



Entergy Nuclear Northeast
Entergy Nuclear Operations, Inc.
Indian Point Energy Center
295 Broadway, Suite 1
P.O. Box 249
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December 6, 2002

Re: Indian Point Unit No. 2
Docket No. 50-247
LER 2002-005-00
NL-02-152

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

Dear Sir:

The attached Licensee Event Report 2002-005-00 is hereby submitted in accordance with the requirements of 10 CFR 50.73.

There are no commitments contained in this letter.

Sincerely,

A handwritten signature in black ink, appearing to read "Fred Dacimo", written over a circular stamp or mark.

Fred Dacimo
Vice President - Operations
Indian Point 2

Attachment

cc: Mr. Hubert J. Miller
Regional Administrator - Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Mr. Patrick D. Milano, Senior Project Manager
Project Directorate I
Division of Licensing Project Management
U.S. Nuclear Regulatory Commission
Mail Stop O-8-C2
Washington, DC 20555

Senior Resident Inspector
U.S. Nuclear Regulatory Commission
PO Box 38
Buchanan, NY 10511

IE22

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)

1 FACILITY NAME Indian Point, Unit 2	2 DOCKET NUMBER 05000247	3 PAGE 1 OF 4
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4. TITLE
Central Control Room Wall Identified As Being In Non-Conformance With Design Drawings

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MO	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO	MO	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
10	08	2002	2002	05	00	12	06	2002		05000
									FACILITY NAME	DOCKET NUMBER
										05000

9. OPERATING MODE	N	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)
10. POWER LEVEL	100	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)		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
		20.2203(a)(2)(iii)		50.46(a)(3)(ii)		50.73(a)(2)(v)(C)	Specify in Abstract below or in NRC Form 366A
		20.2203(a)(2)(iv)		50.73(a)(2)(i)(A)	X	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 Richard Louie, Licensing Engineer	TELEPHONE NUMBER (Include Area Code) (914) 734-5678
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13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX

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

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

On October 8, 2002, an operability assessment of the Indian Point Unit 2 Central Control Room (CCR) south wall determined that in the event of a postulated design basis earthquake, the wall would be subjected to excessive differential building motion. The as-found condition of the wall was identified as being in non-conformance with existing design drawings. During a seismic event, this condition could result in cracking of the wall and a potential breach of the CCR envelope, preventing the Control Room Air Filtration System [EIS:VI] from performing its design function of limiting dose to the operators. This condition was discovered during an ongoing extent of condition review of masonry wall design deficiencies. Indian Point Unit 2 Technical Specification 3.3.H.1 states that, "The control room air filtration system shall be operable at all times when containment integrity is required." Furthermore, Technical Specification 3.3.H.2 states, "From the date that the control room air filtration system becomes and remains inoperable for any reason, operations requiring containment integrity are permissible only during the succeeding 3.5 days." In accordance with Technical Specification 3.3.H.2, on October 8, at approximately 1330 hours, the control room air filtration system was declared inoperable, and the limiting condition of operation was entered in order to implement corrective actions. On October 9, at approximately 1320 hours, upon completion of the necessary actions, the limiting condition of operation was exited. At the time of discovery, the plant was at 100 percent power. No injuries to plant personnel, damage to any equipment, or adverse safety implications to the public occurred as a result of this event.

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Indian Point, Unit 2	05000247	2002	05	00	2 OF 4

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

PLANT AND SYSTEM IDENTIFICATION

Westinghouse 4-Loop Pressurized Water Reactor

EVENT IDENTIFICATION

Central Control Room Wall Identified As Being In Non-Conformance With Design Drawings

EVENT DATE

October 8, 2002

REFERENCES

Condition Reporting System Number: CR-IP2-2002-09027, CR-IP2-2002-09060

PAST SIMILAR EVENTS

NRC Inspection Report Item(s) 50-247/02-02-02 and 50-247/02-010-001

EVENT DESCRIPTION

On October 8, 2002, an operability assessment of the Indian Point Unit 2 Central Control Room (CCR) south wall determined that in the event of a postulated design basis earthquake, the wall would be subjected to excessive differential building motion. The subject masonry constructed wall is located in the Indian Point Unit 1 Superheater Building and forms part of the Unit 2 CCR envelope along the south side of the Control Building structure between column lines G and F4/F5 in the east-west plane and column line 10.4 in the north-south plane. The wall is approximately 15.25 feet wide by 18.4 feet high, spanning between the control room floor at El. 53' and the Superheater Building roof at El. 72'. The original design specified the wall to be an 8-inch thick concrete masonry unit (CMU) and glazed brick composite construction. The as-found condition of the wall was identified as being in non-conformance with existing design drawings. The discrepancies include a steel angle (L3x3x1/4) mortared to a cut-out in the wall at the location of an existing steel girt channel, approximately 12 feet above the floor. Three tie angles (L5x3x1/4) span between the embedded angle and building steel of the CCR, and are welded to both. Additionally, the masonry block wall was cut back to approximately 3.5 inches thick to clear the upper girt. The embedded angle and the tie angles were identified on design drawings for removal, but were not removed during construction of the wall. Consequently, during a seismic event, this condition poses a seismic interaction concern, and could result in cracking of the wall and a potential breach of the CCR envelope, preventing the Control Room Air Filtration System [EII:VI] from performing its design function of limiting dose to the operators. This condition was discovered during an ongoing extent of condition review of masonry wall design deficiencies. Indian Point Unit 2 Technical Specification 3.3.H.1 states that, "The control room air filtration system shall be operable at all times when containment integrity is required." Furthermore, Technical Specification 3.3.H.2 states, "From the date that the control room air filtration system becomes and remains inoperable for any reason, operations requiring containment integrity are permissible only during the succeeding 3.5 days."

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Indian Point, Unit 2	05000247	2002	05	00	3 OF 4

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

EVENT DESCRIPTION (Con't)

In accordance with Technical Specification 3.3.H.2, on October 8, at approximately 1330 hours, the control room air filtration system was declared inoperable, and the limiting condition of operation was entered in order to implement corrective actions. The corrective actions included cutting and removing the three tie angles, and filling in the cut back area of the wall with new masonry block. On October 9, at approximately 1320 hours, upon completion of the necessary actions, the limiting condition of operation was exited. At the time of discovery, the plant was steady state at 100 percent power.

EVENT ANALYSIS

In November 2001, a number of CCR masonry walls at Indian Point 2 were inspected relative to the issues identified in IE Bulletin 80-11, "Masonry Wall Design." Based upon observations at floor level, the condition of the CCR south wall was deemed to be within acceptable design requirements. In October 2002, while performing repairs to the control room side of the south wall, several design discrepancies were noted, which had not been identified previously. This observation was made possible due to the scaffolding erected to perform the repairs and removal of the egg crate ceiling and transite boards. The discrepancies include a steel angle (L3x3x1/4) mortared to a cut-out in the wall at the location of an existing steel girt channel, approximately 12 feet above the floor. Three tie angles (L5x3x1/4) span between the embedded angle and building steel of the CCR, and are welded to both. Additionally, the masonry block wall was cut back to approximately 3.5 inches thick to clear the upper girt. The affected wall is located within the Superheater Building, and provides a building envelope for the CCR. The tie angles were attached to the mortared angle within the wall at one end (Superheater Building) and to the CCR building roof steel at the other. The tie angles effectively bridged across the two buildings. Based on a review of the building drawing, expansion gaps are provided at the El. 53' floor of 1.0 inch and at El. 72' roof of 1.5 inches. These expansion gaps permit normal building growth due to thermal expansion (from ambient temperature variations) and limit building interaction if a seismic event should occur. Based upon an evaluation of the wall in its as-found condition, the resulting calculated loads due to building motion would result in a local yielding of the CCR roof truss steel, and cracking of the concrete masonry wall, a gross breach of the wall is unlikely since the wall and CCR steel will deflect to accommodate building differential motion. Potential exists for severe flexural cracking and local shear failure of the block at the wall ends near the location of decreased wall thickness. As such, it is concluded that the wall, in the as-found configuration can be considered structurally operable, in that catastrophic collapse is unlikely to occur to the CCR side of the wall in the event a postulated earthquake had occurred. Breach of the wall, in terms of CCR envelop is likely in local sections at the edges of the wall at the reduced wall section, due to the decreased flexibility at this section to accommodate the building displacements. Consequently, during a seismic event, this condition poses a seismic interaction concern, and could result in cracking of the wall and a potential breach of the CCR envelope, preventing the Control Room Air Filtration System from performing its design function of limiting dose to the operators. This report is being made pursuant to 10 CFR 50.73(a)(2)(v)(D), which requires that, "Any event or condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to mitigate the consequences of an accident." Pursuant to 10 CFR 50.72(b)(3)(v)(D), on October 8, 2002 the NRC was notified (Event Number 39259) of this condition upon its discovery.

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Indian Point, Unit 2	05000247	2002	05	00	4 OF 4

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

CAUSE OF OCCURRENCE

The cause for this condition is human performance-related, and is attributed to a failure to adhere to the specified structural detail requirements of the CCR south wall during initial construction. Although the embedded angle and the tie angles were identified on design drawings for removal, these were not removed during the construction of the wall.

EVENT SAFETY SIGNIFICANCE

The Control Room Air Filtration System is designed to ensure that control room operators are adequately protected against the effects of accidental releases of toxic chemicals or radioactive gases, and that the plant can be safely operated or shut down under design-basis accident conditions. An assessment of the safety consequences and implications of the degraded wall condition was performed. Although the control room habitability envelope is affected, a seismic event does not cause an immediate radiological hazard. Therefore, a full complement of accident mitigation equipment would remain available, and the expected response by the operators to the event would not be substantially impacted. Based upon an evaluation of the wall in its as-found condition, catastrophic collapse is unlikely to occur to the CCR side of the wall during a postulated seismic event. As such, engineered safeguards components within the CCR remain available. The location and localized nature of the postulated wall degradation, and the presence of intervening structures that act as a barrier to the entry of toxic gas releases into the area of the degradation, are sufficient to maintain the validity of the existing toxic chemical study conclusion that the control room operators are adequately protected. Because localized failure of the affected wall has been determined to not impact any control room equipment, the ability to safely shutdown the plant in the event of a design basis accident has not been reduced. Thus, the failure of the CCR envelope would not be expected to impact the likelihood of successful accident mitigation. Based upon the above, this event has been determined to be of minimal safety significance.

CORRECTIVE ACTIONS

In accordance with Technical Specification 3.3.H.2, on October 8, at approximately 1330 hours, the control room air filtration system was declared inoperable, and the limiting condition of operation was entered in order to implement corrective actions. The corrective actions included cutting a two-inch minimum section out of each tie angle, and filling in the cut back area of the wall with new masonry material and mortar. On October 9, at approximately 1320 hours, upon completion of the necessary actions, the limiting condition of operation was exited. An extent of condition review to determine the presence of any other walls with similar seismic interaction concerns will be completed no later than January 31, 2003.

PREVIOUS OCCURRENCES

This condition was discovered during an ongoing extent of condition review of construction deficiencies associated with the CCR west fire barrier wall. Those deficiencies were originally identified in February 2002 and are documented in NRC Inspection Reports 50-247/02-02 and 50-247/02-010.