

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 3	DOCKET NUMBER (2) 0 5 0 0 0 3 6 2	PAGE (3) 1 OF 0 2
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TITLE (4)  
CONDENSATE STORAGE TANK BLOCKED FLOW PATH

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)					
MONTH	DAY	YEAR	YEAR	SEQ. NUMBER	REV. NUMBER	MONTH	DAY	YEAR	FACILITY NAMES			DOCKET NUMBER(S)		
08	05	84	84	033	00	08	05	84				0 5 0 0 0		
												0 5 0 0 0		

OPERATING MODE (9) 4	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)											
POWER LEVEL (10) 000	20.402(b)			20.405(c)			50.73(a)(2)(iv)			73.71(b)		
	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)			OTHER (Specify in Abstract below and in Text, NRC Form 366A)		
	20.405(a)(1)(iii)			50.73(a)(2)(i)			50.73(a)(2)(vii)(A)					
	20.405(a)(1)(iv)			X 50.73(a)(2)(ii)			50.73(a)(2)(vii)(B)					
	20.405(a)(1)(v)			50.73(a)(2)(iii)			50.73(a)(2)(x)					

LICENSEE CONTACT FOR THIS LER (12)									
NAME J. G. HAYNES, STATION MANAGER							TELEPHONE NUMBER 7 1 4 4 9 2 - 7 7 0 0		

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)											
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NFRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NFRDS		

SUPPLEMENTAL REPORT EXPECTED (14)						EXPECTED SUBMISSION DATE (15)		
YES (If yes, complete EXPECTED SUBMISSION DATE)				X NO				

Abstract (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On August 5, 1984 at 2125, with Unit 3 in Mode 4, it was determined that a plastic construction cap was obstructing the annular suction line between Condensate Storage Tank (T-121) and the sump area of the Condensate Storage Tank (T-120) enclosure. The design bases for the Condensate Storage Tanks identifies the requirement for this line following a Design Bases Earthquake (DBE) to supply up to 200,000 gallons of water to support the Auxiliary Feedwater System for 24 hours. Upon discovery the cap was immediately removed and the similar Unit 2 line was checked and found to be unobstructed.

Based on a review of pertinent documents, the installation of the cap apparently occurred during initial construction and a misinterpretation of the design concept, which resulted in erroneously identifying a capped pipe end rather than the proper open pipe end on the P&ID's, may have contributed to the cap not being subsequently discovered and removed. It has been determined that there are no other lines, in the design of Units 2 and 3, which could have a similar condition existing. In addition, a Foreign Material Exclusion/Inventory Control Program is currently in effect to control the use of items such as plastic construction caps.

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LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

FACILITY NAME (1)  SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 3	DOCKET NUMBER (2)  0   5   0   0   0   3   6   2	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQ. NUMBER	REV. NUMBER		
		8   4	-   0   3   3	-   0   0	0   2	OF 0   2

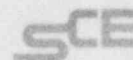
TEXT (If more space is required, use additional NRC Form 366A's) (17)

On August 5, 1984, at 2125, with Unit 3 in Mode 4, it was determined that a plastic construction cap was obstructing the annular suction line between Condensate Storage Tank (T-121) (EIIS Component Code TK) and the sump area of the Condensate Storage Tank (T-120) (EIIS Component Code TK) enclosure. The design bases for the Condensate Storage Tanks identifies the requirements for this line following a Design Bases Earthquake (DBE) to supply up to 200,000 gallons of water to support the Auxiliary Feedwater System (AFWS) (EIIS System Code BA) for 24 hours. Upon discovery the cap was immediately removed and the similar line on Unit 2 was checked and found unobstructed.

Under normal operating conditions, the T-120 tank serves as one source of makeup for the T-121 tank. With the Condensate Transfer Pump (EIIS Component Code P) operating, the T-120 tank can automatically transfer water to maintain the required level of 144,000 gallons in the T-121 tank. In addition, there is a gravity feed cross-connect line between these tanks which can also be used to maintain this required level. In the event of a DBE, with complete structural loss of the T-120 tank, the surrounding seismically qualified enclosure will capture the water lost from the T-120 tank. The annular suction line which cross-connects the enclosure sump with the T-121 tank can be used to transfer the captured water as required. Loss of this line does not result in loss of the entire system, since T-121 has sufficient storage capacity to maintain a hot standby condition for 2 hours, and to provide enough water to remove decay heat and cool down the reactor to a temperature at which the Shutdown Cooling System (EIIS System Code BP) can be used to remove decay heat. It is also possible that other sources of makeup could be set up such as sump pumps, gravity siphons or temporary hoses from the Fire Protection System (EIIS System Code KP) to supply this water. Therefore, there are no reasonable or credible alternative conditions under which this event would have been more severe.

Based on a review of pertinent documents, the time when the cap was installed cannot be exactly determined; however, it apparently occurred during initial construction. The review also discovered a drawing error which may have contributed to the cap not being subsequently discovered and removed. Specifically, the installation drawing indicates that the pipe end is open and uses a continuation symbol to denote that the pipe continues from the tank to the sump; however, when the installation drawing was being processed for incorporation into the P&ID's, the continuation symbol was apparently misinterpreted to be a piping end cap symbol. As discussed above, when discovered the cap was immediately removed and a review indicates that there are no other lines, in the design of Units 2 and 3, which could have a similar condition existing. In addition, the P&ID has been revised to correctly indicate that the piping is uncapped. A Foreign Material Exclusion/Inventory Control Program currently in effect controls the use of items such as plastic construction caps.

*Southern California Edison Company*



SAN ONOFRE NUCLEAR GENERATING STATION

P.O. BOX 128

SAN CLEMENTE, CALIFORNIA 92672

J. G. HAYNES  
STATION MANAGER

September 6, 1984

TELEPHONE  
(714) 492-7100

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

Subject: Docket No. 50-362  
30-Day Report  
Licensee Event Report No. 84-033  
San Onofre Nuclear Generating Station, Unit 3

Pursuant to 10 CFR 50.73(a)(2)(ii)(B), this submittal provides the required 30-day written Licensee Event Report (LER) for an occurrence involving Condensate Storage Tanks. This report was delayed in order to provide a complete response. The health and safety of plant personnel or the public were not affected by this event.

If you require any additional information, please so advise.

Sincerely,

Enclosure: LER 84-033

cc: A. E. Chaffee (USNRC Senior Resident Inspector, Units 1, 2 and 3)  
J. P. Stewart (USNRC Resident Inspector, Units 2 and 3)

J. B. Martin (Regional Administrator, NRC Region V)

Institute of Nuclear Power Operations (INPO)

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