

LICENSEE EVENT REPORT (LER)

APPROVED ONS NO. 2180-0104
EXPIRES - 8/31/85

FACILITY NAME (1)

Limerick Generating Station - Unit 1

DOCKET NUMBER (2)

0 5 0 0 0 3 5 2

PAGE (3)

1 OF 0 3

TITLE (4)

Isolation of Engineered Safety Feature Systems

| 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 NAME | DOCKET NUMBER (8) |
| 0 4 | 3 0 | 8 5 | 8 5 | 0 4 8 | 0 0 | 0 5 | 2 2 | 8 5 | | 0 5 0 0 0 1 1 |
| OPERATING MODE (9) | | | THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11) | | | | | | | |
| 4 | | | <input checked="" type="checkbox"/> 20.402(a) <input type="checkbox"/> 20.406(a) <input checked="" type="checkbox"/> 20.73(a)(2)(iv) <input type="checkbox"/> 20.731(a) | | | | | | | |
| POWER LEVEL (10) | | | <input type="checkbox"/> 20.408(a)(1)(i) <input type="checkbox"/> 20.34(a)(1) <input type="checkbox"/> 20.73(a)(2)(v) <input type="checkbox"/> 20.731(a) | | | | | | | |
| 0 0 0 | | | <input type="checkbox"/> 20.408(a)(1)(ii) <input type="checkbox"/> 20.36(a)(2) <input type="checkbox"/> 20.73(a)(2)(vi) <input type="checkbox"/> OTHER (Specify in Abstract below and in Title, NRC Form 266-A) | | | | | | | |
| | | | <input type="checkbox"/> 20.408(a)(1)(iii) <input type="checkbox"/> 20.73(a)(2)(i) <input type="checkbox"/> 20.73(a)(2)(vii)(A) <input type="checkbox"/> | | | | | | | |
| | | | <input type="checkbox"/> 20.408(a)(1)(iv) <input type="checkbox"/> 20.73(a)(2)(ii) <input type="checkbox"/> 20.73(a)(2)(viii) <input type="checkbox"/> | | | | | | | |
| | | | <input type="checkbox"/> 20.408(a)(1)(v) <input type="checkbox"/> 20.73(a)(2)(iii) <input type="checkbox"/> 20.73(a)(2)(ix) <input type="checkbox"/> | | | | | | | |
| | | | <input type="checkbox"/> 20.408(a)(1)(vi) <input type="checkbox"/> 20.73(a)(2)(iv) <input type="checkbox"/> 20.73(a)(2)(x) <input type="checkbox"/> | | | | | | | |

LICENSEE CONTACT FOR THIS LER (12)

NAME

John C. Nagle, Engineer

TELEPHONE NUMBER

AREA CODE

2 1 5 8 4 1 - 5 1 8 4

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 | J F F U | | B 5 6 9 | N | | | | | | | |
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SUPPLEMENTAL REPORT EXPECTED (14)

☐ YES (If yes, complete EXPECTED SUBMISSION DATE)☒ NO

EXPECTED SUBMISSION DATE (15)

MONTH DAY YEAR

ABSTRACT (Limit to 1000 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

Abstract: 85-048

On April 30, 1985, with Unit 1 in the cold shutdown condition, a blown fuse in the nuclear steam supply shutoff system inboard logic resulted in isolation of the reactor water cleanup system, primary containment instrument gas system, reactor enclosure ventilation system, and RHR shutdown cooling system. The fuse was replaced and all affected systems were returned to normal operation.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/85

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|--|--|----------------|----------------------|--------------------|----------|-----|--|
| FACILITY NAME (1) Limerick Generating Station Unit 1 | DOCKET NUMBER (2) 0 5 0 0 0 3 5 2 8 5 | LER NUMBER (3) | | | PAGE (3) | | |
| | | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | | | |
| | | 0 4 8 | 0 0 | 0 2 | OF | 0 8 | |

TEXT (If more space is required, use additional NRC Form 366a (1))

Description of the Event:

On April 30, 1985, at 7:28 p.m., with Unit 1 in cold shutdown, fuse B21H-F15A, manufactured by Buss, Model No. MIN5, in the nuclear steam supply shutoff system logic blew. The blown fuse resulted in inboard isolation of the reactor water cleanup system, primary containment instrument gas system, reactor enclosure ventilation system, and RHR shutdown cooling system. When the fuse blew, the isolation was appropriately annunciated in the control room.

Consequences of the Event:

The fuse was replaced at 7:50 p.m. and the inboard isolations on the reactor water cleanup, primary containment instrument gas, reactor enclosure ventilation, and RHR shutdown cooling systems were reset. Reactor coolant temperature and chemistry remained essentially unchanged during this event. All systems operated as designed and there were no adverse effects due to the isolations.

Cause of the Event:

The specific cause of the blown fuse is not known. Investigation into the event indicated no other plant activities being performed at the time which could be associated with the blown fuse.

After a previous occurrence of this event, the steady state current was measured and found to be one fifth of the fuse rating. A current recorder was also installed for one month but no significant current fluctuations were observed during that period.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/85

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|--|---|----------------|----------------------|--------------------|----------|--|--|
| FACILITY NAME (1) Limerick Generating Station Unit 1 | DOCKET NUMBER (2) 0 5 0 0 0 3 5 2 8 5 - 0 4 8 - 0 0 0 3 OF 0 3 | LER NUMBER (6) | | | PAGE (3) | | |
| | | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | | | |
| | | | | | | | |

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

Corrective Actions:

The 5 amp fuse was replaced and the inboard isolations reset. A physical inspection of the nuclear steam supply shutoff system logic was performed but no loose connections or abnormalities were discovered. A temporary circuit alteration was installed which added in-line fuses to each parallel inboard logic string supplied by the 5 amp fuse in an attempt to isolate and locate the ground fault if it should reoccur.

Previous Similar Occurrences

LGS LER: 85-008.

PHILADELPHIA ELECTRIC COMPANY

2301 MARKET STREET

P.O. BOX 8699

PHILADELPHIA, PA. 19101

(215) 841-4000

May 22, 1985

Docket No. 50-352

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Washington, DC 20555

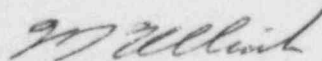
SUBJECT: Licensee Event Report
Limerick Generating Station - Unit 1

This LER concerns the isolation of various engineered safety feature systems due to a blown fuse in the Nuclear Steam Supply Shutoff System inboard logic.

| | |
|------------------|---|
| Reference: | Docket No. 50-352 |
| Report Number: | 85-048 |
| Revision Number: | 00 |
| Event Date: | April 30, 1985 |
| Report Date: | May 22, 1985 |
| Facility: | Limerick Generating Station P.O. Box A, Sanatoga, PA 19464 |

This LER is being submitted pursuant to the requirements of 10 CFR 50.73(a)(2)(iv).

Very truly yours,



W. T. Ullrich
Superintendent
Nuclear Generation Division

cc: Dr. Thomas E. Murley, Administrator, Region I, USNRC
J. T. Wiggins, Senior Site Inspector
See Service List

IE22
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c: Judge Helen F. Hoyt
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Atomic Safety & Licensing Appeal Board
Atomic Safety & Licensing Board Panel
Docket & Service Section (3 Copies)
James Wiggins
Timothy R. S. Campbell

January 16, 1985