

LICENSEE EVENT REPORT (LER)

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|--|--|--------|-----|-----------|--|---|--|--------------------|------|--------------------------------------|--|-------------------|--|-----------|-----------------|---|--|-------------------------------|--|----------------------|-----|------|--|--|--|--|----------------|--|--|--|--|--|------------------|--|--|-----------|--|--|--|--|--|
| FACILITY NAME (1) Susquehanna Steam Electric Station - Unit 2 | | | | | | | | | | DOCKET NUMBER (2) 0 5 0 0 0 3 8 8 | | | | | | | | | | PAGE (3) 1 OF 0 2 | | | | | | | | | | | | | | | | | | | | | |
| TITLE (4) Reactor Water Level Switches Out of Calibration. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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) | | | | | | | | |
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| OPERATING MODE (9) 1 | | | | | | THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §. (Check one or more of the following: (11)) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| POWER LEVEL (10) 1 0 0 | | | | | | 20.402(b) | | | | | | 20.406(c) | | | | | | 50.73(a)(2)(iv) | | | | | | 73.71(b) | | | | | | | | | | | | | | | | | |
| | | | | | | 20.406(a)(1)(i) | | | | | | 50.36(c)(1) | | | | | | 50.73(a)(2)(v) | | | | | | 73.71(c) | | | | | | | | | | | | | | | | | |
| | | | | | | 20.406(a)(1)(ii) | | | | | | 50.36(c)(2) | | | | | | X 50.73(a)(2)(vii) | | | | | | OTHER (Specify in Abstract below and in Text, NRC Form 366A) | | | | | | | | | | | | | | | | | |
| | | | | | | 20.406(a)(1)(iii) | | | | | | 50.73(a)(2)(i) | | | | | | 50.73(a)(2)(viii)(A) | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | 20.406(a)(1)(iv) | | | | | | 50.73(a)(2)(ii) | | | | | | 50.73(a)(2)(viii)(B) | | | | | | | | | | | | | | | | | | | | | | | |
| 20.406(a)(1)(v) | | | | | | 50.73(a)(2)(iii) | | | | | | 50.73(a)(2)(x) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LICENSEE CONTACT FOR THIS LER (12) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NAME D.J. Gandenberger | | | | | | | | | | | | | | | | TELEPHONE NUMBER 7 1 7 5 4 2 - 1 3 9 1 4 | | | | | | | | | | | | | | | | | | | | | | | | | |
| COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CAUSE | | SYSTEM | | COMPONENT | | MANUFACTURER | | REPORTABLE TO NPDs | | CAUSE | | SYSTEM | | COMPONENT | | MANUFACTURER | | REPORTABLE TO NPDs | | | | | | | | | | | | | | | | | | | | | | | |
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| SUPPLEMENTAL REPORT EXPECTED (14) | | | | | | | | | | | | | | | | EXPECTED SUBMISSION DATE (15) | | MONTH | | DAY | | YEAR | | | | | | | | | | | | | | | | | | | |
| X YES (If yes, complete EXPECTED SUBMISSION DATE) | | | | | | | | | | | | | | | | NO | | 0 7 | | 0 1 | | 8 5 | | | | | | | | | | | | | | | | | | | |

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

On February 12, 1985, during the performance of a scheduled surveillance, the setpoints for three reactor water level switches were found to be outside the acceptance criteria. Two of the switches actuate the Reactor Auto-Scram Trip Logic Channels "A2" and "B2" in the Reactor Protection System on low reactor vessel water level. The fact that the setpoints for the switches were outside of the acceptance criteria has been attributed to instrument drift. The instruments were recalibrated within final tolerance in accordance with the surveillance procedure and no abnormalities were noted.

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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) Susquehanna Steam Electric Station Unit 2 | DOCKET NUMBER (2) 05000388 | LER NUMBER (6) | | | PAGE (3) | | |
| | | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | | | |
| | | 85 | 0019 | 00 | 02 | OF | 02 |

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

During the performance of "18 Month Calibration of Reactor Vessel Water Level Channels LIS-B21-N024A,B,C, and D (SI-280-305)" on February 12, 1985, switch 2B of LIS-B21-N024A, switch 1A of LIS-B21-N024C, and switch 1A of LIS-B21-N024D were found outside of the acceptance criteria setpoints. All three of these instruments are Barton Model 288A level indicating switches. Switch 2B of LIS-B21-N024A actuates Division I Reactor Core Isolation Cooling (RCIC) high water level trip. Switch 1A of LIS-B21-N024C actuates Reactor Auto-Scram Trip Logic Channel "A2" in the Reactor Protection System (RPS), and switch 1A of LIS-B21-N024D actuates Reactor Auto-Scram Trip Logic Channel "B2" in the RPS on low reactor water level. Switch 1A of LIS-B21-N024C and switch 1A of LIS-B21-N024D also indirectly actuate some Division II isolation functions on low reactor water level through the logic of the RPS and Nuclear Steam Supply Shutoff System (NSSSS).

In the event of decreasing reactor water level, a reactor scram would still have occurred at a level within the Technical Specification value, even though the setpoints for switch 1A of LIS-B21-N024C and switch 1A of LIS-B21-N024D were less conservative than the Technical Specification allowable value of 11.5 inches. Switch 1A of LIS-B21-N024A and switch 1A of LIS-B21-N024B would have actuated Reactor Auto-Scram Trip Logic Channels "A1" and "B1", respectively, resulting in a scram due to RPS logic arrangement. The Division II isolation functions from NSSSS to the Outboard RHR Discharge Isolation Valve to Radwaste and the B Loop RHR LPCI Injection Valve require a trip input from both LIS-B21-N024C and LIS-B21-N024D in order to actuate. These functions would not have occurred until the reactor vessel level decreased to 9.6 inches indicated level which was the as found setpoint of switch 1A of LIS-B21-N024D. The corresponding Division I isolation functions would have occurred at the level required by Technical Specifications since their trip signal originates at LIS-B21-N024A and LIS-B21-N024B.

The cause of the setpoints being outside of the acceptance criteria has been determined to be instrument drift. This is the first instance of these three particular switches being out of calibration. The instruments were recalibrated within final tolerance values of SI-280-305 and no problems were encountered. Susquehanna Steam Electric Station (SSES) has experienced setpoint drift on Barton Model 288A instruments in the past. A study is currently being conducted which will analyze the performance of the Barton Model 288A instruments in use at both units of SSES in an attempt to identify any generic deficiencies in the switch. The results of this study should be available by July 1, 1985.

In order to observe the stability of the setpoint for switch 2B of LIS-B21-N024A, switch 1A of LIS-B21-N024C, and switch 1A of LIS-B21-N024D, the 18 Month Calibration surveillance will be performed in lieu of the first monthly channel functional check surveillance.



Pennsylvania Power & Light Company

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U.S. Nuclear Regulatory Commission
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SUSQUEHANNA STEAM ELECTRIC STATION
LICENSEE EVENT REPORT 85-009-00
ER 100450 FILE 841-23
PLAS-053

Docket No. 50-388
License No. NPF-22

Attached is Licensee Event Report 85-009-00. This event was determined reportable per 10CFR50.73(a)(2)(vii), in that two channels of reactor vessel level instrumentation were inoperable due to instrument setpoint drift.

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DJG/pjg

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