

February 6, 2001

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE -- PNO-IV-01-004

This preliminary notification constitutes EARLY notice of events of POSSIBLE safety or public interest significance. The information is as initially received without verification or evaluation, and is basically all that is known by the Region IV staff on this date.

**Facility**

Southern California Edison  
San Onofre Nuclear Generating Station Unit 3

Docket: 50-362 License No. NPF-15

**Licensee Emergency Classification**

Notification of Unusual Event  
 Alert  
 Site Area Emergency  
 General Emergency  
 Not Applicable

SUBJECT: CIRCUIT BREAKER FAILURE AND FIRE, RESULTING IN REACTOR SHUTDOWN

DESCRIPTION:

On Friday, February 2, 2001, San Onofre Unit 3 began a startup at the end of a refueling outage. Unit 2 operated at full power and remained at full power through the Unit 3 transient.

On Saturday, February 3, at 3:14 p.m. PST, with the Unit 3 reactor at approximately 39 percent power, a nonsafety-related 4160V switchgear in the turbine building switchgear room failed catastrophically, resulting in a fire in the switchgear, a loss of all nonsafety-related 4160V electric power, and a turbine trip in Unit 3. The licensee stated that an automatic reactor trip was initiated by the reactor protection system.

Plant staff saw smoke and flames in the switchgear. At 3:27 p.m., operators declared an Unusual Event because of a fire expected to last more than 15 minutes. The fire department responded and extinguished the fire by 3:44 p.m. The fire affected other nonsafety busses in the switchgear room. As designed, the safety-related and some of the nonsafety-related loads transferred to Unit 2 power sources, and the Unit 3 emergency diesel generators started but did not load, since the Unit 2 power supplied the safety busses. As a result of the transfers, all emergency core cooling systems remained available and the reactor coolant pumps continued to run. Because of the lack of available power, feedwater was unavailable and circulating water was lost, resulting in a loss of condenser vacuum. Operators manually initiated emergency feedwater before the automatic initiation setpoint occurred and stabilized the plant at normal operating temperature and pressure. The operators continued to use the steam generators to remove heat from the reactor coolant system and relieved steam to the atmosphere using the atmospheric relief valves. The transient also caused a loss of control room annunciators for 16 minutes. Operators were able to monitor plant conditions using instruments available in the control room.

Operators stabilized the plant in Hot Standby, declared the fire out at 3:44 p.m., and exited the Unusual Event at 4:20 p.m. Operators placed the plant in Cold Shutdown around midnight on February 4, with shutdown cooling in service. The licensee continues to assess the effects of the fire and transient.

The resident inspectors were onsite during the event and continuously monitored licensee actions until operators placed the plant in Cold Shutdown. A Special Inspection Team has been dispatched to the site to evaluate licensee efforts to determine the cause of the transient. The Team will also monitor licensee actions to correct degraded conditions.

The state of California has been informed.

This information has been discussed with the licensee and is current as of February 6, 2001.

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