

James A. FitzPatrick  
Nuclear Power Plant  
268 Lake Road  
P.O. Box 41  
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315-342-3840



Michael J. Colomb  
Site Executive Officer

September 26, 2000  
JAFP-00-0220

United States Nuclear Regulatory Commission  
Attn: Document Control Desk  
Mail Station P1-137  
Washington, D.C. 20555

Subject: **Docket No. 50-333**  
**LICENSEE EVENT REPORT: LER-00-010 (DER-00-03931)**

**Departure From Technical Specifications To Facilitate Controlled Shutdown  
Under Notice of Enforcement Discretion (NOED)**

Dear Sir:

This report is submitted in accordance with 10 CFR 50.73 (a) (2) (i) (A) an operation prohibited by the plant's Technical Specifications.

There are no commitments contained in this report.

Questions concerning this report may be addressed to Mr. Mark Abramski at (315) 349-6305.

Very truly yours,

A handwritten signature in black ink, appearing to read 'M. Colomb'.

MICHAEL J. COLOMB

MJC:MA:las  
Enclosure

cc: USNRC, Region 1  
USNRC, Project Directorate  
USNRC Resident Inspector  
INPO Records Center

IE22

**LICENSEE EVENT REPORT (LER)**

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

Estimated burden per response to comply with this mandatory information collection request: 50 hrs. Reported lessons learned are incorporated into the licensing process and fed back to industry. Forward comments regarding burden estimate to the Records Management Branch (T-6 F33), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to the Paperwork Reduction Project (3150-0104), Office of Management and Budget, Washington, DC 20503. If an 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.

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05000333

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**TITLE (4)**  
Departure From Technical Specifications To Facilitate Controlled Shutdown Under Notice of Enforcement Discretion (NOED)

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 NAME	DOCKET NUMBER
08	27	00	00	010	00	09	26	00	N/A	05000
									N/A	05000

  

OPERATING MODE (9)	N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)							
		20.2201(b)		20.2203(a)(2)(v)	<input checked="" type="checkbox"/>	50.73(a)(2)(i)		50.73(a)(2)(viii)	
POWER LEVEL (10)	50	20.2203(a)(1)		20.2203(a)(3)(i)		50.73(a)(2)(ii)		50.73(a)(2)(x)	
		20.2203(a)(2)(i)		20.2203(a)(3)(ii)		50.73(a)(2)(iii)		73.71	
		20.2203(a)(2)(ii)		20.2203(a)(4)		50.73(a)(2)(iv)		OTHER	
		20.2203(a)(2)(iii)		50.36(c)(1)		50.73(a)(2)(v)		Specify in Abstract below or in NRC Form 366A	
		20.2203(a)(2)(iv)		50.36(c)(2)		50.73(a)(2)(vii)			

**LICENSEE CONTACT FOR THIS LER (12)**

**NAME**  
Mr. Mark Abramski

**TELEPHONE NUMBER (include Area Code)**  
315-349-6305

**COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)**

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

**SUPPLEMENTAL REPORT EXPECTED (14)**

**YES** (If yes, complete EXPECTED SUBMISSION DATE).  **NO**

**EXPECTED**

MONTH	DAY	YEAR

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

On August 27, 2000 the plant was operating at approximately 50% power with the B Reactor Feed Pump (RFP) out of service. At approximately 0930 a leak on a hydraulic control oil fitting on the Electro-Hydraulic Control (EHC) system for the main turbine was identified. Concurrent with this hydraulic oil leak, but apparently unrelated, a steam leak had developed at the weld joint on the instrument line for the A RFP suction flow meter. A controlled plant shut down was initiated due to these plant conditions. Enforcement Discretion was requested to allow transitioning from the Run Mode to the Startup mode without certain neutron monitoring instrumentation operable due to lack of required surveillance testing. Enforcement Discretion was granted and a proposed amendment to the Technical Specifications was submitted.

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

EIIS Codes in [ ]

**Event Description:**

On August 27, 2000 the plant was operating at approximately 50% power with the B Reactor Feed Pump (RFP) [SK] out of service. At approximately 0930 a leak on hydraulic control oil fitting on the Electro-Hydraulic Control (EHC) [TG] system for the main turbine was identified. Concurrent with this hydraulic oil leak, but apparently unrelated, a steam leak had developed at the weld joint on the instrument line for the A RFP suction flow meter. A controlled plant shutdown was initiated due to these plant conditions.

At the time the controlled shutdown was initiated, the following Reactor Protection System (RPS) [JE] trip functions were considered inoperable:

- Intermediate Range Monitor (IRM) High Flux
- IRM Inoperative
- Average Power Range Monitor (APRM) Neutron Flux-Startup

Technical Specification (TS) 3.1.A and TS Table 3.1-1 require these RPS trip functions to be operable in the Refuel and Startup modes. These trip functions were considered inoperable because the surveillance requirements for these trip functions specified in TS Table 4.1-1 had not been satisfied. Specifically, each of these trip functions requires a functional test prior to startup and on a weekly frequency thereafter during the Refuel and Startup modes. The functional test surveillance requirement had not been satisfied because it is not required to be satisfied in the Run mode.

During the controlled shutdown, consideration was given to conducting the required surveillance testing to satisfy these surveillance requirements. An implicit part of functionally testing these instrument channels is to calibrate the effected equipment. During the shutdown, it was determined that the test equipment required to calibrate these instrument channels and therefore satisfy these surveillance requirements was off site for

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**Event Description: (cont'd.)**

calibration and the borrowed replacement test equipment had not been calibrated either. With the proper, calibrated test equipment available, the testing requires approximately 6 hours to complete. It was recognized that obtaining the proper calibrated test equipment would delay the controlled shutdown.

Given the degraded condition of the EHC system, it was desirable to transition from the Run mode to the Startup mode as expeditiously as possible because the rate of degradation of the EHC hydraulic control oil pressure boundary was unknown. Additionally, it was believed that the transition from the Run mode to the Startup mode should be made without imparting any significant thermo-hydraulic transient on the Reactor Pressure Vessel (RPV). The basis for this operational decision was recognition that it is desirable from a risk perspective to maintain the main condenser available as a heat sink for the controlled shutdown. Engineering judgement determined that a significant thermo-hydraulic transient such as a manual scram would require a transient response from the turbine bypass valves and therefore the EHC system. It was believed that such a transient demand would adversely effect the degraded EHC system and therefore pose a significant challenge to the main condenser as a heat sink.

Accordingly, a verbal request for a NOED to depart from the requirements of TS 3.0.D and transition from the Run mode to the Startup mode with the RPS trip functions for the IRM High Flux, IRM Inoperative, and APRM Neutron Flux-Startup inoperable was transmitted via telephone from JAF plant staff to the NRC at 2110 on August 27, 2000.

This teleconference did not explicitly address TS 4.0.D by number however the scope of the discussion did explicitly address the substance of TS 4.0.D because the request for the NOED was motivated by recognition that the RPS trip functions for the IRM High Flux, IRM Inoperative, and APRM Neutron Flux-Startup were inoperable due to surveillance requirements not satisfied.

The latitude requested during this teleconference was consistent with the latitude in Limiting Condition for Operation (LCO) 3.0.4 of NUREG - 1433, Standard Technical Specifications - General Electric Plants BWR/4 Revision 1, April 1995.

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**Event Description:** (cont'd.)

The verbal request to depart from the requirements of TS 3.0.D and transition from the Run mode to the Startup mode with the RPS trip functions for the IRM High Flux, IRM Inoperative, and APRM Neutron Flux-Startup inoperative was granted via teleconference at approximately 2200 on August 27, 2000. The verbal request was supplemented by a written request by letter dated August 28, 2000.

**Cause:**

This event was the result of the wording in sections 3.0.D and 4.0.D of the JAF Custom Technical Specifications (CTS) (Cause Code X). A detailed review of the operability and surveillance requirements for the IRM High Flux, IRM Inoperative and APRM Neutron Flux-Startup trip function for the RPS was conducted in 1996. This review did not identify that satisfying these surveillance requirements prior to a mode change had the potential to cause a delay in a forced shutdown when it is not desirable to manually scram the reactor. This review therefore constitutes a missed opportunity to identify this condition.

The cause of the EHC leak and the steam leak on the weld joint on the instrument line for the A RFP suction flow meter are under investigation.

The cause for the lack of required calibrated test equipment on site is also under investigation.

**Analysis:**

The latitude requested in this request for NOED was consistent with the latitude in Limiting Condition for Operation (LCO) 3.0.4 of NUREG - 1433, Standard Technical Specifications - General Electric Plants BWR/4 Revision 1, April 1995. The safety significance of this request is low because the latitude requested is consistent with that affected by NUREG - 1433 Rev 1.

A quantitative assessment of risk was conducted for these plant conditions. The conditional core damage probability (CCDP) for the two cases identified below were quantified:

1. Turbine Trip with Power Conversion System (turbine bypass valves/main condenser) available and a Loss of Feedwater (Sequence T3A in the Probabilistic Risk Assessment).  
CCDP = 4.48 E-7

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**Analysis:** (cont'd.)

2. Turbine Trip with Loss of Power Conversion System (turbine bypass valves/main condenser) and a Loss of Feedwater.

CCDP = 1.01 E-6

The reduction in CCDP due to this requested NOED is therefore:

$$(1.01 \text{ E-6}) - (4.48 \text{ E-7}) = 5.62 \text{ E-7}$$

The increase in risk associated with transitioning from the Run mode to the Startup mode with the RPS trip functions for the IRM High Flux, IRM Inoperative, and APRM Neutron Flux-Startup inoperable is judged to be acceptable based on the latitude to take this action as identified in LCO 3.0.4 of NUREG - 1433 Rev 1.

This event does not constitute a safety system functional failure in the context of NEI 99-02, Rev. 0.

**Corrective Action:**

1. A proposal has been submitted to amend the JAF Technical Specifications to adopt the latitude identified in LCO 3.0.4 of NUREG - 1433 Rev 1. Approval of this proposed amendment was requested on an exigent basis.

**Extent of condition:**

Readily available records of controlled plant shutdowns were reviewed to confirm that for prior plant shutdowns, the required surveillance testing had been conducted prior to placing the mode switch in Startup. The scope of this review covered all shutdowns for the years 1997 through 2000. During this time interval, two normal plant shutdowns occurred in which OP-65 was used (vice a scram) - on 7/13/99 and 12/7/97. All required surveillance testing was completed for neutron instrumentation during both of those shutdowns prior to placing the mode switch in the Startup position.

Previous similar events: None