



**TECHNICAL EVALUATION OF THE LICENSEE'S RESPONSE  
TO I&E BULLETIN 80-06  
CONCERNING ESF RESET CONTROLS FOR THE  
MONTICELLO NUCLEAR GENERATING PLANT**

(DOCKET NO. 50-263)

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# INTERIM REPORT



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Technical Evaluation of the Licensee's Response to I&E Bulletin 80-06 Concerning ESF Reset Controls for the Monticello Nuclear Generating Plant

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This document was prepared primarily for preliminary or internal use. It has not received full review and approval. Since there may be substantive changes, this document should not be considered final.

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INTERIM REPORT

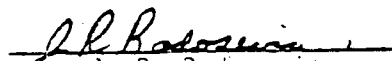
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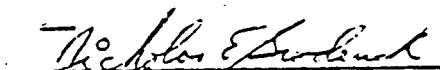
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## INTRODUCTION

On March 13, 1980, the USNRC Office of Inspection and Enforcement (I&E), issued I&E Bulletin 80-06, entitled "Engineered Safety Feature (ESF) Reset Controls," to all PWR and BWR facilities with operating licenses. I&E Bulletin 80-06 requested that the following actions be taken by the licensees:

- (1) Review the drawings for all systems serving safety-related functions at the schematic/elementary diagram level to determine whether or not upon the reset of an ESF actuation signal all associated safety-related equipment remains in its emergency mode.
- (2) Verify that the actual installed instrumentation and controls at the facility are consistent with the schematics reviewed in Item 1 above by conducting a test to demonstrate that all equipment remains in its emergency mode upon removal of the actuating signal and/or manual resetting of the various isolating or actuation signals. Provide a schedule for the performance of the testing in your response to this bulletin.
- (3) If any safety-related equipment does not remain in its emergency mode upon reset of an ESF signal at your facility, describe proposed system modification, design change, or other corrective action planned to resolve the problem.
- (4) Report in writing within 90 days the results of your review, include a list of all devices which respond as discussed in Item 3 above, actions taken or planned to assure adequate equipment control, and a schedule for implementation of corrective action.

This technical evaluation addresses the licensee's response to I&E Bulletin 80-06 and the licensee's proposed system modification, design change, and/or other corrective action planned to resolve the problem. In evaluating the licensee's response to the four Action Item requirements of the bulletin, the following NRC staff guidance is also used:

Upon the reset of ESF signals, all safety-related equipment shall remain in its emergency mode. Multiple reset sequencing shall not cause the affected equipment to deviate from its emergency mode. Justification should be provided for any exceptions.

## EVALUATION AND CONCLUSIONS

In a letter dated June 16, 1980 [Ref. 1], Northern States Power Company (NSP), the licensee for Monticello Nuclear Generating Plant, replied to I&E Bulletin 80-06. The licensee provided additional descriptions of their intended modifications in letters dated January 29, 1981 [Ref. 2] and January 26, 1981 [Ref. 3].

The licensee reported [Ref. 1] that they had completed a review of the drawings for all systems serving safety-related functions. The licensee concluded that, with four exceptions, all safety-related equipment remains in its emergency mode upon reset of an ESF actuation signal. These four exceptions, as evaluated by the licensee, are discussed below.

The APRS valves will close upon manual reset of Channel A and B logic timers. If an initiation signal is present, the APRS valves will reopen after a 120-second time delay.

The TIP system detectors remain in shield and the ball valves remain closed upon isolation logic reset, unless the machine is in the MANUAL FORWARD mode, in which case the ball valves will open and the detector will insert upon logic reset. The isolation logic cannot be manually reset if an isolation signal is present.

Manual reset of the air ejector radiation monitors trip logic will cause the recombiner inlet valves to reopen. The trip logic cannot be manually reset if a high radiation condition exists.

Manual reset of the stack radiation monitors trip logic will cause the stack isolation valves to reopen. The trip logic cannot be manually reset if a high radiation condition exists.

We conclude that the licensee has complied with Action Item 1 of I&E Bulletin 80-06 by completing the drawing review.

In response to Action Item 3 of I&E Bulletin 80-06, the licensee has committed to perform control circuit modifications prior to or during the refueling outage scheduled for April 1981. In the interim period, the licensee has committed to issue appropriate instructions to operating personnel alerting them to the characteristics of the four systems described above. In references 2 and 3, the licensee detailed their intended modifications. The modifications as presented will ensure that the equipment will remain in its emergency mode position upon ESF reset. Hence, we conclude that the licensee has complied with the requirements of Action Item 3 of I&E Bulletin 80-06.

The licensee has committed to complete testing to verify that all equipment remains in its emergency mode upon removal and/or manual resetting of the ESF actuation signal prior to or during the refueling outage scheduled for April 1981. The licensee does not plan to perform special tests on systems for which routine surveillance testing or pre-operational test reports verify the I&E Bulletin 80-06 requirements. We conclude that the licensee has complied with the requirements of Action Item 2 of I&E Bulletin 80-06 by scheduling the required testing.

We conclude that the licensee has complied with the requirements of Action Item 4 of I&E Bulletin 80-06 in their response to Action Items 1, 2, and 3.

#### FINDINGS

Based on our review of the information and documents provided, we conclude that the Monticello ESF reset controls meet the requirements of I&E Bulletin 80-06.

#### REFERENCE

1. NSP letter (D.E. Gilbert) to NRC (J.G. Keppler), Docket 50-263, no title, dated June 16, 1980.
2. Internal NSP letter (R. E. VanDell to D. Muscif), "IEB 80-06 Systems Modifications," dated January 29, 1981.
3. Internal NSP letter (P. A. Tobin to D. D. Antony), "Modification of APRS logic--IEB 80-06," dated January 26, 1981.