

CATEGORY 1

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9712120367 DOC. DATE: 97/12/08 NOTARIZED: NO DOCKET #
 FACIL: 50-315 Donald C. Cook Nuclear Power Plant, Unit 1, Indiana M .05000315
 AUTH. NAME AUTHOR AFFILIATION
 FINISSI, M. American Electric Power Co., Inc.
 BLIND, A.A. American Electric Power Co., Inc.
 RECIP. NAME RECIPIENT AFFILIATION

SUBJECT: LER 97-028-00: on 971107, failure to comply w/10CFR50, App R
 requirements results in unanalyzed condition occurred. Caused
 by misunderstanding of need to request exemption for use of
 fire stops. Fire watch re-established. W/971208 ltr.

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 TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc.

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Indiana Michigan
Power Company
Cook Nuclear Plant
One Cook Place
Bridgman, MI 49106



December 8, 1997

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

Operating Licenses DPR-58
Docket No. 50-315

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:

97-028-00

Sincerely,

A. A. Blind
Site Vice President

/mbd

Attachment

c: A. B. Beach, Region III
E. E. Fitzpatrick
P. A. Barrett
S. J. Brewer
J. R. Padgett
D. Hahn
Records Center, INPO
NRC Resident Inspector

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IE221

LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS, REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), 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.

FACILITY NAME (1)
Donald C. Cook Nuclear Plant- Unit 1DOCKET NUMBER (2)
50-315

Page 1 of 3

TITLE (4)

Failure to Comply with 10CFR50, Appendix R Requirements Results in Unanalyzed Condition

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
11	07	97	97	1028	00	12	08	97	Cook Unit 2	50-316
OPERATING MODE (9)			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 50. (Check one or more) (11)							
5			20.2201(b) 20.2203(a)(3)(i) 50.73(a)(2)(iii) 73.71(b)							
POWER LEVEL (10)			20.2203(a)(1) 20.2203(a)(3)(ii) 50.73(a)(2)(iv) 73.71							
0			20.2203(a)(2)(i) 20.2203(a)(4) 50.73(a)(2)(v) OTHER							
			20.2203(a)(2)(ii) 50.36(c)(1) 50.73(a)(2)(vii) (Specify in							
			20.2203(a)(2)(iii) 50.36(c)(2) 50.73(a)(2)(viii)(A) Abstract below							
			20.2203(a)(2)(iv) 50.73(a)(2)(i) 50.73(a)(2)(viii)(B) and in Text,							
			20.2203(a)(2)(v) X 50.73(a)(2)(ii) 50.73(a)(2)(x) NRC Form 366A)							

LICENSEE CONTACT FOR THIS LER (12)

NAME
Mr. Mike Finissi, Electrical Systems Engineering ManagerTELEPHONE NUMBER (Include Area Code)
616/465-5901, x2830

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

SUPPLEMENTAL REPORT EXPECTED (14)

YES

X NO

EXPECTED
SUBMISSION
DATE (15)

MONTH DAY YEAR

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

10 CFR 50, Appendix R, Section III G.2.(b) requires a twenty foot separation between trains with no intervening combustible materials with fire detection and suppression installed. At Cook Nuclear Plant, fire stops were being used to prevent the possible spread of fire across the twenty foot separation space at two locations in the Auxiliary Building (el. 587' and 609') where there are intervening combustibles (open cable trays) inside the twenty foot separation space. However, an exemption to 10 CFR 50, Appendix R, Section III G.2.(b) had not been requested.

Our configuration had been described to the NRC in submittals dating back to 1983. However, the deviation from Appendix R described above was not specifically noted in applicable Appendix R SERs. On May 21, 1997, we submitted a letter to the NRC which responded to NRC questions dated March 26, 1997, regarding this configuration, and provided our basis for why we did not believe an exemption to Appendix R was necessary. During a conversation with the NRR staff on November 6, 1997, we were informed that a specific exemption to Appendix R is required for this deviation or the intervening combustibles must be eliminated.

Because our configuration differs from the requirements of 10 CFR 50, Appendix R, Section III G.2.(b), it is being reported as a condition outside the plant's design bases. Generic Letter (GL) 92-08 indicated that Thermo-Lag was a combustible material. The fire watch established for these locations, as a result of GL 92-08, was released on December 30, 1996, after the Thermo-Lag wrap had been removed. The Appendix R Safe Shutdown revalidation effort evaluated the use of fire stops again. A fire watch was re-established on January 24, 1997. The fire watches will remain in place until resolution of this issue is obtained.

LICENSEE EVENT CONTINUATION.

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBE 7714), 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.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
Cook Nuclear Plant - Unit 1	50-315	YEAR	SEQUENTIAL	REVISION	2 OF 3
		97	- 028 -	00	

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

Condition Prior to Event

Unit 1 was in Mode Five, Cold Shutdown.

Unit 2 was in Mode Six, Refueling.

Description of Event

At D. C. Cook, fire stops were being used to prevent the possible spread of fire across the twenty foot separation space at two locations in the Auxiliary Building (el. 587' and 609'). However, an exemption to 10 CFR 50 Appendix R, Section III G.2.(b) had not been requested. We have indicated in our Safe Shutdown Capability Assessment (SSCA) and evaluated in our Fire Protection Program Manual (Technical Evaluations 11.42 and 11.43) that we believed we were adequate with respect to maintaining 10 CFR 50 Appendix R, Section III G.2.(b) compliance by utilizing fire stops in cable trays as the method of preventing the spread of fire from one side of a twenty foot separation space to the other side. During a conversation on November 6, 1997, the NRC advised us that since there are intervening combustibles (open cable trays) between the fire stops, we are not in compliance and must submit an exemption request or eliminate the intervening combustibles.

The SSCA was created to address compliance with 10 CFR 50 Appendix R, Section III.G. Appendix R, Section III.G.2.(b) provides one means of ensuring that one of the redundant trains is free of fire damage. This section requires, "[S]eparation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than twenty feet with no intervening combustible or fire hazards. In addition, fire detectors and an automatic fire suppression system shall be installed in the fire area;..."

Revision 0 of the SSCA, dated March 1983, was submitted to the NRC on March 31, 1983, by our letter AEP:NRC:0692E. This submittal contained Sections 8.3.1 and 8.16.1, that described two locations where Section III.G.2.(b) was utilized. In both situations, the SSCA stated that certain "open cable trays traversing the zone from the north side to the south side will be appropriately fire stopped to prevent fire propagation from one section of the fire zone to the other." Revision 1 to the SSCA was submitted on March 20, 1987, by our letter AEP:NRC:0692AZ. There was no change to the statements in Sections 8.3.1 and 8.16.1 quoted above.

On November 9, 1990, the NRC issued Inspection Report #90018, which appeared to accept our 10 CFR 50 Appendix R, Section III G.2.(b) configuration.

In addition to the fire stops, several of the trays traversing the separation space were wrapped with Thermo-Lag. Per GL 92-08, Thermo-Lag is considered combustible and previous testing results are not considered credible. Therefore, we chose to remove the Thermo-Lag in the twenty foot separation space and continue to use our configuration of cable tray fire stops.

In our letter AEP:NRC:0692DB, dated December 27, 1996, we informed the NRC that corrective actions in response to the concerns identified in NRC GL 92-08 have been completed at Cook Nuclear Plant. By letter dated March 26, 1996, the staff requested additional information concerning how our raceway/fire stop configuration, described in AEP:NRC:0692DB, meets the NRC fire protection requirements and Cook Nuclear Plant licensing and design bases. Our response to the request for additional information was contained in our letter AEP:NRC:0692DM, dated May 21, 1997.

LICENSEE EVENT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNB 7714), 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.

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Cook Nuclear Plant - Unit 1	50-315	YEAR	SEQUENTIAL	REVISION	3 OF 3
		97	- 028 -	00	

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

Description of Event

As a result of GL 92-08, we took the conservative position that our twenty foot separation space became an inoperable fire barrier and we established the required fire watch. Thermo-Lag had been used to wrap some open cable trays and as part of the fire stops. On December 30, 1996; these fire watches were released based on our December 27, 1997 submittal letter. As a result of NRC questions on our configuration for establishing the twenty foot separation space, we took a conservative position and re-established fire watches on January 24, 1997, in both of the affected areas. In a phone call with the NRC on November 6, 1997, the NRC stated that because we have intervening combustibles (open cable trays), we are not in compliance with Appendix R, Section III.G.2.(b). The NRC disagreed with our position. Our position was that the use of fire stops met our original licensing bases (SSCA) and therefore, the installation of additional fire stops did not require an exemption request relative to the subject fire stop configuration.

The above shows that based on the NRC position, we were out of compliance with Appendix R Section III.G.2.(b) for the twenty-five days we did not have the fire watch.

Cause of Event

The event was caused by a misunderstanding of the need to request an exemption for the use of fire stops to prevent the possible spread of fire across the twenty foot separation space. The D. C. Cook use of fire stops was described in previous submittals dating back to 1983 (which was before GL 86-10 explained the need for an exemption to use of fire stops on cable trays). Another possible contributor to the misunderstanding was the use of Thermo-Lag wrap on the cable trays at the time of the November 1990, inspection since it may have facilitated the overlooking of the use of fire stops on the cable trays by the NRC inspectors.

Analysis of Event

On November 7, 1997 this condition was determined to be reportable under 10 CFR 50.72(b)(2)(i) as an event found while the reactor is shut down, that had it been found while the reactor was in operation would have resulted in the nuclear power plant being in an unanalyzed condition. An ENS notification was made at 1430 hours EST the same day. This report is submitted in accordance with 10 CFR 50.73(a)(2)(ii)(B), for a condition that was outside the design basis of the plant.

Fire Protection Program Manual (FPPM) Technical Evaluations 11.42 and 11.43 have been performed for these locations and had concluded that the possible fire would not spread across the twenty foot separation space; the safe shutdown capability would be maintained, and that the evaluations did not adversely impact other evaluations and exemptions contained in the FPPM. Thus, the safety consequences are not significant and the condition had been previously evaluated.

Corrective Actions

A fire watch has been re-established and a study has begun which will analyze several alternative resolutions to this issue. These include: performing modifications to have a design in full compliance with Section III.G.2.(b), making some modifications and then submitting an exemption request; or performing further Appendix R re-analysis to determine if a method of compliance other than utilizing a twenty foot separation space is feasible.

Failed Component Identification

Not Applicable

Previous Similar Events

None