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**U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555-0001**

**Subject: Docket No. 50-362
 Licensee Event Report No. 2005-002
 San Onofre Nuclear Generating Station, Unit 3**

Gentlemen:

This submittal provides a Licensee Event Report (LER) 2005-002 for one train of Containment Emergency Cooling inoperable for longer than allowed by Technical Specifications. Redundant containment cooling systems were available during this period. This event did not affect the health and safety of either plant personnel or the public.

If you require any additional information, please contact me.

Sincerely,

Unit 3 LER No. 2005-002

**cc: B. S. Mallett, NRC Regional Administrator, Region IV
 C. C. Osterholtz, NRC Senior Resident Inspector, San Onofre Units 2 & 3**

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LICENSEE EVENT REPORT (LER)(See reverse for required number of
digits/characters for each block)

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1. FACILITY NAME

San Onofre Nuclear Generating Station (SONGS) Unit 3

2. DOCKET NUMBER

05000-362

3. PAGE

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4. TITLE**Emergency Containment Cooling Inoperable for Longer than Allowed by Technical Specifications**

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MO	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO	MO	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
12	23	2004	2005-002-00			11	30	2005		
9. OPERATING MODE		1	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR '': (Check all that apply)							
10. POWER LEVEL		100	20.2201(b)			20.2203(a)(3)(ii)			50.73(a)(2)(ii)(B)	50.73(a)(2)(ix)(A)
			20.2201(d)			20.2203(a)(4)			50.73(a)(2)(iii)	50.73(a)(2)(x)
			20.2203(a)(1)			50.36(c)(1)(i)(A)			50.73(a)(2)(iv)(A)	73.71(a)(4)
			20.2203(a)(2)(i)			50.36(c)(1)(ii)(A)			50.73(a)(2)(v)(A)	73.71(a)(5)
			20.2203(a)(2)(ii)			50.36(c)(2)			50.73(a)(2)(v)(B)	OTHER Specify in Abstract below or in NRC Form 366A
			20.2203(a)(2)(iii)			50.46(a)(3)(ii)			50.73(a)(2)(v)(C)	
			20.2203(a)(2)(iv)			50.73(a)(2)(i)(A)		X	50.73(a)(2)(v)(D)	
			20.2203(a)(2)(v)		X	50.73(a)(2)(i)(B)			50.73(a)(2)(vii)	
			20.2203(a)(2)(vi)			50.73(a)(2)(i)(C)			50.73(a)(2)(viii)(A)	
			20.2203(a)(3)(i)			50.73(a)(2)(ii)(A)			50.73(a)(2)(viii)(B)	

12. LICENSEE CONTACT FOR THIS LER**NAME**

D. P. Breig, Station Manager, Nuclear Generation

TELEPHONE NUMBER (Include Area Code)

949-368-9263

13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX

14. SUPPLEMENTAL REPORT EXPECTED

YES (If yes, complete EXPECTED SUBMISSION DATE)	X	NO
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15. EXPECTED SUBMISSION DATE

MONTH DAY YEAR

16. ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

On October 2, 2005 at 0825 (discovery date) Containment Emergency Cooling Unit Train "A", 3ME399, did not start during its monthly surveillance test. SCE discovered 3BLP0303, Containment Emergency Fan 3ME399 Backup Breaker had tripped open.

SCE's review determined this breaker (and also breaker 3BLP0304 for Train "A" ECU 3ME401) had been installed with incorrect setpoint tolerances. Because SCE installed these breakers during the last refueling, ECUs 3ME399 and 3ME401 were considered inoperable from December 23, 2004 to October 5, 2005. SCE is submitting this report in accordance with 10CFR50.73(a)(2)(i)(B) and 10CFR50.73(a)(2)(v)(D).

This event was initiated by incorrect field implementation of an engineered change package. This condition went undetected after the September 4, 2005 surveillance because the surveillance procedure did not provide sufficient instruction to determine that 3BLP0303 tripped during the surveillance. SCE corrected the breaker setpoint tolerances, and improved the ECU surveillance procedure.

Since redundant Containment Cooling systems remained available and operable throughout the duration of this occurrence, the safety significance of this event is low.

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Plant: San Onofre Nuclear Generating Station (SONGS)
Event Date: December 23, 2004
Discovery Date: October 2, 2005
Reactor Vendor: Combustion Engineering
Mode: Mode 1 – Power Operation
Power: 100 percent

Description of Event

On October 2, 2005 at 0825 (discovery date) Containment Emergency Cooling Unit (ECU) Train "A", 3ME399, did not start during its monthly surveillance test. Plant operators determined that 3BLP0303, Containment Emergency Fan 3ME399 Backup Breaker, was open (tripped). Backup breaker 3BLP0303 is normally closed.

Since the ECUs are located inside containment, the monthly surveillance is conducted by plant operators in the control room monitoring the fan motor starting current. During the last surveillance test of 3ME399 on September 4, 2005, the motor starting current was observed by plant operators. The operators recorded the surveillance as completed satisfactorily, but the breaker 3BLP0303 had tripped open after the starting current was observed.

SCE had replaced backup breakers 3BLP0303 and 3BLP0304 (breaker to fan on ECU 3ME401) during the Unit 3 cycle 13 refueling outage and returned to service on December 23, 2004. SCE's review determined that the breakers had been installed with incorrect setpoint tolerances. ECU 3ME399 had successfully passed its monthly surveillances since 3BLP0303 was installed in December 2004, until it tripped on September 4, 2005. ECU 3ME401 had successfully passed its monthly surveillances since 3BLP0304 was installed in December (3BLP0304 did not trip).

SCE's evaluation concluded that both 3BLP0303 and 3BLP0304, while functional, would not be able to fulfill their design function due to the incorrect setpoint tolerances. Consequently, ECUs 3ME399 and 3ME401 were considered inoperable from December 23, 2004 to October 5, 2005 (when the breakers were replaced and returned to operable status). Both ECUs are in Train "A".

Technical Specifications (TS) 3.6.6.1, Containment Spray and Cooling Systems, requires two trains of containment cooling to be operable while the plant is in Modes 1, 2, and 3. With one train of containment cooling inoperable, TS 3.6.6.1 Action C requires the containment cooling train be restored to operable status in 7 days. Train "A" of containment cooling was inoperable from December 23, 2004 through October 5, 2005 (greater than 7 days).

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If two containment cooling trains are inoperable, TS 3.6.6.1, Action D requires one train to be restored to operable status within 72 hours. If Action D is not completed, Action F requires the plant to be placed in Mode 3 within the following 6 hours.

The Emergency Diesel Generators (EDGs) provide AC power to provide containment cooling under loss of offsite power conditions. TS 3.8.1, Electrical Power Systems, AC Sources, requires two EDGs to be operable in Modes 1 – 4. If one EDG is inoperable, Action B.2 states that a required feature supported by the inoperable EDG must be declared inoperable when its redundant required feature is also inoperable. This action is required to be completed within 4 hours of discovery.

Between December 23, 2004 and October 5, 2005, SCE periodically removed the Train "B" EDGs from service. One instance was the 12-year overhaul of the Train "B" EDG, which removed the EDGs from service for about eight days (August 21-29, 2005). During the overhaul, TS 3.8.1, Action B.2 would have required SCE to declare the Train "B" ECUs inoperable within 4 hours of declaring the Train "B" EDG inoperable and TS 3.6.6.1, Action F, would have required a plant shutdown 72 hours later. Because plant operators were unaware the incorrect breaker setpoint tolerances were installed and the Train "A" ECUs should have been considered inoperable, these actions were not completed.

SCE is reporting the conditions prohibited by TS 3.6.6.1 and TS 3.8.1 in accordance with 10CFR50.73(a)(2)(i)(B).

As noted above, there were times when Train "A" ECU was inoperable at the same time that Train "B" ECU was required by TS 3.8.1 to be considered inoperable. Consequently, even though Train "B" ECU remained functional (normal power was available), SCE is electing to report this occurrence in accordance with 10 CFR 50.73(a)(2)(v)(D), as a loss of safety function.

Cause of Event

During cycle 13 refueling outage, SCE replaced 3BLP0303 and 3BLP0304, Containment Emergency Fan 3ME399 and Fan 3ME401 backup breakers. The replacement breakers required a non-typical setpoint tolerance (-0 percent, +25 percent); however, 3BLP0303 and 3BLP0304 were installed with a SONGS standard setpoint tolerance (nominally +/-25 percent), which was incorrect. The non-typical setpoint tolerance were correctly identified in the engineering change package for the replacement breakers, but the information was not adequately implemented in the planning process and during field installation.

During the September 4, 2005, monthly surveillance, breaker 3BLP0303 tripped due to normal variation of the motor in-rush starting current. The tripped breaker went undetected after the surveillance because the procedure did not provide sufficient instruction to determine if the backup breaker had tripped during the surveillance. The condition of the tripped breaker 3BLP0303 was not discovered until October 2, 2005, during the subsequent monthly surveillance. SCE's review also concluded that backup breaker

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3BLP0304 had not tripped between the time it was installed to the date 3BLP0303 was discovered tripped open.

Corrective Actions

1. SCE installed a new breaker tested to the correct setpoint tolerances in position 3BLP0303 and returned the breaker to operable status on October 5, 2005. Breaker 3BLP0304 was replaced with a new breaker and tested to the correct setpoint tolerances and returned to operable status on October 5, 2005.
2. The surveillance procedure was revised to trend bus to load amps and outlet ECU temperature to determine ECU fan starts and operates continuously through the duration of the surveillance testing. In the past, only indication of motor starting in-rush current was used to determine ECU operability during surveillance testing. SCE will review this surveillance issue with plant operators.
3. SCE revised procedures to ensure engineering changes affecting setpoint tolerances in plant equipment are identified and implemented in the field.

Additional corrective actions may be implemented as they are identified.

Extent of Condition

Breakers 3BLP0303 and 3BLP0304 were two of eight backup penetration breakers (four in Unit 2, four in Unit 3) identified for replacement because they were obsolete equipment. Only these eight breakers specify the non-typical setpoint tolerance of -0 percent, +25 percent. To date, 3BLP0303 and 3BLP0304 had been replaced. Consequently, no other plant systems were affected because the remaining six breakers had not been installed.

SCE's review also concluded that 3BLP0304 had not tripped between the time it was installed to the date 3BLP0303 was discovered tripped open.

Safety Significance

SONGS has two trains of emergency containment cooling systems. Each train has a containment spray pump and two containment emergency coolers.

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Thus, there are six individual components between Train "A" and Train "B" that can provide post accident containment cooling as follows:

Train "A"

- 1) Containment Spray Pump P012
- 2) Emergency Cooler E399
- 3) Emergency Cooler E401

Train "B"

- 4) Containment Spray Pump P013
- 5) Emergency Cooler E400
- 6) Emergency Cooler E402

A probabilistic risk analysis showed the incremental core damage probability (ICDP) and incremental large, early release probability (ILERP) risk due to the inoperability of 3ME399 and 3ME401 was less than 1E-8 for ICDP and less than 1E-9 for ILERP. This analysis was based on actual component unavailability and plant operations from December 23, 2004 through October 5, 2005. Although Containment Cooling Train B was considered TS inoperable, normal power to the components remained available to perform its required safety function throughout the duration of this event.

For these reasons, SCE concludes this event was of low safety significance.

Additional Information

In the past three years, SCE submitted one LER (Unit 3 2002-002-00) for containment cooling being inoperable for longer than allowed by TS. That event was the result of a manufacturing defect which prevented a breaker from fully charging through the end of the charge cycle. That failure mode was discussed in a May 6, 2002, 10CFR21 report from Asea Brown Boveri to the NRC. Because the incorrect setpoint tolerances reported in this LER were not related to a defective breaker, corrective action taken for LER 2002-002-00 could not have prevented this event.

In the past three years, SCE has not reported any events caused by an inadequate procedure that allowed inoperable equipment to be declared operable.