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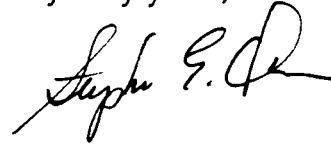
December 2, 1994

Re: Indian Point Unit No. 2
Docket No. 50-247
LER 94-03-00

Document Control Desk
US Nuclear Regulatory Commission
Mail Station P1-137
Washington, DC 20555

The attached Licensee Event Report LER 94-03-00 is hereby submitted
in accordance with the requirements of 10 CFR 50.73.

Very truly yours,



Attachment

cc: Mr. Thomas T. Martin
Regional Administrator - Region I
US Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Mr. Francis J. Williams, Jr., Project Manager
Project Directorate I-1
Division of Reactor Projects I/II
US Nuclear Regulatory Commission
Mail Stop 14B-2
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LICENSEE EVENT REPORT (LER)

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) Indian Point Unit No. 2	DOCKET NUMBER (2) 0 5 0 0 0 2 4 7	PAGE (3) 1 OF 0 4
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TITLE (4)
Inadvertent Start of Component Cooling Water Pump

EVENT DATE (6)			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)																		
1	1	0	2	9	4	9	4	-	0	0	3	-	0	0	1	2	0	2	9	4			0	5	0	0	0		

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)

OPERATING MODE (9) N	20.402(b)	<input checked="" type="checkbox"/>	50.73(a)(2)(iv)	<input type="checkbox"/>	73.71(b)
	20.406(a)(1)(i)	<input type="checkbox"/>	50.73(a)(2)(v)	<input type="checkbox"/>	73.71(c)
	20.406(a)(1)(ii)	<input type="checkbox"/>	50.73(a)(2)(vii)	<input type="checkbox"/>	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
	20.406(a)(1)(iii)	<input type="checkbox"/>	50.73(a)(2)(viii)(A)	<input type="checkbox"/>	
	20.406(a)(1)(iv)	<input type="checkbox"/>	50.73(a)(2)(viii)(B)	<input type="checkbox"/>	
20.406(a)(1)(v)	<input type="checkbox"/>	50.73(a)(2)(ix)	<input type="checkbox"/>		

LICENSEE CONTACT FOR THIS LER (12)

NAME Michael A. Whitney, Senior Engineer	TELEPHONE NUMBER 9 1 4 7 3 4 - 5 1 3 1
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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)

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) (16)

On November 2, 1994, with the unit operating at 89% power, two component cooling water pumps were inadvertently started during the calibration of a flow switch. The inadvertent start occurred when a switch circuit lead was lifted by a technician in accordance with a procedure. Upon the start of the pumps, the calibration procedure was suspended, the switch circuit lead reattached and the pumps secured and returned to automatic. At no time during this event were the two component cooling water pumps needed to fulfill a safety related function, nor was the portion of the circuitry which started these pumps associated with Engineered Safety Feature (ESF) actuation logic.

**LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION**

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		YEAR 9 4	SEQUENTIAL NUMBER 0 0 3	REVISION NUMBER 0 0	0 2	OF 0 4

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

PLANT AND SYSTEM IDENTIFICATION:

Westinghouse 4-Loop Pressurized Water Reactor

IDENTIFICATION OF OCCURRENCE:

Inadvertent Start of Component Cooling Water (CCW) Pumps

EVENT DATE:

November 2, 1994

REPORT DUE DATE:

December 2, 1994

REFERENCES:

Significant Occurrence Report (SOR) 94-566 and 94-566A

PAST SIMILAR EVENT:

None

DESCRIPTION OF OCCURRENCE:

On November 2, 1994, with the unit operating at 89% power and one component cooling water pump in operation, the two remaining component cooling water pumps were inadvertently started. Instrument and Control (I&C) Technicians were in the process of performing a calibration of No. 23 Component Cooling Water Pump flow switch. During this evolution, a technician lifted a lead in the switch circuit in accordance with the procedure. This circuitry was designed to protect a running component cooling water pump from runout conditions. These conditions did not exist. Upon the start of the pumps, the troubleshooting and calibration procedure was suspended, the switch circuit lead reattached and the pumps secured and returned to automatic. At no time during the event were the two inadvertently started component cooling water pumps needed to fulfill a safety related function.

The component cooling water system is designed to remove residual and sensible heat from the reactor coolant system via the residual heat removal system during plant shutdown, to cool the letdown flow to the chemical and volume control system during power operation, and to provide cooling to dissipate waste heat from various primary plant components. In addition, this system provides cooling for engineered safeguards and safe shutdown components.

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

DESCRIPTION OF OCCURRENCE: (continued)

The system is a closed system and includes three CCW pumps, two component cooling heat exchangers and one surge tank. Heat is removed from the CCW system by the service water system through the component cooling heat exchangers. The CCW pumps do not run during the injection phase of a loss of coolant accident (LOCA) with loss of offsite power. Auxiliary pumps provide cooling for the safety injection pumps and the recirculation pumps during this phase. The main CCW pumps are started during the recirculation phase of a LOCA to provide cooling for the RHR heat exchangers, safety injection pumps, the recirculation pumps, and other equipment.

The CCW pumps are protected from being damaged from operation under runout conditions by a circuit which starts the remaining pumps. If one CCW pump is running and the discharge pressure drops to 80 psig, the protection circuit starts the remaining two pumps. If two CCW pumps are running and the discharge pressure drops to 107 psig, the protection circuit starts the remaining pump. The pump running signal is obtained from the flow switches on the discharge piping of each pump. This start circuitry is not the ESF actuation circuitry for these pumps.

ANALYSIS OF OCCURRENCE:

This report is being made because an inadvertent actuation of an Engineered Safety Feature, the CCW pumps, occurred and is reportable under 50.73(a)(2)(iv).

The CCW pumps are listed in the Engineered Safety Features section of the Indian Point Unit No. 2 Technical Specifications. These pumps are also listed in the Final Safety Analysis Report as having "shared functions". These functions include normal operation and accident mitigation. The portion of the circuitry associated with the starting of the two CCW pumps was associated with the normal operation function, not the ESF function. During our initial reportability review, it was concluded that this event was not reportable because the pump runout protection is not the ESF actuation circuitry. However, an independent review of that determination and a review of the station reportability procedure concluded that the event was reportable since ESF equipment (with a shared usage role) was operated unnecessarily regardless of the actuation circuitry.

There was no safety significance of this event since at no time during the event were the two inadvertently started CCW pumps needed for a safety related function; and if they were needed, they would have been available.

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		YEAR 9 4	SEQUENTIAL NUMBER - 0 0 3	REVISION NUMBER - 0 0	0 4	OF	0 4

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

CAUSE OF OCCURRENCE:

The CCW pumps started when a technician who was performing a calibration of the No. 23 Component Cooling Water Pump flow switch in accordance with an approved procedure lifted a lead in the actuation circuit for CCW pump runout protection. The procedure did not fully reflect a revision to a modification to the circuitry which could have prevented the inadvertent start of the CCW pumps. The procedure also contained an error with regard to the flow switch contact position with CCW Pump No. 23 shutdown. The procedure showed the switch contact in the "open" position with zero flow when it should have been shown in a "closed" position. Lifting the lead opened the circuit, de-energizing a relay which started the two remaining CCW pumps. Additionally, the complexity of the drawing showing the pump runout protection circuitry, as well as an error in the drawing, led to a misinterpretation of pump operation that further contributed to the event.

CORRECTIVE ACTION:

The I&C procedure for calibration of the CCW pump flow switches has been revised to ensure that appropriate steps are taken to keep from actuating the CCW pump runout protection circuit.

By December 31, 1994, the plant drawing for the CCW pump runout protection circuit will be revised to include flow and pressure switch settings along with all switch and relay contact developments.

A description of the CCW pump runout protection circuit has been written and will be reviewed with appropriate I&C technicians by January 15, 1995.

By February 1, 1995, I&C preventive maintenance procedures will be reviewed on a sampling basis to ensure that recent modifications have been appropriately reflected.

By February 1, 1995, an engineering process will be implemented to ensure that I&C loop drawings will be generated/updated for electrical modifications.