

ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9105030128 . DOC. DATE: 91/04/26 NOTARIZED: NO DOCKET #
 FACIL: 50-315 Donald C. Cook Nuclear Power Plant, Unit 1, Indiana & 05000315
 50-316 Donald C. Cook Nuclear Power Plant, Unit 2, Indiana & 05000316
 AUTH. NAME AUTHOR AFFILIATION
 FITZPATRICK, E. Indiana Michigan Power Co. (formerly Indiana & Michigan Ele
 RECIP. NAME RECIPIENT AFFILIATION
 DAVIS, A.B. Document Control Branch (Document Control Desk)

SUBJECT: Responds to NRC 910329 ltr re violations noted in Insp Repts
 50-315/91-05 & 50-316/91-06 on 910304-14. Corrective actions:
 design criteria, post-mod test procedure & acceptance
 criteria for differential pressure valves will be reviewed.

DISTRIBUTION CODE: IE01D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 9
 TITLE: General (50 Dkt)-Insp Rept/Notice of Violation Response

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
	PD3-1 PD	1 1	COLBURN, T.	1 1
INTERNAL:	AEOD	1 1	AEOD/DEIIB	1 1
	AEOD/TPAB	1 1	DEDRO	1 1
	NRR MORISSEAU, D	1 1	NRR SHANKMAN, S	1 1
	NRR/DLPQ/LPEB10	1 1	NRR/DOEA/OEAB	1 1
	NRR/DREP/PEPB9D	1 1	NRR/DRIS/DIR	1 1
	NRR/DST/DIR 8E2	1 1	NRR/PMAS/ILRB12	1 1
	NUDOCS-ABSTRACT	1 1	OE DIR	1 1
	OGC/HDS2	1 1	REG FILE 02	1 1
	RGN3 FILE 01	1 1		
EXTERNAL:	EG&G/BRYCE, J.H.	1 1	NRC PDR	1 1
	NSIC	1 1		

NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL DESK,
 ROOM P1-37 (EXT. 20079) TO ELIMINATE YOUR NAME FROM DISTRIBUTION
 LISTS FOR DOCUMENTS YOU DON'T NEED!

TOTAL NUMBER OF COPIES REQUIRED: LTTR 22 ENCL 22



AEP:NRG:1148

Donald C. Cook Nuclear Plant Units 1 and 2
Docket Nos. 50-315 and 50-316
License Nos. DPR-58 and DPR-74
INSPECTION REPORTS 50-315/91006 (DRS) AND 50-316/91006. (DRS);
RESPONSE TO NOTICE OF VIOLATION

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

Attn: A. B. Davis

April 26, 1991

Dear Mr. Davis:

This letter is in response to Mr. M. P. Phillips' letter dated March 29, 1991, which forwarded the report of a routine safety inspection of activities at Cook Nuclear Plant Units 1 and 2 by your staff on March 4 through March 14, 1991. The notice of violation attached to Mr. Phillips' letter identified four examples of violations of the requirements of 10CFR50, Appendix B, Criterion III (design control) which, when taken together, constituted a severity level IV violation. 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,

A handwritten signature in cursive script, appearing to read "E. E. Fitzpatrick".

E. E. Fitzpatrick
Vice President

dfw

Attachment

Handwritten initials, possibly "EED", with the number "11" written below them.



Mr. A. B. Davis

-2-

AEP:NRC:1148

cc: D. H. Williams, Jr. - w/o
A. A. Blind - Bridgman - w/
J. R. Padgett
G. Charnoff
T. E. Murley - NRC, Washington, D. C. - w/
NRC Resident Inspector - Bridgman - w/
NFEM Section Chief - w/

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

NRC Violation

"10CFR50, Appendix B, Criterion III, requires that design changes be subject to design control measures commensurate with those applied to the original design. This design control includes the specifying of design bases and verifying that design through design review and testing. The control of design shall be accomplished by establishing measures to ensure proper design interface and coordination among participating organizations.

Contrary to the above, a number of design control and/or interface deficiencies were identified as follows:

- a. System modification, RFC 2883, Revision 0, provided cooling to emergency diesel generator (EDG) room solid state instrument panels. The test guidance established by corporate design was not completely incorporated into the test procedure. Furthermore, test acceptance criteria deviations were not reported to corporate design for evaluation and calculations update.
- b. System modification, RFC 2883, Revision 0, contained no acceptance criteria for monitoring differential pressure across the ventilation air filters. In addition, the licensee's established monitoring criterion was without design basis and was inconsistent with the design calculation.
- c. System modification, RFC 2883, Revision 1, modified EDG room ventilation alarm logic. However, the licensee's annunciator manual was not revised to reflect the new system configuration. Furthermore, the change sheet made to address the above concern contained errors due to the lack of review by corporate design engineers.
- d. Uncontrolled pressure gauges were found to have been installed on three of the four diesel engine systems. This work was accomplished without use of the licensee's modification program and showed no design control.

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



General Comment

Several of the inspection issues were characterized as attributed to lack of design interface between corporate engineers and the site staff in various areas. While the specific examples are individually addressed below, it is acknowledged that interfaces between the corporate engineers and the site staff have led to difficulties on several occasions. As a step towards addressing this matter, we are designating an individual to serve as the Nuclear Engineering Department (NED) - Site Liaison. The primary responsibility of this individual, who will be located at the Cook Nuclear Plant site, will be to facilitate improved interfaces between the NED in our Columbus offices and the Cook Nuclear Plant staff. Additionally, this individual will be tasked with investigating apparent interface problems, and recommending improved interface practices to be delineated in corporate and plant procedures. This position will be effective June 1, 1991. We are hopeful that this positive action will help to ensure the proper flow of interface information between the NED and the Cook Nuclear Plant, and to ensure the NED is providing appropriate support to the plant in the areas of operations, modifications and maintenance.

Response to Item a.

Although the post-modification test procedure did not completely incorporate the test guidance established by the lead engineer, it was concluded that the design basis intent of the system was successfully verified by the post-modification testing performed by Cook Nuclear Plant personnel. However, the post-modification test acceptance criteria developed for RFC 2883, Revision 0, will be reviewed by the design change lead engineer and the post-modification test procedure (or portions thereof) will be revised as necessary.

(1) Corrective Actions Taken and Results Achieved

As stated above, it was concluded upon review that the design basis intent of the system was successfully verified. Any revisions to the post-modification test procedure that may result from the review discussed above will be implemented and the test results and any deviation from or revision to the test acceptance criteria will be reviewed and concurred with by the respective lead engineer.

(2) Corrective Action Taken to Avoid Further Violation

The corporate-level design change procedure currently requires the engineer responsible for a design change to ensure that special non-routine functional testing is identified and that test acceptance criteria are established. Additionally, this procedure requires the engineer to designate which test results require lead engineering acceptance prior to release of the modified system to operation. While the current implementing plant procedures acknowledge these requirements, there is no definitive guidance on actions to be taken if test acceptance criteria cannot be met. A specific requirement will be added to applicable procedures to require reporting of deviations from test criteria to the lead engineer for disposition.

(3) Date When Full Compliance Will Be Achieved

Full compliance will be achieved by July 31, 1991, at which time the actions discussed in (1) and (2) above will have been completed.

Response to Item b.

Test guidance developed by the lead engineer for RFC 2883, Revision 0 identified differential pressure values across the ventilation air filters based on vendor data which was used in the original design calculation. These values were not completely incorporated into the test procedure.

(1) Corrective Actions Taken and Results Achieved

The design criteria, post-modification test procedure and acceptance criteria will be reviewed and revised if necessary to maintain the validity of the design calculations and system configuration. Any revisions to the post-modification test procedure that may result from this review will be implemented and the test results and any deviation from or revision to the test acceptance criteria will be reviewed and concurred with by the respective lead engineer. These actions will confirm the adequacy of the installed system design. Test results will be used to establish monitoring criteria for the differential pressure across the ventilation air filters.

(2) Corrective Action Taken to Avoid Further Violation

The corporate-level design change procedure currently requires the engineer responsible for a design change to ensure that required special non-routine functional testing is identified and that test acceptance criteria are established. Additionally, this procedure requires the engineer to designate which test results require lead engineer acceptance prior to release of the modified system for operation. While the current implementing plant procedures acknowledge these requirements, there is no definitive guidance on actions to be taken if test acceptance criteria cannot be met. A specific requirement will be added to applicable procedures to require reporting of deviations from test criteria to the lead engineer for disposition. In addition, the importance of strict adherence to procedures has been reinforced to the involved personnel.

(3) Date When Full Compliance Will Be Achieved

Full compliance will be achieved by July 31, 1991, at which time the actions discussed in (1) and (2) above will have been completed.

Response to Item c.

RFC 2883, Revision 1, which modified the EDG room ventilation alarm logic, effected a change to the initiating devices for control room alarms. Although these changes did not impact operator actions as delineated in annunciator response procedures, the initiating devices are listed in these procedures and, therefore, these procedures were impacted by this design change. The current plant procedure governing RFC design changes requires a review of design changes for plant procedure impacts. These reviews were performed for the subject design changes; however, the impact of the design changes on the annunciator response procedures was inadvertently missed during these reviews.

With regard to the noted change sheet errors, normal practice is to have plant procedure impact evaluations performed by the plant departments which are responsible for, and therefore most knowledgeable on, each type of procedure. The deficiencies noted by the inspector in procedure changes issued during the inspection resulted from an attempt to respond to the inspector's issues in too expeditious a

manner. Changes to four procedures were initiated from a "typical" procedure mark-up. Due to the time constraints imposed by expediting these changes during the inspection, the procedure author did not notice subtle differences between the four procedures, and this resulted in the issuance of procedure changes with minor errors. These errors are not, however, considered to have been the result of the lack of review by corporate design engineers.

(1) Corrective Actions Taken and Results Achieved

The annunciator response procedures have been revised to reflect the modifications made to the emergency diesel generator room ventilation alarm logic.

(2) Corrective Action Taken to Avoid Further Violation

Provisions are in place for evaluation of design change impacts on plant procedures. A condition report was written during the inspection to document the fact that the procedure impacts were missed during procedure reviews for this design change. The importance of adherence to procedures has been reinforced to Cook Nuclear Plant personnel. The provisions for evaluation of design change impacts on plant procedures will be reviewed and strengthened as necessary to minimize the potential for this type of deficiency to occur in the future.

(3) Date When Full Compliance Will Be Achieved

Full compliance was achieved on March 22, 1991, when the necessary revision to the annunciator response procedures was made. The review discussed in (2) above will be completed by July 31, 1991.

Response to Item d.

The uncontrolled pressure gauges identified in this finding were mounted at test points on the discharge piping of bypass lube oil pumps for D/Gs 1AB, 2AB, and 2CD. No evidence supporting when and why the gauges were installed has been discovered. The gauges were general process gauges with no traceable identification. Although appropriate design control procedures were in effect at the time, the personnel installing the gauges at the test connections did not adhere to the design control requirements. As a result, the gauges which may have been installed to monitor pump output



pressures following pump maintenance or testing, were not removed as required. Since adherence to the design control procedures in effect at the time would have precluded the occurrence of this event, we do not consider there to have been any lack of design control, but rather a failure to comply with the established program in this instance.

(1) Corrective Actions Taken and Results Achieved

The uncontrolled gauges were removed via job orders immediately upon discovery.

(2) Corrective Action Taken to Avoid Further Violation

Although the cause of this concern has not been identified, we believe that the uncontrolled gauges were likely installed as a temporary modification. Therefore, formal training is under development to better educate plant personnel in the requirements of the temporary modification program. Implementation of this training for management and technical staff has begun.

The temporary modification procedure (PMP 5040 MOD.001) is being revised to better define a temporary modification, involve Plant Engineering and Project Engineering in the review process and provide more definitive guidelines for processing a temporary modification.

(3) Date When Full Compliance Will Be Achieved

The revision to the temporary modification procedure and all training for management and technical staff will be completed by July 31, 1991. Training programs for other selected plant personnel are still under development. We expect to complete these training programs and training of operations and maintenance personnel by December 31, 1991.