

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:8007020591 DOC.DATE: 80/06/26 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
 DOLAN,J.E. Indiana & Michigan Electric Co.
 RECIP.NAME RECIPIENT AFFILIATION
 DENTON,H.R. Office of Nuclear Reactor Regulation, Director

SUBJECT: Forwards response to request concerning addl info on
 responses to NRC short-term requirements for auxiliary
 feedwater sys.

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	I&E	12	2	2	MOORE, V.	22	1
	NRC PDR	02	1	1	OELD	14	1
	OR ASSESS BR	19	1	0	QA BR	15	1
	<u>REG FILE</u>	01	1	1			
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NEW YORK, N. Y. 10004

Donald C. Cook Nuclear Plant Units 1 and 2
Docket Nos. 50-315 and 50-316
License Nos. DPR-58 and DPR-74

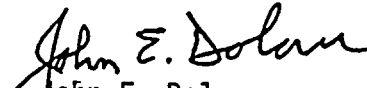
June 26, 1980
AEP:NRC:00307C

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

Dear Mr. Denton:

The attachment to this letter responds to requests from members of your staff concerning additional information on our responses to the NRC requirements for the Auxiliary Feedwater System (AFS) in the Donald C. Cook Nuclear Plant transmitted to us via Mr. Eisenhut's October 30, 1979 letter.

Very truly yours,


John E. Dolan
Vice President

cc: R. C. Callen
G. Charnoff
R. S. Hunter
R. W. Jurgensen
D. V. Shaller - Bridgman

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ATTACHMENT TO AEP:NRC:0307C

In preparing this attachment we have used the same format as that of Mr. Eisenhut's letter of October 30, 1979.

Additional Short Term Recommendation No. 1:

We were requested by the NRC staff to document the information provided during recent telephone discussions concerning this recommendation.

The time spans for the operator to respond to the various combinations of (redundant) alarms on the condensate storage tank level with the largest capacity auxiliary feedwater pump running (900 gpm) are listed below. These times assume no condensate makeup is provided to the condensate storage tank (CST).

- A) Hi alarm to Lo alarm - 3 hours and 42 minutes
- B) Lo alarm to Lo-Lo alarm - 3 hours and 26 minutes
- C) Lo alarm to Auto AFW pump trip - 4 hours and 1 minute
- D) Lo-Lo alarm to Auto AFW pump trip - 35 minutes

The pneumatic air selector switch is a Foxboro Model 38360 two (2) position, four (4) port transfer switch. Figure 1 depicts the materials of construction, schematic tubing arrangement and physical outline of the switch. Port #1 is used for one train of level indication tubing and is designated as CLR-110. Port #3 is used for the redundant train of level indication tubing and is designated as CLR-111. Port #4 is used for the recorder connection while Port #2 is plugged. The 'manual' position of the switch connects CLR-110 to the recorder and the 'automatic' position connects CLR-111 to the recorder (the actual switch mounted on the panel has on it designations CLR-110 and CLR-111, respectively).

The power supply for the control room annunciators/alarms is from the 250 volt station batteries. The respective alarms for CLR-110 and CLR-111 are powered electrically by DC power bus CAB-AFC-1. The alarm modules are Mercoid and United Electric pressure switches located in the back of the main panel on its respective train of pneumatic tubing between the sensor and the pneumatic air switch.

All single failures which could affect the CST level indication would result in actuating the Lo and Lo-Lo alarms on one or both trains. By procedure after verifying a true alarm, the operator will switch to the backup water source (EWS) for auxiliary feedwater supply upon actuation of the alarms. This action places the AFS into its most conservative mode of operation whether or not there is water in the CST. Further, the automatic low suction pressure pump trip being installed in response to NRC recommendation GL-4, trips the pump independently of the CST level indication and alarms. This auto pump trip is itself alarmed. In the event that the operator does not adequately respond to the CST level indication and alarms during the time span from the Lo-Lo alarm to pump trip, pump damage due to loss of suction is prevented automatically by the trip function.

Additional Short Term Recommendation No. 2

The 48 hour endurance testing will be performed on all auxiliary feedwater pumps in both Units 1 and 2 by December 31, 1980. Results of the tests will be reported, as outlined in recommendation No. 2; within 60 days of completion of the testing of all six (6) auxiliary feedwater pumps in Units 1 and 2 .



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FIGURE 1

STANDARD SPECIFICATIONS (Single Plug-Type Air Switch)

Body Forged brass

Connections Tapped for 1/4 NPT, numbered for identification.

Mounting Panel up to 6.5 mm (0.25 in) thick or open piping.

Handle Cast brass, chromium-plated. Removable for adjustment to name plate position.

Maximum Pressure 1 MPa (150 psi, 10 bar or kg/cm²).
(Allowable leakage 10 cubic centimetres per minute between ports and from interior to atmosphere.)

Switch Combination See Table 1 for positions and port configuration.

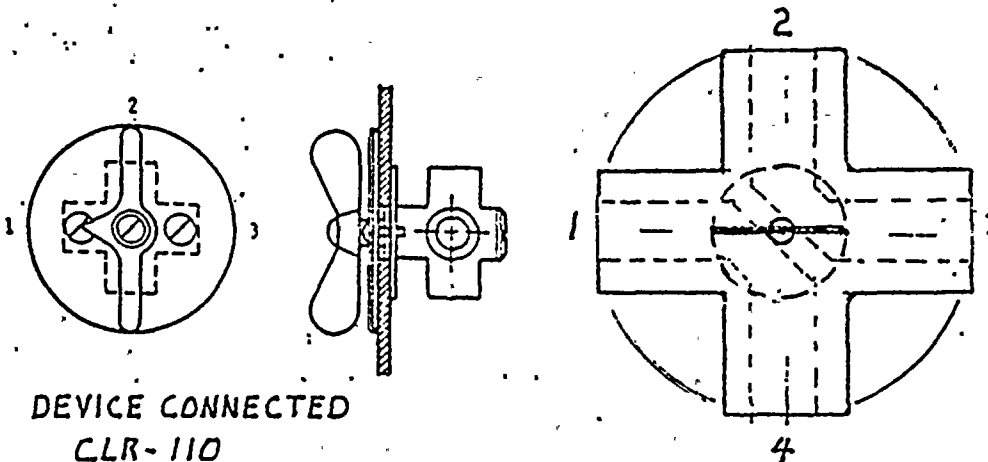


TABLE 1

Part Number	Type	Connection Combinations	Rotation (Clockwise)	Front-View Schematic
0038360(a)	2-Position 4-Port Double Angle Plug	1-2, 3-4 or 2-3, 1-4	90°	

(a) Part Number shown is for switch without nameplate.

SINGLE SWITCH



PORT #	DEVICE CONNECTED
1	CLR-110
2	PLUGGED
3	CLR-111
4	RECORDER

DONALD C. COOK Nuclear Plant

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

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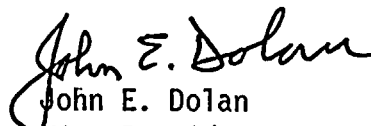
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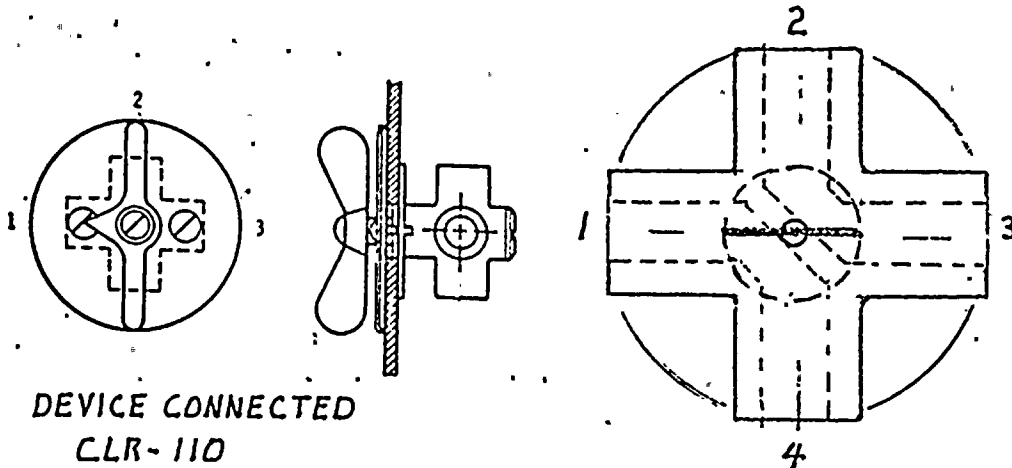


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DONALD C. COOK NUCLEAR PLANT

