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Dr. Raymond W. Waldo
Station Manager
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August 9, 2004

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

Subject: **Docket Nos. 50-362**
Licensee Event Report No. 2004-002
San Onofre Nuclear Generating Station, Unit 3

Gentlemen:

This submittal provides Licensee Event Report (LER) 2004-002 for an incomplete post-maintenance calibration of Logarithmic Power Level-High Channel "A" which resulted in Technical Specification Violations.

Any actions listed are intended to ensure continued compliance with existing commitments as discussed in applicable licensing documents; this LER contains no new commitments. If you require any additional information, please so advise.

Sincerely,

Raymond Waldo

LER No. 3-2004-002

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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NRC FORM 366 (7-2001) U.S. NUCLEAR REGULATORY COMMISSION	APPROVED BY OMB: NO. 3150-0104 EXPIRES: 06/30/2007
LICENSEE EVENT REPORT (LER) (See reverse for required number of digits/characters for each block)	Estimated burden per response to comply with this mandatory information collection request: 50 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Records Management Branch (T-6 E6), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to bjs@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202 (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

1. FACILITY NAME	2. DOCKET NUMBER	3. PAGE
San Onofre Nuclear Generating Station (SONGS) Unit 3	05000-362	1 OF 3

4. TITLE
Incomplete post-maintenance calibration of Logarithmic Power Level-High Channel "A" results in Technical Specification Violations.

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
										05000-362
06	6	2004	2004	-002-	00	8	9	2004	FACILITY NAME	DOCKET NUMBER

9. OPERATING MODE	3
10. POWER LEVEL	0

11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)

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)	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	TELEPHONE NUMBER (Include Area Code)
R. W. Waldo, Station Manager, Nuclear Generation	949-368-8725

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

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX
				N					

14. SUPPLEMENTAL REPORT EXPECTED			15. EXPECTED SUBMISSION DATE	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	**X**	NO				

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

During a recent plant outage, SCE repaired Channel "A" of Log Power by replacing a discriminator card and calibrating the channel. Channel "A" was placed in-service for the plant startup that was completed on 6/6/2004. On 6/8/2004, plant personnel were reviewing calibration records and noticed that one portion of the calibration procedure had not been completed. Completing a startup without a valid calibration for Log Power Channel "A" violated TS 3.3.1, TS 3.3.2, and TS 3.0.4.

This event resulted from a misunderstanding of the actions necessary and sufficient to restore Channel "A" to Operable status (individual personnel error). When performing the calibration, one step of the calibration procedure could not be completed as required. The individuals involved thought the step was not needed to restore Operability and closed the MO as "complete." Closing the MO caused the Control room to believe that channel "A" had been returned to Operability.

SCE has counseled/coached the individuals involved as appropriate. Additional corrective actions are under consideration.

This event had no safety significance because Log Power Channels "B", "C", and "D" were unaffected by this occurrence and were fully Operable.

Plant: San Onofre Nuclear Generating Station (SONGS) Unit 3
Event Date: June 6, 2004
Discovery Date: June 8, 2004
Reactor Vendor: Combustion Engineering
Mode: Mode 3 – Hot Standby
Power: 0 percent

Background

SONGS Unit 3 Reactor Protection System (RPS) [JC] includes four channels ("A" through "D") of Logarithmic Power Level-High trip (Log Power) to protect against an unplanned criticality from a shutdown condition. A reactor trip is initiated by the Logarithmic Power Level-High trip at a less than or equal to 0.93 percent of Rated Thermal Power (RTP) unless this trip is bypassed by the operator. The bypass is automatically removed when the logarithmic power level decreases below 1E-4 percent of RTP.

Technical Specification (TS) 3.3.1, RPS Instrumentation-Operating, and TS 3.3.2, RPS Instrumentation-Shutdown, together require four Log Power and Operating Bypass Removal channels to be Operable in Modes 2, 3, 4, and 5 when any reactor trip circuit breaker (RTCB) [BKR] is closed and any control element assembly is capable of being withdrawn. If one channel of Log Power becomes inoperable in Modes 2, 3, 4, or 5, these TSs require the inoperable channel to be placed in bypass within one hour and to be returned to Operable status prior to entering Mode 2 following the next entry into Mode 5.

On January 26, 2004, Action Request 040101660 was written when Unit 3 Log Power Channel "A" failed a TS surveillance because it was reading about one decade lower than the other three channels. Operators bypassed this channel until no longer required by TS 3.3.2, RPS Instrumentation–Shutdown, and TS 3.3.1, RPS Instrumentation-Operating.

On June 4, 2004, at 0445 PDT, plant operators manually tripped the Unit 3 reactor due to degraded circulating water pump [P] suction caused by heavy influx of sea grass across the traveling screens [SCN] during very low tide conditions. Unit 3 remained in Mode 3 until it was returned to full power operation about two days later. That event was reported to the NRC in LER 3-2004-001.

Description of the Event

Although not required by the TS, SCE used the June 4, 2004 outage as an opportunity to repair Log Power Channel "A." Plant technicians (utility, non-licensed) replaced a discriminator card and performed the TS-required channel calibration procedure. Control Room (utility, licensed) personnel returned the channel to Operable status at 2305 PST on June 5, 2004 and then proceeded with an orderly plant startup. Unit 3 entered Mode 2 at 0023 PST on June 6, 2004 and Mode 1 at 0317 PST on the same date.

On June 8, 2004 (discovery date), plant personnel (utility, non-licensed) reviewing Log Power channel "A" maintenance records noticed a conflict between the "work done" section of the maintenance order (MO) and the steps signed as "complete" in the calibration procedure. After investigating the conflicting information, it was determined that part of the calibration procedure was not performed in accordance with the procedural requirements. Control Room personnel were informed and declared this channel inoperable.

Completing a plant startup without placing a TS-inoperable Log Power Channel in bypass within one hour resulted in the following TS violations:

1. TS 3.3.2 requires four channels of Log Power to be Operable whenever the plant is in Modes 3, 4, or 5 and with one or more reactor trip circuit breakers (RTCB) closed and any control element assembly capable of being withdrawn. Action "A" requires an inoperable channel of Log Power to be placed in bypass within one hour, which was not done.

2. TS 3.3.1 requires four channels of Log Power to be Operable when any RTCB is closed. Action "A" requires an inoperable channel of Log Power to be placed in bypass within one hour, which was not done.

3. TS 3.0.4 requires an LCO to be met prior to entry into a Mode or other condition specified in the LCO applicability statement. TS 3.0.4 was not met because operators changed plant Mode without having Log Power Channel "A" in bypass.

SCE is providing this report in accordance with 10 CFR 50.73(a)(2)(i)(B).

Cause of the event:

This event resulted from a misunderstanding of the actions necessary and sufficient to restore Channel "A" to Operable status (individual personnel error). When performing the calibration, part of the calibration procedure was not completed as required. The individuals involved thought the step was not needed to restore Operability and closed the MO as "complete." Closing the MO caused the Control Room to believe that channel "A" had been returned to Operability.

Corrective Actions:

SCE has counseled/coached the individuals as appropriate. Additional corrective actions are under consideration.

Safety Significance:

This event had no safety significance. Log Power instrumentation Channels "B", "C", and "D" were unaffected by this occurrence and were fully Operable. As noted in the background section of this report, the TS allows continued operation with one channel of Log Power in bypass.

Additional Information:

In the past three years, SCE has not reported any other occurrences placing an RPS channel in service with an incomplete TS calibration.