

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)

PALISADES PLANT

DOCKET NUMBER (2)

0 5 0 0 0 2 5 1 5 1 OF 0 3

PAGE (3)

TITLE (4)

REACTOR TRIP DUE TO LOSS OF LOAD

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)
03	26	86	86	015	00	04	25	86	N/A	050000
									N/A	050000

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)

20.406(e)

X

80.73a(2)(iv)

73.71(b)

POWER LEVEL (10)

01610

20.406(a)(1)(i)

80.36(a)(1)

80.73a(2)(v)

73.71(a)

20.406(a)(1)(ii)

80.36(a)(2)

80.73a(2)(vi)

OTHER (Specify in Abstract below and in Test, NRC Form 306A)

20.406(a)(1)(iii)

80.73a(2)(i)

80.73a(2)(vii)(A)

20.406(a)(1)(iv)

80.73a(2)(ii)

80.73a(2)(vii)(B)

20.406(a)(1)(v)

80.73a(2)(iii)

80.72a(2)(a)

LICENSEE CONTACT FOR THIS LER (12)

NAME

TELEPHONE NUMBER

R A Fenech, Technical Engineer, Palisades

AREA CODE

616 764-8913

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC
X	TL	IRG	W1210	Y					

SUPPLEMENTAL REPORT EXPECTED (14)

EXPECTED SUBMISSION DATE (15)

MONTH DAY YEAR
08 01 86

X YES (If yes, complete EXPECTED SUBMISSION DATE)

NO

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

On March 26, 1986, a turbine generator trip occurred, resulting in an automatic reactor trip due to loss of load. The Reactor Protection System (RPS) functioned as designed to shut down the reactor. The occurrence was initiated by an under-excitation condition on the main generator which reached the loss-of-field trip setpoint. The under-excitation condition was an unanticipated result of moving the voltage regulator handswitch from the automatic position to the test position during voltage regulator system testing.

The root cause of the occurrence has not been determined. Evaluation is continuing. Since the observed problem was related only to the test position of the handswitch, plant operation was resumed with the handswitch caution tagged to be left in the automatic (normal) position.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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		86	015	00	02	OF	03

TEXT (If more space is required, use additional NRC Form 385A's) (17)

Description of Event

On March 26, 1986, at 1258, a turbine generator [TG;TB] trip occurred, resulting in an automatic reactor [RTC;AB] trip due to loss of load. The plant was operating at approximately 60% power at the time of the occurrence. All plant systems, including the Reactor Protection System (RPS) [JC], functioned normally in response to the occurrence.

At 1258, preparations were being made to test the main generator [TB] voltage regulator [RG;TL] (Westinghouse WMA). As part of the test, the voltage regulator function selector handswitch [HS;TL] was changed from the "AUTO" position to the "TEST" position. Immediately, the main generator experienced an excessive under-excitation condition which reached the loss-of-field relay [RLY;TL] setpoint. The loss-of-field condition ultimately initiated a turbine generator trip and RPS actuation.

Since the problem was exclusive of the automatic (normal) mode of voltage regulator operation, as determined by previous plant operation and subsequent testing of the automatic portion of the circuitry, continued plant operation in the automatic mode was permitted. The plant was returned to power operation on March 27, 1986, at 2027.

Cause of Event

At this time, extensive investigation has been unable to determine the root cause of the problem. The circuitry is designed such that changing the position of the handswitch should have had no effect on generator excitation. No abnormalities have been identified in subsequent checks of the circuitry and related components.

Continued evaluation of the observed voltage regulator control problems will be conducted at a non-nuclear Consumers Power Company facility which utilizes similar voltage regulator circuitry.

Corrective Actions

For the interim period, a caution tag has been placed on the voltage regulator handswitch with instruction that the handswitch is to remain in the "AUTO" position at all times, except when an emergency situation would dictate otherwise. The plant has operated with the switch in the "AUTO" position for over three weeks with no further problems noted.

Additional corrective actions may be implemented pending completion of the cause evaluation.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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

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		8 6	- 0 1 5	- 0 0	0 3	OF	0 3

TEXT (If more space is required, use additional NRC Form 385A's) (17)

Analysis of Event

In this event, the RPS functioned as designed to automatically shut down the reactor. While the magnitude of the transient resulting from a reactor trip varies with the power level, a reactor trip from full power is an analyzed occurrence which would not place the plant in a condition which is outside of its design basis.

Additional Information

Similar events were reported in LERs 85-010 and 85-016.



Consumers
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April 30, 1986

US Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

DOCKET 50-255 - LICENSE DPR-20 - PALISADES PLANT -
LICENSEE EVENT REPORT 86-015 - (REACTOR TRIP DUE TO LOSS OF LOAD)
(REPLACES SUBMITTAL OF APRIL 25, 1986)

Licensee Event Report (LER) 86-015, (Reactor Trip Due to Loss of Load) is attached. The LER was previously submitted on April 25, 1986 and contained several format errors. The attached has been revised to comply with the format specified by IE Information Notice 86-08. This event is reportable to the NRC per 10CFR50.73(a)(2)(iv).

Thomas C Bordine
Staff Licensing Engineer

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

Attachment

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