

ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8902070220 DOC. DATE: 89/02/01 NOTARIZED: NO DOCKET #
 FACIL: 50-263 Monticello Nuclear Generating Plant, Northern States 05000263

AUTH. NAME AUTHOR AFFILIATION
 MUSOLF, D. Northern States Power Co.
 RECIP. NAME RECIPIENT AFFILIATION
 Office of Nuclear Reactor Regulation, Director (Post 870411)

SUBJECT: Responds to 881208 request re design of automatic depressurization sys design.

DISTRIBUTION CODE: A001D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 3
 TITLE: OR Submittal: General Distribution

NOTES:

	RECIPIENT ID CODE/NAME	COPIES	LTR	ENCL	RECIPIENT ID CODE/NAME	COPIES	LTR	ENCL
	PD3-1 LA	1		0	PD3-1 PD	2		2
	STEFANO, J	1		1				
INTERNAL:	ARM/DAF/LFMB	1		0	NRR/DEST/ADS 7E	1		1
	NRR/DEST/CEB 8H	1		1	NRR/DEST/ESB 8D	1		1
	NRR/DEST/MTB 9H	1		1	NRR/DEST/RSB 8E	1		1
	NRR/DEST/SICB	1		1	NRR/DOEA/TSB 11	1		1
	NUDOCS-ABSTRACT	1		1	OGC/HDS1	1		0
	<u>REG FILE</u> 01	1		1	RES/DSIR/EIB	1		1
EXTERNAL:	LPDR	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: LTR 19 ENCL 16

*M/A 4
et*

R
I
D
S
/
A
D
D
S

R
I
D
S
/
A
D
D
S



Northern States Power Company

414 Nicollet Mall
Minneapolis, Minnesota 55401-1927
Telephone (612) 330-5500

February 1, 1989

TAC No. 71389

Director of Nuclear Reactor Regulation
U S Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

MONTICELLO NUCLEAR GENERATING PLANT
DOCKET NO. 50-263 LICENSE NO. DPR-22

AUTOMATIC DEPRESSURIZATION SYSTEM DESIGN

In response to your December 8, 1988 request, the design of the Monticello Automatic Depressurization System was evaluated. The results of the evaluation are provided in an attachment to this letter. The evaluation concluded that loss of any one of the power supplies for the Automatic Depressurization System will not disable the system. We have concluded that no design deficiency, similar to the one identified in your letter of December 8, 1988, exists at Monticello.

Please contact us, if you have addition questions or comments on this issue.

David Musolf
Manager Nuclear Support Services

c: Regional Administrator-III, NRC
NRR Project Manager, NRC
Resident Inspector, NRC
G Charnoff

Attachment

8902070220 890201
PIR ADOCK 05000263
P PDC

A001
1/11 3

MONTICELLO NUCLEAR GENERATING PLANT

Automatic Depressurization System Design

Automatic Depressurization System (ADS) power supplies are shown in Figure 1. All power sources are from the 125 VDC or 250 VDC Batteries. There are two 125 VDC batteries, Division I and Division II. There are also two 250 VDC batteries, Division I and Division II. The 250 VDC batteries have center taps so that 125 VDC loads can be supplied from the 250 VDC batteries. All of the ADS loads are 125 VDC. Loss of any one of these four power supplies will not disable the ADS system.

The loss of Division I 125 VDC battery will disable the Channel A logic and cause the control power for the valves to shift to the Division II 125 VDC battery. Since the valves have control power and the Channel B logic and instruments have power, ADS will function properly.

Loss of Division II 125 VDC battery will disable the Channel B logic and the backup control power for the valves. Since the valves have control power from Division I and the Channel A logic and instruments have power, ADS will function properly.

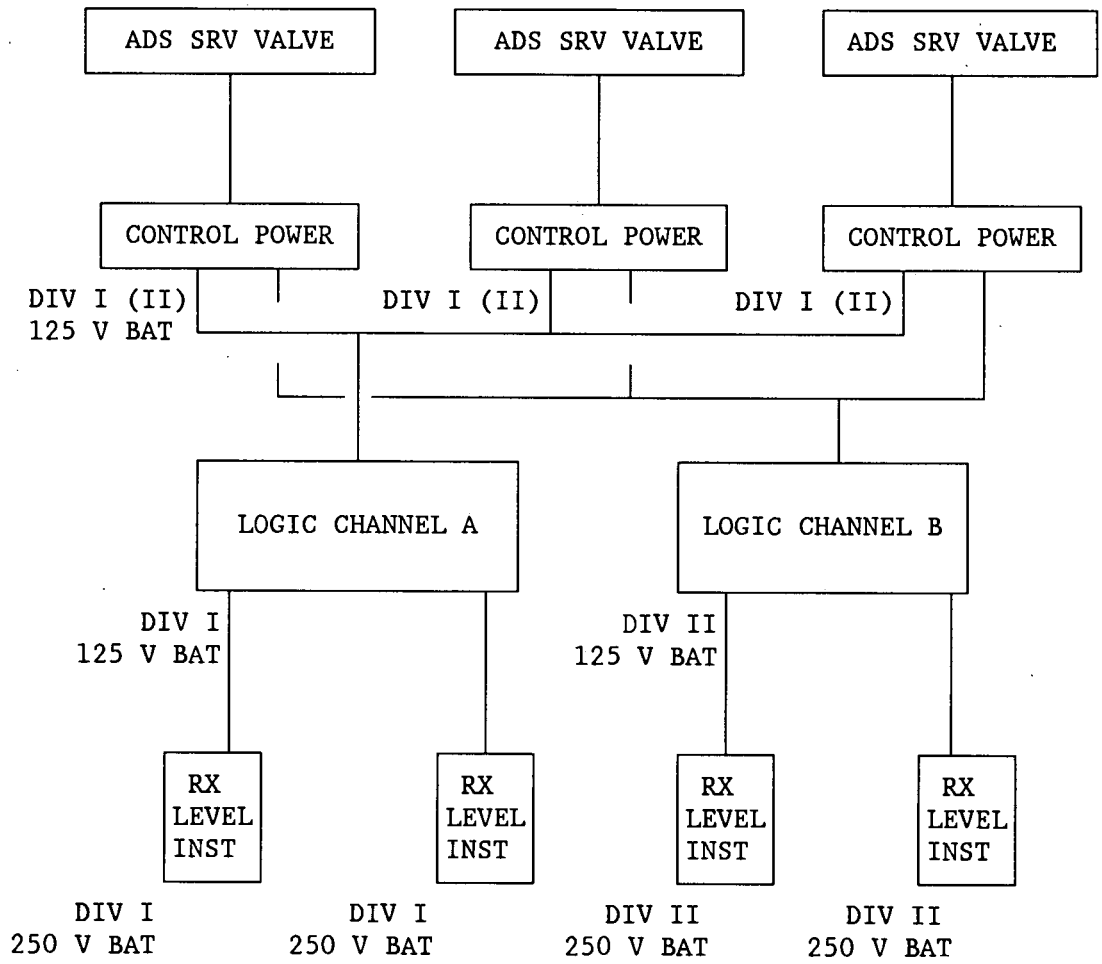
Loss of Division I 250 VDC battery will disable the reactor level instruments that supply level information to Channel A. Since the valves have control power and the Channel B logic and instruments are fully operable, ADS will function properly.

Loss of Division II 250 VDC battery will disable the reactor level instruments that supply level information to Channel B. Since the valves have control power and the Channel A logic and instruments are fully operable, ADS will function properly.

If one SRV should fail, the Automatic Depressurization System function would still be available because only two of the three safety relief valves are necessary for the system to fulfill its function.

FIGURE 1

AUTOMATIC DEPRESSURIZATION SYSTEM POWER SUPPLIES



ABBREVIATIONS:

- (II) = AUTOMATIC BACKUP POWER SUPPLY FROM DIVISION II
- SRV = SAFETY RELIEF VALVE
- DIV I = DIVISION I POWER SUPPLY
- 125 V BAT = 125 VOLT BATTERY
- ADS = AUTOMATIC DEPRESSURIZATION SYSTEM