

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Palisades Nuclear Plant DOCKET NUMBER (2) 050000255 PAGE (3) 1 OF 03

TITLE (4)
Personnel Airlock Leakage

EVENT DATE (5)			LER NUMBER (8)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)				
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES		DOCKET NUMBER(S)		
0	6	88	4	8	4	0	7	2	6	8	4	NA	05000011
									NA			050000	

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

OPERATING MODE (9) N	20.402(b)	20.408(c)	80.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10) 010	20.408(a)(1)(i)	80.38(e)(1)	80.73(a)(2)(v)	73.71(c)
	20.408(a)(1)(ii)	80.38(c)(2)	80.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
	20.408(a)(1)(iii)	X 80.73(a)(2)(ii)	80.73(a)(2)(vii)(A)	
	20.408(a)(1)(iv)	80.73(a)(2)(iii)	80.73(a)(2)(vii)(B)	
	20.408(a)(1)(v)	80.73(a)(2)(iii)	80.73(a)(2)(viii)	

LICENSEE CONTACT FOR THIS LER (12)

NAME David W. Rogers; Technical Engineer; Palisades TELEPHONE NUMBER 616764-8913

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRRDS
X	NIH	ALL	W13012	Y					

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)

On June 29, 1984, with the Plant at shutdown boron concentration and being maintained at 250°F, leak rate testing of the personnel air lock door seals yielded unacceptable results. The leak rate value, when added to the total leakage from all containment penetrations, exceeded the allowable leakage, La. Adjustments were subsequently completed on the seals, resulting in acceptable leakage values.

Due to a calculation error, the occurrence was not discovered until July 10, 1984.

8408060263 840726
PDR ADOCK 05000255
S PDR

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) Palisades Nuclear Plant	DOCKET NUMBER (2) 0 5 0 0 0 2 5 5 8 4	LER NUMBER (8)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		8 4	0 0 8	0 0	0 2	OF	0 3

TEXT (If more space is required, use additional NRC Form 368A's) (17)

On June 28-29, 1984, having commenced plant heat-up, the Palisades Plant was in the process of testing the seals of the inner and outer doors of the personnel air lock [AL;NH]. The primary coolant system [AB] was at shutdown boron concentration with system temperature being maintained at 250°F. The stated plant condition requires containment integrity per Palisades Technical Specification 3.6.1.a.

The leakage values calculated from the results of testing each door's seals [SEAL] are conservatively combined with the total leakage from all containment penetrations. The value is then compared with the total allowable leakage, La.

At 2230, on June 28, 1984, a test of the seals of the inner door of the personnel air lock revealed excessive leakage due to cracks in the inner seal and insufficient contact of the outer seal with the sealing surface. The door seals were subsequently adjusted, as necessary, in preparation for a retest. At 0615, on June 29, 1984, the leak rate calculation from the retest indicated excessive leakage. The inner door was considered inoperable pending further adjustments. The outer door was maintained closed.

At 1113, on June 29, 1984, the initial test of the personnel air lock outer door seals was completed. The original calculated leakage value indicated the leak rate to be within acceptable limits when added with the total leakage for all containment penetrations and compared to La.

Following adjustment at 1345, on June 29, 1984, the seals of the inner door were tested for a third time, which resulted in an acceptable leak rate. With the inner door again operable, adjustments were initiated on the outer door seals to improve the door's leak rate value. Subsequently, the outer door seals were again satisfactorily tested at 2037 on June 29, 1984.

On July 10, 1984, evaluation of the test results revealed that, due to a calculation error, the original leak rate calculation for the outer door seals at 1113, on June 29, 1984, when added with the total leakage from all containment penetrations, did indeed exceed La. Therefore, between 1113 and 1345 on June 29, 1984, the leakage from either door of the personnel air lock, when added to total containment leakage, exceeded La. In retrospect, the consequences of not realizing that La had been exceeded are mitigated by the fact that the inner door's seals were adjusted and satisfactorily tested in less time than would have been necessary to return the Plant to cold shutdown condition.

The excessive leak rate past the door seals identified during testing of the seals is attributed to an adjustment problem with the seals, which occurs as a result of the pressure decay testing of the entire air lock. During this test, strongbacks are installed on the doors, and the air lock is pressurized between the two doors. This activity tends to change the adjustment of the seals such that subsequent testing of each door's seals by pressurization of the area between the seals can, on occasion, yield unacceptable results. Methods to eliminate the shifting of the door seals during testing activities will be evaluated.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) Palisades Nuclear Plant	DOCKET NUMBER (2) 0 5 0 0 0 2 5 5 8 4	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		8 4	- 0 0 8	- 0 0	0 3	OF 0 3

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

The calculation error which resulted in the occurrence remaining undetected until July 10, 1984 is considered an isolated personnel error for which no corrective action is planned. No threat to public health or safety resulted.



Consumers
Power
Company

General Offices: 1945 West Parnall Road, Jackson, MI 49201 • (517) 788-0550

July 26, 1984

Nuclear Reactor Regulation
US Nuclear Regulatory Commission
Washington, DC 20555

DOCKET 50-255 - LICENSE DPR-20 -
PALISADES PLANT - LICENSEE EVENT REPORT 84-008 -
PERSONNEL AIRLOCK LEAKAGE

Attached is Licensee Event Report 84-008 (Personnel Airlock Leakage) which is reportable to the NRC in accordance with 10CFR50.73(a)(2)(i) and 10CRF50.73(a)(2)(v).

Brian D Johnson
Staff Licensing Engineer

CC Director, Office of Nuclear Reactor Regulation
Administrator, Region III, USNRC
NRC Resident Inspector-Big Rock Point

Attachment