

### LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) <b>PALISADES NUCLEAR PLANT</b>	DOCKET NUMBER (2) <b>0 5 0 0 0 2 5 5</b>	PAGE (3) <b>1 OF 0 3</b>
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TITLE (4)  
**Technical Specification Requirements Not Met For Diesel Oil Storage Tank Level**

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 NAMES		
1 1	2 2	8 7	8 7	0 4 0	0 0	1 2	2 2	8 7	N/A		
									N/A		
DOCKET NUMBER(S) <b>0 5 0 0 0</b>											

OPERATING MODE (9) **N**

POWER LEVEL (10) **0 9 9**

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)

<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.408(c)	<input type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 73.71(b)
<input type="checkbox"/> 20.405(a)(1)(i)	<input type="checkbox"/> 50.38(c)(1)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 73.71(a)
<input type="checkbox"/> 20.405(a)(1)(ii)	<input type="checkbox"/> 50.38(c)(2)	<input type="checkbox"/> 50.73(a)(2)(vi)	<input type="checkbox"/> OTHER (Specify in Abstract below and in Text, NRC Form 308A)
<input type="checkbox"/> 20.405(a)(1)(iii)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(vii)(A)	
<input type="checkbox"/> 20.405(a)(1)(iv)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(vii)(B)	
<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(viii)	

LICENSEE CONTACT FOR THIS LER (12)

NAME <b>C S Kozup, Technical Engineer</b>	TELEPHONE NUMBER
	AREA CODE: <b>6 1 6</b> NUMBER: <b>7 6 4 - 8 9 1 3</b>

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS
X	D/C	LT	F 2 9 0	No					

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

EXPECTED SUBMISSION DATE (15)

MONTH	DAY	YEAR

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

Abstract

On November 22, 1987 at 0258 Operations personnel identified that the level in diesel oil storage tank T-10 [DC;TK] was below the Plant Technical Specification (TS) limit. TS 3.7.1 requires that a minimum of 16,000 gallons of oil be in T-10 when the primary coolant system [AB] is heated above 325 degrees. At the time of discovery, approximately 12,000 gallons of oil were in T-10. The reactor was critical with the Plant operating at 99 percent of rated power when the condition was discovered.

The event was discovered when a Control Room Operator noted a discontinuity from previous data trends in the diesel oil storage tank level indication. Tank level was physically verified to be at approximately 12,000 gallons. An Unusual Event was declared and reactor power reduction initiated in accordance with TS 3.0.3. By 0732, approximately 4,900 gallons of oil had been added and storage tank level verified to be greater than 16,000 gallons.

The erroneous level indications have been attributed to temperature induced transmitter [DC;LT] drift. An evaluation has been undertaken to assess the potential for alternative level instrumentation. Until potential actions as a result of this evaluation are implemented, daily level verification will be performed manually.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		8 7	- 0 4 0	- 0 0	0 2	OF	0 3

TEXT (If more space is required, use additional NRC Form 388A's) (17)

Description

On November 22, 1987 at 0258 Operations personnel identified that the level in diesel oil storage tank T-10 [DC;TK] was below the Plant Technical Specification (TS) limit. TS 3.7.1 requires that a minimum of 16,000 gallons of oil be in T-10 when the primary coolant system [AB] is heated above 325 degrees. At the time of discovery, approximately 12,000 gallons of oil were in T-10. The reactor was critical with the Plant operating at 99 percent of rated power when the condition was discovered.

While performing TS Surveillance Procedure D/WO-1, "Operators Daily/Weekly/Bi-Weekly Items", a Control Room Operator noted a discontinuity (88 percent to 68 percent) from previous data trends in the diesel oil storage tank level indication. Tank level is monitored and Operators are alerted to low oil levels by level alarm LIA-1400 [DC;LA]. Consequently, an Auxiliary Operator (AO) was dispatched to physically measure tank level with a dipstick. Measurements revealed that approximately 12,000 gallons of oil were present in the tank.

At 0258 an Unusual Event was declared due to activation of TS 3.0.3. At 0310 Plant shutdown was commenced. Actions were immediately initiated to procure and assure oil delivery. By 0732 approximately 4,900 gallons of oil were delivered to T-10. The storage tank level was manually verified to assure greater than 16,000 gallons of oil were present and at 0736, the Plant secured from the Unusual Event. At 0905 Operations personnel began raising the Plant power level from the low of 80 percent achieved during the event.

Cause Of The Event

The failure to assure compliance with TS 3.7.1 was caused by erroneous readings provided to Control Room Operators via level indicator LIA-1400. Investigations by Instrumentation and Control (I&C) personnel have attributed the erroneous readings to temperature induced transmitter drift within LT-1400 [DC;LT].

A review of post calibration records indicated that when the ambient temperature drops, the output of the transmitter increases and when the ambient temperature goes up, transmitter output decreases. An increase in transmitter output yields a positive (additive) indication of diesel oil storage tank level.

Corrective Actions

After physically verifying the oil level in the storage tank, an Unusual Event was declared and reactor power reduction initiated.

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TEXT (If more space is required, use additional NRC Form 388A's) (17)

Efforts were immediately undertaken to procure diesel oil and within approximately four and one-half hours, T-10 had been filled to a level in excess of the TS requirements.

TS Surveillance Procedure D/WO-1 has been changed to require physical verification (dipsticking) of T-10.

An evaluation has been undertaken to assess alternative level instrumentation. Until potential actions as a result of this evaluation have been taken, Operations personnel will use physical detection to verify tank level.

Analysis Of The Event

The TS requirement to maintain 16,000 gallons of diesel oil in storage tank T-10, in addition to the TS requirement to maintain 2,700 gallons of diesel oil in each of the day tanks, T-25A and T-25B [DC;TK] will provide a diesel generator [EK;DG] operation under required loading conditions for a minimum of seven days.

As stated in the basis for TS 3.7, this amount of diesel oil is felt adequate since it is considered incredible not to be able to secure oil from one of several sources within a radius of 70 miles in less than three days under the worst of weather conditions.

The last receipt and input of diesel oil to storage tank T-10 occurred on November 10, 1987. This input resulted in the tank being filled to approximately 80 percent or 23,454 gallons.

At the time of the event, with approximately 12,000 gallons of diesel oil in storage tank T-10, approximately five days of diesel operation was available. Therefore, no threat to the safety of the general public was presented.

This event is being reported in accordance with 10CFR50.73(a)(2)(i) as an operational condition prohibited by TS.

Additional Information

No known similar reportable events have been identified.

Diesel oil storage tank level transmitter LT-1400 is a Model 617B, manufactured by Robertshaw Controls (R290).



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December 22, 1987

Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

DOCKET 50-255 - LICENSE DPR-20 - PALISADES PLANT -  
LICENSEE EVENT REPORT 87-040 - (TECHNICAL SPECIFICATION REQUIREMENTS NOT  
MET FOR DIESEL OIL STORAGE TANK LEVEL)

Licensee Event Report (LER) 87-040, (Technical Specification Requirements  
Not Met for Diesel Oil Storage Tank Level) is attached. This event is  
reportable to the NRC per 10CFR50.73(a)(2)(i).

Brian D Johnson  
Staff Licensing Engineer

CC Administrator, Region III, USNRC  
NRC Resident Inspector - Palisades

Attachment

OC1287-0257-NL02

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