

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)
SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 1DOCKET NUMBER (2)
0 5 0 0 0 2 0 6 1 OF 0 3TITLE (4)
ENTRY INTO TECHNICAL SPECIFICATION 3.0.3

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)
0	4	87	87	005	01	11	19	87			0 5 0 0 0

OPERATING MODE (9)	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (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) 0710	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)		X 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
H. E. MORGAN, STATION MANAGER	714 368-6241

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)										
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDs		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDs
X	I	G	D	E	T	W	1	2	3	YES

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE)	NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
	X				

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

On 3/24/87, Nuclear Instrumentation System (NIS) Power Range Channel 1207 was declared inoperable due to low output. In accordance with the action requirements of LCO 3.5.1, the channel was placed in the tripped condition at the high-range overpower trip setpoint (109%). On 4/28/87, at 2055, while reducing power for cleaning of condenser water boxes, NIS channel 1207 automatically reset from the tripped state to the inoperable condition when power reached 70% and the mode selector switch was repositioned. The channel similarly reset to the inoperable condition from the tripped state on 4/29/87, at 0424, as the Unit was being returned to 92% power.

Although LCO 3.5.1 permits up to 8 hours to initially trip an inoperable channel, and up to 2 hours in the un-tripped condition for the purpose of surveillance testing thereafter, it does not explicitly permit the channel to be in an inoperable condition for any other reason. Accordingly, the condition resulted in an entry into LCO 3.0.3.

The NIS operations procedure did not provide for maintaining the channel in a tripped condition. As corrective action, the procedure was revised to ensure that the affected channel output is increased prior to the mode selector switch being repositioned. The event was discussed with all licensed operations personnel.

The detector has been replaced. Limited testing of the detector was unable to determine the cause of low output condition. Due to the scheduled replacement of the complete NIS and ALARA considerations, no further testing of the detector will be performed.

There was no safety significance to this event since the three other power range channels remained operable in accordance with the minimum operability requirements of the Technical Specifications.

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On 3/24/87, while operating at 92% power, Nuclear Instrumentation System (NIS) Power Range Channel 1207 (EIIS System Code IG) (EIIS Component Code MON) was determined to have a low output. In accordance with the action requirements of LCO 3.5.1 for an inoperable channel, the channel was tripped by increasing the channel output to exceed the 109% trip setpoint for full power operation. With the channel tripped, and sealed in, the output of the channel was returned to normal providing an indicated power level of 92%.

On 4/28/87, at 2055, while in the process of reducing power for cleaning of the condenser water boxes, channel 1207 was reset to the mid-range trip setpoint required by procedure, as reactor power was decreased below 70%. This is accomplished by placing the NIS low/mid/high range mode selector switch in the "Mid" position (85% trip setpoint). Prior to changing the position of the switch, the Control Room personnel discussed the operation of the switch with an NIS channel in the tripped state. The switch was then operated, and it was observed that the channel trip had cleared, returning the channel to the inoperable condition. Control Room personnel, upon recognizing what had occurred, adjusted the channel output above the 85% mid-range trip setpoint in approximately 8 minutes, returning the channel to the tripped condition as required by the Technical Specification.

On 4/29/87, at 0424, while returning the Unit to 92% power, and with the channel output indicating the same power level as the remaining 3 channels, the channel similarly reset into an inoperable condition from the tripped state as the selector switch was placed in the "High" position. At this time, Control Room personnel immediately readjusted the channel output to place the channel in the tripped condition, as had been planned based on the earlier event.

Although, LCO 3.5.1 permits up to 8 hours to initially trip an inoperable channel, and up to 2 hours in the un-tripped condition for the purpose of surveillance testing thereafter, it does not explicitly permit the channel to be in this condition for any other reason. Control Room operators took prompt action to restore channel 1207 to the tripped condition, however, the brief period the channel was not in the tripped condition (approximately 8 minutes for the first occurrence, and momentarily for the second) resulted in an entry into Technical Specification 3.0.3.

Investigation revealed that the NIS operations procedure did not provide for placing or maintaining the channel in the tripped condition. A detailed evaluation of the event was performed. As corrective action, the procedure was revised to ensure that the channel output be increased prior to the mode selector switch being repositioned such that the channel will be maintained in the tripped condition. Additionally, the event was discussed with all licensed operations personnel.

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The low output from NIS channel 1207 detector had been compensated for by increasing the channel output to provide a power level reading equivalent to the results of the daily plant thermal calibration. On 3/24/87, the channel output was observed to be fluctuating. The channel was therefore declared inoperable, and placed in the tripped state. Replacement of the detector was planned, at that time, for the next outage. The detectors associated with the remaining 3 channels have not provided any indication of such degradation. The channel 1207 detector was replaced and the channel restored to operability on 5/24/87.

Limited testing of the detector was unable to determine the cause of the low output condition. Further testing or examination of the detector will not be performed to determine the cause of the failure for the following reasons:

1. The detector is now approximately 6 to 10 rad/hr on contact due to neutron induced radioactivity. SCE has decided not to examine the detector further due to ALARA considerations and the detector has been appropriately discarded.
2. The NIS is being completely replaced due to age related degradation, increased maintenance and unavailability of spare parts. Detectors of a more reliable design are used in the new NIS. The NIS replacement is in progress and will be completed during the next refueling outage.

There was no safety significance to this event since the three other power range channels remained operable in accordance with the minimum operability requirements of the Technical Specifications.

Southern California Edison Company

SAN ONOFRE NUCLEAR GENERATING STATION

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SAN CLEMENTE, CALIFORNIA 92672

H. E. MORGAN
STATION MANAGER

November 19, 1987

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

Subject: Docket No. 50-206
30-Day Report
Licensee Event Report No. 87-05, Revision 1
San Onofre Nuclear Generating Station, Unit 1

Reference: Letter, H. E. Morgan (SCE) to USNRC Document Control Desk, dated
May 29, 1987

The referenced letter provided the required 30-day Licensee Event Report (LER) involving an entry into Technical Specification 3.0.3. This submittal provides additional information regarding the results of an investigation into the cause of this event.

If you require any additional information, please so advise.

Sincerely,

HEMog

Enclosure: LER No. 87-05, Rev.1

cc: F. R. Huey (USNRC Senior Resident Inspector, Units 1, 2 and 3)
J. B. Martin (Regional Administrator, USNRC Region V)
Institute of Nuclear Power Operations (INPO)

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