

*Southern California Edison*  
*2026-WMPs – 2026-WMPs*

**DATA REQUEST SET S P D - S C E - W M P 2 0 2 6 - 0 0 3**

**To: SPD**

**Prepared by: Jonathan Brownstein**

**Job Title: Engineering Manager**

**Received Date: 7/21/2025**

**Response Date: 7/24/2025**

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**Question 07.a-f:**

In its reply to Question 1.a.iii of Energy Safety data request OEIS-P-WMP\_2025-SCE-010, SCE states that it is evaluating risk from traveling faults which may result in an expansion of SCE's covered conductor program.

- a. Provide a detailed description of how a traveling fault could occur.
- b. Provide a list of all drivers that can cause a traveling fault.
- c. Provide a detailed description of how a traveling fault could result in an ignition.
- d. Provide evidence that a traveling fault has caused an ignition in SCE's territory.
- e. Provide copies of any studies SCE has conducted related to traveling faults.
- f. Provide copies of any studies that SCE is aware of related to traveling faults.

**Response to Question 07.a-f:**

- a. When a fault occurs with the electrical system, there is an unintended, uncontrolled, high current flow through the equipment along the path back to the source substation. The intensity of the high current is dependent on the location of the initial fault and the impedance of the lines along the path back to the substation. If there is a weak component along the path back to the substation, this high current can cause this weakened equipment to fail. SCE calls this a travelling fault. SCE has reviewed ignition data to try and identify these concerns. A subset of SCE's ignition data shows the Root Cause location is different from the ignition location, along with a filter for where there was an intermediate cause. A manual review of events is performed to determine if the ignition location was upstream (along the path back to substation) of the root cause location and a related event.
- b. Travelling faults can occur from any type of fault/driver occurring on the system. The driver for most of these secondary location failures (or travelling fault) are Equipment/Facility Failures (EFF). Generally, the EFF will be some type of connector but could impact on other equipment that is degraded.
- c. Equipment on the system has a rating to withstand a certain amount of fault current. Degradation in the rating can occur for various reasons. Reasons may include but are not limited to loss of grease, weakened connection, or the equipment lost its ability to withstand the high current. When this happens, arcing occurs where the connection has weakened and

creates incandescent particles. These particles can fall to dry grass/brush and cause an ignition.

- d. Please see the attached Interruption Log Sheet (ILS) titled “SPD\_SCE\_WMP2026\_003\_7\_d.pdf” for documentation of an event where an ignition was the result of a travelling fault. In this example, a tracking event occurred internally on a pad-mounted switch. The fault current travelling through a connector along the path back to the substation caused incandescent particles to come to ground and ignited a fire.
- e. SCE does not have any studies on traveling faults.
- f. SCE is not aware of any studies related to traveling faults.