

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1): Fort Calhoun Station, Unit No. 1
DOCKET NUMBER (2): 050000285
PAGE (3): 1 OF 03

TITLE (4): Emergency Diesel Generator

| 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) |
| 05 | 06 | 87 | 87 | 017 | 00 | 06 | 05 | 87 | N | | 050000 |
| | | | | | | | | | | | 050000 |

OPERATING MODE (9): 5

POWER LEVEL (10): 01010

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

| | | | |
|--|--|---|--|
| <input type="checkbox"/> 20.402(b) | <input type="checkbox"/> 20.408(a) | <input type="checkbox"/> 60.73(a)(2)(iv) | <input type="checkbox"/> 73.71(b) |
| <input type="checkbox"/> 20.408(a)(1)(ii) | <input type="checkbox"/> 60.38(a)(1) | <input type="checkbox"/> 60.73(a)(2)(v) | <input type="checkbox"/> 73.71(a) |
| <input type="checkbox"/> 20.408(a)(1)(iii) | <input type="checkbox"/> 60.38(a)(2) | <input type="checkbox"/> 60.73(a)(2)(vi) | OTHER (Specify in Abstract below and in Text, NRC Form 365A) |
| <input type="checkbox"/> 20.408(a)(1)(iv) | <input checked="" type="checkbox"/> 60.73(a)(2)(i) | <input type="checkbox"/> 60.73(a)(2)(viii)(A) | |
| <input type="checkbox"/> 20.408(a)(1)(v) | <input type="checkbox"/> 60.73(a)(2)(ii) | <input type="checkbox"/> 60.73(a)(2)(viii)(B) | |
| <input type="checkbox"/> 20.408(a)(1)(vi) | <input type="checkbox"/> 60.73(a)(2)(iii) | <input type="checkbox"/> 60.73(a)(2)(ix) | |

LICENSEE CONTACT FOR THIS LER (12):
NAME: Bruce W. Shubert, Shift Technical Advisor
Fort Calhoun Station, Unit No. 1
TELEPHONE NUMBER: 402 426-4011

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 |
|-------|--------|-----------|--------------|---------------------|-------|--------|-----------|--------------|---------------------|
| | | | | | | | | | |
| | | | | | | | | | |

SUPPLEMENTAL REPORT EXPECTED (14):
 YES (If yes, complete EXPECTED SUBMISSION DATE) NO
EXPECTED SUBMISSION DATE (15): MONTH: DAY: YEAR:

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

The annual inspection of Emergency Diesel Generator D-2 was scheduled for January, 1987. Due to the refueling shutdown scheduled to commence in early March, 1987, OPPD personnel began investigating the allowable delay for performance of the surveillance. During this review it was discovered that delay until refueling was appropriate based upon completion date of the test in 1986. However, it was also discovered that the annual inspection of Emergency Diesel Generator D-2, scheduled for January, 1986, coincided with the plant start up for the tenth operating cycle. Due to an assumption that the test carried a time allowance of plus or minus twenty-five percent, the test was postponed until the last week in February. During conversations with the Nuclear Regulatory Commission on February 28, 1987, concerning delay, if necessary, of the 1987 test, it was determined that the test interval requirements may not be interpreted in that manner. Using the revised interpretation, Technical Specification 3.7(1d) was violated. Technical Specification 3.7(1d) requires the emergency diesel generators to be given a thorough inspection at least annually following the manufacturer's recommendations for this class of standby service.

The event has been reviewed from a safety perspective and determined that this event posed no significant safety hazards.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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| | | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | | | |
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TEXT (if more space is required, use additional NRC Form 388A's) (17)

The annual inspection of Emergency Diesel Generator D-2 was scheduled for January, 1987. Due to the refueling shutdown scheduled to commence in early March, 1987, OPPD personnel began investigating the allowable delay for performance of the surveillance. During this review it was discovered that delay until refueling was appropriate based upon completion date of the test in 1986. However, it was also discovered that the annual inspection of Emergency Diesel Generator D-2, scheduled for January, 1986, coincided with the plant start up for the tenth operating cycle. Due to an assumption that the test carried a time allowance of plus or minus twenty-five percent, the test was postponed until the last week in February. During conversations with the Nuclear Regulatory Commission on February 28, 1987, concerning delay, if necessary, of the 1987 test, it was determined that the test interval requirements may not be interpreted in that manner. Using the revised interpretation, Technical Specification 3.7(1d) was violated. Technical Specification 3.7(1d) requires the emergency diesel generators to be given a thorough inspection at least annually following the manufacturer's recommendations for this class of standby service. The emergency diesels are General Motors V-20 Turbocharged, rated at 2500 KW, at 4.16 kV and 60 Hz.

Emergency power at the Fort Calhoun Station is ensured by means of two emergency diesel generators supplying vital station loads and station batteries. The safety significance of the event was evaluated to determine if any safety margin was reduced. To ensure operability of the emergency diesel generators, Technical Specification 3.7 requires the emergency diesel generators to be started once a month (demonstrating the 10 second start criterion), synchronized with the normal power source and loaded for a minimum of 15 minutes. During a review of the master control room and shift supervisors' logs, in conjunction with a review of the surveillance tests for operating cycle ten, it was determined that the emergency diesel generators had not failed any of the tests, providing assurance of their operability. A review of the emergency diesel generator outage log revealed that emergency diesel generator D-1 was out of service for 6 days 4.4 hours during operating cycle ten, emergency diesel generator D-2 was out for 5 days 21.5 hours during operating cycle ten, both generator down times due to the annual inspection. This is an additional indication of the acceptability of the diesels. Also, two unanticipated starts were recorded during operating cycle ten. The first, on July 2, 1986, resulted from an automatic reactor trip from one hundred percent power due to inverter failure, reported in LER-86-001. The second, on August 1, 1986, was due to a manual reactor trip from eighty-five percent power due to generator bus duct overheating problems, reported in LER-86-004. In both cases, the emergency diesel generators automatically started and were on standby waiting to be loaded. This also is a demonstration of the reliability of the diesel generators despite a one-month delay in conducting the surveillance test. Thus, this event posed no significant safety hazards.

It should also be noted that a plus or minus twenty-five percent interval extension for surveillance items is a part of standard Technical Specifications. This substantiates the position that there is not a safety concern with a twenty-five percent extension to this surveillance test.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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| FACILITY NAME (1) Fort Calhoun Station, Unit No. 1 | DOCKET NUMBER (2) 0 5 0 0 0 2 8 5 8 7 - 0 1 1 7 - 0 1 0 | LER NUMBER (8) | | | PAGE (3) | |
| | | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | | |
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TEXT (If more space is required, use additional NRC Form 388A's) (17)

Corrective action has been initiated to prevent the recurrence of this problem. The importance of conducting surveillance tests when scheduled has been reiterated to station personnel. An amendment to the emergency diesel generator Technical Specification 3.7 has been submitted to the Nuclear Regulatory Commission to revise the annual inspection surveillance interval to a refueling surveillance interval. This should eliminate difficulties in conducting the emergency diesel generator preventative maintenance during normal power operation and insure that both diesel generators will be available during power operation. Additionally, an application for amendment to the Technical Specifications is being processed to add a plus or minus twenty-five percent time allowance to the existing surveillance intervals for all surveillance tests not currently covered by this clause. This should ensure that the tests, if impossible to complete as scheduled, can be conducted at the earliest possible date, without violating Technical Specifications or reducing the margin of safety.

This is the third LER for failure to perform a scheduled surveillance test within the Technical Specification interval. Others are LER-86-005 and LER-87-016.

Omaha Public Power District
1623 Harney Omaha, Nebraska 68102-2247
402/536-4000

June 5, 1987
LIC-87-395

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

Reference: Docket No. 50-285

SUBJECT: Licensee Event Report for the Fort Calhoun Station

Gentlemen:

Please find attached Licensee Event Report 87-017 dated June 5, 1987. This report is being submitted per requirements of 10 CFR 50.73.

Sincerely,

for R. L. Andrews

R. L. Andrews
Division Manager
Nuclear Production

RLA:rge

Attachment

- c: J. E. Gagliardo, NRC Chief
W. A. Paulson, NRC Project Manager
P. H. Harrell, NRC Senior Resident Inspector
INPO Records Center
American Nuclear Insurers
SARC Chairman
PRC Chairman, % R. G. Ellis
Fort Calhoun File (2)
B. W. Shubert
Fort Calhoun Station Training, % J. J. Fluehr

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