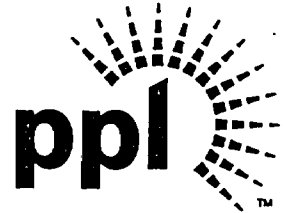


**R. A. Saccone**  
Vice President - Nuclear Operations

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JAN 20 2005

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Mail Stop O-P1-17  
Washington, DC 20555-0001

**SUSQUEHANNA STEAM ELECTRIC STATION  
LICENSEE EVENT REPORT 50-387/2005-001-00  
PLA-5858**

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**Docket 50-387**

Attached is Licensee Event Report 50-387/2005-001-00. While analysis of the situation is not yet completed, there is a potential that six primary containment instrument lines found penetrating the Unit 1 Reactor Building's Railroad Bay could prevent structures or systems needed to control the release of radioactive material from fulfilling their safety function. Although the Railroad Bay can be aligned to Secondary Containment, it has not normally been placed in this configuration. The instrument line location is not consistent with station licensing documents that require containment of the lines from a dose analysis and a Secondary Containment design configuration standpoint. Accordingly, this event is being reported in accordance with 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.

No new regulatory commitments have been created through issuance of this report.

A handwritten signature in black ink, appearing to read "R. A. Saccone", is written over the printed name.

Robert A. Saccone  
Vice President - Nuclear Operations

Attachment

IE22

cc: Mr. S. J. Collins  
Regional Administrator  
U.S. Nuclear Regulatory Commission  
475 Allendale Road  
King of Prussia, PA 19408

Mr. A. J. Blamey  
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P. O. Box 8469  
Harrisburg, PA 17105-8469

**U.S. NUCLEAR REGULATORY  
COMMISSION****LICENSEE EVENT REPORT (LER)**(See reverse for required number of  
digits/characters for each block)

APPROVED BY OMB: NO. 3150-0104

EXPIRES: 06/30/2007

Estimated burden per response to comply with this mandatory collection request: 50 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Records and FOIA/Privacy Service Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to [infocollects@nrc.gov](mailto:infocollects@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 1

2. DOCKET NUMBER

05000387

3. PAGE

1 OF 3

4. TITLE Primary Containment Instrument Lines Located Outside Secondary Containment

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
11	22	2004	2005	001	00	01	20	2005	Susq. SES –Unit 2	05000388
									FACILITY NAME	DOCKET NUMBER
										05000

9. OPERATING MODE  
1

10. POWER LEVEL  
15

11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)

<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.73(a)(2)(i)(C)	<input type="checkbox"/> 50.73(a)(2)(vii)
<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)
<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.73(a)(2)(ii)(B)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)
<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 50.36(c)(1)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)(A)
<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 50.36(c)(1)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(iv)(A)	<input type="checkbox"/> 50.73(a)(2)(x)
<input type="checkbox"/> 20.2203(a)(2)(iii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	<input type="checkbox"/> 73.71(a)(4)
<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.46(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(v)(B)	<input type="checkbox"/> 73.71(a)(5)
<input type="checkbox"/> 20.2203(a)(2)(v)	<input type="checkbox"/> 50.73(a)(2)(i)(A)	<input checked="" type="checkbox"/> 50.73(a)(2)(v)(C)	<input type="checkbox"/> OTHER
<input type="checkbox"/> 20.2203(a)(2)(vi)	<input type="checkbox"/> 50.73(a)(2)(i)(B)	<input type="checkbox"/> 50.73(a)(2)(v)(D)	Specify in Abstract below or in NRC Form 366A

## 12. LICENSEE CONTACT FOR THIS LER

FACILITY NAME

Eric J. Miller – Nuclear Regulatory Affairs

TELEPHONE NUMBER (Include Area Code)

570-542-3321

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

CAUSE	SYSTEM	COMPONENT	MANU-FACTORER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTORER	REPORTABLE TO EPIX

## 14. SUPPLEMENTAL REPORT EXPECTED

☒ YES (If yes, complete 15. EXPECTED SUBMISSION DATE) NO15. EXPECTED  
SUBMISSION  
DATE

MONTH	DAY	YEAR
05	27	2005

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

On 11/22/2004, it was identified that six Primary Containment instrument lines penetrated the Unit 1 Reactor Building's Railroad Bay. The Railroad Bay door serves as an access/egress point for equipment and materials to and from the Unit 1 Reactor Building. Although the area can be aligned to Secondary Containment, it has not normally been maintained in this configuration. The instrument lines that are located in the Railroad Bay, and have been typically located outside Secondary Containment due to ventilation system alignment practices, are not consistent with assumptions currently found in station licensing documents. The principal causes for the non-compliance can be traced to past licensing basis changes that credited Secondary Containment in the accident analysis and removed normal alignment of the Railroad Bay to Secondary Containment Zone III. In response to this situation, administrative controls have been enacted that align the Railroad Bay to the Secondary Containment Zone III when the Railroad Bay door is not open. Additional actions are planned to evaluate and resolve those shortcomings, as stated above, that have contributed to the non-compliance. Preliminary analysis indicates that postulated leakage from the lines in question is within the margin available in the LOCA dose analysis for Secondary Containment Bypass Leakage. Further, the analysis indicates that the instrument lines, if cracked or broken, will not introduce radiological consequences that exceed those presented in the Safety Analysis Report for a break outside of Secondary Containment. Because these are only preliminary assessments, this event is being reported in accordance with 10 CFR 50.73(a)(2)(v)(C) as a condition that could have prevented structures or systems needed to control the release of radioactive material from fulfilling their safety function.

## LICENSEE EVENT REPORT (LER)

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
Susquehanna Steam Electric Station – Unit 1	05000387	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 3
		2005	- 001	- 00	

17. NARRATIVE (If more space is required, use additional copies of NRC Form 366A)

**EVENT DESCRIPTION**

On 11/22/2004, it was identified that six Primary Containment (EIS Code: NH) instrument lines penetrated the Unit 1 Reactor Building's Railroad Bay (EIS Code: NG). Two of the instrument lines are associated with the Unit 1 Reactor Recirculation system (EIS Code: AD) while the remaining four are associated with the Unit 1 Residual Heat Removal system (EIS Code: BO). These instrument lines have been located in the Railroad Bay since plant startup. Although the area can be aligned to Secondary Containment (EIS Code: NH), it has not normally been configured as such since 1995. The original Safety Analysis Review (SAR) did not rely upon instrument lines being located within Secondary Containment. The SAR was, however, changed in 1998 to credit Secondary Containment in the SAR accident analysis. The instrument lines that are located in the Railroad Bay, and are thus typically located outside Secondary Containment, are not then consistent with assumptions currently found in station licensing documents.

The non-compliance described above is being reported in accordance with 10 CFR 50.73(a)(2)(v)(C) as a condition that could have prevented structures or systems needed to control the release of radioactive material from fulfilling their safety function. No radioactive releases resulted from this event.

**CAUSE OF EVENT**

Preliminary results pending completion of the evaluation under the Corrective Action Process:

The principal causes for the current non-compliance with the licensing basis were the changes made to the accident analysis that credited Secondary Containment and the change in 1995 that established normal alignment of the Railroad Bay outside Secondary Containment.

**ANALYSIS / SAFETY SIGNIFICANCE**

Preliminary analysis of Secondary Containment bypass leakage has concluded that the postulated leakage from these lines is within the margin available in the LOCA dose analysis for Secondary Containment Bypass Leakage. Further, the analysis indicates that the instrument lines, if cracked or broken, will not introduce radiological consequences that exceed those presented in the SAR for a break outside of Secondary Containment. Because these are only preliminary assessments, this event is being reported in accordance with 10 CFR 50.73(a)(2)(v)(C) as a condition that could have prevented structures or systems needed to control the release of radioactive material from fulfilling their safety function.

**LICENSEE EVENT REPORT (LER)**

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
Susquehanna Steam Electric Station – Unit 1	05000387	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	3 OF 3
		2005	- 001	- 00	

17. NARRATIVE (If more space is required, use additional copies of NRC Form 366A)

**CORRECTIVE ACTIONS**

The following corrective actions have been completed:

- Administrative controls have been enacted to align the Railroad Bay to the Secondary Containment Zone III when the Railroad Bay door is not open.

The following corrective actions are planned:

- This non-conformance has been entered into the Corrective Action program for evaluation and resolution.

**ADDITIONAL INFORMATION**

None