

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8704280194 DOC. DATE: 87/04/22 NOTARIZED: NO DOCKET #  
 FACIL: 50-387 Susquehanna Steam Electric Station, Unit 1, Pennsylv 05000387  
 AUTH. NAME AUTHOR AFFILIATION  
 HIRT, J. A. Pennsylvania Power & Light Co.  
 BYRAM, R. G. Pennsylvania Power & Light Co.  
 RECIP. NAME RECIPIENT AFFILIATION

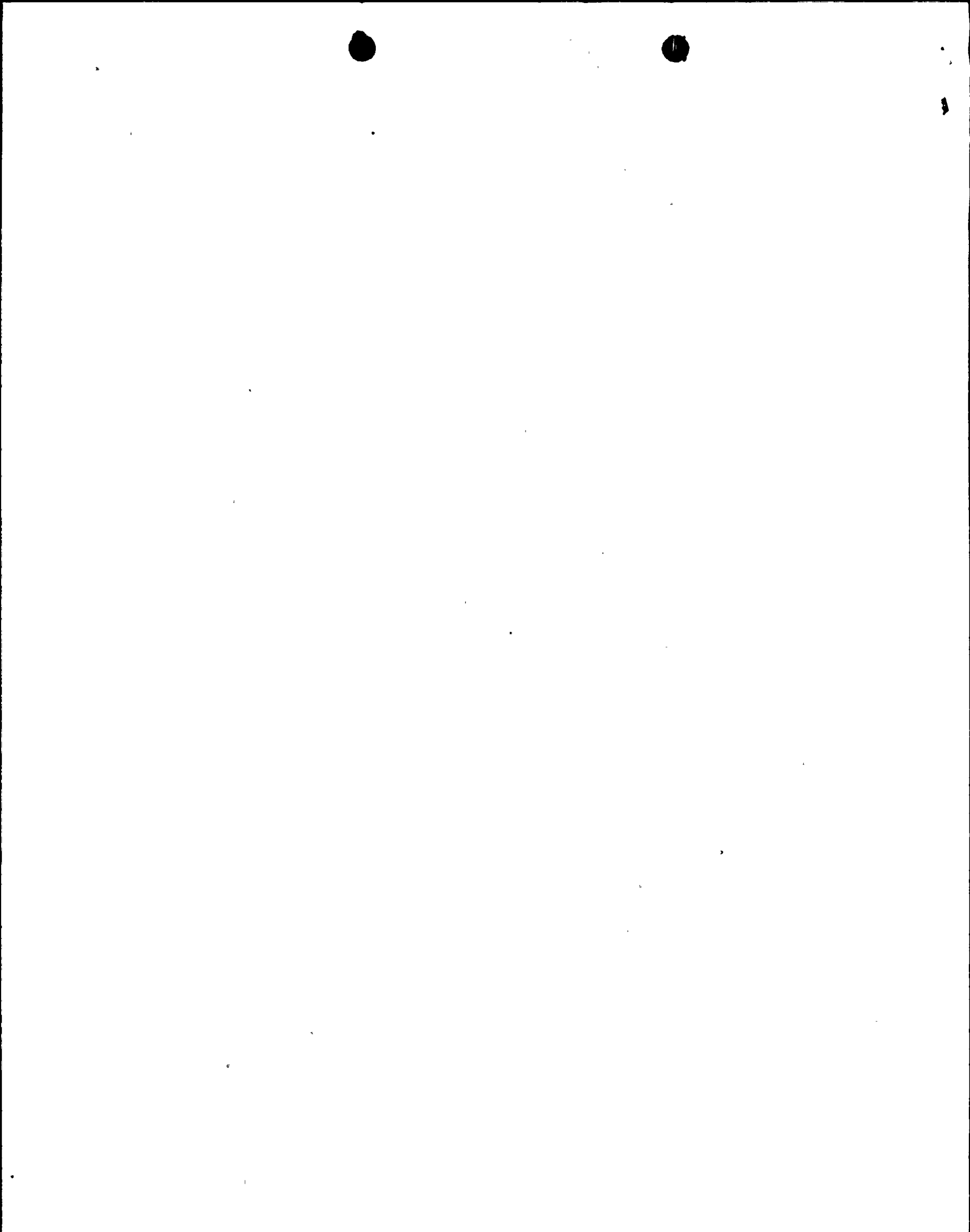
SUBJECT: LER 87-004-01: on 870203, HPIS isolated. Caused by technician mistakenly setting RWCU switch in test position while performing Surveillance Procedure SI-152-205. Switch reset to normal position. W/870422 ltr.

DISTRIBUTION CODE: IE22D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 5  
 TITLE: 50.73 Licensee Event Report (LER), Incident Rpt, etc.

NOTES: 1cy NMSS/FCAF/PM. LPDR 2cys Transcripts. 05000387

	RECIPIENT ID CODE/NAME	COPIES LTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTR ENCL
	PD1-2 LA	1 1	PD1-2 PD	1 1
	THADANI, M	1 1		
INTERNAL:	ACRS MICHELSON	1 1	ACRS MOELLER	1 1
	AEOD/DOA	1 1	AEOD/DSP/ROAB	2 2
	AEOD/DSP/TPAB	1 1	NRR/ADT	1 1
	NRR/DEST/ADE	1 0	NRR/DEST/ADS	1 0
	NRR/DEST/CEB	1 1	NRR/DEST/ELB	1 1
	NRR/DEST/ICSB	1 1	NRR/DEST/MEB	1 1
	NRR/DEST/MTB	1 1	NRR/DEST/PSB	1 1
	NRR/DEST/RSB	1 1	NRR/DEST/SGB	1 1
	NRR/DLPQ/HFB	1 1	NRR/DLPQ/GAB	1 1
	NRR/DOEA/EAB	1 1	NRR/DREP/EPB	1 1
	NRR/DREP/RAB	1 1	NRR/DREP/RPB	2 2
	NRR/PMAS/ILRB	1 1	NRR/PMAS/PTSB	1 1
	REG FILE 02	1 1	RES SPEIS, T	1 1
	RGNI FILE 01	1 1		
EXTERNAL:	EG&G GROH, M	5 5	H ST LOBBY WARD	1 1
	LPDR	2 2	NRC PDR	1 1
	NSIC HARRIS, J	1 1	NSIC MAYS, G	1 1
NOTES:		3 3		

TOTAL NUMBER OF COPIES REQUIRED: LTR 46 ENCL 44



LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Susquehanna Steam Electric Station - Unit One	DOCKET NUMBER (2) 0 5 0 0 0 3 8 7	PAGE (3) 1 OF 0 4
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TITLE (4) The High Pressure Coolant Injection System Isolates Due to An I&C Technician Bypassing the Incorrect Isolation Logic 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		
0 2	0 3	8 7	8 7	0 0 4	0 1	0 4	2 2	8 7			
									DOCKET NUMBER(S) 0 5 0 0 0		

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 1 0 1 0	20.402(b)	20.405(e)	<input checked="" type="checkbox"/>	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)	<input checked="" type="checkbox"/>	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(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 Jeffrey A. Hirt, Engineer Level I	TELEPHONE NUMBER 7 1 7 5 4 2 - 1 3 9 1 7
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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 February 3, 1987, at approximately 1930 hours, the High Pressure Coolant Injection (HPCI) System isolated. At the time, the reactor was operating at 100% rated thermal power. Instrument and Control (I&C) technicians were performing surveillance procedure SI-152-205 "Monthly Channel Functional Test of HPCI Equipment Room Differential Temperature Channels TDSH-E41-N601A&B." Step 6.1.3 of SI-152-205 instructed the technician to set the HPCI ISOLATION NORMAL/TEST BYPASS switch for Division 1 in the TEST BYPASS position to prevent an actual isolation from occurring. However, the technician mistakenly set the Reactor Water Cleanup (RWCU) ISOLATION NORMAL/TEST BYPASS switch in the TEST/BYPASS position. As a result, when the technician tripped the channel, as required by the procedure, the HPCI inboard containment isolation valves closed. A review of the panel layout revealed that the position of the HPCI test switch is non-standard and that this contributed to the technician choosing the RWCU switch. Usually system related switches are positioned vertically. On this particular panel the HPCI switch is found to the right of the HPCI manual isolation pushbutton. The technician read the HPCI label above the pushbutton and placed the switch below it in the TEST/BYPASS position. This switch was for the RWCU system.

Immediate corrective action included removing the trip signal, resetting the RWCU key switch to the NORMAL position and restoring HPCI to operable status. To prevent recurrence, a caution has been added to the surveillance procedure, prior to the bypass step, which explains the switch lay-out is non-standard.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) Susquehanna Steam Electric Station Unit One	DOCKET NUMBER (2) 0   5   0   0   0   3   8   7	LER NUMBER (6)			PAGE (3)		
		YEAR 8   7	SEQUENTIAL NUMBER -   0   0   4	REVISION NUMBER -   0   1	0   2	OF 0   4	

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

DESCRIPTION OF EVENT

On February 3, 1987, at approximately 1930 hours, the High Pressure Coolant Injection (HPCI) System (EIIS Code: BJ) isolated. At the time, the reactor was operating at 100% rated thermal power. Instrument and Control (I&C) technicians (non-licensed, utility) were performing surveillance procedure SI-152-205 "Monthly Channel Functional Test of HPCI Equipment Room Differential Temperature Channels TDSH-E41-N601A&B." Step 6.1.3 of SI-152-205 instructed the technician to set the HPCI ISOLATION NORMAL/TEST BYPASS switch for Division 1 in the TEST BYPASS position to prevent an actual isolation from occurring. However, the technician mistakenly set the Reactor Water Cleanup (RWCU) ISOLATION NORMAL/TEST BYPASS switch in the TEST/BYPASS position. As a result, when the technician tripped the channel, as required by the procedure, the HPCI inboard containment isolation valves closed.

CAUSE OF EVENT

The HPCI isolation was caused by an I&C technician bypassing the Reactor Water Cleanup (RWCU) (EIIS Code: CE) isolation logic instead of the HPCI isolation logic. Figure 1 shows the arrangement of the key switches. The technician performing the surveillance read the label for the HPCI manual isolation pushbutton and then inserted the key into the RWCU key switch located directly beneath the pushbutton. The technician failed to notice the label identifying the key switch was for the RWCU system.

A review of the panel layout revealed that the position of the HPCI test switch is non-standard and that this contributed to the technician choosing the RWCU switch. Usually system related switches are located beneath one another. On this particular panel the HPCI TEST/BYPASS switch is situated to the right of the HPCI manual isolation pushbutton while the RWCU TEST/BYPASS switch is located beneath the HPCI pushbutton.

CORRECTIVE ACTIONS

Immediate corrective action included removing the trip signal, resetting the RWCU key switch to the NORMAL position and restoring HPCI to operable status. To prevent recurrence a caution has been added to the surveillance procedure, prior to the bypass step, which explains the switch layout is non-standard.

SAFETY ASSESSMENT

Due to the extremely short time duration (~5 minutes) the HPCI system was inoperable, combined with the availability of other safety systems this event did not pose any significant safety consequence.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
Susquehanna Steam Electric Station Unit One	0500038787	87	004	01	03	OF 04

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

PREVIOUS SIMILAR EVENTS

Two Unit 2 Licensee Event Reports, LER 84-005-00 and LER 85-022-00, have been filed with the Commission describing related inadvertent containment isolations which occurred during surveillance testing. LER 84-005-00 describes a May 1984 RWCU isolation which resulted when an I&C technician (non-licensed, utility) mistakenly bypassed the incorrect isolation logic for the division he was testing. As a result, when the channel was activated the outboard containment isolation valve for RWCU closed. Corrective action for this isolation included formal instruction on the importance of verbatim compliance with procedures. The second LER details a RWCU isolation which occurred approximately fourteen months later. This particular isolation occurred while an I&C technician performed the quarterly calibration of the HPCI equipment room differential temperature channels. The technician (non-licensed, non-utility) connected his test equipment to the RWCU system module instead of the HPCI module. When the technician initiated a test signal the RWCU containment outboard isolation valve closed. Corrective action included labeling of the rear input wires of the module, counselling the technician involved and reviewing the event with I&C personnel.

REPORTABILITY

This event was determined to be reportable per 10CFR50.73 (a) (2) (iv) and (vii) in that an unanticipated Engineered Safety Feature actuation occurred which rendered a single train safety system inoperable.

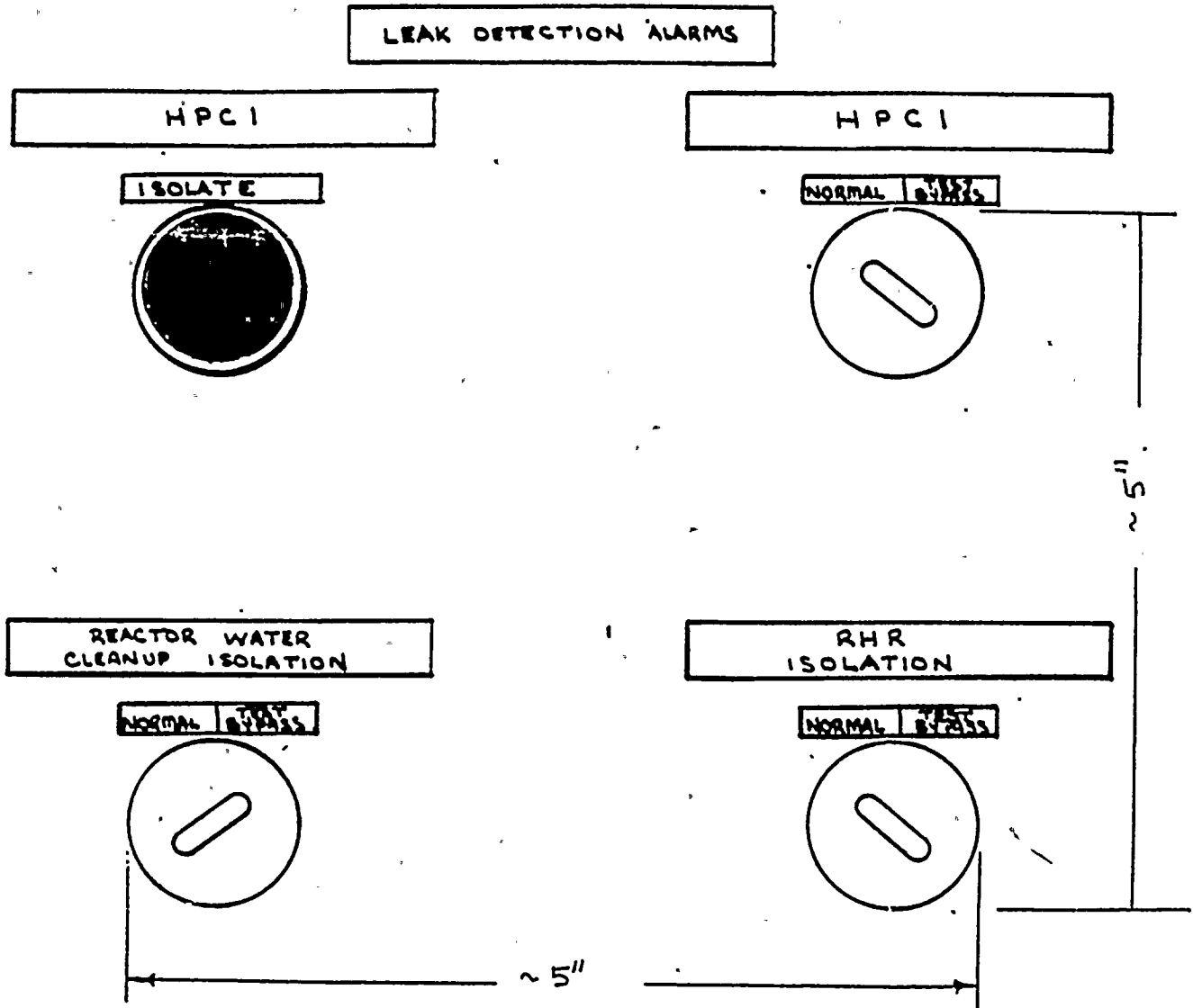


FIGURE 1



Pennsylvania Power & Light Company

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

April 22, 1987


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

SUSQUEHANNA STEAM ELECTRIC STATION  
LICENSEE EVENT REPORT 87-004-01  
FILE R41-2  
PLAS - 246

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

Attached is Licensee Event Report 87-004-01 which is an update to LER 87-004-00 filed on March 5, 1987. This event was determined reportable per 10CFR50.73 (a) (2) (iv) and 10 CFR50.73(a) (2) (vii), in that, during surveillance testing, the HPCI inboard containment isolation valves closed due to a technician's error.

  
R. G. Byram  
Superintendent of Plant - Susquehanna

JAH/cmiv

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