

**ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM**  
REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:8809230057      DOC.DATE: 88/09/19      NOTARIZED: NO      DOCKET #  
 FACIL:50-387 Susquehanna Steam Electric Station, Unit 1, Pennsylv      05000387  
 AUTH.NAME      AUTHOR AFFILIATION  
 WEHRY,R.R.      Pennsylvania Power & Light Co.  
 BYRAM,R.G.      Pennsylvania Power & Light Co.  
 RECIP.NAME      RECIPIENT AFFILIATION

SUBJECT: LER 88-019-00:on 880902, valves not tested per ASME Code Section XI requirements.

W/8      ltr.

DISTRIBUTION CODE: IE22D      COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 4  
 TITLE: 50.73 Licensee Event Report (LER), Incident Rpt, etc.

NOTES:LPDR 2 cys Transcripts.

05000387

	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
	PD1-2 LA	1 1	PD1-2 PD	1 1
	THADANI,M	1 1		
INTERNAL:	ACRS MICHELSON	1 1	ACRS MOELLER	2 2
	ACRS WYLIE	1 1	AEOD/DOA	1 1
	AEOD/DSP/NAS	1 1	AEOD/DSP/ROAB	2 2
	AEOD/DSP/TPAB	1 1	ARM/DCTS/DAB	1 1
	DEDRO	1 1	NRR/DEST/ADS 7E	1 0
	NRR/DEST/CEB 8H	1 1	NRR/DEST/ESB 8D	1 1
	NRR/DEST/ICSB 7	1 1	NRR/DEST/MEB 9H	1 1
	NRR/DEST/MTB 9H	1 1	NRR/DEST/PSB 8D	1 1
	NRR/DEST/RSB 8E	1 1	NRR/DEST/SGB 8D	1 1
	NRR/DLPQ/HFB 10	1 1	NRR/DLPQ/QAB 10	1 1
	NRR/DOEA/EAB 11	1 1	NRR/DREP/RAB 10	1 1
	NRR/DREP/RPB 10	2 2	NRR/DRIS/SIB 9A	1 1
	NUDOCS-ABSTRACT	1 1	<u>REG FILE</u> 02	1 1
	RES TELFORD,J	1 1	RES/DSIR DEPY	1 1
	RES/DSIR/EIB	1 1	RGNI FILE 01	1 1
EXTERNAL:	EG&G WILLIAMS,S	4 4	FORD BLDG HOY,A	1 1
	H ST LOBBY WARD	1 1	LPDR	2 2
	NRC PDR	1 1	NSIC HARRIS,J	1 1
	NSIC MAYS,G	1 1		
NOTES:		2 2		

TOTAL NUMBER OF COPIES REQUIRED: LTTR 49 ENCL 48

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Susquehanna Steam Electric Station - Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 3 8 7	PAGE (3) 1 OF 0 3
--	--------------------------------------	----------------------

TITLE (4)  
Valves not tested per ASME Code Section XI Requirements

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)																																																																																																																																					
0 9	0 2	8 8	8 8	0 1	9 0	0 9	1 9	8 8	SSES - Unit 2		0 5 0 0 0 3 8 8																																																																																																																																					
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:15%;">OPERATING MODE (9) 1</td> <td colspan="11">THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)</td> </tr> <tr> <td rowspan="5">POWER LEVEL (10) 1 0 0</td> <td>20.402(b)</td> <td>20.405(a)(1)(i)</td> <td>20.405(a)(1)(ii)</td> <td>20.405(a)(1)(iii)</td> <td>20.405(a)(1)(iv)</td> <td>20.405(a)(1)(v)</td> <td>20.406(b)</td> <td>20.406(c)(1)</td> <td>20.406(c)(2)</td> <td>20.406(a)(2)(i)</td> <td>20.406(a)(2)(ii)</td> <td>20.406(a)(2)(iii)</td> <td>20.406(a)(2)(iv)</td> <td>20.406(a)(2)(v)</td> <td>50.73(a)(2)(iv)</td> <td>50.73(a)(2)(v)</td> <td>50.73(a)(2)(vi)</td> <td>50.73(a)(2)(vii)(A)</td> <td>50.73(a)(2)(vii)(B)</td> <td>50.73(a)(2)(ix)</td> <td>73.71(b)</td> <td>73.71(c)</td> <td>OTHER (Specify in Abstract below and in Text, NRC Form 366A)</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>												OPERATING MODE (9) 1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)											POWER LEVEL (10) 1 0 0	20.402(b)	20.405(a)(1)(i)	20.405(a)(1)(ii)	20.405(a)(1)(iii)	20.405(a)(1)(iv)	20.405(a)(1)(v)	20.406(b)	20.406(c)(1)	20.406(c)(2)	20.406(a)(2)(i)	20.406(a)(2)(ii)	20.406(a)(2)(iii)	20.406(a)(2)(iv)	20.406(a)(2)(v)	50.73(a)(2)(iv)	50.73(a)(2)(v)	50.73(a)(2)(vi)	50.73(a)(2)(vii)(A)	50.73(a)(2)(vii)(B)	50.73(a)(2)(ix)	73.71(b)	73.71(c)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)																																																																																																	
OPERATING MODE (9) 1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)																																																																																																																																															
POWER LEVEL (10) 1 0 0	20.402(b)	20.405(a)(1)(i)	20.405(a)(1)(ii)	20.405(a)(1)(iii)	20.405(a)(1)(iv)	20.405(a)(1)(v)	20.406(b)	20.406(c)(1)	20.406(c)(2)	20.406(a)(2)(i)	20.406(a)(2)(ii)	20.406(a)(2)(iii)	20.406(a)(2)(iv)	20.406(a)(2)(v)	50.73(a)(2)(iv)	50.73(a)(2)(v)	50.73(a)(2)(vi)	50.73(a)(2)(vii)(A)	50.73(a)(2)(vii)(B)	50.73(a)(2)(ix)	73.71(b)	73.71(c)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)																																																																																																																									

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
R.R. Wehry, Power Production Engineer - Compliance	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	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

SUPPLEMENTAL REPORT EXPECTED (14)

<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR

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

On September 2, 1988, analysis of results from recent self-initiated reviews of the In-Service Testing (IST) Program, including a Safety System Functional Inspection of the Emergency Service Water (ESW) system, determined that sixteen (16) safety related valves in the IST Program were not included in the IST Program for Remote Position Indicator (RPI) testing, as required by ASME Code Section XI, paragraph IWV-3300. Six (6) additional ESW system valves and four (4) Residual Heat Removal Service Water system valves acquired specified safety-related functions in 1986, but were not added to the IST Program at that time. These deficiencies were caused by an oversight on the part of plant staff engineering personnel. The sixteen valves already in the IST Program have been added to the IST RPI test procedures. The remaining ten valves have been added to the IST Program. To prevent recurrence, the Station IST administrative procedure will be revised by September 30, 1988 to:

- 1) Add a cross-reference listing of RPI check procedures and confirmation of inclusion of all IST valves in those procedures; and
- 2) Emphasize consideration of inclusion into the IST Program for pumps and valves installed or changed by plant modifications.

A review of valves added by past plant modifications, for inclusion into the IST Program, will be completed by October 30, 1988.

8809230057 880919  
PDR ADOCK 05000387  
S PNU

JE 2.2  
1/1

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)  Unit 1 Susquehanna Steam Electric Station	DOCKET NUMBER (2)  0   5   0   0   0   3   8   7	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		8   8	-   0   1   9	-   0   0	0   2	OF	0   3

TEXT (If more space is required, use additional NRC Form 368A's) (17)

DESCRIPTION OF EVENT

On September 2, 1988, analysis of results from recent self-initiated reviews of the In-Service Testing (IST) Program, including a Safety System Functional Inspection (SSFI) of the Emergency Service Water system (ESW; EIIS Code:BI), determined that sixteen (16) safety-related valves already in the IST Program (eight valves on Unit 1; eight valves on Unit 2) were not included in the IST Program for Remote Position Indicator (RPI) testing. These eight valves on each unit provide ESW System isolation from that unit's Reactor Building Closed Cooling Water (RBCCW; EIIS Code:CC) and Turbine Building Closed Cooling Water (TBCCW; EIIS Code:KB) heat exchangers. ASME Code Section XI, paragraph IWV-3300 requires that a RPI test on valves important to safety be performed at least once every two (2) years. The sixteen valves had been functionally exercised every three months, including observation of remote position indication. The only check not performed was confirmation of valve actual position to the remote indicated position. Six (6) additional ESW system valves and four (4) Residual Heat Removal Service Water system (RHRSW; EIIS Code:BS) valves acquired specified safety-related functions following plant modifications in 1986. These ten valves should have been added to the IST Program at that time, but were not. The six ESW valves had been demonstrated to fulfill their safety function during 18 Month Loss of Offsite Power Surveillance testing. The four RHRSW valves had been verified to be in their proper position by performance of a monthly valve alignment check surveillance.

CAUSE OF EVENT

These IST Program deficiencies were discovered during self-initiated IST Program and SSFI reviews and were attributed to a cognitive oversight on the part of plant staff engineering personnel (utility; non-licensed). The sixteen valves already in the IST Program have been functionally exercised every three months as part of SO-054-004/005, Quarterly ESW/TBOCW and ESW/RBCCW Isolation Valve Exercizing, and the IST Program, but were inadvertently not added to SO-054-015, Eighteen (18) Month ESW System Remote Position Indicator (RPI) Checks.

REPORTABILITY/ANALYSIS

This condition was determined reportable per 10CFR50.73(a)(2)(i)(B) in that the failure to include remote position indicator checks for the sixteen valves already in the IST Program is contrary to the requirements of ASME Code Section XI, paragraph IWV-3300, and Technical Specification 4.0.5.a for In-Service Testing of ASME Code Class 1,2 and 3 valves. The sixteen valves have been functionally exercised every three months, including observation of remote position indication. The only check not performed was confirmation of valve actual position to the remote indicated position. The failure to include the ten ESW and RHRSW valves, which acquired specified safety-related functions following plant modifications in 1986, in the IST Program is contrary to the requirements of ASME Code Section XI paragraphs IWV-3300, IWV-3410 and IWV-3520 and Technical Specification 4.0.5.a and, as such, is reportable per

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)  Unit 1 Susquehanna Steam Electric Station	DOCKET NUMBER (2)  0 5 0 0 0 3 8 7	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		8 8	- 0 1 9	- 0 0	0 3	OF 0 3

TEXT (If more space is required, use additional NRC Form 366A's) (17)

10CFR50.73(a)(2)(i)(B). The six ESW valves have been demonstrated to fulfill their safety function during performance of the 18 Month Loss of Offsite Power surveillance tests SO-224-A02, SO-224-B02, SO-224-107 and SO-224-207. The four RHRSW system valves have been verified to be in their proper position by performance of SO-116-001, Monthly RHRSW Alignment Check. There were no safety consequences or compromise to public health or safety as a result of this deficiency.

CORRECTIVE ACTIONS

The sixteen valves already in the IST Program have been added to SO-054-015, Eighteen (18) Month ESW System Remote Position Indicator (RPI) Checks, and were checked successfully on 8/26/88. The remaining six ESW valves and four RHRSW valves have been added to the Station IST Program documents ISI-T-200.0, ISI-T-100.0 and AD-QA-423, Station Pump and Valve Testing Program. Relief Request 59 was generated and the appropriate surveillances are in the process of being revised. In the intervening months since activation of the four valves added to the RHRSW System and the six valves added to the ESW System, Nuclear Plant Engineering (NPE) procedure EPM-QA-209, Modification Package, has been changed to better address the issue of modification design considerations, such as IST. EPM-QA-209 now requires that the NPE Responsible Engineer consider all areas which may be impacted by the modification. Documented evidence of this consideration is also required, in the form of a completed checklist of design considerations, including IST Program documentation updates.

To prevent recurrence, AD-QA-423, Station Pump and Valve Testing Program, will be revised to:

- 1) Add a cross-reference listing of RPI check procedures and confirmation of inclusion of all IST valves in those procedures, and
- 2) Emphasize consideration of inclusion into the IST Program for pumps and valves installed or changed by plant modifications.

This procedure revision is targeted for completion by September 30, 1988. A review of valves added by past modifications, for inclusion into the IST Program, will also be performed. Completion of this review is projected for October 30, 1988.

ADDITIONAL INFORMATION

The IST Program review also identified four valves, which were added to the IST Program following the addition to the plant of the fifth Emergency Diesel Generator (EIIS Code:EK), which had not been added to the IST RPI testing program in 1987. No code requirement for these valves had yet been exceeded. These four valves were also added to SO-054-015 for performance of IST RPI checks and were checked successfully on 8/26/88.





Pennsylvania Power & Light Company

Two North Ninth Street • Allentown, PA 18101 • 215/770-5151

September 19, 1988

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

SUSQUEHANNA STEAM ELECTRIC STATION  
LICENSEE EVENT REPORT 88-019-00  
FILE R41-2  
PIAS- 336

Docket No. 50-387  
License No. NPF-14

Attached is Licensee Event Report 88-019-00. This condition, discovered during self-initiated reviews of the In-Service Testing Program, including a Safety System Functional Inspection, was determined reportable per 10CFR50.73(a)(2)(i)(B) in that the failure to include Remote Position Indicator checks for sixteen (16) safety-related valves and the failure to add ten (10) valves to the In-Service Testing Program, following plant modifications, are contrary to the requirements of Technical Specification 4.0.5.a and ASME Section XI for in-service testing of ASME Class 1,2 and 3 valves.

R.G. Byram  
Superintendent of Plant - Susquehanna

RFW/mjm

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

Mr. Frank Young  
Sr. Resident Inspector  
U.S. Nuclear Regulatory Commission  
P.O. Box 52  
Shickshinny, PA 18655

IE22  
11