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November 8, 1994

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

Subject: Docket No. 50-361
Voluntary Report
Licensee Event Report No. 94-005
San Onofre Nuclear Generating Station, Unit 2

This submittal provides a voluntary written Licensee Event Report (LER) for an occurrence involving an administrative entry into Technical Specification 3.0.3. Neither the health nor the safety of plant personnel or the public was affected by this occurrence.

If you require any additional information, please so advise.

Sincerely,

Enclosure: LER No. 94-005

cc: L. J. Callan, Regional Administrator, NRC Region IV
A. B. Beach, Director, Division of Reactor Projects, NRC Region IV
K. E. Perkins, Jr., Director, Walnut Creek Field Office, NRC Region IV
J. A. Sloan, NRC Senior Resident Inspector, San Onofre Units 2 & 3
M. B. Fields, NRC Project Manager, San Onofre Units 2 and 3
Institute of Nuclear Power Operations (INPO)

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LICENSEE EVENT REPORT (LER)

Facility Name (1)	Docket Number (2)	Page (3)
SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 2	0 5 0 0 0 3 6 1	1 of 0 3

Title (4)

Voluntary Tech Spec 3.0.3 Entry Due to Declaring Both Trains of ECCS Inoperable in Mode 1

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 Names	Docket Number(s)
1 0	1 2	9 4	9 4	---	0 0 5	--- 0 0	1 1	0 8	9 4	NONE	0 5 0 0 0
											0 5 0 0 0

OPERATING MODE (9)	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR (Check one or more of the following) (11)			
1	___ 20.402(b)	___ 20.405(c)	___ 50.73(a)(2)(iv)	___ 73.71(b)
POWER LEVEL (10) 0 9 8	___ 20.405(a)(1)(i)	___ 50.36(c)(1)	___ 50.73(a)(2)(v)	___ 73.71(c)
	___ 20.405(a)(1)(ii)	___ 50.36(c)(2)	___ 50.73(a)(2)(vii)	X Other (Specify in Abstract below and in text) Voluntary Report
	___ 20.405(a)(1)(iii)	___ 50.73(a)(2)(i)	___ 50.73(a)(2)(viii)(A)	
	___ 20.405(a)(1)(iv)	___ 50.73(a)(2)(ii)	___ 50.73(a)(2)(viii)(B)	
	___ 20.405(a)(1)(v)	___ 50.73(a)(2)(iii)	___ 50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

Name	TELEPHONE NUMBER
R. W. Krieger, Vice President, Nuclear Generation	AREA CODE 7 1 4 3 6 8 - 6 2 5 5

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	///////	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	///////
B	L K	R G	X 9 9 9	N	///////						///////
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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 fifteen single-space typewritten lines) (16)

On 10/12/94, with Unit 2 in Mode 1 at 98% power, first stage pressure reducing valve [RG] 2PCV6418 in the Backup Nitrogen System (BNS) supply to the Train B Component Cooling Water (CCW) System [CC] surge tank, was found to be leaking nitrogen to atmosphere. Valve 2PCV6418 was isolated for replacement, rendering Train B CCW BNS inoperable. Edison declared Emergency Core Cooling System (ECCS) [BQ][BP][CB][CA] Train B inoperable, replaced valve 2PCV6418, and returned Train B CCW BNS and Train B ECCS to service. However, on 10/12/94, Edison had administratively removed a Train A Shutdown Cooling System (SDCS) [BP] valve from service to perform planned motor operated valve actuator testing, and had conservatively declared ECCS Train A inoperable.

Edison considers the SDCS to be part of the ECCS and conservatively requires the SDCS to be operable in Modes 1 - 3, a requirement not mandated by the TS. When Train B of the ECCS became inoperable with Train A administratively controlled as if it were inoperable, Edison conservatively treated the inoperability of train B CCW BNS as if both trains of ECCS were inoperable, a condition not allowed by the TS. Edison administratively entered TS 3.0.3 for 35 minutes.

Edison's evaluation is that the valve malfunction was due to a small accumulation of dirt in the close fitting parts of the relief mechanism. Edison replaced the leaking BNS valve and determined that no further corrective actions are required.

DESCRIPTION OF THE EVENT:

Plant: San Onofre Nuclear Generating Station, Unit 2
Reactor Vendor: Combustion Engineering
Event Date: October 12, 1994
Mode: Mode 1, Power Operation
Power: 98%

BACKGROUND:

For operation in Modes 1 - 3, the Technical Specifications (TS) for Unit 2 require operability of two independent trains of: 1) high pressure safety injection (HPSI) [BQ], 2) low pressure safety injection (LPSI) [BP], 3) charging pump makeup [CB] with suction from either the boric acid makeup tank or the refueling water storage tank [CA], and 4) an independent flow path to these pumps initially taking suction from the refueling water storage tank and automatically transferring suction to the containment emergency sump. The TS require the Shutdown Cooling System (SDCS) [BP] to be operable in Modes 4 and 5, but not in Modes 1 - 3. In recognition of the fact that the SDCS may be needed for long term decay heat removal for a small break loss of coolant accident, Edison considers the SDCS to be part of the Emergency Core Cooling System (ECCS) and conservatively requires the SDCS to be operable in Modes 1 - 3. Edison interprets Branch Technical Position RSB 5-1 as requiring the SDCS to be capable of remote alignment for service, and, therefore, that motor operated valves in the SDCS be electrically operable.

On 10/12/94, at 0425, with Unit 2 in Mode 1 at 98% power, Edison administratively removed Train A SDCS to LPSI pump isolation valve 2HV9379 from service to perform planned motor operated valve actuator testing. Since SDCS Train A could not be placed in service remotely, Edison conservatively declared ECCS Train A inoperable and applied the 72 hour action statement for Modes 1 - 3 of TS 3.5.2, "ECCS Subsystems - T-avg Greater Than or Equal to 350 Degrees F."

The Component Cooling Water (CCW) system [CC] is a supporting system for the ECCS. The CCW system is comprised of two independent trains, each supplying cooling water to ECCS pumps, an SDCS heat exchanger, and other engineered safeguards features components. Each train contains a surge tank which is pressurized with nitrogen overpressure to prevent void formation at high points in the system and to minimize the potential for water hammer in the event of a rapid drawdown in surge tank level and a CCW pump trip and restart transient. To ensure availability of nitrogen pressure following a seismic event, each surge tank is equipped with a safety-related seismically qualified Backup Nitrogen System (BNS).

EVENT:

On 10/12/94, the night shift primary plant equipment operator (utility, nonlicensed), while investigating a reported reduction in BNS pressure, discovered that the Train B BNS first stage pressure reducing valve [RG], 2PCV6418, was leaking nitrogen to atmosphere. Valve 2PCV6418 (TESCOM model 44-1327-2082-056) was isolated for replacement at 2245, rendering Train B CCW BNS inoperable. At the same time, calculations were completed which indicated that the nitrogen leak rate was in excess of 2,200 standard cubic centimeters per minute, the maximum allowed leak rate for BNS operability. Because the CCW system is a supporting system for the ECCS, Edison declared ECCS Train B inoperable at 2245 due to loss of Train B CCW BNS. Edison promptly replaced valve 2PCV6418 and returned Train B CCW BNS and Train B ECCS to service at 2320.

The TS do not allow both trains of ECCS to be inoperable in Mode 1. Consequently, when Train B of the ECCS became inoperable at 2245 with Train A administratively controlled as if it were inoperable, Edison conservatively treated the inoperability of train B CCW BNS as a voluntary entry into TS 3.0.3. TS 3.0.3 was exited at 2320, when Train B of CCW (and hence ECCS) was restored to service. No reduction in power level took place. Edison is voluntarily reporting this 35 minute administrative entry into TS 3.0.3 as an item of regulatory interest.

CAUSE OF THE EVENT:

The event was caused by a leaking valve (2PCV6418). Edison's evaluation is that the valve malfunction was due to a small accumulation of dirt in the close fitting parts of the relief mechanism.

CORRECTIVE ACTIONS:

Edison replaced 2PCV6418 with a qualified in-kind replacement valve. No further corrective actions are required.

SAFETY SIGNIFICANCE:

This event had minimal safety significance. The normal nitrogen system continued to supply pressure to the Train B CCW surge tank throughout the event. The increase in probability of core damage due to unavailability of one train of CCW BNS for one day is estimated to be approximately 2E-7. Therefore, the increase in probability for the 35 minutes of inoperability during this event is negligible.

ADDITIONAL INFORMATION:

There have been no previous LERs for similar events in the past three years.

On 05/20/94, Edison submitted TS Proposed Change Number (PCN) 387 to the NRC requesting new operability and surveillance requirements for the BNS. PCN 387 would provide an action statement allowing one or both trains of BNS to be inoperable for up to eight hours. Under the provisions of PCN 387, Edison would not have considered this event to be an administrative TS 3.0.3 entry.