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United States Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Stop O-P1-17
Washington, D.C. 20555

Subject: **Docket No. 50-333**
LICENSEE EVENT REPORT: LER-01-003 (DER-01-00918)

Failure To Satisfy Technical Specifications Table 4.2-8, Primary Containment Hydrogen/Oxygen Concentration Analyzer Calibration Requirements

Dear Sir:

This report is submitted in accordance with 10 CFR 50.73(a)(2)(i)(B), "Any operation or condition which was prohibited by the plant's Technical Specifications."

There are no commitments contained in this report.

Questions concerning this report may be addressed to Mr. Gordon Brownell at (315) 349-6360.

Very truly yours,

T. A. Sullivan

TAS:GB:las
Enclosure

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

IE22

NRC FORM 366 (6-1998) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104 EXPIRES 06/30/2001

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.

LICENSEE EVENT REPORT (LER)

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

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TITLE (4)

Failure to Satisfy Technical Specifications Table 4.2-8, Primary Containment Hydrogen/Oxygen Concentration Analyzer Calibration Requirements

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
									N/A	05000
03	01	01	01	003	00	04	26	01	FACILITY NAME: N/A	DOCKET NUMBER: 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)	X	50.73(a)(2)(i)		50.73(a)(2)(viii)		
POWER LEVEL (10)	100		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	TELEPHONE NUMBER (Include Area Code)
Mr. Gordon Brownell, Licensing Engineer	(315) 349-6360

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)				EXPECTED SUBMISSION	MONTH	DAY	YEAR
	YES (If yes, complete EXPECTED SUBMISSION DATE).	X	NO				

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

On March 01, 2001, during a review of instrument calibration requirements for the primary containment system's Containment Atmosphere Dilution (CAD) System, it was identified that Technical Specifications (T.S.) surveillance requirements were not being met. Specifically, the test scope and acceptance criteria contained in the procedure used to perform T.S. required once per three months calibration of the Primary Containment Hydrogen/Oxygen Monitoring System did not include the entire instrument channel or calibration of the full instrument range as defined in the T.S. At the time of the discovery, the reactor mode switch was in the RUN position and the plant was operating at 100 percent power.

The cause for this omission of the calibration requirements was inadequate procedure development.

Corrective actions include revising the calibration procedure, retesting of the equipment in accordance with T.S. requirements, and conducting a root cause evaluation.

The safety significance of this event was minimal. The completion of calibration of both channels of the Containment H2/O2 Monitoring System to the revised test methods and parameters on March 09, 2001 demonstrated assurance that the equipment was capable of performing its intended safety function.

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

EVENT DESCRIPTION

On March 01, 2001, during a review of instrument calibration requirements for the primary containment system's Containment Atmosphere Dilution (CAD) System [BB], it was identified that Technical Specifications (T.S.) surveillance requirements were not being met. Specifically, the test scope and acceptance criteria contained in the procedure used to perform T.S. required calibration of the Primary Containment Hydrogen/Oxygen Monitoring System [BB] did not include the entire instrument channel or calibration of the full instrument range as defined in the T.S. At the time of the discovery, the reactor mode switch was in the RUN position and the plant was operating at 100 percent power.

The Containment Hydrogen (H2) and Oxygen (O2) Monitoring System includes two subsystems. Remote control cabinets 27PCX-101A and 27PCX-101B are located in the Relay Room and contain the control and display electronics, trend recorders, and alarm boards. Analyzer cabinets 27PCA-101A and 27PCA-101B are located on the Reactor Building 300 foot elevation and contain the sample pump and measurement components. The remote control cabinets properly combine the H2 and O2 temperature and pressure signals from the analyzer cabinets to compute the H2 and O2 gas concentrations. T.S. Table 4.2-8, "Minimum Test and Calibration Frequency for Accident Monitoring Instrumentation" requires that the Primary Containment Hydrogen/Oxygen Monitoring System be calibrated at a frequency of once per three months.

Technical Specifications define channel calibration as the adjustment of channel output such that it responds within the necessary range and accuracy to known values of the parameter that the channel monitors. The channel calibration shall encompass the entire channel, including the required sensor, alarm, display, and trip function. The channel calibration may be performed by means of any series of sequential, overlapping, or total channel steps so that the entire channel is calibrated.

Instrument Surveillance Procedure ISP-30-1, "Containment Hydrogen/Oxygen Analyzer Calibration" is used to fulfill T.S. Table 4.2-8 calibration requirements. During a review of this procedure, it was discovered that the test methods and parameters monitored did not include all sensors and auxiliary equipment required to determine the acceptance range and accuracy of the hydrogen and oxygen concentrations, and failed to check all alarms within the instrument channel.

CAUSE OF EVENT

The cause for the failure to perform the Technical Specification required quarterly calibration of the instrument channels associated with the Containment Hydrogen/Oxygen Monitoring System was inadequate procedure development. [Cause Code D]

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CAUSE OF EVENT (cont.)

Based on reviews of procedure development data from the mid-1980s, it appears that procedure writers used requirements from vendor technical manuals and installation modification pre-operational test data in the development of ISP-30-1. These manufacturer's requirements were established to ensure the monitors met the requirements for reliable operation without excessive testing of the units (which has the potential for resulting in premature component failure).

EVENT ANALYSIS

This report is being submitted in accordance with 10 CFR 50.73(a)(2)(i)(B), "Any operation or condition which was prohibited by the plant's Technical Specifications...".

The Primary Containment H2/O2 Monitoring System supplements the Atmosphere Dilution (CAD) System by ensuring the containment atmosphere oxygen concentration is less than 4 percent volume during normal plant operation and following a postulated Design Bases Accident (DBA).

Both channels of the Primary Containment H2/O2 Monitoring System were declared inoperable on March 01, 2001 at 1309 hours, following confirmation that TS calibration requirements were not being met. Operators immediately entered TS Table 3.2-8, "Accident Monitoring Instrumentation" Action Statement, Note F, which states, with the number of operable channels less than the required minimum, continued reactor operation is permissible for the following 30 days provided at least once per 24 hours, either the appropriate parameters(s) is monitored and logged using 27PCX-101A, B, or an appropriate grab sample is obtained and analyzed. If this condition cannot be met, be in Hot Shutdown within the next 12 hours.

On March 09, 2001, at 1702 hours, following completion of revised calibration requirements, the LCO was exited and the Primary Containment H2/O2 Concentration Analyzers were returned to an operable condition.

The safety significance of this event was minimal. The completion of calibration of both channels of the Containment H2/O2 Monitoring System to the revised test methods and parameters on March 09, 2001 demonstrated assurance that the equipment was capable of performing its intended safety function.

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EXTENT OF CONDITION

A missed opportunity to identify this problem in 1993 occurred when a surveillance test adequacy review concluded the single point calibration of the devices was adequate. As a result, a review is being conducted of other similar instrument systems with multiple parameter inputs to verify component surveillance testing/calibration is being performed in accordance with T.S. requirements.

CORRECTIVE ACTIONS

1. T.S. calibration requirements for both channels of the Containment Hydrogen/Oxygen concentration Analyzers were successfully completed on March 09, 2001.

2. Instrument Surveillance Procedure ISP-30-1 is being revised to include the calibration of all required components throughout each Containment Hydrogen/Oxygen Analyzer channel.
(Scheduled Completion Date – May 31, 2001)

3. A review is being conducted of other similar instrument systems to verify component surveillance testing/calibration is being performed in accordance with T.S. requirements.
(Scheduled Completion Date – June 30, 2001)

4. Instrument and Controls Department line and staff personnel will be briefed on LER-01-003, associated DER-01-00918 and the completed root cause evaluation.
(Scheduled Completion Date – May 31, 2001)

ADDITIONAL INFORMATION

A. Previous Similar Events:

LER-98-011 dealt with the failure to satisfy T.S. quarterly calibration requirements for the Continuous Atmosphere Monitoring (CAM) System.

LER-00-007 dealt with the failure to satisfy T.S. surveillance requirements for the Torus Bulk Water Temperature Instrumentation.

B. Failed Components: NONE

C. Applicability to NEI 99-02, Rev. 0, "Regulatory Assessment Performance Indicator Guideline".

The above described condition does not constitute a Safety System Functional Failure as defined in NEI 99-02, Revision 0.