

LICENSEE EVENT REPORT (LER)

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

TITLE (4) Reactor Trips From Nuclear Instrument Noise

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)			
0	8	23	85	85	013	00	09	23	85	NA	0 5 0 0 0		
										NA	0 5 0 0 0		

OPERATING MODE (9) N THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)

POWER LEVEL (10) 01010	20.402(b)	20.406(e)	<input checked="" type="checkbox"/> 80.73(a)(2)(iv)	73.71(b)
	20.406(a)(1)(i)	80.38(a)(1)	80.73(a)(2)(v)	73.71(e)
	20.406(a)(1)(ii)	80.38(e)(2)	80.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 306A)
	20.406(a)(1)(iii)	80.73(a)(2)(i)	80.73(a)(2)(vii)(A)	
	20.406(a)(1)(iv)	80.73(a)(2)(ii)	80.73(a)(2)(vii)(B)	
	20.406(a)(1)(v)	80.73(a)(2)(iii)	80.73(a)(2)(ix)	

LICENSEE CONTACT FOR THIS LER (12)

NAME R A Fenech, Technical Engineer, Palisades TELEPHONE NUMBER 616 764 - 8913

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS
X	JC	DET	G305	Y					

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE)  NO

EXPECTED SUBMISSION DATE (15)

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

On August 23, 26 and 27, 1985, a noise spike resulted in an inadvertent Reactor Protection System actuation. In each event, the Plant was initially in a shutdown condition. Therefore, no transient resulted from the reactor trip signals. All equipment actuations occurred normally.

The noise spikes were attributed to an unused circuit feeding into a startup rate bistable card. The circuit has been removed from the system. Other system channels will be evaluated for a similar unused circuit.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		8 5	0 1 3	0 0	0 2	OF 0 2

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

At 0440 on August 23, 1985, with the Plant shutdown (515 degrees, 1400 psi), a noise spike in a nuclear instrument channel [IG] resulted in an inadvertent Reactor Protection System [JC] actuation signal. At 1104 on August 26, 1985, with the Plant in cold shutdown (175 degrees, 260 psi), a nuclear instrument noise spike again resulted in a reactor trip signal. On August 27, 1985, with the Plant in hot shutdown, two additional reactor trip signals occurred from noise spikes. A high start-up rate trip occurred at 0625, and a second high start-up rate trip occurred at 2216. In each event, all plant systems responded normally.

Troubleshooting revealed the source of the electrical noise to be from an unused latching circuit feeding into a start-up rate bistable card. The resultant voltage spikes actuated the Reactor Protection System high start-up rate channels. The unused circuit was disconnected from the system. The circuit was not utilized for any system function. Other nuclear instrument channels will be evaluated for the presence of a similar unused circuit.

A reactor trip is initiated from either of the two wide range, logarithmic nuclear instrument channels if the rate of change exceeds a specific setpoint. The wide range instruments are provided to monitor reactor power from the start-up range to full power. Each wide range channel feeds two protective system channels. The reactor trip occurs from a two-of-four coincidence logic.

In each event, the Reactor Protection System actuations occurred with the Plant in a shutdown condition. No transients resulted from any of the actuations. All equipment responded normally to the reactor trip signals.



Consumers  
Power  
Company

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

September 23, 1985

US Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

DOCKET 50-255 - LICENSE DPR-20 - PALISADES PLANT -  
LICENSEE EVENT REPORT 85-013- REACTOR TRIP FROM NUCLEAR  
INSTRUMENT NOISE

Licensee Event Report (LER) 85-013 (Reactor Trip From Nuclear Instrument  
Noise) is attached. This event is reportable to the NRC per  
10 CFR 50.73 (a)(2)(iv).

Brian D Johnson  
Staff Licensing Engineer

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

Attachment

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