REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:8105070283 DOC.DATE: 81/05/04 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
HUNTER,R.S. Indiana & Michigan Electric Co.
RECIP.NAME RECIPIENT AFFILIATION
DENTON,H.R. Office of Nuclear Reactor Regulation, Director

SUBJECT: Forwards required circuit mods per 810202 request & 800620 response to IE Bulletin 80-06, "Engineered Safety Feature Reset Controls." Mods will be implemented by 810831.

DISTRIBUTION CODE: A001S COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 3
TITLE: General Distribution for after Issuance of Operating License

NOTES:I&E:3 copies all material. 05000315
Send 3 copies of all material to I&E. 05000316

	RECIPIENT ID CODE/NAME		COPIES LTTR	COPIES ENCL	RECIPIENT ID CODE/NAME		COPIES LTTR	COPIES ENCL
ACTION:	VARGA,S.	04	13	13				
INTERNAL:	D/DIR,HUM FAC	08	1	1	DIR,DIV OF LIC		1	1
	I&E	06	2	2	NRC PDR	02	1	1
	OELD	11	1	0	OR ASSESS BR	10	1	0
	RAD ASMT BR		1	1	REG FILE	01	1	1
EXTERNAL:	ACRS	09	16	16	LPDR	03	1	1
	NSIC	05	1	1				

MAY 07 1981

A0/I 1/2

TOTAL NUMBER OF COPIES REQUIRED: LTTR 43 ~~40~~ ENCL 41 ~~38~~

INDIANA & MICHIGAN ELECTRIC COMPANY

P. O. BOX 18
BOWLING GREEN STATION
NEW YORK, N. Y. 10004

RECEIVED
MAY 06 1981
U.S. NUCLEAR REGULATORY COMMISSION

May 4, 1981
AEP:NRC:00387A

Donald C. Cook Nuclear Plant Unit Nos. 1 and 2
Docket Nos. 50-315 and 50-316
License Nos. DPR-58 and DPR-74
IE Bulletin 80-06, Additional Information

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Mr. Denton:

This letter and its Attachment supplement our letter of June 20, 1980 (AEP:NRC:00387) and provide the additional information requested by members of your staff and their consultants concerning our response to IE Bulletin 80-06 on the matter of ESF reset controls.

As a result of both the testing being conducted pursuant to the requirements of the subject Bulletin and additional engineering review, the test breaker control circuit for the Emergency Diesel Generator (EDG) needs to be modified to conform to the Bulletin requirements. In the current design, the test breaker changes position after the Safety Injection signal has been reset. This additional modification is being implemented on the same schedule as our previous commitments.

In our June 20, 1980 letter we committed to perform modifications in conformance with the Bulletin requirements, in the control circuits of the following equipment:

a) Component Cooling Water Pump Emergency Ventilation Fans 12-HV-ACCP-1, -2, -3,

b) Engineered Safeguards Equipment Room Ventilation Dampers HV-AES1D, - AES2D,

c) Containment Air Recirculation Hydrogen Skimmer Fans HV-CEQ-1, -2.

A001
S
1/1

8105070283

A description of the required circuit modifications as requested on February 2, 1981 is provided in the Attachment to this letter.

Our June 20, 1980 letter also pointed out that no modifications to the control circuits of the main feedwater regulating valves were necessary since there is no unacceptable safety-related consequence to the valve changing its position when the feedwater isolation signal is reset. On March 11, 1981, we were informed by members of your staff that the main feedwater regulating valve control circuits should conform to the bulletin's requirements, i.e. the valves should not change their emergency mode of operation upon reset of Feedwater Isolation. The control circuits of the main feedwater regulating valves, in our present design, receive a Feedwater Isolation signal which causes an interruption of the power air to the valve operator by de-energizing either the Train A or Train B solenoid valves. This interruption causes the feedwater regulating valves to close.

We will modify our procedures involving resetting of Feedwater Isolation by adding steps to require the operator to place the feedwater regulating valve controllers in their manual closed position corresponding to zero feedwater flow before resetting the Feedwater Isolation signal. Upon reset, the valve will now remain in the closed position, thereby conforming to the bulletin's requirements. This procedural change will be implemented in both Units 1 and 2 by August 31, 1981. We believe that since the motor operated block valve in series with each feedwater regulating valve does not change its emergency mode of operation (i.e. closed) upon resetting Feedwater Isolation, this additional administrative control on the redundant function performed by the feedwater regulating valve is sufficient and adequately addresses the bulletin concerns without adding unnecessary complication to the control circuit.

Very truly yours,

R. S. Hunter
Vice President

RSH/os

cc: John E. Dolan - Columbus
R. C. Callen
G. Charnoff
R. W. Jurgensen
D. V. Shaller - Bridgman
N. C. Moseley - NRC (OIE)
Region III Resident Inspector at Cook Plant - Bridgman

ATTACHMENT TO AEP:NRC:0387A

This attachment provides the description of the control circuit modifications necessary to prevent changing the emergency operating mode of ESF equipment upon the resetting of the actuating signal at system level. We committed to perform these modifications in our letter of June 20, 1980 (AEP:NRC:00387) which responded to IE Bulletin 80-06.

The Containment Air Recirculation Hydrogen Skimmer Fan Controls were acceptable as they were, except for the case in which the Containment Isolation, Phase B (CI-B) signal was reset before the 10 minute starting delay had elapsed. In this case, the starting delay timer would reset and the fan would not start. The circuit design was revised to provide a seal-in circuit which kept the starting delay timer energized after a CI-B signal had been initiated and subsequently reset. The fan will start and continue to run unless the operator turns the fan control switch to the "off" position following the system level reset of CI-B. A white indicating light has been provided to inform the operator that the seal-in circuit is operating.

The Engineered Safeguards Equipment Room Ventilation Fan charcoal filter bypass damper control circuit design was revised to include a seal-in circuit to keep the bypass damper control solenoid valves de-energized following an actuation and subsequent reset of CI-B signal. A white indicating lamp is provided to inform the operator that the damper control circuit is sealed in. A push button is provided which will allow the operator to interrupt the seal-in of this control circuit after a CI-B signal has been reset at the system level. The operator may then position the damper as required.

The design of the control circuits to the Component Cooling Water Pump Emergency Ventilation Fans were revised to include a seal-in circuit around the initiating contact. The initiating contact operates on load conservation following loss of auxiliary power coincident with safety injection. The initiating signal is maintained for 75 seconds which provides more than sufficient time for the bus to be re-energized from the emergency power source. With the modified circuit, the fans will continue running after the reset of the load conservation signal.

With the EDG in the testing mode the test breaker is closed. If a Safety Injection is initiated, the test breaker trips open as it should, however, upon reset of the SI signal at the system level, the test breaker closes. The control circuit design of the EDG test breaker will be modified to prevent the breaker from reclosing to the test bank upon reset of the SI signal. We are modifying the control of the breaker by adding a contact from the breaker's control switch in series with the breaker closing circuit. This contact will be closed only when the control switch is in the closed position. This will prevent the breaker from reclosing once it has tripped open. Operator action will be required for the breaker to be closed again. In the event of a loss ofoffsite power requiring the EDG to energize its corresponding safety buses an interlock is already provided in the control circuit design which prevents the test breaker from reclosing when the breakers connecting the EDG to its safety buses are closed.