Bryce L. Shriver
Vice President – Nuclear Site Operations

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MAY 18 2001

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Station P1-137
Washington, DC 20555

SUSQUEHANNA STEAM ELECTRIC STATION
LICENSEE EVENT REPORT 50-388/2001-003-00
PLA - 5317 FILE R41-2

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

Attached is Licensee Event Report 50-388/2001-003-00. This event was determined to be reportable per 10CFR50.73(a)(2)(ii)(A) in that the secondary containment bypass leakage limit was exceeded during regularly scheduled Local Leak Rate Testing. The main contributor to the leakage was the RHR Loop B Drywell Spray Outboard Isolation Valve. This valve was reworked and successfully passed its Local Leak Rate Test. There were no consequences to the health or safety of the public.

Bryce L. Shriver
Vice President – Nuclear Site Operations

Attachment

cc: Mr. H. J. Miller
Regional Administrator
U. S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

cc: Mr. S. L. Hansell
Sr. Resident Inspector
U.S. Nuclear Regulatory Commission
P. O. Box 35
Berwick, PA 18603-0035

IE22

NRC FORM 366 (1-2001)

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104 EXPIRES 6-30-2001

Estimated burden per response to comply with this mandatory information 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 Management Branch (T-6 E6), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to bjs1@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 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.

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 2	05000388	1 OF 3

TITLE (4)

U2 Secondary Containment Bypass Leakage Exceeded

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MO	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO	MO	DAY	YEAR	FACILITY NAME	DOCKET NUMBER 05000
03	19	2001	2001	003	00	05	18	2001	FACILITY NAME	DOCKET NUMBER 05000

OPERATING MODE (9)	5
POWER LEVEL (10)	0

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

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

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER (Include Area Code)
Cornelius T. Coddington - Nuclear Licensing	610 / 774-4019

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

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX
X	BD	ISV	A391	Y					

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 March 19, 2001, at 0803 hours, with Unit 2 in Condition 5 (Refueling) at 0 percent power, it was determined that the as-found minimum pathway Secondary Containment Bypass Leakage (SCBL) Technical Specification limit had been exceeded during regularly scheduled Local Leakage Rate Testing. The Technical Specification SCBL limit is 9 scfh and the measured bypass leakage was 9.14 SCFH. At that time, additional SCBL pathways remained to be leak rate tested. After completion of all leak rate testing, the total SCBL was determined to be 11.13 scfh. The major contributor to the SCBL was the RHR Loop B Drywell Spray outboard isolation valve. This event was determined to be reportable in accordance with 10CFR50.73(a)(2)(ii) in that the total as-found minimum pathway SCBL leakage rate limit exceeded the Technical Specification limit. The cause of the high leakage through the RHR Loop B Drywell Spray outboard isolation valve (HV251F016B) was due to the gland follower and stem being in contact. In addition, a small area of pitting on the disc contributed to the high leakage. The valve was reworked and successfully passed its leak rate test.

There were no safety consequences or compromise to the public health or safety as a result of the additional SCBL leakage since the dose consequences from the additional leakage would not have exceeded 10CFR100 or 10CFR50 Appendix A, GDC 19 limits.

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

EVENT DESCRIPTION

On March 19, 2001, at 0803 hours, with Unit 2 in Condition 5 (Refueling) at 0 percent power, it was determined that the as-found minimum pathway Secondary Containment Bypass Leakage (SCBL) Technical Specification limit had been exceeded during regularly scheduled Local Leakage Rate Testing. The Technical Specification SCBL limit is 9 scfh and the measured leakage was 9.14 SCFH. At that time, additional SCBL pathways remained to be leak rate tested. After completion of all leak rate testing, the total SCBL was determined to be 11.13 scfh. The major contributor to the SCBL was the RHR (EIIS Code: BO) Loop B Drywell Spray outboard isolation valve (EIIS Code: BD) with approximately 73% of the total minimum pathway SCBL leakage.

CAUSE OF EVENT

The cause of the high leakage through the RHR Loop B Drywell Spray outboard isolation valve (HV251F016B) was due to the gland follower and stem being in contact. During valve movement, the gland follower and the stem were rubbing against each other. This rubbing caused increased friction, which reduced the force that would normally be applied to the valve disc to seat interface. In addition, a small area of pitting on the disc contributed to the high leakage.

There are no generic implications due to this failure. The high leakage experienced on HV251F016B has not been experienced on the other similar valves. In addition, the RHR Loop A Drywell Spray outboard isolation valve (HV251F016A) was repacked during this outage with no evidence of stem and gland follower contact.

REPORTABILITY/SAFETY SIGNIFICANCE

This event was determined to be reportable in accordance with 10CFR50.73(a)(2)(ii) in that the total as-found minimum pathway leakage rate exceeded the Technical Specification limit. If a Design Basis Accident-Loss of Coolant (DBA-LOCA) with fuel failure had occurred in Unit 2, the leakage of 11.13 scfh (8.13 scfh from the RHR Loop B Drywell Spray penetration) would have bypassed secondary containment. This would have resulted in an increase in offsite dose. However, the increase in dose would not have exceeded either 10CFR100 or 10CFR50, Appendix A, GDC 19 dose limits. Therefore, there were no safety consequences or compromise to the public health or safety as a result of the increased Secondary Containment Bypass Leakage.

In accordance with the guidelines provided in NUREG-1022, Revision 2, Section 5.1.1, the required submission date for this report was determined to be May 18, 2001.

CORRECTIVE ACTION

The following corrective actions were completed on the RHR Loop B Drywell Spray outboard isolation valve:

- The gland follower was lined.

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

- The stem was replaced.
- The disc and seat were cleaned.
- The valve was satisfactorily retested.

ADDITIONAL INFORMATION

Past Similar Events: LER 96-002-00, Docket No. 387/License No. NPF-14
LER 96-011-00, Docket No. 387/License No. NPF-14
LER 99-002-00, Docket No. 388/License No. NPF-22

Failed Component: 12 inch globe valve: HV251F016B

Manufacturer: Anchor Darling Valve Co.