PALISADES PLANT
Docket 50-255

NRC FORM 366 (7-77)

U. S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

CONTROL BLOCK: (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0 1 | LICENSEE CODE: M I P A L 1 (2) | LICENSE NUMBER: 0 0 - 0 0 0 0 0 - 0 0 (3) | LICENSE TYPE: 4 1 1 1 1 (4) | CAT (5)

CON'T 0 1 | REPORT SOURCE: L (6) | DOCKET NUMBER: 0 5 0 0 0 2 5 5 (7) | EVENT DATE: 0 7 1 9 8 3 (8) | REPORT DATE: 0 8 0 2 8 3 (9)

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 During the Palisades FSAR update process, reviewers discovered that the
0 3 current resulting from a short-circuit in the 125 V DC System will result in
0 4 the temperature of the associated conducters exceeding the value specified in
0 5 the Palisades Plant FSAR, Section 8.5.2.3. On July 19, 1983, this condition
0 6 was determined to be reportable per T.S. 6.9.2.A(8). No threat to public
0 7 health or safety results.
0 8

	SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP. SUBCODE	VALVE SUBCODE
0 9	E C (11)	X (12)	Z (13)	E L E C O N (14)	Z (15)	Z (16)

(17) LER/RO REPORT NUMBER	EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
	8 3	—	0 4 9	/	0 1	T	—	0

ACTION TAKEN	FUTURE ACTION	EFFECT ON PLANT	SHUTDOWN METHOD	HOURS (22)	ATTACHMENT SUBMITTED	NPRD-4 FORM SUB.	PRIME COMP. SUPPLIER	COMPONENT MANUFACTURER
X (18)	X (19)	Z (20)	Z (21)	0 0 0 0	Y (23)	N (24)	A (25)	X 9 9 9 (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 Cause attributed to installation, in 1981, of larger capacity station
1 1 batteries. Operability of the DC system during normal and accident
1 2 conditions remains unaffected by this discrepancy, since the design load
1 3 current does not result in unnacceptable conducter temperatures.
1 4

1 5 | FACILITY STATUS: E (28) | % POWER: 0 8 9 (29) | OTHER STATUS (30): NA | METHOD OF DISCOVERY: C (31) | DISCOVERY DESCRIPTION (32): FSAR Update Review

1 6 | ACTIVITY RELEASED: Z (33) | CONTENT OF RELEASE: Z (34) | AMOUNT OF ACTIVITY (35): NA | LOCATION OF RELEASE (36): NA

PERSONNEL EXPOSURES
1 7 | NUMBER: 0 0 0 (37) | TYPE: Z (38) | DESCRIPTION (39): NA

PERSONNEL INJURIES
1 8 | NUMBER: 0 0 0 (40) | DESCRIPTION (41): NA

LOSS OF OR DAMAGE TO FACILITY (43)
1 9 | TYPE: Z (42) | DESCRIPTION: NA

PUBLICITY
2 0 | ISSUED: N (44) | DESCRIPTION (45): NA | NRC USE ONLY

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PDR ADOCK 05000255
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Consumers Power Company

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

August 2, 1983

James G Keppler, Administrator
Region III
US Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

DOCKET 50-255 - LICENSE DPR-20 -
PALISADES PLANT - LICENSEE EVENT REPORT 83-49 - DC SYSTEM SHORT-CIRCUIT CURRENT IN EXCESS OF FSAR LIMIT

On the reverse please find Licensee Event Report 83-49 (DC System Short Circuit Current in Excess of FSAR Limit), which is reportable to the NRC per Technical Specification 6.9.2.a(8).

David J VandeWalle
Nuclear Licensing Administrator

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

Attachment

OC0883-0003A-NL02

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Attachment to LER 83-049
Consumers Power Company
Palisades Plant
Docket 50-255

While performing a review of the Palisades Plant FSAR for updating purposes, reviewers discovered that the current resulting from a short-circuit in the 125 V DC system (maximum DC system current) will result in the temperature of the associated conductors exceeding the values specified in the Palisades Plant FSAR Section 8.5.2.3. The condition results from the installation of larger capacity station batteries during the 1981 refueling outage.

Analysis shows that the FSAR specified conductor temperature limits will be exceeded for #4 AWG conductors and smaller assuming four cycles for system protection breakers to open.

Operation of the DC system under normal and accident conditions is not affected by the discrepancy because the design load current does not result in conductor temperatures that exceed the limits stated in the Palisades Plant FSAR.

Initial corrective measures under consideration are: 1) Evaluation of the DC loads that are fed by panels D11, D11A, D21, D21A and their feeder cables to determine the adequacy of the cables to withstand the higher short-circuit current capability of the new batteries. 2) Replacement of all inadequate cables with cables of sufficient current carrying capability to withstand the short-circuit current of the new batteries and maintain temperatures within the FSAR limits. 3) Provide a technical seminar for the Palisades Plant Technical Department to discuss system protection electrical considerations for future modifications.

Additional information on corrective measures will be provided when available.