

## DATA REQUEST SET A1503003 ED-SCE-05

To: ENERGY DIVISION Prepared by: Scott Lacy, P.E. Title: Project Engineer Dated: 09/18/2015

## **Question 04.a:**

A gas-insulated substation would require a smaller footprint. Provide the following information:

A. Would it be feasible to construct a 500-kV gas insulated substation west of the existing 230-kV substation? Explain why or why not.

## **Response to Question 04.a:**

(Note: In contrast to Data Request Question 2.B., SCE presumes that this question posits that the new substation will require the installation of multiple transformer banks, similar to the Proposed Project. If that is not the case, then this question is most considering SCE's prior responses to that question and Question 2.C.)

While SCE agrees that the footprint of a gas-insulated substation (GIS) is generally smaller, that size reduction benefit is limited only to the switchracks (of any voltage), not the transformer banks. Accordingly, there is NOT sufficient space available west of the existing 230 kV substation to build a new 500 kV GIS, because the space required to build the transformer banks is more restricted in that portion of the property.

Note: This response does not include the necessary modifications to the existing 500 kV and 230 kV transmission lines that currently exist in the area west of the existing 230 kV substation. See SCE's reply to Data Request Question 2.C for more details.