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 RECIP. NAME      RECIPIENT AFFILIATION  
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SUBJECT: Responds to NRC 910917 ltr re violations noted in Safety  
 Insp Repts 50-315/91-17 & 50-316/91-17 on 910723-0903.  
 Corrective actions: molded case circuit breaker reinstalled &  
 revised relay setting sheets issued.

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AEP:NRC:1148D

Donald C. Cook Nuclear Plant Units 1 and 2  
Docket Nos. 50-315 and 50-316  
License Nos. DPR-58 and DPR-74  
NRC INSPECTION REPORT NOS. 50-315/91017 (DPR)  
AND 50-316/91017 (DPR); RESPONSE TO NOTICE OF VIOLATION

U. S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, D.C. 20555

ATTN: A. B. Davis

October 17, 1991

Dear Mr. Davis:

This letter is in response to Mr. B. Clayton's letter dated September 17, 1991, which forwarded the report on the routine safety inspection conducted by members of your staff from July 23 through September 3, 1991, of activities at Cook Nuclear Plant Units 1 and 2. The Notice of Violation attached to Mr. Clayton's letter identified one Severity Level IV violation associated with a condition in which removal of a circuit breaker resulted in a lack of isolation of a safety-related electrical system from a balance-of-plant system. Our response to the notice of violation is provided in the attachment to this letter.

This document has been prepared following Corporate procedures that incorporate a reasonable set of controls to ensure its accuracy and completeness prior to signature by the undersigned.

Sincerely,

E. E. Fitzpatrick  
Vice President

dfw

Attachment

Handwritten initials "JF" and a vertical line.

Mr. A. B. Davis

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AEP:NRC:1148D

cc: D. H. Williams, Jr.  
A. A. Blind - Bridgman  
J. R. Padgett  
G. Charnoff  
NFEM Section Chief  
NRC Resident Inspector

ATTACHMENT TO AEP:NRC:1148D  
RESPONSE TO NOTICE OF VIOLATION

## NRC Violation

- "a. The licensee's engineering design review performed on January 15, 1990, for modification RFC-12-3008, subtask No. 2, was inadequate. It produced incorrect drawings and instructions which resulted in the removal of a safety-related isolation breaker on November 29, 1990, from motor control center (MCC) 1-ABD-C, compartment R1ER. This breaker provides isolation and protection of MCC 1-ABD-C from non-safety related MCC 12-TSC-S.
- b. The licensee's engineering design review for modification RFC-12-3008 performed on January 25, 1990 was inadequate. The licensee failed to update four safety related and 16 balance-of-plant (BOP) relay setting diagrams to reflect recalculated settings for breaker coordination. Consequently, field breakers were not reset, resulting in continuing miscoordination between safety related and BOP MCC components within the same train.

This is a Severity Level IV violation (Supplement I)."

## Response

Design change RFC-12-3008 subtask 2 was initiated to provide enhanced electrical breaker coordination between the molded case circuit breaker (MCCB) which powered the BOP MCC 12-TSC-S and the MCCBs located in the MCC. The supply breaker was located in ESS MCC 1-ABD-C. A study, previously performed by a contractor, incorrectly identified the BOP MCC (12-TSC-S) as an ESS MCC. The misclassification of the BOP MCC led to the removal, for presumed enhanced coordination purposes, of the MCCB which fed the BOP MCC. The breaker was removed and replaced with a solid connection to the engineered safety system (ESS) MCC bucket. The contractor's design change verification process failed to detect and correct the misclassifications of the BOP MCC. Had the MCC been properly classified as non-safety related in the coordination study, it would have been recognized that proper coordination existed between the BOP isolation point and the upstream supply breaker and no modification would have been required.

With regard to relay settings, as part of the design change, several relay settings, associated with the 4-Kv and 600V switchgear, needed to be changed to enhance the electrical distribution system coordination. The relay settings are recorded and transmitted to Cook Nuclear Plant in accordance with AEPSC Nuclear Engineering Department (NED) procedure NESP-19.02. These setting sheets are retained on a computer. During the iterative process of updating the sheets, administrative changes were made to the existing settings and

inadvertently issued as the proposed settings. The relay settings did not involve MCCBs.

(1) Corrective Actions Taken and Results Achieved

The immediate actions taken were to reinstall the MCCB which was removed, issue revised relay setting sheets, and to review the remainder of the request for change (RFC) package for technical adequacy. The remainder of the package was technically acceptable. Design change MM-01-228 was initiated to reinstall the removed circuit breaker that serves as the isolation point between the ESS and BOP MCCs. Design change MM-01-228 reinstalled the removed breaker on July 24, 1991. The affected relay setting sheets were revised and reissued to the plant on August 21, 1991. The remainder of the setting changes resulting from the other RFC subtasks will be implemented during the upcoming unit outages in 1992. The affected final design report (FDR) was modified to incorporate the correct status of the MCC and it has been verified and been added to the RFC package.

On September 17, 1991, section training was held to review and inform the section members of the discoveries and the lessons learned.

To address the relay setting sheet deficiencies, NED procedure NESP-19.02, covering relay settings, will be enhanced to require additional controls to preclude recurrence. The procedure currently requires that setting changes be documented and approved in accordance with appropriate procedures. Procedure NESP-19.02 will require that setting changes be documented by use of NED procedure 6.4, Calculation Procedure. Prior to issue, the setting sheet will require a verifier's sign-off in addition to the existing requirement for originator and approval sign-offs. The procedure will be revised to require confirmation that the setting changes were implemented by Cook Nuclear Plant personnel.

(2) Corrective Actions Taken to Avoid Further Violation

Since the time that the design modification was engineered, extensive procedure training has been held and procedural enhancements have been made. As stated in (1) above, additional modifications will be made to the relay settings procedure to include additional sign-offs and reviews to preclude this event from occurring again.

(3) Date When Full Compliance Will Be Achieved

The removed circuit breaker was reinstalled on July 24, 1991. The affected relay setting sheets were revised and reissued on August 21, 1991, and training of personnel to review lessons learned was completed on September 17, 1991. Full compliance will be achieved by February 15, 1992, when enhancements to the relay setting procedures will have been implemented.