

Indiana Michigan  
Power Company  
500 Circle Drive  
Buchanan, MI 49107 1395



December 8, 2004

AEP:NRC:2573-22  
10 CFR 50.73

Docket No. 50-316

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Mail Stop O-P1-17  
Washington, DC 20555-0001

Donald C. Cook Nuclear Plant Unit 2  
LICENSEE EVENT REPORT 316/2004-003-00, FAILURE TO COMPLY  
WITH CONTAINMENT VENTILATION OPERABILITY REQUIREMENTS  
SPECIFIED IN TECHNICAL SPECIFICATIONS 3.0.4, 3.9.4, AND 3.9.9

In accordance with 10 CFR 50.73, "Licensee Event Report System," the following report is submitted:

Licensee Event Report (LER) 316/2004-003-00: "Failure to Comply With Containment Ventilation Operability Requirements Specified in Technical Specifications 3.0.4, 3.9.4, And 3.9.9."

Attachment 1 identifies the commitments contained in this submittal.

Should you have any questions regarding this correspondence, please contact Mr. Toby K. Woods, Compliance Supervisor, at (269) 466-2798.

Sincerely,

A handwritten signature in black ink, appearing to read "Jensen", with a long horizontal line extending to the right.

Joseph N. Jensen  
Site Vice President

RAM/jen

Attachments

JE22

c: J. L. Caldwell – NRC Region III  
K. D. Curry – AEP Ft. Wayne  
J. T. King – MPSC  
C. F. Lyon – NRC Washington DC  
MDEQ – WHMD/HWRPS  
NRC Resident Inspector  
Records Center - INPO

ATTACHMENT 1 TO AEP:NRC:2573-22

REGULATORY COMMITMENTS

The following table identifies those actions committed to by Indiana Michigan Power Company (I&M) in this document. Any other actions discussed in this submittal represent intended or planned actions by I&M. They are described to the Nuclear Regulatory Commission (NRC) for the NRC's information and are not regulatory commitments.

Commitment	Date
Modify the Electronic Shift Operations Management System (eSOMS) to activate and utilize an existing program feature that will identify and provide information regarding the TS impacted for clearance points contained on clearances. [CRA 04285009-03]	January 31, 2005
Establish formalized procedural controls for coordination between scheduling, clearance, and work groups to ensure plant impacts from clearances are identified and entered into the schedule with the appropriate logic ties. [CRA 04285009-04]	January 31, 2005

**LICENSEE EVENT REPORT (LER)**

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

Estimated burden per response to comply with this mandatory 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 and FOIA/Privacy Service Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to [infocollects@nrc.gov](mailto:infocollects@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 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.

<b>1. FACILITY NAME</b> Donald C. Cook Nuclear Plant Unit # 2	<b>2. DOCKET NUMBER</b> 05000-316	<b>3. PAGE</b> 1 of 4
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**4. TITLE**  
Failure To Comply With Containment Ventilation Operability Requirements Specified In Technical Specifications 3.0.4, 3.9.4, and 3.9.9

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 Unit 1	DOCKET NUMBER
10	09	2004	2004	-- 003	-- 00				FACILITY NAME	DOCKET NUMBER 05000-315
									FACILITY NAME	DOCKET NUMBER

<b>9. OPERATING MODE</b> Mode 6	<b>11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)</b>									
<b>10. POWER LEVEL</b> 0%	<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.73(a)(2)(i)(C)	<input type="checkbox"/> 50.73(a)(2)(vii)						
	<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)						
	<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.73(a)(2)(ii)(B)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)						
	<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 50.36(c)(1)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)(A)						
	<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 50.36(c)(1)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(iv)(A)	<input type="checkbox"/> 50.73(a)(2)(x)						
	<input type="checkbox"/> 20.2203(a)(2)(iii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	<input type="checkbox"/> 73.71(a)(4)						
<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.46(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(v)(B)	<input type="checkbox"/> 73.71(a)(5)							
<input type="checkbox"/> 20.2203(a)(2)(v)	<input type="checkbox"/> 50.73(a)(2)(i)(A)	<input checked="" type="checkbox"/> 50.73(a)(2)(v)(C)	<input type="checkbox"/> OTHER	Specify in Abstract below or in NRC Form 366A						
<input type="checkbox"/> 20.2203(a)(2)(vi)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)(B)	<input type="checkbox"/> 50.73(a)(2)(v)(D)								

**12. LICENSEE CONTACT FOR THIS LER**

<b>FACILITY NAME</b> Toby Woods, Regulatory Affairs	<b>TELEPHONE NUMBER (Include Area Code)</b> (269) 466-2798
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**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

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

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

At 1330 hours, on October 9, 2004, Indiana Michigan Power Company (I&M) established an equipment clearance in Unit 2 to facilitate calibration of time delay relays. As part of the clearance, breakers supplying power to both trains of the solid state protection system (SSPS) outputs were opened. This disabled the automatic actuation of both trains of the containment ventilation isolation (CVI) and manual phase "A" containment isolation. At 1441 hours, on October 9, 2004, movement of fuel from the reactor vessel to the spent fuel pool commenced. At this point, the requirements of Technical Specifications (TS) 3.9.9, 3.9.4, and 3.0.4 were not met. Late in the day on October 10, 2004, the clearance was lifted and CVI returned to operable status and compliance with TS 3.9.9, 3.9.4, and 3.0.4 was restored. The causes of this event were the failure to identify and establish appropriate logic sequence/ties for the outage schedule and the failure of the clearance review to identify the adverse impact of the clearance on the plant. Corrective actions included the establishment of enhanced controls for operations shift management activities and clearance order controls. I&M review identified two similar historical events for Unit 1. The similar historical Unit 1 events occurred on: May 11, 2002, through May 13, 2002, and October 26, 2003, through October 30, 2003.

LICENSEE EVENT REPORT (LER)

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
Donald C. Cook Nuclear Plant Unit 2	05000316	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 of 4
		2004	- 003	-- 00	

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

Conditions Prior to Event

Unit 2 - MODE 6

Description of Event

At 1330 hours, on October 9, 2004, Indiana Michigan Power Company (I&M) established a clearance in Unit 2 to facilitate calibration of time delay relays. As part of the clearance, breakers supplying power to both trains of the solid state protection system (SSPS) outputs were opened. This disabled the automatic actuation of both trains of the containment ventilation isolation (CVI) and manual phase "A" containment isolation.

At 1441 hours, on October 9, 2004, movement of fuel from the reactor vessel to the spent fuel pool commenced. At this point, the requirements of Technical Specifications (TS) 3.9.9, 3.9.4, and 3.0.4 were not met. TS 3.9.9 requires that the containment purge isolation system be operable during core alterations or fuel movement. TS 3.9.4 requires containment penetration closure capability during fuel movement. TS 3.0.4 prohibits entry into a mode or applicability condition when the requirements of the applicable TSS are not met.

Late in the day on October 10, 2004, the clearance was lifted and CVI returned to operable status and compliance with TS 3.9.9, 3.9.4, and 3.0.4 was restored.

At 0020 hours, on October 11, 2004, during an investigation into an unexpected component operational response, I&M discovered the above discussed TS violations.

Upon identification of the concern, I&M conducted an extent of condition review. This review identified two similar historical events for Unit 1. The similar historical Unit 1 events occurred on May 11, 2002, through May 13, 2002, and October 26, 2003, through October 30, 2003. These events did not result in both trains of containment ventilation system inoperable, therefore the safety function remained.

This licensee event report is being submitted in accordance with the requirements of 10 CFR 50.73(a)(2)(V)(C) as an event or condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to control the release of radioactive material and in accordance with the requirements of 10 CFR 50.73(a)(2)(i)(B) as a condition which was prohibited by the plant's TS for the Unit 2 October 10, 2004, event. Additionally, this licensee event report is being submitted in accordance with the requirements of 10 CFR 50.73(a)(2)(i)(B) as a condition which was prohibited by the plant's TS for the historical Unit 1 events noted above.

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		2004	- 003	-- 00	

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

Cause of Event

The root causes of this event were:

Root Cause 1: The failure to properly identify and logic sequence the clearance order into the outage schedule, including establishment of necessary logic ties, to preclude conflict with other incompatible outage activities and to support TS requirements.

Root Cause 2: The failure of the clearance issuer to identify the adverse impact of the clearance on the plant.

Analysis of Event

Based upon a qualitative assessment, it has been determined that there is no change in risk with respect to core damage and large early release frequency from the unavailability of the automatic actuation of containment purge and exhaust isolation system. The actual safety significance of this event was small. Operators could have manually closed the CVI valves individually from the control room at any time during the event. Procedures were in place to direct this response; therefore, the manual isolation function remained available. The containment radiation monitors and high radiation alarm function remained operable.

Corrective Actions

Immediate Corrective Actions:

- The refueling procedure guidelines were revised to incorporate a requirement to hang caution tags on the breakers supplying power to the SSPS output bays. Caution tags will also be hung to ensure that the SSPS output bay mode select switches remain in "operate" (needed for CVI operability).
- A review was performed of all clearances involving power supplies, including clearances used in the outage to date, currently hanging clearances, and clearances scheduled to be used during the outage. This review included an evaluation for appropriate logic ties and verification that no TS conflicts existed. No issues with similarity to this event were identified.
- The outage schedule was reviewed to identify any medium or high risk activities that were not previously identified as such. This action ensured that additional barriers were in place for activities such as the removal of power from the SSPS output bays.

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

Corrective Actions To Prevent Recurrence:

Root Cause 1:

- Modify the Electronic Shift Operations Management System (eSOMS) to activate and utilize an existing program feature that will identify and provide information regarding the TS impacted for clearance points contained on clearances. [CRA 04285009-03]
- Establish formalized procedural controls for coordination between scheduling, clearance, and work groups to ensure plant impacts from clearances are identified and entered into the schedule with the appropriate logic ties. [CRA 04285009-04]

Root Cause 2:

- Modify the eSOMS system to activate and utilize an existing program feature that will identify and provide information regarding the TS impacted for clearance points contained on clearances. [CRA 04285009-03]

Previous Similar Events

Unit 2 LER 05000-316/2002-002-00, "Technical Specification 3.9.4.c was Violated During Core Alteration." A review of the causes and corrective actions associated with this LER demonstrated that the root cause and corrective actions for LER 05000-316/2002-002-00 were substantively different and could not have prevented the event reported in LER 05000-316/2004-003-00.