

December 17, 2002

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

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

Gentlemen:

This submittal provides Licensee Event Report (LER) 2002-004 describing an occurrence of an emergency room cooler which may have been inoperable for longer than allowed by Technical Specification 3.7.10, which is reportable in accordance with 10CFR50.73(a)(2)(i)(B).

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:

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

*IE22*

<b>NRC FORM 366</b> (7-2001)	<b>U.S. NUCLEAR REGULATORY COMMISSION</b>	<b>APPROVED BY OMB NO. 3150-0104</b>	<b>EXPIRES 7-31-2004</b>
<b>LICENSEE EVENT REPORT (LER)</b>  (See reverse for required number of digits/characters for each block)		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.	

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

**4. TITLE**  
Emergency Room Cooler for Component Cooling Water Pump conservatively considered Inoperable for longer than allowed by TS

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
5	07	2002	2002	004-00		12	17	02	None	
										DOCKET NUMBER

<b>9. OPERATING MODE</b>	1	<b>11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)</b>								
<b>10. POWER LEVEL</b>	100		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)	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 Specify in Abstract below or in NRC Form 366A				
			20 2203(a)(2)(iii)	50 46(a)(3)(ii)	50.73(a)(2)(v)(C)					
			20 2203(a)(2)(iv)	50 73(a)(2)(i)(A)	50.73(a)(2)(v)(D)					
			20 2203(a)(2)(v)	<input checked="" type="checkbox"/> 50 73(a)(2)(i)(B)	50.73(a)(2)(vi)					
	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 R. W. Waldo, Station Manager, Nuclear Generation	TELEPHONE NUMBER (Include Area Code) 949-368-8725

13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT									
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX

<b>14. SUPPLEMENTAL REPORT EXPECTED</b>	<b>15. EXPECTED SUBMISSION DATE</b>	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE) <input checked="" type="checkbox"/> NO				

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

On 5/7/02, during a surveillance run of an ECWS train, plant personnel noticed that emergency room cooler 3ME455 sounded noisy and conservatively declared it inoperable. After collecting bearing vibration data, the bearings were replaced and on 5/20/02, 3ME455 was returned to service, within the 14 days allowed by TS 3.7.10. At that time, it was SCE's engineering judgment that ME455 was capable of performing its safety function at the time it was removed from service.

The noise from 3ME455 is attributed to normal bearing wear. The bearings for 3ME455 were replaced and the unit declared operable on May 20, 2002.

Later, SCE re-evaluated this occurrence and on 10/23/02, concluded that it could not be determined with certainty (1) how long 3ME455 would have operated in its as-found condition and (2) when 3ME455 bearing degradation began. Because the bearing degradation may have existed for more than 14 days prior to discovery, SCE conservatively considers that 3ME455 may have been inoperable for longer than allowed by TS 3.7.10 without implementing the actions required by TS 3.7.7. SCE is reporting this occurrence in accordance with 10CFR50.73(a)(2)(i)(B).

There is little or no safety significance to this event because the normal and emergency room coolers are not essential for CCW pump operability.

**LICENSEE EVENT REPORT (LER)**  
TEXT CONTINUATION

1 FACILITY NAME	2 DOCKET NUMBER	6 LER NUMBER			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REV NO	
San Onofre Nuclear Generating Station (SONGS) Unit 3	05000-362	2002	- 004 -	0	2 of 3

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

Event Date: May 7, 2002  
 Discovery Date: October 23, 2002

Mode: Unit 3  
 1  
 Power (percent): 100

**Background:**

San Onofre Units 2 and 3 have a common Emergency Chilled Water System (ECWS) [KM], which has two 100% capacity loops. This system is intended to remove process heat from plant areas containing safety-related equipment if the normal chilled water system [KM] is unavailable. To do so, the ECWS provides chilled water to individual room coolers [CLR] (consisting of a cooling coil and a fan), which then keep their serviced rooms cool enough to allow steady state operation of the safety-related equipment in the room. 3ME455 is an emergency room cooler that provides room cooling for component cooling water (CCW) [CC] pump 3P026.

Technical Specification (TS) 3.7.10 requires two trains of the Emergency Chilled Water System (ECWS) to be OPERABLE in Modes 1, 2, 3, and 4. If one train of ECWS is inoperable, TS 3.7.10 Action A.1 requires the train to be restored within 14 days, or place the Units in Mode 3 within 6 hours, and Mode 5 within 36 hours.

If one or more individual room cooler(s) become inoperable, the affected ECW train remains OPERABLE. The equipment in the affected room remains operable if the backup room cooler remains operable and the temperature in the affected room remains below its design temperature. If an individual room cooler is out of service for 14 days or more, or if the room temperature rises above its design temperature, then the equipment in the room must be declared inoperable and the appropriate TS actions entered.

TS 3.7.7, Component Cooling Water (CCW) System, requires two trains of CCW to be OPERABLE in Modes 1, 2, 3, and 4. If one train is inoperable, Action A.1 requires the inoperable train to be restored to operable status within 72 hours or place the Units in Mode 3 within 6 hours, and Mode 5 within 36 hours.

**Description of the Event:**

On May 7, 2002, during a surveillance run of an ECWS train, plant personnel (Utility, licensed and non-licensed) noticed that 3ME455 sounded noisy and conservatively declared it inoperable. After collecting bearing vibration data, the bearings were replaced and on May 20, 2002, 3ME455 was returned to service, within the 14 days allowed by TS 3.7.10.

Concurrently, SCE questioned whether or not ME455 would have been able to perform its specified safety function in its as-found condition. The bearing vibration data indicated that while some bearing wear had occurred, bearing vibration levels were below the level at which industry guidance recommends replacement. Therefore, at that time, it was SCE's engineering judgment that ME455 was capable of performing its safety function at the time it was removed from service.

**LICENSEE EVENT REPORT (LER)**  
TEXT CONTINUATION

1. FACILITY NAME	2. DOCKET NUMBER	6 LER NUMBER			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REV NO	
San Onofre Nuclear Generating Station (SONGS) Unit 3	05000-362	2002	- 004 -	0	3 of 3

Later, SCE re-evaluated this occurrence and on October 23, 2002, concluded that it could not be determined with certainty (1) how long 3ME455 would have operated in its as-found condition and (2) when 3ME455 bearing degradation began. Because the bearing degradation may have existed for more than 14 days prior to discovery, SCE conservatively considers that 3ME455 may have been inoperable for longer than allowed by TS 3.7.10 without implementing the actions required by TS 3.7.7. SCE is reporting this occurrence in accordance with 10CFR50.73(a)(2)(i)(B).

**Cause of the Event:**

The noise from 3ME455 is attributed to normal bearing wear. SCE considers that a TS violation may have occurred because SCE could not predict with certainty, how long 3ME455 would operate without repair in its as-found condition.

**Corrective Actions:**

As noted above, the bearings for 3ME455 were replaced and the unit declared operable on May 20, 2002. No further corrective actions are required.

**Safety Significance:**

There is little or no safety significance to this event because the normal and emergency room coolers are not essential for CCW pump operability. Engineering Calculation M-0075-074, CCN 1 demonstrates that with no cooling, CCW room temperature during the worst case design basis accident would asymptotically reach approximately 109 degrees Fahrenheit within 2 hours, and remain at this level for the duration of the event.

The required equipment in the CCW pump rooms has been previously evaluated for a total loss of room cooling (M-85089, Attachment S). That evaluation demonstrated that this equipment is capable of operating satisfactorily at an ambient temperature of 125 degrees Fahrenheit for up to 5% of the 40-year design life of the plant (i.e., for up to two (2) cumulative years). Given the operating history of the plant, it is believed that this period of time is available for operation at elevated temperatures which is in itself, sufficient to assure that the CCW system would be capable of performing its specified safety function if normal and/or emergency room coolers were unavailable. This could also allow time to either (1) restore CCW room cooling (normal or emergency) or (2) restart the redundant CCW train following a postulated accident. Therefore, there is little or no safety significance to this event.

**Additional Information:**

In the past three years, SCE has not reported a TS violation caused by an emergency room cooler that was judged to be inoperable.