

# ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9006130348      DOC. DATE: 90/06/08      NOTARIZED: NO      DOCKET #  
 FACIL: 50-388 Susquehanna Steam Electric Station, Unit 2, Pennsylv      05000388  
 AUTH. NAME      AUTHOR AFFILIATION  
 RYDER, T.S.      Pennsylvania Power & Light Co.  
 STANLEY, H.G.      Pennsylvania Power & Light Co.  
 RECIP. NAME      RECIPIENT AFFILIATION

SUBJECT: LER 90-004-00: on 900515, RCIC initiation due to personnel error during surveillance testing.

W/9      ltr.

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NOTES: LPDR 1 cy Transcripts. 05000388

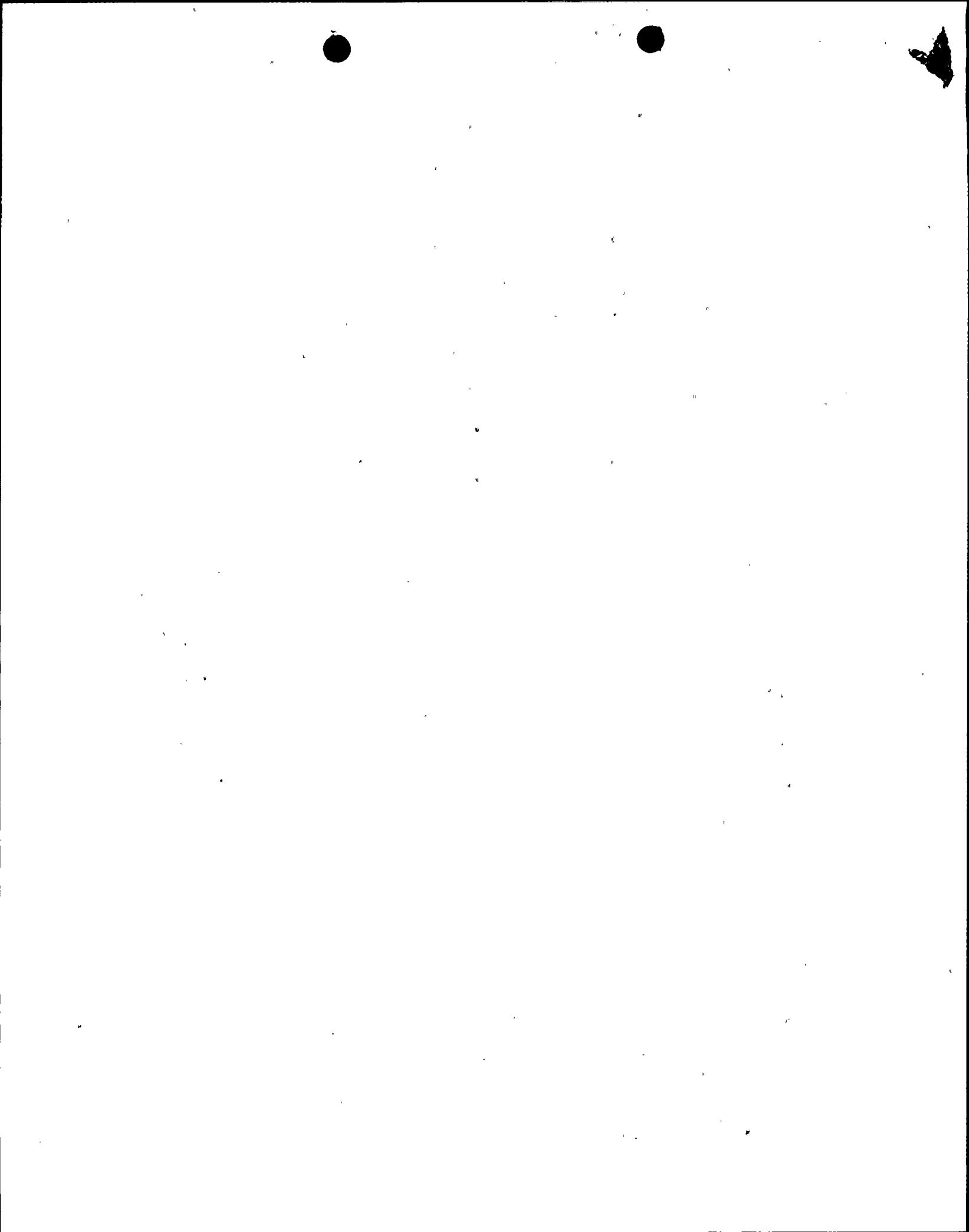
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	AEOD/DOA	1 1	AEOD/DSP/TPAB	1 1
	AEOD/ROAB/DSP	2 2	DEDRO	1 1
	NRR/DET/ECMB 9H	1 1	NRR/DET/EMEB9H3	1 1
	NRR/DLPQ/LHFB11	1 1	NRR/DLPQ/LPEB10	1 1
	NRR/DOEA/OEAB11	1 1	NRR/DREP/PRPB11	2 2
	NRR/DST/SELB 8D	1 1	NRR/DST/SICB 7E	1 1
	NRR/DST/SPLB8D1	1 1	NRR/DST/SRXB 8E	1 1
	<u>REG FILE</u> 02	1 1	RES/DSIR/EIB	1 1
	RGNI FILE 01	1 1		
EXTERNAL:	EG&G STUART, V.A	4 4	L ST LOBBY WARD	1 1
	LPDR	1 1	NRC PDR	1 1
	NSIC MAYS, G	1 1	NSIC MURPHY, G.A	1 1
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NOTES:		2 2		

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June 8, 1990

U.S. Nuclear Regulatory Commission  
Document Control Desk  
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SUSQUEHANNA STEAM ELECTRIC STATION  
LICENSEE EVENT REPORT 90-004-00  
FILE R41-2  
PLAS - 427

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

Attached is Licensee Event Report 90-004-00. This report documents a May 15, 1990 Reactor Core Isolation Cooling (RCIC) injection on Unit 2. The RCIC System at Susquehanna is not classified as an Engineered Safety Feature, therefore this event is not reportable per 10CFR50.73. This LER is being provided on a voluntary basis.

Pursuant to Technical Specification 4.7.3.d, a Special Report documenting the total accumulated actuation cycles due to the RCIC injection and the current usage factor for affected nozzles if in excess of 0.70 will be provided within the required 90 day time period under a separate letterhead.

  
H.G. Stanley  
Superintendent of Plant - Susquehanna

TSR/mjm

cc: Mr. T. T. Martin  
Regional Administrator, Region I  
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PDR ADOCK 05000388  
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11

LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST 500 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) 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)  
RCIC Initiation Due to Personnel Error During Surveillance Testing

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	5	1	5	9	0	0	0	4	0	0	0	6	0	8	9	0	0	5	0	0	0

OPERATING MODE (9) 1

POWER LEVEL (10) 1 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)	50.73(a)(2)(iv)	73.71(b)
20.405(a)(1)(i)	50.38(c)(1)	50.73(a)(2)(v)	73.71(c)
20.405(a)(1)(ii)	50.38(c)(2)	50.73(a)(2)(vi)	<input checked="" type="checkbox"/> OTHER (Specify in Abstract below and in Text, NRC Form 366A)
20.405(a)(1)(iii)	50.73(a)(2)(i)	60.73(a)(2)(viii)(A)	
20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
20.405(a)(1)(v)	50.73(a)(2)(iii)	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
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NFRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NFRDS

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE)  NO

EXPECTED SUBMISSION DATE (15)

MONTH	DAY	YEAR

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (18)

On May 15, 1990 with Unit 2 operating in Condition 1 at 100% power, an inadvertent RCIC system injection to the reactor vessel occurred. The maximum power level recorded during the initiation was 102% power over a time interval of less than 16 seconds. The RCIC turbine was manually tripped from the control room 30 seconds after the RCIC initiation signal was received. RCIC continued to inject into the vessel for an additional 15 seconds while the RCIC turbine and pump coasted down. The event was caused by personnel error during the performance of an 18 month surveillance test which calibrates the reactor water level channels. An I&C technician improperly connected the test leads to his multimeter in such a manner as to cause a short circuit energizing the RCIC initiation logic. Self checking was not performed and standard color convention for test leads was not followed. This event had no impact on the health and safety of the public. The RCIC system injected into the vessel for 45 seconds. Operation at 102% power for 16 seconds was within the allowable deviation limits of the licensed power level. No thermal limits were exceeded and no fuel preconditioning guidelines were exceeded. No changes in offgas pretreatment radiation levels were observed. Per Chapter 6.0 of the Final Safety Analysis Report, the RCIC system is not an Engineered Safety Feature. Thus, the event is not reportable per 10CFR50.73. This report is being submitted on a voluntary basis. I&C work practices training will be expanded to emphasize the proper use and care of test leads. I&C personnel will receive training on this event to benefit from lessons learned.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

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)  Unit 2 Susquehanna Steam Electric Station	DOCKET NUMBER (2)  0 5   0 0   0 3   8 8	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		9 0	- 0   0   4	- 0   0	0   2	OF	0   3

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

DESCRIPTION OF EVENT

On May 15, 1990 at 1420 hours with Unit 2 operating in Condition 1 at 100% power, an inadvertent Reactor Core Isolation Cooling (RCIC, EIIS Code: BN) system injection to the reactor vessel occurred. The maximum power level recorded during the initiation was 102% power over a time interval of less than 16 seconds. Operations personnel immediately recognized the initiation and injection and verified that it was not valid. The RCIC turbine was manually tripped from the control room 30 seconds after the RCIC initiation signal was received. RCIC continued to inject into the vessel for an additional 15 seconds while the RCIC turbine and pump coasted down.

CAUSE OF EVENT

The event was caused by personnel error during the performance of an 18 month surveillance test which calibrates reactor water level channels LIS-B21-2N31A-D. An Instrumentation & Controls (I&C) technician (utility, non-licensed) improperly connected the test leads to his multimeter in such a manner as to cause a short circuit energizing the RCIC initiation logic. Self checking was not performed and standard color convention for test leads was not followed.

REPORTABILITY/ANALYSIS

This event had no impact on the health and safety of the public. The RCIC system injected into the vessel for 45 seconds. Reactor power increased to a maximum of 102% power during the transient due to increased core inlet subcooling. Operation at 102% power for 16 seconds was within the allowable deviation limits of the licensed power level. No thermal limits were exceeded and no fuel preconditioning guidelines were exceeded. No changes in offgas pretreatment radiation levels were observed.

Per Chapter 6.0 of the Final Safety Analysis Report, the RCIC system is not an Engineered Safety Feature. Thus, the event is not reportable per 10CFR50.73. This report is being submitted on a voluntary basis.

Pursuant to Technical Specification 4.7.3.d, a Special Report documenting the total accumulated actuation cycles due to the RCIC injection and the current usage factor for affected nozzles if in excess of 0.70 will be provided within the required 90 day time period under a separate letterhead.

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (8)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
Unit 2 Susquehanna Steam Electric Station	0   5   0   0   0   3   8   8	9   0	-   0   0   4	-   0   0	0   3	OF	0   3

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

CORRECTIVE ACTIONS

I&C will expand its training module on work practices to emphasize the proper use and care of test leads. I&C personnel will receive training on this event to benefit from lessons learned. It was discovered that the particular logic was being tested six times more frequently than required by Technical Specifications to satisfy logic system functional testing requirements. To reduce the risk involved due to excessive testing, the frequency will be decreased from quarterly to once per 18 months which fully satisfies Technical Specification requirements.

ADDITIONAL INFORMATION

Failed Component Identification: Not applicable.

Previous Similar Events: There have been no previous LER's describing occurrences caused by improperly connecting test leads to a meter based on a review of the station's event database. LER 89-002-00 documents an inadvertent RCIC initiation on Unit 2 when an instrument isolation valve was mispositioned.