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MAY 26 2016

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

10 CFR 50.73

SUSQUEHANNA STEAM ELECTRIC STATION
LICENSEE EVENT REPORT 50-388(387)/2016-002-00
UNIT 2 LICENSE NO. NPF-22
UNIT 1 LICENSE NO. NPF-14
PLA-7474

Docket No. 50-388
50-387

Attached is Licensee Event Report (LER) 50-388(387)/2016-002-00. This LER reports a condition that could have prevented fulfillment of the Secondary Containment integrity safety function. In this event, both doors for one of the secondary containment access airlock were briefly opened simultaneously due to a degraded door latch mechanism. This LER is being submitted pursuant to the requirements of 10 CFR 50.73(a)(2)(v)(C).

There were no actual consequences to the health and safety of the public as a result of this event.

This letter contains no new regulatory commitments.


J. A. Franke

Attachment: LER 50-388(387)/2016-002-00

Copy: NRC Region I
Mr. J. E. Greives, NRC Sr. Resident Inspector
Ms. T. E. Hood, NRC Project Manager
Mr. M. Shields, PA DEP/BRP



LICENSEE EVENT REPORT (LER)

(See Page 2 for required number of
digits/characters for each block)

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA, Privacy and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to Infocollections.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

1. FACILITY NAME

Susquehanna Steam Electric Station Unit 2

2. DOCKET NUMBER

05000388

3. PAGE

1 of 4

4. TITLE

Secondary Containment Breach due to Simultaneous Opening of Airlock Doors Due to Degraded Latch Mechanism

| 5. EVENT DATE | | | 6. LER NUMBER | | | 7. REPORT DATE | | | 8. OTHER FACILITIES INVOLVED | |
|---------------|-----|------|---------------|-------------------|---------|----------------|-----|------|---|---------------|
| MONTH | DAY | YEAR | YEAR | SEQUENTIAL NUMBER | REV NO. | MONTH | DAY | YEAR | FACILITY NAME | DOCKET NUMBER |
| 03 | 29 | 2016 | 2016 | - 002 | - 00 | 05 | 26 | 2016 | Susquehanna Steam Electric Station Unit 1 | 05000387 |
| | | | | | | | | | FACILITY NAME | DOCKET NUMBER |
| | | | | | | | | | | 05000 |

| 9. OPERATING MODE | 11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply) | | | |
|-------------------|---|---|---|---|
| 1 | <input type="checkbox"/> 20.2201(b) | <input type="checkbox"/> 20.2203(a)(3)(i) | <input type="checkbox"/> 50.73(a)(2)(ii)(A) | <input type="checkbox"/> 50.73(a)(2)(viii)(A) |
| | <input type="checkbox"/> 20.2201(d) | <input type="checkbox"/> 20.2203(a)(3)(ii) | <input type="checkbox"/> 50.73(a)(2)(ii)(B) | <input type="checkbox"/> 50.73(a)(2)(viii)(B) |
| | <input type="checkbox"/> 20.2203(a)(1) | <input type="checkbox"/> 20.2203(a)(4) | <input type="checkbox"/> 50.73(a)(2)(iii) | <input type="checkbox"/> 50.73(a)(2)(ix)(A) |
| | <input type="checkbox"/> 20.2203(a)(2)(i) | <input type="checkbox"/> 50.36(c)(1)(i)(A) | <input type="checkbox"/> 50.73(a)(2)(iv)(A) | <input type="checkbox"/> 50.73(a)(2)(x) |
| 10. POWER LEVEL | <input type="checkbox"/> 20.2203(a)(2)(ii) | <input type="checkbox"/> 50.36(c)(1)(ii)(A) | <input type="checkbox"/> 50.73(a)(2)(v)(A) | <input type="checkbox"/> 73.71(a)(4) |
| | <input type="checkbox"/> 20.2203(a)(2)(iii) | <input type="checkbox"/> 50.36(c)(2) | <input type="checkbox"/> 50.73(a)(2)(v)(B) | <input type="checkbox"/> 73.71(a)(5) |
| | <input type="checkbox"/> 20.2203(a)(2)(iv) | <input type="checkbox"/> 50.46(a)(3)(ii) | <input checked="" type="checkbox"/> 50.73(a)(2)(v)(C) | <input type="checkbox"/> 73.77(a)(1) |
| | <input type="checkbox"/> 20.2203(a)(2)(v) | <input type="checkbox"/> 50.73(a)(2)(i)(A) | <input type="checkbox"/> 50.73(a)(2)(v)(D) | <input type="checkbox"/> 73.77(a)(2)(i) |
| | <input type="checkbox"/> 20.2203(a)(2)(vi) | <input type="checkbox"/> 50.73(a)(2)(i)(B) | <input type="checkbox"/> 50.73(a)(2)(vii) | <input type="checkbox"/> 73.77(a)(2)(ii) |
| | <input type="checkbox"/> 50.73(a)(2)(i)(C) | <input type="checkbox"/> OTHER | Specify in Abstract below or in NRC Form 366A | |

12. LICENSEE CONTACT FOR THIS LER

LICENSEE CONTACT

Nicole Pagliaro, Licensing Specialist - Nuclear Regulatory Affairs

TELEPHONE NUMBER (Include Area Code)

(570) 542-6578

13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

| CAUSE | SYSTEM | COMPONENT | MANU-FACTURER | REPORTABLE TO EPIX | CAUSE | SYSTEM | COMPONENT | MANU-FACTURER | REPORTABLE TO EPIX |
|-------|--------|-----------|---------------|--------------------|-------|--------|-----------|---------------|--------------------|
| X | NG | DR | N/A | N | N/A | N/A | N/A | N/A | N/A |

14. SUPPLEMENTAL REPORT EXPECTED

☐ YES (If yes, complete 15. EXPECTED SUBMISSION DATE) ☒ NO


15. EXPECTED SUBMISSION DATE


| MONTH | DAY | YEAR |
|-------|-----|------|
| | | |

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

On March 29, 2016 at approximately 23:13, an employee leaving the Unit 2 Turbine Building entered the Turbine Building to Reactor Building airlock. Prior to opening the airlock door, employee verified a green light was present, indicating the opposite airlock door was closed. The employee entered the airlock and the airlock alarm was heard. At this time, a rush of air was observed from the Reactor Building side of the airlock, forcing the door open (Door 120A). The individual quickly closed both doors. The individual then proceeded through the Reactor Building door to the nearest phone and informed the Control Room of the event. Having both airlock doors momentarily open simultaneously results in a potential loss of safety function and requires reporting under 10 CFR 50.73(a)(2)(v)(C).

The cause of this event was determined to be normal wear of the Door 120A (Reactor Building airlock door) door latch. Corrective actions to address this issue include repair of the door latch mechanism.

| NRC FORM 366A (11-2015) | U.S. NUCLEAR REGULATORY COMMISSION  LICENSEE EVENT REPORT (LER) CONTINUATION SHEET | APPROVED BY OMB: NO. 3150-0104 EXPIRES: 10/31/2018 Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA, Privacy and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to Infocollects.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection. | | | | | | | | | |
|---|---|---|----------------------|--|--|------|-------------------|---------|------|-------|------|
| 1. FACILITY NAME Susquehanna Steam Electric Station, Unit 2 | 2. DOCKET NUMBER 05000388 | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="3" style="text-align: left; padding: 2px;">3. LER NUMBER</th> </tr> <tr> <th style="width: 33%; text-align: center; padding: 2px;">YEAR</th> <th style="width: 33%; text-align: center; padding: 2px;">SEQUENTIAL NUMBER</th> <th style="width: 33%; text-align: center; padding: 2px;">REV NO.</th> </tr> <tr> <td style="text-align: center; padding: 2px;">2016</td> <td style="text-align: center; padding: 2px;">- 002</td> <td style="text-align: center; padding: 2px;">- 00</td> </tr> </table> | 3. LER NUMBER | | | YEAR | SEQUENTIAL NUMBER | REV NO. | 2016 | - 002 | - 00 |
| 3. LER NUMBER | | | | | | | | | | | |
| YEAR | SEQUENTIAL NUMBER | REV NO. | | | | | | | | | |
| 2016 | - 002 | - 00 | | | | | | | | | |
| <p>NARRATIVE</p> <p>CONDITIONS PRIOR TO EVENT:</p> <p>Unit 2 – Mode 1, 100 percent Rated Thermal Power</p> <p>Unit 1 - Mode 5, 0 percent Rated Thermal Power</p> <p>There were no structures, systems, or components that were inoperable at the start of the event that contributed to the event.</p> <p>EVENT DESCRIPTION:</p> <p>On March 29, 2016 at approximately 23:13, an employee leaving the Unit 2 Turbine Building [EIS System Identifier: NM] entered the Turbine Building to Reactor Building airlock [EIS Component Identifier: AL] on elevation 676'. Prior to opening the airlock door [EIS Component Identified: DR], employee verified a green light was present, indicating the opposite airlock door was closed. The employee entered the airlock and the airlock alarm was heard. At this time, a rush of air was observed from the Reactor Building [EIS System Identifier: NG] side of the airlock, forcing the door open (Door 120A). The individual quickly closed both doors. The individual then proceeded through the Reactor Building door to the nearest phone and informed the Control Room [EIS System Identifier: NA] of the event.</p> <p>CAUSE OF EVENT:</p> <p>The direct cause of this event is normal wear of the airlock door latch. Based on investigation performed, the Door 120A latch was determined to be sticking inside the crash bar. This prevented the Reactor Building airlock door from properly latching and staying latched when differential pressure was applied to the door upon entering the airlock from the Unit 2 Turbine Building side.</p> | | | | | | | | | | | |

| | | | | |
|--|---|--|----------------------------|------------|
| NRC FORM 366A (11-2015) | U.S. NUCLEAR REGULATORY COMMISSION | APPROVED BY OMB: NO. 3150-0104 | EXPIRES: 10/31/2018 | |
|  LICENSEE EVENT REPORT (LER) CONTINUATION SHEET | | Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA, Privacy and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to Infocollects.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection. | | |
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| Susquehanna Steam Electric Station, Unit 2 | 05000388 | YEAR | SEQUENTIAL NUMBER | REV NO. |
| | | 2016 | - 002 | - 00 |
| <p>NARRATIVE</p> <p>ANALYSIS/SAFETY SIGNIFICANCE:</p> <p>Technical Specification 3.6.4.1 Surveillance Requirement 3.6.4.1.3 requires that one secondary containment access door in each access opening is closed. This event is being reported pursuant to 10 CFR 50.73(a)(2)(v)(C) as having both Secondary Containment airlock doors momentarily open simultaneously results in a condition that could have prevented fulfillment of a safety function to mitigate the consequences of an accident by controlling the release of radioactive material.</p> <p>There was no actual safety consequence as a result of this event. Engineering analysis of this event has determined that secondary containment could have performed its safety function of isolating, as assumed in the accident analysis, and also of re-establishing 0.25 in w.g. vacuum (drawdown) within the assumed accident analysis time (10 minutes). Therefore, the subject event did not cause a loss of safety function.</p> <p>This event will not be counted as a safety system functional failure (SSFF) for the NRC performance indicator based on the Engineering analysis supporting the system's ability to fulfill the safety function.</p> <p>CORRECTIVE ACTIONS:</p> <p>As discussed above, the cause of this event was attributed to normal wear of the airlock door latch. A work order was written to investigate and repair the Door-120A latch as necessary. Maintenance lubricated and tightened screws on the latch mechanism; the door was then successfully tested and confirmed operable by Operations.</p> <p>No regulatory commitments are associated with this report.</p> <p>COMPONENT FAILURE INFORMATION:</p> <p>Reactor Building Elevation 676' Door-120A – Normal Wear.</p> | | | | |

NRC FORM 366A
(11-2015)

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0104

EXPIRES: 10/31/2018



LICENSEE EVENT REPORT (LER) CONTINUATION SHEET

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|--|------------------|---------------|----------------------|------------|
| Susquehanna Steam Electric Station, Unit 2 | 05000388 | YEAR | SEQUENTIAL NUMBER | REV NO. |
| | | 2016 | - 002 | - 00 |

NARRATIVE

PREVIOUS SIMILAR EVENTS:

The following recent LERs involving loss of Secondary Containment due to door issues:

LER 50-387(388)/ 2016-001-00 (PLA7453), "Secondary Containment Declared Inoperable Due to an Airlock Door Open Due to Random Occurrence," dated April 18, 2016.

LER 50-387(388)/2016-002-00 (PLA7454), "Secondary Containment Declared Inoperable due to an Airlock Doors Open Due to Random Occurrence," dated April 18, 2016.

LER 50-387(388)/ 2015-011-00 (PLA7432), "Secondary Containment Declared Inoperable Due to an Airlock Door that had not been Properly Latched," dated January 29, 2016.

LER 50-388(387)/ 2015-006-00 (PLA7383), "Secondary Containment Declared Inoperable due to Secondary Containment Boundary Door 104-R Breached," dated September 18, 2015.

LER 50-387/ 2015-004-00 (PLA7353), "Secondary Containment Inoperable due Secondary Containment Boundary Door Found Ajar," dated June 25, 2015.

LER 50-388/2015-002-00 (PLA7329), "Secondary Containment Inoperability due Failure to Meet Technical Specification Surveillance Requirement 3.6.4.1.1," dated June 10, 2015.

LER 50-387(388)/2014-002-00 (PLA7155), "Secondary Containment Door found Ajar," dated April 9, 2014.

LER 50-388(387)/2014-001-00 (PLA7270), "Both Doors of a Secondary Containment Airlock Momentarily Open due to a Personnel Error resulting in entry into Secondary Containment Technical Specification Limiting Condition for Operation," dated December 31, 2014.