

1 **Further, in reference to Schedule “B”, page 18 of 82 – rebuild substations at a project cost**
2 **of \$557,000:**

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4 **Q. Please advise as to which connectors are to be replaced and when was the last time**
5 **that these switch connectors were replaced and what is the life of a switch**
6 **connector.**

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8 A. Connectors are used to attach wires or conductors to electrical equipment (transformers,
9 metering tanks, switches, etc.) within substations. A visual representation of a switch
10 connector is shown in the Thermoscan Report on the Glendale substation provided in
11 Attachment B of response CA-20 (b).

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13 The Company’s records do not indicate when specific switch connectors were previously
14 replaced. As a result, the life of an individual switch connector is difficult to determine.
15 The most recent depreciation study, filed with the Board as part of the Company’s 2003
16 General Rate Application, estimates an average service life for substation equipment of
17 44 years.

18
19 Switch connectors may become loose over time due to cyclical expansion and contraction
20 that occur with variations in the flow of electrical current. As the connectors loosen,
21 electricity will arc and damage the connectors.

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23 The decision to replace these switch connectors is not based on their age. Through its
24 Infrared Inspection Program, the Company has identified a number of connectors that are
25 overheating. The higher the temperature level detected, the increased likelihood of
26 connector related problems and the higher the priority for replacement.