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 **EG&G**
ENERGY MEASUREMENTS GROUP

**TECHNICAL EVALUATION OF THE LICENSEE'S RESPONSE
TO I&E BULLETIN 80-06
CONCERNING ESF RESET CONTROLS FOR THE
CRYSTAL RIVER NUCLEAR POWER STATION, UNIT 3**

(DOCKET 50-302)

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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 Crystal River Nuclear Power Station, Unit 3

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P. Bender/R. Wilson, ICSB

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

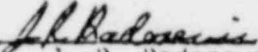
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by

D. H. Laudenschach

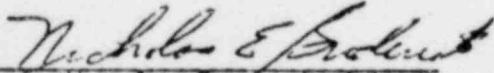
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J. R. Radosevic
Department Manager

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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 12, 1980 [Ref. 1], Florida Power Corporation, the licensee for Crystal River Nuclear Power Station, Unit 3, replied to I&E Bulletin 80-06. In a telephone conference call conducted on January 29, 1981 [Ref. 2], the licensee provided additional information and clarification of their original response [Ref. 1].

The licensee reported [Ref. 1] that a thorough review of all equipment actuated by the ESFAS system has been completed at the schematic/elementary diagram level. The ESFAS system includes High Pressure Injection, Low Pressure Injection, Reactor Building Isolation, and Reactor Building Spray. The licensee indicated [Ref. 2] that their response to Action Item 1 of I&E Bulletin 80-06 (in their June 12, 1980 letter [Ref. 1]) meant that "all systems serving safety-related functions were reviewed." We conclude that the licensee has complied with the requirements of Action Item 1 of I&E Bulletin 80-06 by completing the drawing review of all systems serving safety-related functions.

The licensee reported [Ref. 1] that Surveillance Procedure SP-417, entitled "Refueling Interval Integrated Plant Response to Engineered Safeguards Actuation," has been modified to include a test to demonstrate that all equipment remains in its emergency-mode upon removal of the actuating signal and/or upon manual resetting of the various isolating or actuation signals. This test will be conducted during restart of Unit 3. We conclude that the licensee has complied with the requirements of Action Item 2 of I&E Bulletin 80-06 by providing a schedule for the performance of the testing.

The licensee reported [Ref. 1] they have determined, as a result of the drawing review conducted in response to Action Item 1 of I&E Bulletin 80-06, that no valve, ventilation damper, motor, etc., returns to its preactuation condition upon reset of the ESF signal. Based on the findings presented [Refs. 1 and 2], we conclude that the licensee has complied with the requirements of Action Item 3 of I&E Bulletin 80-06.

The licensee has complied with the requirements of I&E Bulletin 80-06, Action Item 4, in their response to Action Items 1 through 3.

FINDINGS

Based on our review of the information and documents provided by the licensee, we find that the ESF reset controls for Crystal River Nuclear Power Station, Unit 3, satisfy the requirements of I&E Bulletin 80-06.

REFERENCES

1. Florida Power Corporation letter (P. Y. Baynard) to NRC/I&E (J. P., O'Reilly), "Response to I&E Bulletin 80-06", dated June 12, 1980.
2. Telephone conference call, NRC (P. Bender); Florida Power Corporation (W. Lobo, E. Good); EG&G, Inc., San Ramon (D. Hackett, D. Laudenbach), January 29, 1981.