

MAY 1981



**TECHNICAL EVALUATION OF THE LICENSEE'S RESPONSE
TO I&E BULLETIN 80-06
CONCERNING ESF RESET CONTROLS FOR THE
POINT BEACH NUCLEAR POWER STATION, UNITS 1 AND 2**

(DOCKET NOS. 50-266 AND 50-301)

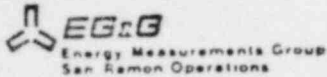
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INTERIM REPORT



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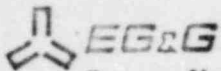
P. Bender/R. Wilson, ICSB

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Energy Measurements Group
San Ramon Operations

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by

D. B. Hackett

Approved for Publication

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This document is UNCLASSIFIED

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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 6, 1980 [Ref. 1], Wisconsin Electric Power Company (WE), the licensee for Point Beach Nuclear Power Station, Units 1 and 2, replied to I&E Bulletin 80-06. A conference call was made to the licensee on February 5, 1981 [Ref. 2] to discuss several open items. The licensee sent a letter dated March 10, 1981 [Ref. 3] as follow-up documentation.

In response to Action Item 1 of I&E Bulletin 80-06, the licensee reported that they had conducted a review of drawings to determine whether or not equipment returned to its non-emergency mode upon removal of the ESF actuation signal and reset of the ESF function. The licensee concluded that there are two instances in which equipment returns to its non-emergency mode, as discussed below:

- (1) Two valves on each unit control the addition of additive to the Containment Spray System (CSS). Upon initiation of CSS, these valves remain in their normal, closed position; thus, not allowing additive into the CSS. Two minutes after CSS initiation, the valves will open allowing additive injection into the CSS. The operator may prevent these valves from opening by switching the valve controls to manual prior to the expiration of the 2-minute delay time. Upon removal of the CSS actuation signal and reset of the CSS, these valves will return to their non-emergency or closed position; thus, cutting off additive to the CSS. The operator does have a manual control of valve position at all times.
- (2) Upon initiation of Containment Isolation (CI) in either unit, a single solenoid valve is de-energized, causing 100 percent recirculation of control room air. Upon removal of the CI actuation signal and reset of CI, the solenoid valve is energized returning control room ventilation to its non-emergency mode. The operator does have manual control of valve position at all times.

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

In response to Action Item 3 of I&E Bulletin 80-06, the licensee committed to perform modifications to the solenoid valve control, as described in (2) above. The modifications as described in the conference call of February 5, 1981 [Ref. 2] and confirmed in reference 3, will ensure that 100 percent recirculation of control room air will continue after reset of containment isolation. Return of the control room ventilation to

its non-emergency mode will require separate operator action. In reference 3, the licensee reported the completion and satisfactory testing of this modification. Therefore, we conclude that the licensee has complied with the requirements of Action Item 3 of I&E Bulletin 80-06 for control room ventilation.

In response to Action Item 3 of I&E Bulletin 80-06 for the CSS additive valves, the licensee does not intend to make any modifications. The licensee has offered the following justification:

We do not believe it is necessary to modify control of the containment spray additive valves as described in (1) above. This evaluation is based on the fact that containment spray would not be reset unless it was intended to stop the spray system shortly thereafter. The present configuration would close the spray additive valves automatically as a result of containment spray reset and the spray pumps would be manually stopped. Requiring that a separate operator action be required to close the spray additive valves before stopping the spray pumps would provide no change in the sequence of events and would introduce another manual action required by the operator. Also, the operator has at all times the option of manually controlling the position of the spray additive valves. Manual control is needed to control the pH of the containment sump water during the post accident recirculation phase.

The above justification was offered by the licensee in lieu of any system modification, design change, or other corrective action. We have reviewed the justification submitted by the licensee to ensure that sufficient information is provided as a basis for the NRC staff to prepare a Safety Evaluation Report.

In response to Action Item 2 of I&E Bulletin 80-06, the licensee reported that a test to verify that the actual valve control functions, as identified in the review of schematic diagrams during ESF actuation and ESF reset, was conducted on Unit 2 during its 1980 refueling outage [Ref. 1] and on Unit 1 during its recent refueling outage [Ref. 3]. We conclude that the licensee has complied with the requirements of Action Item 2 of I&E Bulletin 80-06 by performing the 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 find that the ESF reset controls for Point Beach Nuclear Power Station, Units 1 and 2 meet the requirements of Action Items 1, 2, and 4 of I&E Bulletin 80-06.

In response to Action Item 3 of I&E Bulletin 80-06, the licensee performed modifications to the control room ventilation and offered the justification given in the previous section of this report in lieu of any system modifications or other corrective actions on the containment spray additive valves.

REFERENCES

1. WE letter (C. Fay) to NRC (J. Keppler), "Reply to I&E Bulletin 80-06," dated June 6, 1980.
2. Telephone conference call, NRC (P. Bender and J. Colburn) and EG&G/SRU (D. Hackett) to WE (P. Katers and C. Krause), February 5, 1981.
3. WE letter (C. Fay) to NRC (J. Keppler), "Additional Information, I&E Bulletin 80-06," dated March 10, 1981.