REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8704220277 DOC. DATE: 87/04/16 NOTARIZED: NO DOCKET #
FACIL: 50-397 WPPSS Nuclear Project, Unit 2, Washington Public Powe 05000397
AUTH. NAME AUTHOR AFFILIATION
ARBUCKLE, J. D. Washington Public Power Supply System
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RECIP. NAME RECIPIENT AFFILIATION

SUBJECT: LER 87-001-00: on 870317, standby gas treatment sys fans 1A1 & 1A2 inadvertently started during performance of electrical troubleshooting activities. Caused by personnel error. Personnel counseled. W/870416 ltr.

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

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL
	PD5 LA	1	1	PD5 PD	1	1
	SAMWORTH, R	1	1			
INTERNAL:	ACRS MICHELSON	1	1	ACRS MOELLER	1	1
	AEOD/DOA	1	1	AEOD/DSP/ROAB	2	2
	AEOD/DSP/TAPB	1	1	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/QAB	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	RGN5 FILE 01	1	1
EXTERNAL:	EG&G GROH, M	5	5	H ST LOBBY WARD	1	1
	LPDR	1	1	NRC PDR	1	1
	NSIC HARRIS, J	1	1	NSIC MAYS, G	1	1

TOTAL NUMBER OF COPIES REQUIRED: LTTR 43 ENCL 41

NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

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TITLE (4)
Inadvertent Start of Standby Gas Treatment System Due to Personnel Error

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 3	1 7	8 7	8 7	— 0 0 1	— 0 0	0 4	1 6	8 7		0 5 0 0 0
										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)	0 7 2	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(a)(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
J.D. Arbuckle, Compliance Engineer	AREA CODE 5 0 9 — 3 7 7 - 2 1 1 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
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

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

On March 17, 1987 at 1705 hours, Standby Gas Treatment (SGT) System Fans 1A1 and 1A2 inadvertently started during the performance of electrical troubleshooting activities. The inadvertent start was caused by a utility maintenance electrician who, during an effort to determine why electrical strip heaters were not working in an SGT Filter unit, mistakenly pushed an SGT "A" Train Electrical Heating Coil control button (each SGT Train will start or stop if the associated Electrical Heating Coil is turned on or off). As a result, SGT Fan 1A1 started and then subsequently tripped because the inlet damper was closed; accordingly, SGT Fan 1A2 auto started.

After verification that no actual initiating condition existed, the "A" Train of the SGT System was returned to normal lineup and was tested to verify operability. No problems were identified. The personnel involved were counseled and the event was discussed during Electrical Maintenance Shop Meetings.

No safety significance was associated with the event in that no actual initiating condition existed and the SGT System operated as designed.

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

Plant Conditions

a) Power Level - 72%
b) Plant Mode - 1 (Power Operation)

Event

On March 17, 1987 at 1705 hours, Standby Gas Treatment (SGT) System "A" Train Fans 1A1 and 1A2 inadvertently started during the performance of electrical troubleshooting activities. The inadvertent start was caused by a utility maintenance electrician who mistakenly pushed a button marked "Heater Control On" on SGT local heater control panel 1A1.

The troubleshooting activities were initiated by problems associated with inoperable Electrical Strip Heaters (ESHS) 1A and 2A. The heaters are locally controlled and maintain the charcoal filters 10°F above the design dew point when the SGT Systems are not operating. It should be noted that at the time of the event, the "B" train of SGT was out of service for replacement of electric strip heaters and a Technical Specification LCO was in effect.

After a briefing on the troubleshooting plan in the Control Room, the electricians proceeded to the "A" SGT unit; however, at the local controls for Carbon Bed Heater No. 1 (for SGT Fan 1A), no power was detected to the electrical contactors.

The electricians phoned the Control Room to locate from where the Carbon Bed Heater No. 1 control box contactors were fed. The Control Room Operator replied, "MC7B." The electricians misinterpreted the message as "MC7B-B, apparently due to the background noise level.

The electricians then proceeded to the MC7B-B room where they found Clearance Order Tags hung for electrical strip heater replacement on the "B" train of SGT. These tags were part of the overall tagout for equipment and personnel protection and were located on the Electric Heating Coils (EHCs) for the "B" train of SGT. The coils reduce the humidity of the gas entering the SGT trains to less than 70% during operating conditions. The location of the Clearance Order Tags for the "B" SGT train ESH work appeared to enforce the misconception that room MC7B-B was the correct motor control center.

While in room MC7B-B, the electricians opened a breaker door identified as "Electric Heating Coil SGT-1A1" and noticed that the cable number in the breaker did not coincide with the work instructions. Although the electricians decided that this was the wrong breaker, a phone could not be located in the room and they continued the search for the correct breaker in room MC7B-B.

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

An electrician then located a control panel identified as "SGT-EHC-1A1." Mistaking "EHC" for "EHS", and thinking that the Carbon Bed Heater No. 1 control box contactors may have been deactivated, the electrician pushed a green button marked "Heater Control On", thereby inadvertently starting SGT Fan 1A1. The 1A1 fan subsequently tripped because the inlet damper was closed. As a result, SGT Fan 1A2 auto started.

The electricians realized their mistake and contacted the Control Room to inform Operations that they had inadvertently caused the SGT System to actuate. The electricians were then directed to room MC-7B where they discovered a blown fuse in the breaker for SGT-ESH-2A. The fuse was replaced and the "A" SGT System was returned to operability.

Immediate Corrective Action

After verification that no actual initiating condition existed, the "A" Train of the SGT System was returned to normal lineup and tested to verify operability. No problems were identified.

Further Evaluation and Corrective Action

- Plant Procedure 1.3.42, "Troubleshooting Plant Systems and Equipment", was applied to this activity. The initial troubleshooting plan was reviewed and determined to be adequate. However, during the performance of the plan, the troubleshooting actions needed revision but time constraints overly influenced the craftsmen due the critical implications of both SGT trains being potentially inoperable. As a result, the craftsmen proceeded to actuate the wrong initiate push button prior to verification of the consequences of that action.

  Accordingly, a Management letter will be developed regarding situations where Plant personnel may be uncertain during the performance of assigned tasks. Plant personnel will be advised, in such situations, to evaluate the assignment prior to proceeding until they are confident of performing the task correctly. In addition, the need to re-review appropriateness of troubleshooting actions with respect to the original plan will be emphasized.

- The personnel involved were counseled and the event was discussed during Electrical Shop Meetings.

- The providing of improved communications, including the installation of telephones in rooms MC7B-B and MC8B-B, will be considered.

- Signs will be posted at the SGT-EHC local control panels to caution personnel that actuation of heater control buttons will cause starting or stopping of the SGT System.

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

Safety Significance

This event has no safety significance in that there was no actual initiating condition and the system operated as designed.

Similar Events

None

EIIS Information

Text Reference	EIIS Reference	
	System	Component
Electric Heating Coil	BH	SGT-EHC-1A1
Standby Gas Treatment System (SGT)	BH	----------

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

P.O. Box 968 • 3000 George Washington Way • Richland, Washington 99352

Docket No. 50-397

April 16, 1987

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

Subject: NUCLEAR PLANT NO. 2
LICENSEE EVENT REPORT NO. 87-001

Dear Sir:

Transmitted herewith is Licensee Event Report No. 87-001 for WNP-2 Plant. This report is submitted in response to the report requirements of 10CFR50.73 and discusses the item of reportability, corrective action taken, and action taken to preclude recurrence.

Very truly yours,

C.M. Powers (M/D 927M)
WNP-2 Plant Manager

CMP:

Enclosure:
Licensee Event Report No. 87-001

cc: Mr. John B. Martin, NRC - Region V
Mr. R. T. Dodds, NRC - Site (901A)
Ms. Dottie Sherman, ANI
INPO Records Center - Atlanta, GA
Mr. C. R. Bryant, BPA (M/D 399)

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