

LICENSEE EVENT REPORT (LER)

| | | |
|---|-------------------------------|--------------------|
| FACILITY NAME (1) Millstone Nuclear Power Station Unit 3 | DOCKET NUMBER (2) 05000423 | PAGE (3) 1 OF 2 |
|---|-------------------------------|--------------------|

TITLE (4)
Reactor Trip Due to SSPS General Warning

| 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 | | |
| 02 | 13 | 86 | 86 | 017 | 00 | 03 | 14 | 86 | DOCKET NUMBER(S) 05000 | | |

OPERATING MODE (9) 1

POWER LEVEL (10) 0.15

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5. (Check one or more of the following) (11)

| | | | |
|--|---|---|--|
| <input type="checkbox"/> 20.402(b) | <input type="checkbox"/> 20.405(c) | <input checked="" type="checkbox"/> 50.73(a)(2)(iv) | <input type="checkbox"/> 73.71(b) |
| <input type="checkbox"/> 20.405(a)(1)(i) | <input type="checkbox"/> 50.36(e)(1) | <input type="checkbox"/> 50.73(a)(2)(v) | <input type="checkbox"/> 73.71(c) |
| <input type="checkbox"/> 20.405(a)(1)(ii) | <input type="checkbox"/> 50.36(e)(2) | <input type="checkbox"/> 50.73(a)(2)(vi) | OTHER (Specify in Abstract below and in Text, NRC Form 366A) |
| <input type="checkbox"/> 20.405(a)(1)(iii) | <input type="checkbox"/> 50.73(a)(2)(iii) | <input type="checkbox"/> 50.73(a)(2)(vii)(A) | |
| <input type="checkbox"/> 20.405(a)(1)(iv) | <input type="checkbox"/> 50.73(a)(2)(ii) | <input type="checkbox"/> 50.73(a)(2)(vii)(B) | |
| <input type="checkbox"/> 20.405(a)(1)(v) | <input type="checkbox"/> 50.73(a)(2)(iii) | <input type="checkbox"/> 50.73(a)(2)(ix) | |

LICENSEE CONTACT FOR THIS LER (12)

NAME: David McDaniel, Reactor Engineer

TELEPHONE NUMBER: 203 447-1791

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 |
|-------|--------|-----------|--------------|---------------------|-------|--------|-----------|--------------|---------------------|
| X | JC | | W351 | Y | | | | | |

SUPPLEMENTAL REPORT EXPECTED (14)

See Text

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)

At 1133 on 2/13/86, while operating at 15% reactor power, the plant received a reactor trip caused by a General Warning Alarm in both trains of the Solid State Protection System (SSPS). Operators verified that all rods inserted and that all reactor trip breakers opened.

The A train of SSPS had a general warning alarm present due to a surveillance test in progress. A spurious General Warning Alarm occurred on the B train of SSPS, the cause of which is still unknown.

This report is being submitted in accordance with 10CFR50.73 (a) (2) (iv).

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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|--|-------------------------------|----------------|-------------------|-----------------|----------|-------|
| FACILITY NAME (1) Millstone Nuclear Power Station Unit 3 | DOCKET NUMBER (2) 05000423 | LER NUMBER (6) | | | PAGE (3) | |
| | | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | | |
| | | 86 | 017 | 00 | 02 | OF 02 |

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

At 1133 on 10/13/86, while operating at 15% reactor power with the main turbine generator off-line, the plant received a reactor trip due to simultaneous General Warning Alarms in both trains of Solid State Protection (SSPS). A General Warning Alarm is received when a train of SSPS is taken out of service. As both SSPS cannot be out of service at the same time a reactor trip will occur if two General Warning Alarms exist simultaneously.

At the time of the reactor trip the A SSPS train was out of service, or in a General Warning condition, due to surveillance testing. A spurious General Warning occurred on the B train of SSPS and the reactor tripped. The reactor trip breakers opened, all rods inserted, and all safety equipment operated as expected.

The B train General Warning lasted less than 40 ms. At the time the second General Warning occurred there was no work going on in or near the B SSPS. A check was also done to see if any radios were in the area or if any welding was going on which could cause a noise spike at the time of the trip. There were no radios or welding in areas which could have affected the SSPS.

The conditions at the time of the trip in both SSPS trains were duplicated and the A SSPS train surveillance was reperformed to see if the trip could be caused again. However, the surveillance was reperformed with no failures. A check of all inputs to the general warning circuit was also performed on both trains of SSPS. No abnormalities were noted.

A review of the process computer digital change of state file for the month prior to the trip was also performed. The review revealed that in the four hours prior to the trip, three spurious General Warning Alarms had occurred, each lasting less than 500 ms. A study was done to see if any common element, such as starting or stopping major electrical loads could be tied to the spurious General Warning Alarms but none could be found.

A monitoring program was set up using special test equipment on the General Warning Alarm and some of its inputs for the B SSPS train. The monitoring system was left in place for ten days before it was removed with no spurious General Warning Alarms occurring. In addition, the process computer digital change of state alarm log is still being reviewed for spurious General Warning Alarms.

The investigation to date has not been able to identify a cause of the spurious General Warning Alarms on 2/13/86. This problem does not have any safety implications to plant personnel or the public as the design of the system is fail-safe. It will cause a trip rather than prevent one from occurring.

If the root cause of this event is identified and corrective action is implemented, a revision to this report will be submitted.

This report is being submitted in accordance with 10CFR50.73 (a) (2) (iv).

NORTHEAST UTILITIES



THE CONNECTICUT LIGHT AND POWER COMPANY
WESTERN MASSACHUSETTS ELECTRIC COMPANY
HOYOKE WATER POWER COMPANY
NORTHEAST UTILITIES SERVICE COMPANY
NORTHEAST NUCLEAR ENERGY COMPANY

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March 14, 1986
MP-8817

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

Reference: Facility Operating License No. NPF-49
Docket No. 50-423
Licensee Event Report 50-423/86-017-00

Gentlemen:

This letter forwards Licensee Event Report 86-017-00 required to be submitted within thirty days pursuant to 10CFR50.73 (a) (2) (iv), any event or condition that resulted in manual or automatic actuation of any Engineered Safety Feature (ESF).

Yours truly,

NORTHEAST NUCLEAR ENERGY COMPANY

Wayne D. Romberg
Station Superintendent
Millstone Nuclear Power Station

WDR/DM:se

Attachment: LER 86-017-00

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

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