

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) PALISADES NUCLEAR PLANT										DOCKET NUMBER (2) 0 5 0 0 0 2 5 5					PAGE (3) 1 OF 0 2	
TITLE (4) Containment Temperature																
EVENT DATE (6)			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)			
									NA				0 5 0 0 0			
1 0	2 2	8 4	8 4	0 2 2	0	1 1	2 0	5 8 4	NA				0 5 0 0 0			
OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5: (Check one or more of the following) (11)														
N		20.402(b)				20.405(a)				80.73(a)(2)(iv)				73.71(b)		
POWER LEVEL (10)		20.405(a)(1)(i)				80.38(a)(1)				X 80.73(a)(2)(v)				73.71(a)		
0 1 0 1 0		20.405(a)(1)(ii)				80.38(a)(2)				80.73(a)(2)(vi)				OTHER (Specify in Abstract below and in Text, NRC Form 308A)		
		20.405(a)(1)(iii)				80.73(a)(2)(i)				80.73(a)(2)(vii)(A)						
		20.405(a)(1)(iv)				X 80.73(a)(2)(ii)				80.73(a)(2)(vii)(B)						
		20.405(a)(1)(v)				80.73(a)(2)(iii)				80.73(a)(2)(v)						
LICENSEE CONTACT FOR THIS LER (12)																
NAME										TELEPHONE NUMBER						
David W. Rogers; Technical Engineer; Palisades										6 1 6 7 6 4 - 1 8 9 1 1 3						
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)																
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDOS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDOS						
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)

The Palisades Plant analysis of peak containment building pressure following a postulated Main Steam Line Break was discovered to contain an incorrect value for the initial containment air temperature. Temperatures inside the containment building routinely exceed the assumed temperature of 104 degrees F, resulting in higher calculated containment pressure. Initial containment temperature was not previously identified as a significant parameter relative to peak containment pressure. Subsequently, temperature limits have been established and implemented for various Plant operating conditions.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO 3150-0104
EXPIRES 8/31/85

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			

TEXT (If more space is required, use additional NRC Form 365A's (1/7))

On September 26, 1984, with the Plant in cold shutdown condition, the containment building [NH] air temperature was discovered to be routinely greater than the 104 degrees F value assumed in the Main Steam Line Break accident analysis. The analysis determined that following a Main Steam Line Break (MSLB) with a loss of off-site power and failure of one diesel generator [DG;EK], peak containment pressure may exceed the containment design limit of 55 psig. Subsequent analysis determined that the 55 psig limit would not be exceeded unless the average initial temperature was in excess of 137 degrees F, rather than 104 degrees F.

Records indicate that on July 4, 1983, a temperature of 138 degrees F was measured in the containment dome. No other readings above 137 degrees F were recorded in 1983 or 1984 while the Plant was in operation. The occurrence was determined to be reportable on October 22, 1984.

The cause of the error has been attributed to personnel error. Although it remains unknown how the initial temperature value of 104 degrees F came to be used, it is evident that initial containment temperature was not previously identified as a significant variable and was, therefore, not monitored for purposes related to peak containment pressure.

Containment temperature limits have subsequently been established and implemented for various Plant operating conditions, which will ensure that peak containment pressure will remain below the design limit following a postulated MSLB. A Technical Specifications revision to incorporate the containment temperature limits is being investigated. An increase in the design pressure rating of the containment building from 55 psig to 60 psig is also being investigated, which would permit high enough initial temperatures to preclude the necessity of temperature monitoring.

Although a temperature of 138 degrees F was measured in the containment dome on July 4, 1983, three additional temperature indicators at various other locations inside containment indicated temperatures of 120, 122 and 130 degrees F. Therefore, the average containment temperature would presumably be less than 138 degrees F. Since an accurate method of averaging containment temperature readings has not been developed, the highest temperature was conservatively taken as the average containment temperature. Consequently, should the postulated MSLB have occurred on July 4, 1983, containment pressure would not have exceeded the design limit, and no threat to public health or safety would have resulted.

The 104 degree F value was also assumed when calculating the qualified lifetime of certain plant equipment relative to the Equipment Environmental Qualification (EEQ) program. The impact of the higher temperatures on the qualification of equipment in the containment building is being evaluated. Initial evaluation indicates that while the qualified life of some equipment in the containment building may have been shortened by the higher temperatures, none of the qualified life spans have been exceeded. New qualified life spans will be developed, and equipment replacement schedules altered as necessary.



**Consumers
Power
Company**

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US Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

DOCKET 50-255 - LICENSE DPR-20 -
PALISADES PLANT - LICENSEE EVENT REPORT 84-022, REVISION 1
(CONTAINMENT TEMPERATURE)

Attached please find Licensee Event Report 84-022, Revision 1 (Containment Temperature) which is reportable to the NRC per 10 CFR 50.73(a)(2)(ii) and 10 CFR 50.73(a)(2)(v).

Ralph R. Frisch
Ralph R Frisch

Senior Licensing Analyst

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

Attachment