NRC Form 366 (9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
PALISADES NUCLEAR PLANT	0 5 0 0 0 2 5 5	1 OF 0 3

TITLE (4)

AUTOMATIC ACTUATION OF AUXILIARY FEEDWATER SYSTEM

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	DOCKET NUMBER(S)
									N/A	0 5 0 0 0
0 3	2 5	8 7	8 7	— 0 0 9	— 0 0	0 4	2 4	8 7	N/A	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)			
POWER LEVEL (10) 0 0 0	20.402(b)	20.405(c)	X 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)(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
CSKozup, Technical Engineer, Palisades	AREA CODE 6 1 6 7 6 4 - 8 9 1 3

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	
A											

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-space typewritten lines) (16)

On March 25, 1987 an Auxiliary Feedwater System actuation signal (AFAS) was received due to low secondary water level in steam generator E-50B. The actuation signal was received during testing of the atmospheric steam dumps and resulted in actuation of auxiliary feedwater pump P-8C. Prior to, and during testing, steam generator water levels were being maintained at approximately 30% or normal levels for chemistry control. The Plant was in hot shutdown condition at the time of the event.

During atmospheric steam dump testing, a shrinkage of approximately eight percent was noted from steam generator level transmitters. This shrinkage, combined with the already lowered steam generator levels, caused the automatic actuation of the auxiliary feedwater system.

All engineered safety features associated with the AFAS and auxiliary feedwater pumps functioned as designed.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
PALISADES PLANT	0 5 0 0 0 2 5 5	8 7	— 0 0 9	— 0 0	0 2 OF 0 3

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

Description

On March 25, 1987 at 1149, an Auxiliary Feedwater System [BA] acutation signal (AFAS) was received due to low secondary water level in steam generator E-50B [AB;SG]. The actuation signal was received during testing of the atmospheric steam dumps and resulted in actuation of auxiliary feedwater pump P-8C [BA;P]. Prior to, and during, atmospheric steam dump testing, steam generator water levels were being maintained at approximately 30% of normal for chemistry control. The Plant was in hot shutdown condition (primary coolant system; 531 degrees, 2030 psia) at the time of the event.

When the atmospheric steam dumps were operated during testing, a shrinkage of approximately eight percent was noted from steam generator level transmitters [BA;LIT]. This shrinkage, combined with the already lowered secondary water level, caused an automatic actuation of the auxiliary feedwater pumps.

All engineered safety features associated with the AFAS and auxiliary feedwater pumps [BA;P] functioned as designed.

Cause of the Event

The actuation of the auxiliary feedwater system was caused by low secondary water level in the steam generators. The low level was caused by shrinkage of the steam generator level when the atmospheric dumps were operated during testing.

Operations personnel did not adequately anticipate the effects (shrinkage) on the presently existing low steam generator levels when initiating atmospheric steam dump testing.

Analysis of the Event

The actuation of the auxiliary feedwater system during this event presented no increased safety consequences, in that the auxiliary feedwater system is utilized to raise secondary water levels to operating levels through standard operating procedures (ie, had there not been an automatic actuation, operations personnel would have manually initiated auxiliary feedwater flow to raise secondary water level).

The inflow of auxiliary feedwater to an operating temperature steam generator is an analyzed condition considered in the plants design basis.

This event is being reported per 10CFR50.73(a)(2)(iv) as an event that resulted in the automatic actuation of an Engineered Safety Feature.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
PALISADES PLANT	0 5 0 0 0 2 5 5	8 7	— 0 0 9	— 0 0	0 3 OF 0 3

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

Corrective Action

Licensed operations personnel will be formally informed as to the circumstances leading to the occurrence of this event and to the need to be cognizant of the possibility for unplanned challenges to engineered safety features.

A prerequisite will be added to the procedure governing the testing of the atmospheric steam dumps to ensure steam generator levels are greater than 45% of normal operating levels prior to testing.

Consumers Power
POWERING MICHIGAN'S PROGRESS
General Offices: 1945 West Parnall Road, Jackson, MI 49201 • (517) 788-0550

April 24, 1987

Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

DOCKET 50-255 - LICENSE DPR-20 - PALISADES PLANT -
LICENSEE EVENT REPORT 87-009 - AUTOMATIC ACTUATION
OF AUXILIARY FEEDWATER SYSTEM

Licensee Event Report (LER) 87-09, (Automatic Actuation of Auxiliary Feedwater System) is attached. This event is reportable to the NRC per 10CFR50.73(a)(2)(iv).

Brian D Johnson
Staff Licensing Engineer

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

Attachment

IE22
1/1

OC0487-0046-NL02