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ENERGY MEASUREMENTS GROUP

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

(DOCKET NO. 50-305)

SAN RAMON OPERATIONS
2801 OLD CROW CANYON ROAD
SAN RAMON, CALIFORNIA 94583

INTERIM REPORT

EG&G
Energy Measurements Group
San Ramon Operations

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Author(s):

B. Kountanis

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P. Bender/ R. Wilson, ICSB

EG&G Energy Measurements Group
San Ramon Operations
San Ramon, CA 94583

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by

B. Kountanis

Approved for Publication

J. R. Radosevic
Department Manager

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Nicholas E. Broderick
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 17, 1980 [Ref. 1], Wisconsin Public Service Corporation, the licensee for Kewaunee Nuclear Power Plant, replied to I&E Bulletin 80-06. In a telephone conference call on February 12, 1981 [Ref. 2], the licensee provided clarification of their original response [Ref. 1]. Additional information was provided by the I&E inspector's report [Ref. 3].

In response to Action Item 1 of I&E Bulletin 80-06, the licensee reported [Ref. 1] that they have completed the review of all applicable schematic and logic diagrams and that all equipment operates in its intended manner after ESF reset. In a telephone call [Ref. 2], the licensee stated that "intended manner" refers to the manner required by I&E Bulletin 80-06. We, therefore, conclude that the licensee has complied with the requirements of Action Item 1 of I&E Bulletin 80-06.

In response to Action Item 2 of I&E Bulletin 80-06, the licensee indicates [Ref. 1] that their routine surveillance tests are performed on each ESF by verifying its proper operation following initiation and after reset. This test is done at each refueling outage and the most recent occurred in May and June of 1980. In a telephone call [Ref. 2], the licensee verified that the tests were completed as stated above and that the control room indicators showed that all equipment stayed in its emergency position. The I&E inspector's report [Ref. 3] provided additional information. The I&E inspector determined that after load sequencing was performed on the diesel generator, the HPSI pumps were switched off before reset was initiated. The I&E inspector's report [Ref. 3] indicated that surveillance procedure SP-33-110 should be changed before the next shutdown so that the HPSI pumps would not be turned off. We, therefore, conclude that Action Item 2 of I&E Bulletin 80-06 has been satisfied.

Since no problems were identified and SP-33-110 will be modified before the next outage, we conclude that Action Item 3 of I&E Bulletin 80-06 is satisfied. Furthermore, the licensee has satisfied the requirements of Action Item 4 of I&E Bulletin 80-06 in their reply to Items 1 through 3.

FINDINGS

Based on our review of the documents and information provided by the licensee, we conclude that the ESF reset controls for the Kewaunee Nuclear Power Plant comply with the requirements of I&E Bulletin 80-06. This conclusion was confirmed by the I&E inspection report [Ref. 3].

REFERENCES

1. Wisconsin Public Service Corporation letter (E. R. Mathews) to NRC (J. G. Keppler), "I&E Bulletin 80-06 ESF Reset Controls," dated June 17, 1980.

2. Telephone conference call, NRC (P. Bender and R. Licciardo); Wisconsin Public Service Corporation (C. Schrock); EG&G, Inc., San Ramon (B. Kountanis and D. Hackett), February 12, 1981.

3. NRC letter (R. F. Hershman) to Wisconsin Public Service Corporation (E. R. Mathews), "Transmittal of Inspection Report no. 50-305/80-16," dated September 19, 1980.