FROM:
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Minneapolis, Minnesota 5[illegible]01
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Dr. Peter A. Morris

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Ltr reporting Unusual Occurrences at The Monticello Nuclear Generating Plant
(1) Loss of Plant Air Resulting in ECCS Initiation, and Related Events...

ENCLOSURES:
(2) ECCS Initiation Resulting from Instrument Surveillance Testing...
(3) Unsafe Failure of ECCS Initiating Low-Low Reactor Water Level Switch...

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REMARKS:

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Minneapolis, Minnesota 55401

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Dr. Peter A. Morris
Division of Reactor Licensing
United States Atomic Energy Commission
Washington, D. C. 20545

Dear Dr. Morris:

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

Reporting of Unusual Occurrences

Three conditions have occurred recently at the Monticello Nuclear Generating Plant which we interpret to be reportable in accordance with Section 6.6.C of the Technical Specifications. The Region III Compliance Inspector has been notified of these occurrences.

1. <u>Loss of Plant Air Resulting in ECCS Initiation, and Related Events</u>

On September 5, 1971, a reactor scram, isolation, and ECCS initiation resulted from a low pressure condition in the plant compressed air system. The cause of the low air pressure condition has been traced to a failed compressor control, combined with operator action of improperly placing the standby air compressor controls in the "OFF" position. The low air pressure condition caused the condensate demineralizer effluent valves to close, resulting in a low suction pressure trip of the reactor feedwater pumps. The reactor scrammed on low reactor water level. The reactor water level decreased to just below the "low-low" level trip setting, causing an isolation, and an ECCS initiation. Reactor water level was returned to the normal operating level by automatic operation of the HPCI and RCIC Systems, and manual operation of a reactor feedwater pump.

Analysis of computer records and the steam line pressure recorder chart indicated that the main steam isolation valves had closed and then reopened for no known reason.

Testing was performed on the isolation system to verify that the MSIV's cannot be reopened until the isolation is manually reset. Based on test results and findings of the occurrence investigation, the Operations Committee concluded that an operator unknowingly reset the isolation signal and caused the MSIV's to reopen.

The air compressor loading controls have been repaired. The procedural errors have been discussed with the individuals involved. A cover has been placed on the steam line isolation "reset" switch to prevent inadvertent operation. A memo has been distributed to the plant operators reminding them of the proper procedure for resetting this isolation.

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2. ECCS Initiation Resulting from Instrument Surveillance Testing

On September 9, 1971, an initiation signal was generated during surveillance testing that caused the standby diesel generators to start, and the RCIC System to operate.

Prior to removal of a simulated trip signal for a "low-low" reactor water level switch, leads for a volt/ohmmeter were clipped in place in preparation for testing of another similar switch. The clips were inadvertently short circuited, thereby simulating a trip of a second "low-low" reactor water level switch and initiating the "one of two-twice" logic trip circuit for the RCIC System and the diesel generators.

The surveillance test procedure has been revised to include the detailed steps of testing. These procedures have been discussed with the Instrument men to assure that they understand the written procedure, and the importance of correctly following the procedure.

3. Unsafe Failure of ECCS Initiating Low-Low Reactor Water Level Switch

On September 9, 1971, surveillance testing revealed a failed mercury wetted, magnetic switch in a low-low reactor water level instrument channel. The failed switch is one of four that provide signals to the Automatic Pressure Relief System, both Core Spray Systems, and the RCIC System. The switches are arranged in one of two-twice logic. Had a valid low-low level condition existed the redundant instrument would have operated as required.

The failed switch has been replaced and the surveillance test successfully completed. The failed switch has been sent to the manufacturer to determine the cause of the failure.

Unusual Occurrence reports have been written for these three occurrences and will be available to the Region III Compliance Inspector for review during his next visit.

Yours very truly,

R. O. Duncanson /CEL

R. O. Duncanson, Jr., P.E.
Gen. Supt. of Power Plants-Mechanical
Chairman-Monticello Safety Audit Committee

ROD/mmm