



Monticello Nuclear Generating Plant  
2807 West County Road 75  
Monticello, MN 55362-9637

Operated by Nuclear Management  
Company LLC

February 12, 2001

Technical Specification Table 3.14.1

US Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555

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

**30 Day Special Report**  
**Inoperable Reactor Building Wide Range Gas Monitor**

This special report is being submitted as required by Monticello Technical Specification Table 3.14.1 for a Reactor Building Ventilation Wide Range Gas Monitor (WRGM) being inoperable for more than seven days. Although the WRGM was repaired within 24 hours of it being discovered to be inoperable, investigation of the event indicates it may have been inoperable for longer than seven days.

Attachment A of this letter provides results of our investigation into this event. This letter therefore fulfills the above notification requirements.

This letter contains no new NRC commitments, nor does it modify any prior commitments.

Please contact Sam Shirey, Senior Licensing Engineer, at (763) 295-1449 if you require further information.

Byron D Day  
Plant Manager  
Monticello Nuclear Generating Plant

cc: Regional Administrator-III, NRC  
NRR Project Manager, NRC  
Resident Inspector, NRC  
J E Silberg

IEB

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## BACKGROUND AND ACTION TAKEN

On January 16, 2001 Chemistry identified a condition indicating abnormal operation of A-channel of the Reactor Building Ventilation Wide Range Gas Monitor (WRGM). Specifically, when the WRGM filter papers were removed as part of weekly Procedure 0356, "Stack/Vent Iodine/Particulate Dose Rate Limits," the A-channel filter appeared lighter in color than the B-channel filter. The difference in color is a possible indication of air in-leakage downstream of the filter. Condition Report 20010277 was initiated to document the investigation of the failure.

On January 17, 2001 a Work Order was initiated to investigate if any air in-leakage was present at the WRGM sample skid and a 7-day Limiting Condition of Operation was entered per Technical Specification Table 3.14.1. The problem was identified as a leaking A-channel WRGM pump. A second WO was written to replace the pump, repair/refurbish the removed pump, and determine the cause of the failure. The replacement pump was installed and declared operable on January 17, 2001.

Review of previous condition reports indicates a failure of a pump diaphragm in April, 1997. The corrective action resulting from that failure was to incorporate the comparison of filter paper particulate density into the weekly chemistry surveillance as a means of detecting air in-leakage. This action was successful in detecting the January 16, 2001 event. However, since pump replacement occurred the day following the comparison and the comparison could only detect differences covering the previous 7 days of operation, it is not possible to conclude that the A-channel was operable for the 7 days preceding the replacement. Therefore, this 30 day letter special report is submitted to comply with Technical Specifications Table 3.14.1.

## CAUSE OF THE INOPERABILITY

Investigation determined the cause of the leakage to be a ruptured pump diaphragm. Past failures indicate no trend in the life of the diaphragm. One failure occurred within a month of installation indicating a level of infant mortality with this pump. The January 16, 2001 failure was not easily detected since sample flow remained within specifications. Also, during normal operation radiation levels in the plenum are approximately the same as in the room which contains the WRGM skids. Therefore, no difference was recorded in the indicated count rate. The weekly filter paper comparison does detect flow problems but is only effective after the flow has been degraded for a number of days. A modification is being considered to: 1) provide positive indication of the flow upstream of the pump to detect any degradation of capability, and 2) to locate a more reliable high flow pump.

## PLANS AND SCHEDULE FOR RESTORING THE SYSTEM TO OPERABLE STATUS

The system was restored to operable status within 24 hours of the problem determination by replacing the failed pump.

## SAFETY SIGNIFICANCE

The Reactor Building Ventilation WRGMs are not safety related, nor do they provide any trip functions. They are a Regulatory Guide 1.97 accident monitoring system. B-channel was operable at all times during the period that A-channel WRGM was suspected of being inoperable. Therefore, the safety significance of this event is minimal.