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R. W. Krieger
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November 3, 2000

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

Subject: **Docket Nos. 50-361**
30-Day Report
Licensee Event Report No. 2000-013
San Onofre Nuclear Generating Station, Unit 2

Gentlemen:

This submittal provides a 30-day Licensee Event Report (LER) in accordance with 10CFR50.73(a)(2)(i) describing a missed Technical Specification surveillance during the cooldown of the Reactor Coolant System. 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,

R Waldo for R.W.K.

LER No. 2000-013

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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NRC FORM 366 (MMM-YYYY) U.S. NUCLEAR REGULATORY COMMISSION LICENSEE EVENT REPORT (LER) (See reverse for required number of digits/characters for each block)	APPROVED BY OMB NO. 3150-0104 EXPIRES MM/DD/YYYY Estimated burden per response to comply with this mandatary 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, Information collection.

FACILITY NAME (1)	Docket Number (2)	Page (3)
San Onofre Nuclear Generating Station (SONGS) Unit 2	05000-361	1 of 3

TITLE (4): Missed RCS Cooldown Rate TS Surveillance

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
10	08	2000	2000	-- 013 --	00	11	03	2000	FACILITY NAME	DOCKET NUMBER

OPERATING MODE	5	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check One or More) (11)							
			20.2201(b)		20.2203(a)(2)(v)	X	50.73(a)(2)(i)		50.73(a)(2)(viii)
POWER LEVEL (10)	N/A		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)(vii)		

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER (Include Area Code)
R.W. Krieger, Vice President, Nuclear Generation	949-368-6255

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 fifteen single-spaced typewritten lines (16)

On 10/8/2000, San Onofre Unit 2 was entering its refueling outage. As a part of this process, Operators secured the reactor coolant pumps and transitioned to Shutdown Cooling to remove decay heat. During this transition, for two 30 minute periods, the Reactor Coolant System (RCS) cooldown was not monitored as required by the Technical Specifications. Southern California Edison is reporting this event in accordance with 10CFR50.73(a)(2)(i).

The cause of this event was Operator error in monitoring RCS cooldown.

Proper RCS cooldown monitoring was established at 1450 PDT on October 8, 2000. An engineering determination that the RCS is acceptable for continued operation was completed on October 26, 2000, bring the unit into full compliance with the TS LCO. Operator training and procedure guidance on the process of controlling cold leg temperature and monitoring that parameter during this unique transition period will be improved prior to the Unit 3 shutdown for its scheduled refueling outage (January 2001).

This event had minimal safety significance.

Plant: San Onofre Nuclear Generating Station, Unit 2
Reactor Vendor Combustion Engineering
Discovery Date October 8, 2000
Mode 5 - Cold shutdown
Power N/A

Background:

Technical Specification (TS) 3.4.3, Reactor Coolant System (RCS)(AB) Pressure and Temperature (P/T) Limits, limits the maximum RCS cooldown. TS Surveillance Requirement (SR) 3.4.3.1 requires the RCS pressure and temperature, and RCS cooldown rate be verified at least every 30 minutes. TS 3.4.3 Action C requires that whenever the cooldown LCO is not met, action is to be taken immediately to restore parameter(s) to within limits, and a determination that the RCS is acceptable for continued operation be made before entering Mode 4.

Description of the Event:

On October 8, 2000, San Onofre Unit 2 was entering its refueling outage. As a part of this process, Operators secured the remaining two Reactor Coolant Pumps (RCPs)(P). This process (stopping forced circulation in the RCS loops and steam generators and relying upon Shutdown Cooling (SDC)(BP) to remove decay heat) changes the cooling water flow pattern in the RCS. With RCPs running, the best indications of cold leg temperature are the wide range loop instruments. With the RCPs secured, the wide range loop instruments may no longer be in the active cooling flow path. Then the SDC return temperature is used to monitor RCS cooldown.

With RCP 2P004 (RCS loop 2A) and 2P001 (RCS loop 1A) running, Operators were monitoring RCS temperature with loop 2A cold leg temperature indicator 2T125. When Operators secured 2P004, they transitioned to using loop 1A cold leg temperature indicator 2T115 to monitor RCS temperature (2P001 still running). Next, Operators secured 2P001 and transitioned to using the SDC return temperature indicator 2T351X to monitor RCS temperature. At each transition, Operators began a new temperature trend. While the Operators did properly record temperature and pressure, they did not calculate a cooldown rate due to the change in instruments being used. Thus, for two 30 minute periods on October 8, 2000, the RCS cooldown was not monitored as required by TS SR 3.4.3.1. After discussions with the NRC resident inspectors, Southern California Edison (SCE) is reporting this event in accordance with 10CFR50.73(a)(2)(i).

Cause of the Event:

This event was caused by Operator (licensed utility) error in implementing RCS cooldown monitoring.

Corrective Actions:

- The RCS cooldown was properly determined at 1450 PDT on October 8, 2000.
- An engineering determination that the RCS is acceptable for continued operation was completed on October 26, 2000, bring the unit into full compliance with the TS LCO.

- Operator training and procedure guidance on the process of controlling cold leg temperature and monitoring that parameter during this unique transition period will be improved prior to the Unit 3 shutdown for its scheduled refueling outage (January 2001).

Safety Significance:

This event had minimal safety significance. An engineering evaluation determined the RCS is acceptable for continued operation. This occurrence is categorized "Green" using the latest draft of the Reactor Safety Significance Determination Process (SSDP).

Additional Information:

- In the past 3 years, SCE has not reported any other instance missed RCS heatup or cooldown TS SR.

- About one hour after securing the last RCP, management review of the transient identified a large change in cold leg temperature by comparing RCS loop temperature to SDC return temperature. A maximum indicated cooldown of 50 degrees in a one hour period could be calculated by using RCS temperature readings from different instruments (located at different positions within the RCS). Because the TS allowed cooldown was about 35 degrees F in a one hour period, to comply with TS 3.4.3 Action C, the cooldown was stopped until RCS temperatures stabilized.