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 PLANT	0 5 0 0 0 2 5 5	1 OF 0 2

TITLE (4)

MISSILE SHIELD LIFT DEVICE OUTSIDE SAFE WORKING LOAD REQUIREMENT

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 1	0 2	8 6	8 6	0 0 2	0 0	0 2	0 3	8 6	N/A	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)	0 0 0	20.402(b)	20.405(c)	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)	X OTHER (Specify in Abstract below and in Text, NRC Form 366A) Voluntary
		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
R A Fenech, 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	

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 January 2, 1986, a review of the weights to be used for partial load test of the Polar Crane revealed that the missile shields weighed 64 tons rather than 35 tons. This error has no found cause. The 64 tons was outside the 52-ton "safe working load" of one component of the missile shield lifting device, eg., master ring. This "safe working load" is determined from requirements in NUREG-0612 and ANSI-B30.9, Chapter 9-2.

The missile shield lifting device vendor stated that elongation of the master ring in the lifting device would be the first evidence of degradation. Measurements of the master ring were taken and they fell within manufacturing tolerances. It was concluded that since the lifting device had successfully made approximately eight lifts since it was put into service without any degradation, it could be safely used for required lifts until a new missile shield lifting device could be obtained.

Due to no evidence of degradation, no additional risk resulted to the health and safety of the public.

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
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TEXT (If more space is required, use additional NRC Form 366A's) (17)

On January 2, 1986, a review of the weights to be used for partial load test of the Polar Crane revealed that while the procedure states each missile shield section weighs 35 tons, the review of the print and weight calculations showed the missile shield weight to be approximately 64 tons. The error in the procedure has no found cause.

The movement of the missile shields is governed by NUREG-0612 which states the lifting devices not specially designed should be used in accordance with ANSI-B30.9, Chapter 9-2. This Chapter states a minimum safety factor of 5 is required and that the ultimate strength of the device divided by 5, equals the "safe working load" of the device. The present missile shield rigging, in use since August 1983, meets "safe working load" requirements of lifting loads greater than 64 tons on all of its components except one. This component, the master ring in the lifting device, has a safe working load of 52 tons.

The manufacturer was contacted and stated that the first indication of master ring degradation would be elongation of the ring. On January 18, 1986, measurements were taken on the master ring and it was found to be within normal manufacturing tolerances. It was concluded that no deformation had taken place after having made approximately eight lifts with the device since it was first placed in service. The long-term action taken was to use the missile shield lifting device until a new device could be purchased.

This decision was based upon the fact no deformation had occurred in the previous eight lifts and that the load being lifted is less than 20% over the "safe working load" resulting in a safety factor of slightly greater than 4 instead of 5 for this device.

Consumers Power Company believes in light of these facts, no threat to the public health or safety occurred in the previous missile shield lifts or will occur in any lifts required before the new lifting device is obtained.

Consumers Power Company

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

February 3, 1986

US Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

DOCKET 50-255 - LICENSE DPR-20 - PALISADES PLANT -
LICENSEE EVENT REPORT 86-002 - MISSILE SHIELD LIFT DEVICE OUTSIDE SAFE WORKING LOAD REQUIREMENT

Licensee Event Report (LER) 85-002, (Missile Shield Lift Device Outside Safe Working Load Requirement) is attached. This event is being made as a voluntary report to the NRC.

Brian D Johnson

Brian D Johnson
Staff Licensing Engineer

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

Attachment

OC0186-0016-NL02

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