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A. Edward Scherer
Manager of
Nuclear Regulatory Affairs

December 11, 2002

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

Subject: **Docket No. 50-362**
60-Day Report
Licensee Event Report No. 2002-003
San Onofre Nuclear Generating Station, Unit 3

Gentlemen:

This submittal provides Licensee Event Report (LER) 2002-003 describing a manual actuation of the Auxiliary Feedwater System at Unit 3, which is reportable in accordance with 10CFR50.73(a)(2)(iv)(A).

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,

Enclosure: LER No. 2002-003

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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IE22

NRC FORM 366 (7-2001) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104 EXPIRES 7-31-2004

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

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

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

4. TITLE

Main Feedwater Pump Turbine Trip Results in Manual Actuation of Auxiliary Feedwater System

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
									none	
10	16	2002	2002-003-00			12	11	2002	FACILITY NAME: none	DOCKET NUMBER

9. OPERATING MODE	1
10. POWER LEVEL	100

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)	X 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
20.2203(a)(2)(iii)	50 46(a)(3)(ii)	50 73(a)(2)(v)(C)	Specify in Abstract below or in NRC Form 366A
20.2203(a)(2)(iv)	50 73(a)(2)(i)(A)	50 73(a)(2)(v)(D)	
20.2203(a)(2)(v)	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

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)

On October 16, 2002, Unit 3 plant operators were conducting Main Feedwater Pump Turbine (MFWPT) lube oil supply auto-start testing. Immediately after restoring the MFWPT lube oil supply to normal operation, MFWPT 3K006 tripped. Plant operators manually started the Auxiliary Feedwater (AFW) system and initiated a power reduction to approximately 75% power. The AFW system functioned correctly. This manual actuation of AFW is being reported in accordance with 10CFR50.73(a)(2)(iv)(A).

SCE's investigation is ongoing. To complete the cause evaluation, the MFWPT lube oil system and associated control systems will require disassembly. SCE will complete the cause evaluation following the next scheduled refueling outage and implement appropriate corrective actions at that time.

SCE concludes that this event was of very low to no safety significance; all safety systems functioned correctly.

Plant: San Onofre Nuclear Generation Station (SONGS) Unit 3
Reactor Vendor Combustion Engineering

Event Date: October 16, 2002
Event Time: 0152 PDT

Unit 3
Mode 1
Power (percent): 100

BACKGROUND:

San Onofre Unit 3 has two turbine driven Main Feedwater Pumps (MFWP). Each pump normally provides about 50 percent of full-load feedwater flow to the two steam generators. A separate lube oil support system provides bearing oil, hydraulic oil, and control oil for each of the two MFWP/MFWPTs. Each lube oil system contains three pumps (2 AC, 1 DC). The AC-powered lube oil pumps can supply 100 percent of required oil. Typically, one AC-powered lube oil pump is in service with the other AC-powered pump serving as a standby that will start automatically if needed. This auto start feature is periodically tested locally. The DC pump auto-starts on low bearing oil pressure or loss of both AC pumps.

DESCRIPTION OF THE EVENT:

Early, on October 16, 2002, Unit 3 was at 100% power and plant operators (Utility, licensed and unlicensed) were conducting MFWPT protective device testing in accordance with procedure SO23-2-1.1. During this work, operators performed an auto-start test of the standby Lube Oil Pump P109 for MFWPT K006. After confirming operation of both AC-powered lube oil pumps, at 0152 PDT, Operators stopped the Lube Oil Pump P122. Immediately thereafter, MFWPT K006 tripped. In accordance with plant Abnormal Operating Instruction (AOI) SO23-13-24, plant operators manually actuated the Emergency Feedwater Actuation System (EFAS). All three Auxiliary Feedwater (AFW) pumps started and provided feedwater to both Steam Generators (SG). Plant operators also initiated a power reduction to approximately 75% power in accordance with the AOI. This action allowed operators to secure feeding both steam generators by AFW at 0157, five minutes into the transient. At 0218, operators reset EFAS.

AT 0902 PDT on October 16, 2002, Southern California Edison (SCE) made an 8-hour telephone notification to the NRC Operations Center (Log No. 39292) in accordance with 10CFR50.72(b)(3)(iv)(A) for a valid Engineered Safety Features (ESF) actuation of EFAS. SCE is providing this 60-day follow up report in accordance with 10CFR50.73(a)(2)(iv)(A).

CAUSE OF THE EVENT:

Based on engineering judgment, SCE believes that there are two possible causes of the MFWPT trip:

1. A spurious trip occurred due to an inadequately latched turbine trip reset mechanism, or
2. A low oil pressure condition occurred due to a malfunctioning oil pressure regulator or check valve.

Either of these conditions would have resulted in the observed MFWPT trip.

SCE's investigation is ongoing. To complete the cause evaluation, the MFWPT lube oil system and associated control systems will require disassembly. This work is planned for the next scheduled refueling outage (January, 2003). SCE will complete the cause evaluation and implement appropriate corrective actions at that time. A supplemental LER will be submitted if the cause is significantly different than noted above.

CORRECTIVE ACTIONS:

Pending identification and repair of malfunctioning component(s), the MFWPT AC lube oil pump auto-start tests for all MFWPTs have been suspended (Unit 2 and Unit 3). Additionally, the on-line lockout and trip exercise testing for MFWPT K006 has been suspended.

SAFETY SIGNIFICANCE:

The MFWPs are not essential for safe shutdown of the plant. The SONGS 2/3 UFSAR, Sections 15.2.2.5 and 15.10.2.2.5, credits the AFW system for maintaining an adequate heatsink during a transient in which an instantaneous and complete loss of feedwater occurs. The event reported herein, where one feedwater pump was lost and all safety systems functioned correctly is bounded by the UFSAR safety analysis identified above. Therefore, SCE concludes that this event was of very low to no safety significance.

ADDITIONAL INFORMATION.

In the past three years, SCE has not reported any ESF actuations that resulted from feedwater transients.