

ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8804250032 DOC. DATE: 88/04/19 NOTARIZED: NO DOCKET #
 FACIL: 50-388 Susquehanna Steam Electric Station, Unit 2, Pennsylvania 05000388
 AUTH. NAME AUTHOR AFFILIATION
 RYDER, T.S. Pennsylvania Power & Light Co.
 BYRAM, R.G. Pennsylvania Power & Light Co.
 RECIP. NAME RECIPIENT AFFILIATION

SUBJECT: LER 88-006-00: on 880323, MSIV isolation logic actuation occurred. R

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

NOTES: LPDR 2 cys=Transcripts. 05000388 S

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INTERNAL:	ACRS MICHELSON		1	1	ACRS MOELLER		2	2		D
	AEOD/DOA		1	1	AEOD/DSP/NAS		1	1		D
	AEOD/DSP/ROAB		2	2	AEOD/DSP/TPAB		1	1		S
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	NRR/DEST/ADS 7E		1	0	NRR/DEST/CEB 8H		1	1		
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	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	NRR/PMAS/ILRB12		1	1		
	REG FILE 02		1	1	RES TELFORD, J		1	1		
	RES/DE/EIB		1	1	RES/DRPS DIR		1	1		
	RGN1 FILE 01		1	1						
EXTERNAL:	EG&G GROH, M		4	4	FORD BLDG HOY, A		1	1		R
	H ST LOBBY WARD		1	1	LPDR		2	2		I
	NRC PDR		1	1	NSIC HARRIS, J		1	1		D
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LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Susquehanna Steam Electric Station - Unit 2	DOCKET NUMBER (2) 0 5 0 0 0 3 8 8	PAGE (3) 1 OF 0 3
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TITLE (4)
MSIV Isolation Logic Actuation

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		
0	3	2	3	8	8	8	8	8			
									DOCKET NUMBER(S) 0 5 0 0 0		
									0 5 0 0 0		

OPERATING MODE (9)	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)									
POWER LEVEL (10)	<input type="checkbox"/>	20.402(b)	<input type="checkbox"/>	20.406(c)	<input checked="" type="checkbox"/>	50.73(a)(2)(iv)	<input type="checkbox"/>	73.71(b)		
	<input type="checkbox"/>	20.406(a)(1)(i)	<input type="checkbox"/>	50.38(c)(1)	<input type="checkbox"/>	50.73(a)(2)(v)	<input type="checkbox"/>	73.71(c)		
	<input type="checkbox"/>	20.406(a)(3)(iii)	<input type="checkbox"/>	50.38(c)(2)	<input type="checkbox"/>	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)			
	<input type="checkbox"/>	20.406(a)(1)(iii)	<input type="checkbox"/>	50.73(a)(2)(i)	<input type="checkbox"/>	50.73(a)(2)(viii)(A)				
	<input type="checkbox"/>	20.406(a)(1)(iv)	<input type="checkbox"/>	50.73(a)(2)(ii)	<input type="checkbox"/>	50.73(a)(2)(viii)(B)				
	<input type="checkbox"/>	20.406(a)(1)(v)	<input type="checkbox"/>	50.73(a)(2)(iii)	<input type="checkbox"/>	50.73(a)(2)(ix)				

LICENSEE CONTACT FOR THIS LER (12)	
NAME T.S. Ryder - Power Production Engineer	TELEPHONE NUMBER AREA CODE: 7 1 7 5 4 2 1 3 2 3 5

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

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

On March 23, 1988 with Unit 2 in Condition 5 at 0% power, a full MSIV isolation signal was received when the wrong relay was removed during modification work to the MSIV isolation logic. The MSIV's were out of service and gagged closed at the time of the occurrence so no valve motion resulted. The event was caused by conflicting information in the work instructions of a construction work order (CWO) which influenced the work group to select the wrong relay for removal. This event was determined to be reportable per 10CFR50.73(a)(2)(iv), in that actuation of the MSIV isolation logic constituted an unplanned ESF actuation. The event did not pose any significant safety consequences. The MSIV isolation trip logic is provided to limit the amount of fission product release for certain postulated events. This logic is required for operational conditions 1, 2, and 3 and does not apply for this situation with Unit 2 being shutdown in Condition 5 at 0% power. The MSIV's were already closed which placed them in the desirable isolation trip position. The relay was reinstalled and the MSIV isolation signal was reset. To prevent recurrence in the future, work instructions for scheme checks will be written to identify relays by relay number and coordinate identifier when applicable in the specific work steps. Instructions will be added to require the work group to verify that the written identification of components to be removed or de-terminated agrees with field conditions and no discrepancies exist. Discrepancies will be addressed for proper resolution before any additional scheme checking is performed.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION.

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		YEAR 8 8	SEQUENTIAL NUMBER - 0 0 6	REVISION NUMBER - 0 0			

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

DESCRIPTION OF EVENT

On March 23, 1988 with Unit 2 in Condition 5 at 0% power, a full Main Steam Isolation Valve (MSIV, EIIIS Code: SB) isolation signal was received when the wrong relay was removed during modification work to the MSIV isolation logic. The modification involved installation of a new selector switch to allow channel functional testing of the Main Steam Leak Detection logic without causing a 1/2 MSIV isolation logic trip. The "A" MSIV isolation logic channel was already in the de-energized (trip condition) state to support the modification work. The work group was in the process of performing scheme checks for the selector switch. A relay associated with the "B" logic was mistakenly removed which caused a full isolation signal for the MSIV's. The MSIV's were out of service and gagged closed at the time of the occurrence so no valve motion resulted.

CAUSE OF EVENT

Work instructions were written in the construction work order (CWO) to perform the final tie-in terminations and a scheme check associated with implementation of the modification to the MSIV isolation logic for Unit 2. Conflicting information in the work instructions for the scheme check portion of the CWO influenced the work group to select relay K7F instead of K7E for removal. This resulted in an isolation signal to the MSIV "B" logic. Since the MSIV "A" logic was de-energized for the CWO work, the addition of the "B" isolation signal initiated a full MSIV isolation signal. The conflicting information in the CWO was comprised of giving the correct relay, K7E, for removal and additionally providing a panel coordinate identifier which identified the physical location of the wrong relay, K7F, within the panel. The work group utilized the panel coordinate identifier for relay location determination and consequently pulled the wrong relay.

REPORTABILITY/ANALYSIS

This event was determined to be reportable per 10CFR50.73 (a) (2) (iv), in that actuation of the MSIV isolation logic constituted an unplanned ESF actuation. The event did not pose any significant safety consequences. The MSIV isolation trip logic is provided to limit the amount of fission product release for certain postulated events. This logic is required for operational conditions 1, 2, and 3 and does not apply for this situation with Unit 2 being shutdown in Condition 5 at 0% power. The MSIV's were already closed which placed them in the desirable isolation trip position.

The MSIV's were out service and gagged closed at the time of the occurrence so no valve motion resulted and no challenge to this particular Engineered Safety Feature actually took place. Further review of the guidance provided in NUREG 1022 and supplements would indicate this event to be not reportable. This LER is being provided as a followup document due to an ENS notification having been made.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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

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

CORRECTIVE ACTIONS

Relay K7F was reinstalled and the MSIV isolation signal was reset. To prevent recurrence in the future, work instructions for scheme checks will be written to identify relays by relay number and coordinate identifier when applicable in the specific work steps. Instructions will be added to require the work group to verify that the written identification of components to be removed or de-terminated agrees with field conditions and no discrepancies exist. Discrepancies will be addressed for proper resolution before any additional scheme checking is performed.

ADDITIONAL INFORMATION

Failed Component Identification: Not Applicable.

Previous Similar Events: None.



Pennsylvania Power & Light Company

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April 19, 1988

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

SUSQUEHANNA STEAM ELECTRIC STATION
LICENSEE EVENT REPORT 88-006-00
FILE R41-2
PLAS- 314

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

Attached is a Licensee Event Report 88-006-00. This event was determined reportable per 10CFR50.73(a)(2)(iv) in that an engineered safety feature actuation occurred when a full MSIV isolation signal was unexpectedly received.


R.G. Byram
Superintendent of Plant Susquehanna

TSR/mjm

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