NRC FORM 366 (4-95) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104
EXPIRES 04/30/98
ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS MANDATORY INFORMATION COLLECTION REQUEST: 50.0 HRS. REPORTED LESSONS LEARNED ARE INCORPORATED INTO THE LICENSING PROCESS AND FED BACK TO INDUSTRY. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (T-6 F33), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block).

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Susquehanna Steam Electric Station - Unit 1	05000387	1 OF 3

TITLE (4)
Nine (9) Check Valves Exceeded Inservice Testing Program Test Frequency

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
4	2	98	98	-- 005 --	00	5	4	98	Susquehanna SES - Unit 2	05000388
									FACILITY NAME	DOCKET NUMBER 05000

OPERATING MODE (9)	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)							
POWER LEVEL (10)	100		20.2201(b)		20.2203(a)(2)(v)	X	50.73(a)(2)(i)		50.73(a)(2)(viii)
			20.2203(a)(1)		20.2203(a)(3)(i)		50.73(a)(2)(ii)		50.73(a)(2)(x)
			20.2203(a)(2)(i)		20.2203(a)(3)(ii)		50.73(a)(2)(iii)		73.71
			20.2203(a)(2)(ii)		20.2203(a)(4)		50.73(a)(2)(iv)		OTHER
			20.2203(a)(2)(iii)		50.36(c)(1)		50.73(a)(2)(v)		Specify in Abstract below or in NRC Form 366A
			20.2203(a)(2)(iv)		50.36(c)(2)		50.73(a)(2)(vii)		

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER (Include Area Code)
Stephen J. Ellis - Senior Engineer, Licensing	717 / 542-3537

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

SUPPLEMENTAL REPORT EXPECTED (14)			EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE).	X	NO				

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On April 2, 1998, at 1530 hours, with both Unit 1 and 2 in Condition 1 (Power Operation) and operating at 100 % power, it was discovered that closure testing of certain check valves which provide a containment isolation function, had not been performed per the frequency specified in the IST Program. The IST program requires that the closure capability of these check valves be tested at a frequency of once per refueling cycle. The closure capability of the valves had historically been accomplished by the successful completion of Appendix J leakage testing of their associated containment penetrations. The Appendix J testing was performed once every refueling outage until the implementation of Option B in July, 1996, which allows deferral of Appendix J testing to a frequency longer than once a refuel cycle. This deferral did not consider the refuel cycle IST requirement for the subject check valves. The causes of the event have been identified as: 1) there were no specific tests to accomplish the IST check valve operability tests, 2) the Local Leak Rate Test (LLRT) procedures used to meet IST test requirements did not specifically address that an IST requirement was being met, and 3) less than adequate change management was used to evaluate the associated impacts of changing the 10CFR 50 Appendix J Program to Option B. There was minimal safety significance of this event and the health of the public was not compromised. Corrective actions include: performance of the appropriate testing, instituting a mechanism to specifically track the check valve tests and documenting this requirement in the IST Program Procedure, revising the appropriate LLRTs to address IST criteria, and familiarizing the appropriate engineering personnel on the PP&L change management model.

FACILITY NAME (1)	DOCKET	LER NUMBER (6)			PAGE (3)
	05000	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Susquehanna Steam Electric Station - Unit 1	387	98	-- 005 --	00	2 OF 3

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

EVENT DESCRIPTION

On April 2, 1998, at 1530 hours, with both Unit 1 and 2 in Condition 1 (Power Operation) and operating at 100 % power, it was discovered that closure testing of certain check valves which provide a containment isolation function, had not been performed per the frequency specified in the IST Program Refueling Outage Justifications. The IST program requires that the closure capability of these check valves be tested at a frequency of once per refueling cycle. The discrepancy was self-identified during a review of the IST Program by the IST Program engineer.

CAUSE OF EVENT

The closure capability of the check valves had historically been accomplished by the successful completion of Appendix J leakage testing of their associated containment penetrations. The Appendix J testing was performed once every refueling outage until the implementation of Option B in July, 1996. Appendix J, Option B, is a performance based program which allows deferral of Appendix J testing to a frequency longer than once a refuel cycle. The deferral of Appendix J testing for the applicable penetrations did not consider that the tests also fulfilled the IST requirement for these check valves, which resulted in the check valves exceeding their IST Program testing frequency.

An investigation of this event was completed and concluded that the root causes for the missed testing were:

- There were no specific tests to accomplish the IST check valve operability tests (i.e., the IST requirements were verified during performance of Local Leak Rate Tests).
- The Local Leak Rate Test (LLRT) procedures used to meet IST test requirements did not specifically address that an IST requirement was being met.
- Less than adequate change management was used to evaluate the associated impacts of changing the 10CFR 50 Appendix J Program to Option B.

REPORTABILITY/ANALYSIS

The condition described in this report was identified as a result of a review of the IST Program. From this review, 9 containment isolation check valves (4 on Unit 1 and 5 on Unit 2) were identified as not being closure tested at the frequency specified in the IST program. Technical Specification 4.0.5 sets the requirements and frequency for the IST program. The subject check valves inadvertently exceeded their required testing frequency, and thus, in keeping with the reportability guidance, this condition is reportable per 10 CFR50.73(a)(2)(i)(B). The performance history of the subject valves was reviewed from past LLRTs and shown to be good. Based on their past history, and the satisfactory completion of the five Unit 2 tests during a recent forced outage, it is reasonable to conclude that these valves would have been able to

perform their safety function if called upon. As such, the safety significance of the event is minimal, and there were no safety consequences. The health and welfare of the public was not compromised.

In accordance with the guidance provided in NUREG-1022, Revision 1, Section 5.1.1, the required submission date for this report was determined to be May 4, 1998.

CORRECTIVE ACTIONS

The following corrective actions have been taken:

- The Unit 2 valves have been tested satisfactorily.
- The Unit 1 valves are being tested in the current Unit 1 10th refueling outage.

Additionally, the following actions are being implemented to prevent recurrence:

- Separate procedures or appropriate mechanisms to track the required check valve tests will be put into place.
- All applicable LLRT procedures will be revised to specifically address the IST requirements.
- The department procedure describing the IST program will be revised to require separate tracking of IST test components.
- Familiarization training for System Engineers on the PP&L change management model will be conducted.

ADDITIONAL INFORMATION

Past Similar Events: No similar events have been identified with respect to the IST program.

Failed Component: None