



R. W. Krieger  
Vice President  
Nuclear Generation

November 29, 2000

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

Subject: **Docket No. 50-361 and 50-362**  
**30-Day Report**  
**Licensee Event Report No. 2000-014**  
**San Onofre Nuclear Generating Station, Units 2 and 3**

Gentlemen:

This submittal provides a 30-day Licensee Event Report (LER) in accordance with 10CFR50.73(a)(2)(i). The guidance provided in NUREG 1022, Rev. 1 states that "missed IST/ISI/ASME tests are reportable when the test interval plus any allowable extension plus the LCO action time has been exceeded." This occurrence is applicable to both Units 2 and 3. Neither the health nor the safety of plant personnel or the public was affected by this occurrence.

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,

A handwritten signature in black ink, appearing to read "R. W. Krieger".

LER No. 2000-014

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

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IE22

NRC FORM 366 (MM-YYYY) <sub>2</sub>		U.S. NUCLEAR REGULATORY COMMISSION			APPROVED BY OMB NO. 3150-0104			EXPIRES MM/DD/YYYY					
<b>LICENSEE EVENT REPORT (LER)</b>								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.					
(See reverse for required number of digits/characters for each block)													
FACILITY NAME (1) <b>San Onofre Nuclear Generation Station (SONGS) Unit 2</b>						DOCKET NUMBER (2) <b>05000-361</b>			PAGE (3) <b>1 of 3</b>				
TITLE (4) <b>Missed IST for Safety Injection Tank Nitrogen Valves</b>													
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			
11	03	2000	2000	- 014 -	00	11	29	2000	<b>SONGS Unit 3</b>	<b>05000-362</b>			
									FACILITY NAME	DOCKET NUMBER			
OPERATING MODE (9)		N/A		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)									
POWER LEVEL (10)		N/A		20.2201(b)		20.2203(a)(2)(v)		X 50.73(a)(2)(i)		50.73(a)(2)(vii)			
				20.2203(a)(1)		20.2203(a)(3)(i)		50.73(a)(2)(ii)		50.73(a)(2)(x)			
				20.2203(a)(2)(i)		20.2203(a)(3)(ii)		50.73(a)(2)(iii)		73.71			
				20.2203(a)(2)(ii)		20.2203(a)(4)		50.73(a)(2)(iv)		OTHER			
				20.2203(a)(2)(iii)		50.36(c)(1)		50.73(a)(2)(v)		Specify in Abstract below or in NRC Form 366A			
				20.2203(a)(2)(iv)		50.36(c)(2)		50.73(a)(2)(vi)					
LICENSEE CONTACT FOR THIS LER (12)													
NAME <b>R. W. Krieger, Vice President, Nuclear Operations</b>								TELEPHONE NUMBER (Include Area Code) <b>949-368-6255</b>					
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)

On November 3, 2000, SCE determined that the SIT nitrogen supply check valves are not in the SONGS IST Program and have not undergone testing. The guidance provided in NUREG 1022, Rev. 1 states that "missed IST/SI/ASME tests are reportable when the test interval plus any allowable extension plus the LCO action time has been exceeded." Consequently, SCE is providing this Licensee Event Report in accordance with 10CFR50.73(a)(2)(i).

SCE is investigating the cause of this omission.

The Unit 2 valves were tested satisfactorily on November 4, 2000. An Operability Assessment demonstrated that continued operation is justified for Unit 3. The Unit 3 valves will be tested under the IST program during the Unit 3 Cycle 11 refueling outage, currently scheduled for January 2001. The valves will be added to the SONGS IST program for future testing.

These valves, while not tested in the IST program, have been demonstrated to be functional. Consequently, this occurrence is categorized "Green" using the latest draft of the Reactor Safety Significance Determination Process (SDP).

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
San Onofre Nuclear Generating Station (SONGS) Unit 2	05000-361	2000	- 014 -	00	2 of 3

Plant: San Onofre Nuclear Generation Station (SONGS) Units 2 and 3  
Discovery Date: November 3, 2000

Reactor Vendor:	<u>Unit 2</u> Combustion Engineering	<u>Unit 3</u> Combustion Engineering
Mode:	Mode 5 – Cold Shutdown	Mode 1 – Power Operation
Power:	N/A	99.88 percent

## BACKGROUND:

San Onofre (SONGS) Units 2 and 3 each have four safety injection tanks (SIT)(BQ). Each SIT is designed to inject water into the Reactor Coolant System (RCS)(AB) if a postulated accident were to cause the RCS to depressurize below the SIT pressure. The SITs are filled with water and pressurized with nitrogen gas from a common system header. The SIT tank pressure is maintained between 615 psia and 655 psia by Technical Specification (TS) Surveillance Requirement (SR) 3.5.1.3. Because a small break Loss Of Coolant Accident (LOCA) may not depressurize the RCS below the SIT discharge pressure for some period of time, the SITs must remain pressurized from the start of the event until they are needed. (Large LOCAs are not relevant to this criterion because SIT discharge occurs near the start of the event.) Because SIT pressure has an accident mitigation function, SIT pressurization has been assured by designing the SIT nitrogen supply system to ASME Section 3, Class 2 requirements, as specified by Regulatory Guide 1.26. 10CFR50.55(a) requires the boundary valves for this class of equipment be tested pursuant to the rules of the Code. The SIT nitrogen supply check valves are a Code boundary for the SITs.

## DESCRIPTION OF THE EVENT:

On November 3, 2000, SCE determined that the SIT nitrogen supply check valves (V) are not in the SONGS IST Program and have not undergone testing (AR001000900). The guidance provided in NUREG 1022, Rev. 1 states that "missed IST/ISI/ASME tests are reportable when the test interval plus any allowable extension plus the LCO action time has been exceeded." Consequently, SCE is providing this Licensee Event Report in accordance with 10CFR50.73(a)(2)(i).

## CAUSE OF THE EVENT:

SCE is investigating the cause of this omission.

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**CORRECTIVE ACTIONS:**

- The Unit 2 valves were tested satisfactorily on November 4, 2000. (Note that Unit 2 was shutdown for scheduled refueling at the time of discovery.)
- On November 3, 2000, SCE completed an Operability Assessment that demonstrated the Unit 3 SITs are operable, and that continued operation is justified. The Unit 3 valves will be tested under the IST program during the Unit 3 Cycle 11 refueling outage, currently scheduled for January 2001.
- The valves will be added to the SONGS IST program for future testing.

**SAFETY SIGNIFICANCE:**

The safety significance of this condition is minimal.

- Because SITs must remain pressurized until needed, smaller LOCAs (which have longer RCS depressurization times) are the limiting condition for continued SIT pressurization. The largest break size LOCA for which the accident analysis does not credit SIT injection for mitigation is 0.05 square foot. (Note that while the 0.05 square foot break analysis does not credit SIT injection, this analysis determines the SITs would inject at 1630 seconds, if credited.)

The 0.05 square foot, and all other SBLOCA analyses assumes a minimum SIT pressure of approximately 595 psia (including instrument uncertainty) at approximately 1630 seconds after event initiation. Assuming an initial minimum SIT pressure of 610 psia (TS minimum is 615 psia less 4.7 psi instrument uncertainty) at the start of the accident, the connected components must not exhibit leakage, under conditions and assumptions applying to SBLOCA, of more than 15 psi in 1630 seconds (about 30 minutes) at operating SIT pressure.

A review of plant data shows very little nitrogen leakage from the SITs. On November 2-3, 2000, Unit 3 (the operating unit) SIT leakage rates were no more than 0.2 psi/hr. Therefore, SIT nitrogen cover pressure would remain above 595 psia 30 minutes after a SBLOCA.

- Based on the points above, and the successful Unit 2 IST, these valves were functional, and the SITs were capable of performing their safety function. Consequently, this occurrence is categorized "Green" using the latest draft of the Reactor Safety Significance Determination Process (SDP).

**ADDITIONAL INFORMATION:**

In the past three years, SCE has not reported any other events involving SIT or components being omitted from the IST Program.