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Dr. Raymond W. Waldo
Station Manager
San Onofre

August 30, 2002

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Subject: **Docket Nos. 50-361 and 50-362**
60-Day Report
Licensee Event Report No. 2002-004
San Onofre Nuclear Generating Station, Units 2 and 3

Gentlemen:

This Licensee Event Report (LER) is being provided in accordance with 10CFR50.73(a)(2)(i)(B). The LER describes three (3) similar occurrences prohibited by Technical Specification Surveillance Requirement 3.0.4 when reactor thermal power was increased above 20 percent prior to completing all required Core Operating Limits Supervisory System (COLSS) and COLSS Backup Computer System surveillance tests. While these occurrences are applicable to Units 2 and 3, a single report for Unit 2 is being submitted in accordance with Section 5.2.7(8) of NUREG-1022, Revision 2.

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 advise.

Sincerely,

Raymond Waldo

Enclosure: LER No. 2002-004

cc: E. W. Merschoff, Regional Administrator, NRC Region IV
C. C. Osterholtz, NRC Senior Resident Inspector, San Onofre Units 2 & 3

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NRC FORM 366 (MM-YYYY)	U.S. NUCLEAR REGULATORY COMMISSION	APPROVED BY OMB NO. 3150-0104 EXPIRES MM-YYYY
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 hrs Reported lessons learned are incorporated into the licensing process and fed back to industry Forward comments regarding burden estimate to the Information and Records Management Branch (T-6 F33), U S Nuclear Regulatory Commission, Washington, DC 20555-0001, and to the Paperwork Reduction Project (3150-0104), Office of Management and Budget, Washington, DC 20503 If a document used to impose an 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

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
San Onofre Nuclear Generation Station (SONGS) Unit 2	05000-361	1 of 4

TITLE (4)

Defective Procedure Results In TS Violation When Reactor Thermal Power Was Increased Above 20 Percent Prior To Completing All Required Surveillances.

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
07	03	2002	2002	004	00	08	30	2002	SONGS Unit 3	05000-362
									FACILITY NAME	DOCKET NUMBER

OPERATING MODE (9)	1
POWER LEVEL (10)	020

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

	20 2201(b)		20 2203(a)(3)(i)	50.73(a)(2)(i)(C)	50 73(a)(2)(vii)
	20 2201(d)		20 2203(a)(3)(ii)	50 73(a)(2)(ii)(A)	50 73(a)(2)(viii)(A)
	20 2203(a)(1)		20 2203(a)(4)	50 73(a)(2)(ii)(B)	50 73(a)(2)(viii)(B)
	20 2203(a)(2)(i)		50 36(c)(1)(i)(A)	50 73(a)(2)(iii)	50.73(a)(2)(ix)(A)
	20 2203(a)(2)(ii)		50 36(c)(1)(ii)(A)	50 73(a)(2)(iv)(A)	50.73(a)(2)(x)
	20 2203(a)(2)(iii)		50 36(c)(2)	50 73(a)(2)(v)(A)	73.71(a)(4)
	20.2203(a)(2)(iv)		50 46(a)(3)(ii)	50 73(a)(2)(v)(B)	73.71(a)(5)
	20 2203(a)(2)(v)		50.73(a)(2)(i)(A)	50 73(a)(2)(v)(C)	OTHER
	20 2203(a)(2)(vi)	X	50 73(a)(2)(i)(B)	50 73(a)(2)(v)(D)	Specify in Abstract below or in NRC Form 366A

LICENSEE CONTACT FOR THIS LER (12)

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

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

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

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

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

Technical Specification (TS) Surveillance Requirement (SR) 3.0.4 prohibits entry into a mode or other specified condition in the Applicability of a Limiting Condition for Operation (LCO) unless the TS LCO's SRs have been met. On July 3, 2002, operators raised reactor power above 20 percent Reactor Thermal Power (RTP) prior to completing some TS SRs for the Core Operating Limits Supervisory System (COLSS) and the COLSS Backup Computer System (CBCS) alarm functions. This operation prohibited by TS SR 3.0.4 is being reported in accordance with 10CFR50.73(a)(2)(i)(B).

The cause of this event was a defective procedure. SCE will revise the TS SR procedure to reduce the probability of similar events.

Two similar events with the same apparent cause were discovered during the investigation of the July 3 event.

SCE concludes there was very little to no safety significance to these events. In each case, the subsequent surveillances provided reasonable assurance that COLSS and CBCS alarms were operable at the time 20 percent RTP was exceeded.

Plant: San Onofre Nuclear Generation Station (SONGS) Unit 2
Event Date: July 3, 2002
Discovery Date: July 9, 2002

	Unit 2	Unit 3
Reactor Vendor:	Combustion Engineering	Combustion Engineering
Power:	20 percent	100 percent

BACKGROUND:

Technical Specification (TS) Limiting Condition for Operation (LCO) 3.1.7, Regulating Control Element Assembly (CEA) [EIIS code: JD] Insertion Limits, applicable in Modes 1 and 2, requires in part the Power Dependent Insertion Limit (PDIL) alarm circuit to be operable. TS Surveillance Requirement (SR) 3.1.7.3 verifies the PDIL alarm circuit (alerts operators that limits are being approached or exceeded) is operable at least every 31 days.

TS LCO 3.2.1, Linear Heat Rate (LHR), applicable in Mode 1 when thermal power (RTP) is above 20 percent RTP, requires the LHR to not exceed the limits specified in the Core Operating Limits Report (COLR). TS SR 3.2.1.3 verifies at least every 31 days that the Core Operating Limits Supervisory System (COLSS) margin alarm (alerts operators that limits are being approached) actuates at a thermal power </= to the core power operating limit based on LHR.

TS LCO 3.2.3, Azimuthal Power Tilt (Tq), applicable in Mode 1 when thermal power is above 20 percent RTP, requires the measured Tq to be </= to the Tq allowance used in the Core Protection Calculators (CPCs). TS SR 3.2.3.2 verifies at least every 31 days that the COLSS azimuthal tilt alarm (alerts operators when Tq exceeds its operating limit) is actuated at a Tq value </= to the Tq value used in the CPCs.

TS LCO 3.2.4, Departure From Nucleate Boiling Ratio (DNBR), applicable in Mode 1 when thermal power is above 20 percent RTP, requires when COLSS is in service that DNBR be maintained by one of the following methods:

a. Maintaining COLSS calculated core power </= to COLSS calculated core power operating limit based on DNBR when either one or both Control Element Assembly Calculators (CEACs) are operable;

b. Maintaining COLSS calculated core power </= to COLSS calculated core power operating limit based on DNBR decreased by 13.0 percent RTP when neither CEAC is operable.

TS SR 3.2.4.3 verifies at least every 31 days that the COLSS margin alarm (alerts operators that limits are being approached) actuates at a thermal power </= to the core power operating limited based on DNBR.

TS SR 3.0.4 prohibits entry into a mode or other specified condition (such as greater than 20 percent RTP) in the Applicability of an LCO unless the TS LCO's SRs have been met.

Procedure SO23-3-3.41, COLSS/COLSS Backup Computer System (CBCS) Operability and Computer Surveillances, Attachments 1 and 2 are used to perform the COLSS and CBCS Operability surveillances. Attachments 4 and 5 of this procedure are used to perform the alarm surveillances.

DESCRIPTION OF THE EVENT:

On June 29, 2002, while Unit 2 was being returned to power operation following a planned refueling outage, operators (utility, licensed) performed the COLSS/CBCS surveillance tests. Because reactor power was less than 15 percent at the time, only the PDIL alarm functions (required in Modes 1 and 2) were tested, as prescribed by procedure.

On July 2, 2002, while reactor power was between 15 and 20 percent RTP, computer technicians (utility, non-licensed) performed the procedure SO23-3-3.41 Attachments 1 and 2 surveillances (COLSS and CBCS, respectively). The technicians did not recognize that Attachments 4 and 5 had been completed for the PDIL alarm portion only, and the procedure did not guide them to a different conclusion (defective procedure).

On July 3, 2002 (event date), at approximately 0100 PDT, operators (utility, licensed) raised reactor power above 20 percent RTP.

On July 9, 2002 (discovery date), at approximately 1500 PDT, while reviewing completed surveillance procedures, SCE discovered the missed COLSS/CBCS alarm surveillances (AR020700480). At approximately 1712 PDT the same day, the missed surveillances were satisfactorily performed which provide reasonable assurance that the COLSS/CBCS alarms had been operable at the time reactor power exceeded 20 percent RTP.

10CFR50.73(a)(2)(i)(B) states that any operation prohibited by the plant's TS is reportable unless the event consisted "solely" of a late surveillance test where the oversight was corrected, and the equipment was found to be capable of performing its specified safety functions. Because the event reported herein also involved entering a mode or condition that required the prior performance of the surveillance, this event is being reported as an operation prohibited by TS SR 3.0.4.

CAUSE OF THE EVENT:

The cause of this event was a defective procedure. Procedure SO23-3-3.41, Attachments 4 and 5, directs the user to mark steps omitted when power is less than 15 percent RTP as "N/A". The procedure directs the user to enter the "valid through" date on the Attachments by adding 31 days to the date the work was done. This gave the appearance that the entire surveillance had been completed when in fact only the PDIL portion was completed. Therefore, when the computer technicians performed the attachment 1 & 2 SR's, it appeared that all attachment 4 & 5 were complete & valid. The procedure does not direct the user to check for steps that may have been marked "N/A."

CORRECTIVE ACTIONS:

- Upon discovery on July 9, 2002, the missed surveillances were performed satisfactorily, bringing the plant into full compliance with TS LCOs 3.2.1, 3.2.3 and 3.2.4.
- A Pre-Shift Brief summarizing the event and the apparent cause was read to Operations crews.
- A Priority Reading Assignment, more detailed than the Pre-Shift Brief, was made available to all operating crews.
- Procedure SO23-3-3.41 will be revised to reduce the probability of similar events.

SAFETY SIGNIFICANCE:

SCE concludes there was very little to no safety significance to these events because there was no loss of alarm function. Upon discovery, SCE satisfactorily performed the required surveillances, which provided reasonable assurance that COLSS and CBCS alarms were operable when power was raised above 20 percent RTP.

ADDITIONAL INFORMATION:

- SCE is also reporting herein two similar events that occurred on November 17, 2000, for Unit 2 and on February 3, 2001, for Unit 3. SCE concludes that these two separate events resulted from the same cause as the event reported herein. In both events, the subsequent surveillances provide reasonable assurance that COLSS and CBCS alarms were operable at the time 20 percent RTP was exceeded The corrective actions described above, had they been in-place, would have prevented those events.
- In the past three years, there have been no reported events caused by a surveillance procedure that did not properly account for changes in plant conditions.