

LICENSEE EVENT REPORT (LER)

| | | | | | | | | | | | | | | | | | | | | | | |
|--|--------|--|----------------|-------------------|-----------------|------------------|-----------------|-----------|----------------------------------|--|---|---|---|--|-----|------|---|---|---|----------------------|---|---|
| FACILITY NAME (1) Haddam Neck | | | | | | | | | | DOCKET NUMBER (2) 0 5 0 0 0 2 1 3 1 | | | | | | | | | | PAGE (3) 1 OF 0 3 | | |
| TITLE (4) Failure of Service Water Valve Motor Operators | | | | | | | | | | | | | | | | | | | | | | |
| 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 Not Applicable | | | DOCKET NUMBER(S) 0 5 0 0 0 | | | | | | | | | | |
| 0 | 8 | 2 | 4 | 8 | 4 | 8 | 5 | 0 | 1 | 0 | 0 | 0 | 5 | 2 | 0 | 8 | 5 | 0 | 5 | 0 | 0 | 0 |
| OPERATING MODE (9) 6 | | THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5: (Check one or more of the following) (11) | | | | | | | | | | | | | | | | | | | | |
| POWER LEVEL (10) 0 1 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) | | | | X 50.73(a)(2)(v) | | | | 73.71(c) | | | | | | | | |
| | | 20.405(a)(1)(ii) | | | | 50.36(c)(2) | | | | 50.73(a)(2)(vii) | | | | OTHER (Specify in Abstract below and in Text, NRC Form 366A) | | | | | | | | |
| | | 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)(ix) | | | | | | | | | | | | |
| LICENSEE CONTACT FOR THIS LER (12) | | | | | | | | | | | | | | | | | | | | | | |
| NAME Richard S. Yankowski, Engineer | | | | | | | | | | | | TELEPHONE NUMBER AREA CODE 210 13 216 17 1-12 1516 | | | | | | | | | | |
| 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 | B | I | T | I | S | I | V | L | I | 2 | 0 | 1 | 0 | Y | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| 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)

During surveillance testing on August 28, 1984, with the plant shut down for a planned refueling and maintenance outage, both motor operated service water outlet isolation valves, for the component cooling water heat exchangers, failed to operate when energized. Per plant surveillance procedure, both valves are required to close within ninety (90) seconds. Both motor operators were immediately repaired and retested satisfactorily. This event is reportable pursuant to 10CFR50.73(a)(2)(v)(D).

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/85

| FACILITY NAME (1) | DOCKET NUMBER (2) | LER NUMBER (6) | | | PAGE (3) | | |
|-------------------|-------------------|----------------|-------------------|-----------------|----------|-----|------------|
| | | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | | | |
| Haddam Neck | 0 5 0 0 0 2 1 3 | 8 5 | — | 0 1 0 | — | 0 0 | 0 2 OF 0 3 |

TEXT (If more space is required, use additional NRC Form 366A's) (17)

Event Description

During surveillance testing on August 28, 1984, with the plant shutdown in Mode 6, the motor operated services water outlet isolation valves (SW-MOV-3 and SW-MOV-4) for the component cooling water heat exchangers failed to operate when the motors were energized. However, both motor operators performed satisfactory in the manual position.

Plant surveillance procedure requires that both valves close within ninety (90) seconds from the time the control switch is placed in the closed position. The procedure also requires that the motor operators be tested every refueling outage. When the motor operators were energized, the cause of the failure was not readily apparent. During normal system operation, the valves are manually throttled to provide the required service water flow through the component cooling water heat exchangers to maintain the desired component cooling water outlet temperature for cooling primary plant equipment. At the time of surveillance testing, both motor operators were in the motor position.

Reportability

This event is reportable because: A failure of one emergency diesel generator in the post LOCA condition coincident with a complete loss of normal station service A.C. power will result in only one service water pump being automatically started.

This is the most limiting condition for the service water system since one pump must supply the post LOCA service water cooling loads. The major post LOCA heat loads that would require service water cooling immediately in this mode are the containment air recirculation coolers, the operating emergency diesel generator, and the residual heat removal system heat exchangers. Once the emergency diesel generator has attained speed and voltage, the motor operated service water outlet valves for the component cooling water heat exchangers automatically shut to isolate service water flow to nonessential components. With one service water pump operating, failure of the service water motor operated valves to shut would significantly reduce service water flow to the major post accident heat loads.

Flow analysis has shown that the containment air recirculation coolers would have reduced service water flow thus impairing their safety function. The result would be a degradation in the ability of the containment air recirculation coolers to mitigate the radiological consequences of the accident. Therefore, this condition is reportable pursuant to 10CFR50.73 (a)(2)(v)(D).

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| | | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | | | |
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TEXT (If more space is required, use additional NRC Form 366A's) (17)

Failure Cause

The failure cause of SW-MOV-3 has not been determined due to inadequate maintenance records.

SW-MOV-4 was found to have a broken gear limit switch rotor. The failure cause was determined to be cyclic fatigue of the phenolic rotor.

Corrective Action

Both motor operators were completely disassembled, internal parts were cleaned, reassembled, and repacked with grease. Both were retested satisfactorily and declared operational for use. An extensive valve motor operator preventative maintenance program has been implemented to prevent recurrence.



CONNECTICUT YANKEE ATOMIC POWER COMPANY

HADDAM NECK PLANT

RR#1 • BOX 127E • EAST HAMPTON, CONN. 06424

May 20, 1985

U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, D. C. 20555

Reference: Facility Operating License No. DPR-61
Docket No. 50-213
Reportable Occurrence 50-213/LER 85-010-00

Gentlemen:

This letter forwards the Licensee Event Report 85-009-010 required to be submitted within thirty days pursuant to the requirements of Connecticut Yankee Technical Specifications. Please note that the event was originally determined not to be reportable, however, the Plant Operations Review Committee recommended that an engineering evaluation be conducted regarding the reportability of the event. The ensuing engineering evaluation found the event to be reportable.

Very truly yours,

Richard H. Graves
Station Superintendent

RHG:RY/dlf

Attachment: LER 85-010-00

cc: Dr. T. E. Murley, Region 1

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11