PRIORITY 1
(ACCELERATED RIDS PROCESSING)

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:9511160193 DOC.DATE: 95/11/10 NOTARIZED: NO DOCKET #
FACIL:50-388 Susquehanna Steam Electric Station, Unit 2, Pennsylva 05000388
AUTH.NAME AUTHOR AFFILIATION
WEHRY,R.R. Pennsylvania Power & Light Co.
STANLEY,H.G. Pennsylvania Power & Light Co.
RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: LER 95-013-00:on 951014,discovered unplanned ESF occurred. Caused by procedural inadequacy.Procedures revised.W/951110 ltr.

DISTRIBUTION CODE: IE22T COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 4
TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc.

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL
	PD1-2 PD	1	1	POSLUSNY,C	1	1
INTERNAL:	ACRS	1	1	AEOD/SPD/RAB	2	2
	AEOD/SPD/RRAB	1	1	FILE CENTER	1	1
	NRR/DE/ECGB	1	1	NRR/DE/EELB	1	1
	NRR/DE/EMEB	1	1	NRR/DRCH/HHFB	1	1
	NRR/DRCH/HICB	1	1	NRR/DRCH/HOLB	1	1
	NRR/DRCH/HQMB	1	1	NRR/DRPM/PECB	1	1
	NRR/DSSA/SPLB	1	1	NRR/DSSA/SPSB/B	1	1
	NRR/DSSA/SRXB	1	1	RES/DSIR/EIB	1	1
	RGN1 FILE 01	1	1			
EXTERNAL:	L ST LOBBY WARD	1	1	LITCO BRYCE,J H	2	2
	NOAC MURPHY,G.A	1	1	NOAC POORE,W.	1	1
	NRC PDR	1	1	NUDOCS FULL TXT	1	1

PRIORITY 1 DOCUMENT

NOTE TO ALL "RIDS" RECIPIENTS:
PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL DESK, ROOM P1-37 (EXT. 504-2083) TO ELIMINATE YOUR NAME FROM DISTRIBUTION LISTS FOR DOCUMENTS YOU DON'T NEED!

FULL TEXT CONVERSION REQUIRED
TOTAL NUMBER OF COPIES REQUIRED: LTTR 27 ENCL 27

Pennsylvania Power & Light Company
Two North Ninth Street • Allentown, PA 18101-1179 • 610/774-5151

November 10, 1995

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

SUSQUEHANNA STEAM ELECTRIC STATION
LICENSEE EVENT REPORT 95-013-00
PLAS - 654 FILE R41-2

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

Attached is Licensee Event Report 95-013-00. This report is being made pursuant to 10CFR50.73(a)(2)(iv) in that an unplanned Engineered Safety Feature actuation occurred twice during Reactor Pressure Vessel ASME Class 1 System Boundary Leakage Pressure Testing when a Residual Heat Removal head spray inboard shutoff valve inadvertently closed.

S.J. Kazyminski for
H.G. Stanley
VP - Nuclear Operations

RRW/dmd

cc: Mr. T. T. Martin
Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Ms. Maitri Banerjee
Sr. Resident Inspector
U.S. Nuclear Regulatory Commission
P.O. Box 35
Berwick, PA 18603-0035

9511160193 951110
PDR ADOCK 05000388
S PDR

JE22

NRC FORM 366 (6-89)

U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT (LER)

APPROVED OMB NO. 3150-0104
EXPIRES: 4/30/92
ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)	DOCKET NUMBER(2)	PAGE (3)
Susquehanna Steam Electric Station - Unit 2	0 5 0 0 0 3 8 8	1 OF 0 3

TITLE (4)
Unplanned ESF Actuation - Valve Automatically Closed During ASME Class 1 Leakage Pressure Test

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)
1 0	1 4	9 5	9 5	— 0 1 3	— 0 0	1 1	1 0	9 5	SSES - Unit 1	0 5 0 0 0 3 8 7
										0 5 0 0 0

OPERATING MODE (9): 4

POWER LEVEL (10): 0 0 0

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)

20.402(b)	20.405(c)	X 50.73(a)(2)(iv)	73.71(b)
20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
20.405(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(1)(2)(viii)(B)	
20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

(LICENSEE CONTACT FOR THIS LER (12))

NAME	TELEPHONE NUMBER (AREA CODE)
Richard R. Wehry - Project Engineer, Nuclear Licensing	7 1 7 5 4 2 - 3 6 6 4

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

CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	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 fifteen single-space typewritten lines) (16)

On October 14, 1995, with Unit 2 in Condition 4 (Cold Shutdown) at 0% power, it was discovered that an unplanned Engineered Safety Feature (ESF) had occurred twice during performance of a reactor pressure vessel (RPV) ASME Class 1 boundary system leakage pressure test. Specifically, a Residual Heat Removal (RHR) head spray inboard shutoff valve, previously opened on 10/13/95, was found to be in the closed position, constituting an unplanned ESF actuation. Since the RPV was initially pressurized for the testing on 10/13/95 and then re-pressurized on 10/14/95 following a depressurization in order to remain within the Technical Specification temperature limits, the unplanned ESF actuation occurred twice. The cause of the unplanned ESF actuations was attributed to a procedural inadequacy, which has since been corrected. The closure of the RHR head spray inboard shutoff valve was per design in response to increasing pressure and there were no safety consequences or compromises to public health and safety as a result of this event. A review of other test procedures that were revised as a result of application of the 1989 edition of ASME Code Section XI was performed and no similar procedural errors were found. A review of the event and reasons behind the procedural error will be conducted for appropriate personnel.

DESCRIPTION OF EVENT

On October 14, 1995, with Unit 2 in Condition 4 (Cold Shutdown) at 0% power, it was discovered that an unplanned Engineered Safety Feature (ESF) actuation had occurred twice during performance of a reactor pressure vessel (RPV) ASME Class 1 boundary system leakage pressure test. Specifically, a Residual Heat Removal (RHR; EIIS Code BO) head spray inboard shutoff valve, previously opened on 10/13//95, was found to be in the closed position, constituting an unplanned ESF actuation. Since the RPV was initially pressurized for the testing on 10/13/95 and then re-pressurized on 10/14/95 following a depressurization evolution in order to remain within the Technical Specification temperature limits, the unplanned ESF actuation occurred twice.

CAUSE OF EVENT

The cause of the unplanned ESF actuations was attributed to a procedural inadequacy. The RHR head spray inboard shutoff valve is designed to automatically close when RPV pressure is greater than 98 psig. The subject test procedure, SE-200-002, ASME Class 1 Boundary System Leakage / Hydrostatic Pressure Testing, is used for both hydrostatic testing (once every 10 years) and for system leakage pressure testing. Procedural steps pertaining only to performance of hydrostatic testing are designated by gray shading in the procedure. The RHR head spray inboard shutoff valve should not have been opened for the system leakage pressure testing (i.e., the step to open the valve should have been a gray shaded step), or, if it was opened per the procedure, then the step to install a jumper to maintain it open should have been performed (this step was a gray shaded step so it was not performed). The procedure preparer (utility; non-licensed) failed to recognize that the procedure directed the opening of the valve and that it did not direct the installation of the jumper to prevent its automatic closure during system leakage pressure testing.

REPORTABILITY/ANALYSIS

This event was determined to be reportable per 10CFR50.73(a)(2)(iv) in that an unplanned ESF actuation occurred when the RHR head spray inboard shutoff valve automatically closed during initial pressurization and again during re-pressurization for performance of the RPV system leakage pressure test. It is further believed that the similar valve on Susquehanna Unit 1 closed during performance of RPV system leakage pressure testing on 4/29/95 due to a similar Unit 1 test procedure inadequacy.

The valve responded per its design to increasing RPV pressure. As a result of the RHR head spray inboard shutoff valve being closed during the 10/14/95 system leakage pressure testing (4/29/95 for Unit 1), the piping between the RHR head spray inboard and outboard shutoff valves was not pressurized. However, the 1989 edition of ASME Section XI, paragraph IWA-5223, reduced the scope of the ASME Code Class 1 inservice leakage test boundary to "those pressure retaining components under operating pressures during normal system service". The subject section of piping is not pressurized to operating pressure during normal system service, and, as such, remains in accordance with the current ASME requirements. Based on the above, there were no safety consequences or compromises to public health or safety as a result of the unplanned ESF actuations.

In accordance with guidance provided in NUREG 1022, Supplement 1, Item 14.1 and 10CFR50.4(d), the required submission date for this report was determined to be November 13, 1995.

CORRECTIVE ACTIONS

The procedures for conducting RPV ASME Class 1 Boundary System Leakage / Hydrostatic Pressure Testing have been revised for both Susquehanna units. The revision now results in the RHR head spray inboard shutoff valve not being open during RPV system leakage pressure testing, but also provides that if the valve is opened (as would be the case for hydrostatic testing, or if system leakage testing of the outboard RHR head spray shutoff valve was required), a jumper must be installed to prevent automatic closure of the valve when pressure is increased. The procedural changes will prevent a recurrence of this nature. A review of other test procedures that were revised as a result of application of the 1989 edition of ASME Code Section XI was performed and no similar procedural errors were found.

Additionally, a review of the event and the reasons behind the procedural error, related to procedure preparation and review, will be conducted with appropriate personnel.

ADDITIONAL INFORMATION

Failed Component Identification: Not applicable

Past Similar Events: LER 50-388 / 89-015-00

LER 50-387 / 90-029-00