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June 28, 2002

United States Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Operating Licenses DPR-74
Docket Nos. 50-316

Document Control Manager:

In accordance with the criteria established by 10 CFR 50.73 entitled Licensee Event Report System, the following report is being submitted:

LER 316/2002-004-01: "Unanticipated Start of the Turbine Drive Auxiliary Feedwater Pump"

The following commitment is identified in this submittal:

- Procedure 02-OHP-4021-001-003 will be revised prior to the next refueling outage.

A vertical line in the right hand margin of this submittal annotates the revised sections of this report.

Should you have any questions regarding this correspondence, please contact Mr. Gordon P. Arent , Manager, Regulatory Affairs, at (616) 697-5553.

Sincerely,

Joseph E. Pollock

Joseph E. Pollock
Site Vice President

RM/pae

Attachment

IE22

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NRC Form 366 (7-2001) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104 EXPIRES 7-31-2004

Estimated burden per response to comply with this mandatory information collection request: 50 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Records Management Branch (T-6 E6), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to bjs1@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202 (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

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4. TITLE

Unanticipated Start of the Turbine Drive Auxiliary Feedwater Pump

5. EVENT DATE			6. LER NUMBER				7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER		REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
01	19	2002	2002	--	004	-- 01	06	28	2002	FACILITY NAME	DOCKET NUMBER

9. OPERATING MODE	5
10. POWER LEVEL	00

11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)

20.2201(b)	20.2203(a)(3)(ii)	50.73(a)(2)(ii)(B)	50.73(a)(2)(ix)(A)
20.2201(d)	20.2203(a)(4)	50.73(a)(2)(iii)	50.73(a)(2)(x)
20.2203(a)(1)	50.36(c)(1)(i)(A)	X 50.73(a)(2)(iv)(A)	73.71(a)(4)
20.2203(a)(2)(i)	50.36(c)(1)(ii)(A)	50.73(a)(2)(v)(A)	73.71(a)(5)
20.2203(a)(2)(ii)	50.36(c)(2)	50.73(a)(2)(v)(B)	OTHER Specify in Abstract below or in NRC Form 366A
20.2203(a)(2)(iii)	50.46(a)(3)(ii)	50.73(a)(2)(v)(C)	
20.2203(a)(2)(iv)	50.73(a)(2)(i)(A)	50.73(a)(2)(v)(D)	
20.2203(a)(2)(v)	50.73(a)(2)(i)(B)	50.73(a)(2)(vii)	
20.2203(a)(2)(vi)	50.73(a)(2)(i)(C)	50.73(a)(2)(viii)(A)	
20.2203(a)(3)(i)	50.73(a)(2)(ii)(A)	50.73(a)(2)(viii)(B)	

12. LICENSEE CONTACT FOR THIS LER

NAME	TELEPHONE NUMBER (Include Area Code)
Richard A. Meister, Regulatory Affairs	(616) 465-5901, X1707

13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX

14. SUPPLEMENTAL REPORT EXPECTED			15. EXPECTED SUBMISSION DATE	MONTH	DAY	YEAR
	YES (If Yes, complete EXPECTED SUBMISSION DATE).	X NO				

16. Abstract (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

At 00:01 hours on 01/19/02, in preparation for a Unit 2 refueling outage, Operations shift personnel initiated a planned manual reactor trip of Unit 2 from 22% power per procedure 02-OHP-4021-001-003, Revision 15, "Power Reduction." Shortly thereafter, an automatic start of the turbine driven auxiliary feedwater pump (TDAFP) occurred as a result of a valid low level indication in the steam generators. Due to a lack of written procedural guidance in the "Power Reduction" procedure, the automatic start of the TDAFP was determined to be an "unanticipated" engineered safety feature (ESF) actuation.

Steam generator levels rapidly recovered. Operators secured the TDAFP and throttled the flows from the motor driven auxiliary feedwater pumps in accordance with plant procedures for reactor trip response and recovery. Reactor coolant system cooldown and depressurization proceeded normally. During the trip, pressurizer level shrank lower than procedurally anticipated, resulting in a reactor coolant system letdown isolation.

At 07:56 on 01/19/02, the Shift Manager made an eight hour, non-emergency notification to the NRC (EN# 38640) per 10CFR50.72(b)(3)(iv)(A) for an unanticipated ESF actuation. The cause of this event was inadequate procedural guidance. Corrective actions included revision of the applicable shutdown procedures to ensure operators are alerted to the potential for an automatic start of the TDAFP, and a reduction in the planned power level trip point to reduce the potential for automatic start of the TDAFP.

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17. TEXT *(If more space is required, use additional copies of NRC Form (366A)*

Conditions Prior to Event

Unit 1 - 100 percent power
Unit 2 - 22 percent power

Description of Event

At 00:01 hours on 01/19/02, in preparation for a Unit 2 refueling outage, Operations shift personnel initiated a planned manual reactor trip of Unit 2 from 22% power per procedure 02-OHP-4021-001-003, Revision 15, "Power Reduction." Shortly thereafter, an automatic start of the turbine driven auxiliary feedwater pump (TDAFP) occurred as a result of valid low level indication in the Steam Generators. Prior to commencing the unit shutdown, a "pre-job" brief was held with the operating crew. During the pre-job briefing, it was discussed that the TDAFP may start (an expected condition). Due to a lack of written procedural guidance in the "power reduction" procedure, the automatic start of the TDAFP was later determined to be an "unanticipated" engineered safety feature (ESF) Actuation, in accordance with the guidance contained in NUREG-1022, Revision 2, Paragraph 3.2.6.

Steam Generator levels rapidly recovered. Operators secured the TDAFP and throttled flows from the motor driven auxiliary feedwater pumps in accordance with plant procedures for reactor trip response and recovery. Reactor Coolant System (RCS) cooldown and depressurization proceeded normally. During the trip, pressurizer level shrank lower than procedurally anticipated, resulting in a reactor coolant system letdown isolation. The operating crew recovered from the letdown isolation in accordance with approved plant procedures.

At 07:56 on 01/19/02, the Shift Manager made an eight hour, non-emergency notification to the NRC (EN# 38640) in accordance with 10CFR50.72(b)(3)(iv)(A) for an unanticipated ESF actuation.

Cause of Event

With regard to the operational aspects of this event, it was acknowledged that a planned trip should not challenge the emergency safety-features equipment to automatically start. The operational aspects were initially overlooked when this event was first reported.

Procedure 02-OHP-4021-001-003 did not clearly state that an automatic start of the TDAFP was anticipated. The procedure should have included a notification about the TDAFP in the procedure prior to the steps to initiate the manual trip from less than 22%. Such notification should have indicated that a drop in Steam Generator water level was expected as a result of the reactor trip and that the TDAFP may auto-start. This would have fully documented that such a TDAFP auto-start was expected and preplanned.

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17. TEXT *(If more space is required, use additional copies of NRC Form (366A)*

Analysis of Event

Although the automatic start of the TDAFP was not specifically called out as an expected occurrence after manual reactor trip from 20% power in procedure 02-OHP-4021-001-003, the drop in steam generator narrow range level instrumentation to less than 21% and the subsequent automatic start of the TDAFP were expected occurrences following a reactor trip. However, a planned reactor trip should not result in an unnecessary challenge to automatic actuation of safety related components. The system performed as designed. Prior to the conduct of the unit shutdown a pre-job briefing was held with the operating crew. During this pre-job briefing it was discussed that the TDAFP may start (an expected condition).

There were no actual nuclear, radiological, or industrial safety consequences as a result of this event.

Corrective Action

Procedure 01-OHP-4021-001-003 was revised to reduce the planned power level trip set point from 22% power to less than 17% power.

Procedure 02-OHP-4021-001-003 will be revised prior to the next refueling outage.

Previous Similar Events

None.