



Northern States Power Company

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

August 22, 1986

Mr C W Hehl, Chief
Operations Branch
US Nuclear Regulatory Commission
Region III
799 Roosevelt Road
Glen Ellyn, IL 60137

MONTICELLO NUCLEAR GENERATING PLANT
Docket No. 50-263 License No. DPR-22

Response to Inspection Report No. 50-263/86006(DRS)

In response to your letter of July 24, 1986, concerning Inspection Report No. 50-263/86006(DRS), the following information is offered.

On June 16, 1986 during performance of the weekly Intermediate Range Monitor (IRM) functional test, it was discovered that all four IRMs in the B Reactor Protection System were inoperable. The -24 VDC power supply fuses were found to be blown. The fuses were replaced and the IRM weekly functional test was successfully completed.

Investigation revealed that, on June 14, 1986, while performing 480 volt bus switching, a transient was experienced on the B + 24 volt battery system that blew both the positive and negative 24 VDC IRM power fuses. A technician replaced the + 24 VDC fuse in each IRM, which cleared all IRM alarms and brought the IRM readings back on scale. With the apparent return to normal operation, the technician did not investigate the condition of the - 24 VDC fuses.

Subsequent testing revealed that removing the - 24 VDC fuse resulted in a momentary downscale alarm which immediately cleared. Regardless of the initial IRM reading, the indication returned on-scale after the fuse was removed. The Source Range Monitors (SRMs) and the Process Radiation Monitors have the same design deficiency.

VIOLATION

Technical Specification 3.1.A and Table 3.1.3 require that the minimum number of trip systems and the minimum number of instrument channels per trip system that must be operable with the Mode Switch in "Refuel" include three Intermediate Range Monitor (IRM) "High-High" and "Inoperative" trips. Technical Specification 3.2.C and Table 3.2.3 require that the minimum number of operable instrument channels per trip system that must initiate a Rod Block when the Mode Switch is in "Refuel" include three IRM "Downscale" and "Upscale" functions.

8609030065 860822
PDR ADOCK 05000263
Q PDR

AUG 25 1986

1/0
FED

Contrary to the above, from 1249 HRS. on June 14, 1986 to 2350 HRS. on June 16, 1986, with the Mode Switch in "Refuel," four (4) out of four (4) IRM instrument channels in one RPS trip system were inoperable and would not have performed their design trip function if required.

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

RESPONSE

Corrective Action Taken and Results Achieved

A -24 VDC power monitoring relay was installed in each SRM and IRM so that they will now fail on a loss of either the positive or negative DC supply.

Instructions were issued to the I&C Technicians to use the plant work control process to govern fuse replacements. This process addresses the requirements for post maintenance testing.

Corrective Action to Avoid Further Noncompliance

Modifications will be made to the process radiation monitors so that they will fail safe on loss of either DC supply.

The + 24 VDC battery chargers will be replaced to reduce the ripple voltage on the DC buses.

Date of Full Compliance

All modifications are scheduled to be completed by the end of the 1987 refueling outage.

VIOLATION

10 CFR 50, Appendix B, Criterion XVII requires that operating logs shall be maintained to furnish evidence of activities affecting quality. This requirement is implemented by Administrative Control Document No. 4.ACD.4.7 which requires the maintenance of a Shift Supervisors Log and Control Room Log. 4.ACD4.7 specifies that all significant operating actions or occurrences such as surveillances or special tests, and instrumentation or equipment failures shall be recorded in such logs. 10 CFR 50, Appendix B, Criterion V requires that activities affecting quality be prescribed by documented instructions and be accomplished in accordance with those instructions.

Contrary to the above, the following examples of inadequate logs being maintained by operations personnel were identified:

- a: On June 14, IRMs No. 15, 16 and 17 plus the Discharge Canal Process Monitor failed when their ± 24 volt fused blew following replacement of the 480 VAC breaker 304 on load center 103. Both logs are silent regarding these equipment failures.
- b: Four hours after the initial event, on June 14, the Shift Supervisor noted that the Discharge Canal Process Monitor was not working correctly and proceeded to replace the ± 24 volt fuses. No record was made of the finding and corrective action taken which was the first indication that a design problem existed with the loss of the ± 24 volt power to the instruments.
- c: On June 16 during a reactor pressure vessel hydro the control rod drive scram timing surveillance test was preformed. Both logs are silent regarding the testing performed.

This is a Severity Level IV violation (Supplement 1).

RESPONSE

Corrective Action Taken and Results Acheived


A memorandum was issued to all Shift Supervisors and Control Room Operators reminding them of the requirements of Administrative Control Document 4.ACD.4.7, concerning log entries. In addition, the General Superintendent, Operations met with each shift crew to discuss the logging problem and the ACD requirements. An improvement in the quality of log entries has been observed since that time.

Corrective Action to Avoid Further Noncompliance

Administrative Control Document 4.ACD.4.7 is presently being revised to clarify requirements concerning log entries during periods when the plant is shutdown and numerous activities are taking place.

Date of Full Compliance

The revised ACD will be issued by November 28, 1986.


C E Larson

Vice President - Nuclear Generation

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