



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

SAFETY EVALUATION REPORT  
GENERIC LETTER 83-28, ITEM 2.1 (PART 2)  
VENDOR INTERFACE PROGRAMS (RTS COMPONENTS)  
HATCH NUCLEAR PLANT UNITS 1&2  
DOCKET NOS. 50-321/366

1.0 INTRODUCTION

On February 25, 1983, both of the scram circuit breakers at Unit 1 of the Salem Nuclear Power Plant failed to open upon an automatic reactor trip signal from the reactor protection system. This incident was terminated manually by the operator about 30 seconds after the initiation of the automatic trip signal. The failure of the circuit breakers was determined to be related to the sticking of the undervoltage trip attachment. Prior to this incident, on February 22, 1983, at Unit 1 of the Salem Nuclear Power Plant, an automatic trip signal was generated based on steam generator low-low level during plant start-up. In this case, the reactor was tripped manually by the operator almost coincidentally with the automatic trip.

Following these incidents, on February 28, 1983, the NRC Executive Director for Operations (EDO), directed the staff to investigate and report on the generic implications of these occurrences at Unit 1 of the Salem Nuclear Power Plant. The results of the staff's inquiry into the generic implications of the Salem unit incidents are reported in NUREG-1000, "Generic Implications of the ATWS Events at the Salem Nuclear Power Plant." As a result of this investigation, the Commission (NRC) requested (by Generic Letter 83-28 dated July 8, 1983<sup>1</sup>) all licensees of operating reactors, applicants for an operating license, and holders of construction permits to respond to generic issues raised by the analyses of these two ATWS events.

This report is an evaluation of the response submitted by Georgia Power Company, the licensee for the Hatch Nuclear Plant, Units 1&2, for Item 2.1 (Part 2) of Generic Letter 83-28. The actual documents reviewed as part of this evaluation are listed in the references at the end of the report.

Item 2.1 (Part 2) requires the licensee to conform that an interface has been established with the NSSS or with the vendors of each of the components of the Reactor Trip System which includes:

periodic communication between the licensee/applicant and the NSSS or the vendors of each of the components of the Reactor Trip System, and,

a system of positive feedback which confirms receipt by the licensee/applicant of transmittals of vendor technical information.

## 2.0 EVALUATION

The licensee for the Hatch Nuclear Plant, Units 1&2, responded to the requirements of Item 2.1 (Part 2) with submittals dated November 7, 1983<sup>2</sup>, February 29, 1984<sup>3</sup>, and June 3, 1985<sup>4</sup>. The licensee stated in these submittals that General Electric is the NSSS vendor for the Hatch Nuclear Plant, Units 1&2 and that the RTS is included as part of the General Electric interface program established for these plants. The response also confirms that this interface program includes both periodic communication between General Electric and the licensee and positive feedback from the licensee in the form of signed receipts for technical information transmitted by General Electric.

### 3.0 CONCLUSION

Based on our review of these responses, we find the licensee's statements confirm that a vendor interface program exists with the NSSS vendor for components that are required for performance of the reactor trip function. This program meets the requirements of Item 2.1 (Part 2) of the Generic Letter 83-28, and is therefore acceptable.

### 4.0 REFERENCES

1. NRC Letter, D. G. Eisenhower to all Licensees of Operating Reactors, Applicants for Operating License, and Holders of Construction Permits, "Required Actions Based on Generic Implications of Salem ATWS Events (Generic Letter 83-28)," July 8, 1983.
2. Georgia Power Company letter to NRC, L. T. Gucwa to Director of Nuclear Reactor Regulation, "Status Report on Salem Generic Requirements," November 7, 1983.
3. Georgia Power Company letter to NRC, L. T. Gucwa to Director of Nuclear Reactor Regulation, "Response to Generic Letter 83-28, Salem Requirements," February 29, 1984.
4. Georgia Power Company letter to NRC, L. T. Gucwa to Director of Nuclear Reactor Regulation, "Response to Request for Additional Information," June 3, 1985.





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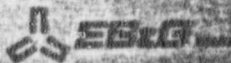
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EGG-NTA-7591  
April 1987

## **INFORMAL REPORT**

CONFORMANCE TO ITEM 2.1 (PART 2) OF GENERIC  
LETTER 83-28 REACTOR TRIP SYSTEM VENDOR INTERFACE  
HATCH-1 AND -2, MILLSTONE-1

F. G. Farmer



Work performed under  
DOE Contract  
No. DE-AC01-78DP0057

Prepared for the  
U.S. NUCLEAR REGULATORY COMMISSION

~~EGG-NTA-7591~~ 157P.

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CONFORMANCE TO  
ITEM 2.1 (PART 2) OF GENERIC LETTER 83-28  
REACTOR TRIP SYSTEM VENDOR INTERFACE  
HATCH-1 AND -2  
MILLSTONE-1

F. G. Farmer

Published April 1987

Idaho National Engineering Laboratory  
EG&G Idaho, Inc.  
Idaho Falls, Idaho 83415

Prepared for the  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555  
Under DOE Contract No. DE-AC07-76ID01570  
FIN Nos. D6001 and D6002



### ABSTRACT

This EG&G Idaho, Inc. report provides a review of the submittals for some of the General Electric (GE) nuclear plants for conformance to Generic Letter 83-28, Item 2.1 (Part 2). The report includes the following General Electric plants, and is in partial fulfillment of the following TAC Nos.:

<u>Plant</u>	<u>Docket Number</u>	<u>TAC Number</u>
Hatch-1	50-321	52844
Hatch-2	50-366	52845
Millstone-1	50-245	52854

## FOREWORD

This report is provided as part of the program for evaluating licensee/applicant conformance to Generic Letter 83-28, "Required Actions Based on Generic Implications of Salem ATWS Events." This work is conducted for the U. S. Nuclear Regulatory Commission, Office of Nuclear Reactor Regulation, Division of PWR Licensing-A by EG&G Idaho, Inc.

The U. S. Nuclear Regulatory Commission funded the work under the authorization, B&R 20-19-19-11-3, FIN Nos. D6001 and D6002.



## CONTENTS

ABSTRACT .....	11
FOREWORD .....	111
1. INTRODUCTION .....	1
2. REVIEW REQUIREMENTS .....	2
3. GROUP REVIEW RESULTS .....	3
4. REVIEW RESULTS FOR HATCH-1 AND -2 .....	4
4.1 Evaluation .....	4
4.2 Conclusion .....	4
5. REVIEW RESULTS FOR MILLSTONE-1 .....	5
5.1 Evaluation .....	5
5.2 Conclusion .....	5
6. GROUP CONCLUSION .....	6
7. REFERENCES .....	7

CONFORMANCE TO  
ITEM 2.1 (PART 2) OF GENERIC LETTER 83-28  
REACTOR TRIP SYSTEM VENDOR INTERFACE  
HATCH-1 AND -2  
MILLSTONE-1

1. INTRODUCTION

On July 8, 1983, Generic Letter 83-28<sup>1</sup> was issued by D. G. Eisenhower, Director of the Division of Licensing, Office of Nuclear Reactor Regulation, to all licensees of operating reactors, applicants for operating licenses, and holders of construction permits. This letter included required actions based on generic implications of the Salem ATWS events. These requirements have been published in Volume 2 of NUREG-1000, "Generic Implications of ATWS Events at the Salem Nuclear Power Plant."<sup>2</sup>

This report documents the EG&G Idaho, Inc. review of the submittals of three of the General Electric plants, Hatch-1 and -2 and Millstone-1, for conformance to Item 2.1 (Part 2) of Generic Letter 83-28. The submittals from the licensees and applicants utilized in these evaluations are referenced in Section 7 of this report.

## 2. REVIEW REQUIREMENTS

Item 2.1 (Part 2) (Reactor Trip System - Vendor Interface) requires licensees and applicants to establish, implement and maintain a continuing program to ensure that vendor information on Reactor Trip System (RTS) components is complete, current and controlled throughout the life of the plant, and appropriately referenced or incorporated in plant instructions and procedures. The vendor interface program is to include periodic communications with vendors to assure that all applicable information has been received, as well as a system of positive feedback with vendors for mailings containing technical information, e.g., licensee/applicant acknowledgement for receipt of technical information.

That part of the vendor interface program which ensures that vendor information on RTS components, once acquired, is appropriately controlled, referenced and incorporated in plant instructions and procedures, will be evaluated as part of the review of Item 2.2 of the Generic Letter.

Because the Nuclear Steam System Supplier (NSSS) is ordinarily also the supplier of the entire RTS, the NSSS is also the principal source of information on the components of the RTS. This review of the licensee and applicant submittals will:

1. Confirm that the licensee/applicant has identified an interface with either the NSSS or with the vendors of each of the components of the Reactor Trip System.
2. Confirm that the interface identified by licensees/applicants includes periodic communication with the NSSS or with the vendors of each of the components of the Reactor Trip System.
3. Confirm that the interface identified by licensees/applicants includes a system of positive feedback to confirm receipt of transmittals of technical information.



### 3. GROUP REVIEW RESULTS

The relevant submittals from each of the included reactor plants were reviewed to determine compliance with Item 2.1 (Part 2). First, the submittals from each plant were reviewed to establish that Item 2.1 (Part 2) was specifically addressed. Second, the submittals were evaluated to determine the extent to which each of the plants complies with the staff guidelines for Item 2.1 (Part 2).

#### 4. REVIEW RESULTS FOR HATCH-1 AND -2

##### 4.1 Evaluation

Georgia Power, the licensee for Hatch-1 and -2, provided their responses to Item 2.1 (Part 2) of the Generic Letter on November 7, 1983, February 29, 1984, and June 3, 1985. In those responses, the licensee confirms that the NSSS for Hatch-1 and -2 is General Electric and that the Reactor Protection System (RPS) for Hatch, which includes those components necessary to trip the reactor, is included as a part of the GE interface program established for the Hatch NSSS.

The GE interface program for the NSSS includes both periodic communication between GE and licensees/applicants and aperiodic communications such as "Service Information Letters" (SILs) containing information and recommendations concerning GE systems, and a system of positive feedback from licensees/applicants in the form of signed receipts for SILs transmitted by GE.

##### 4.2 Conclusion

We find the licensee's confirming statement that Hatch is a participant in the General Electric interface program for the RPS meets the staff position on Item 2.1 (Part 2) of the Generic Letter and is, therefore, acceptable.

## 5. REVIEW RESULTS FOR MILLSTONE-1

### 5.1 Evaluation

Northeast Utilities, the licensee for Millstone-1, provided their response to Item 2.1 (Part 2) of the Generic Letter on January 16, 1987. In that response, the licensee confirms that the NSSS for Millstone-1 is General Electric and that the Reactor Protection System (RPS) for Millstone-1, which includes those components necessary to trip the reactor, is included as a part of the GE interface program established for the Millstone-1 NSSS.

The GE interface program for the NSSS includes both periodic communication between GE and licensees/applicants and aperiodic communications such as "Service Information Letters" (SILs) containing information and recommendations concerning GE systems, and a system of positive feedback from licensees/applicants in the form of signed receipts for SILs transmitted by GE.

### 5.2 Conclusion

We find the licensee's confirming statement that Millstone-1 is a participant in the General Electric interface program for the RPS meets the staff position on Item 2.1 (Part 2) of the Generic Letter and is, therefore, acceptable.



## 6. GROUP CONCLUSION

We conclude that the licensee/applicant responses for the listed General Electric plants for Item 4.5.2 of Generic Letter 83-28 are acceptable.

## 7. REFERENCES

1. NRC Letter, D. G. Eisenhut to all licensees of Operating Reactors, Applicants for Operating License, and Holders of Construction Permits, "Required Actions Based on Generic Implications of Salem ATWS Events (Generic Letter 83-28)," July 8, 1983.
2. Generic Implications of ATWS Events at the Salem Nuclear Power Plant NUREG-1000, Volume 1, April 1983; Volume 2, July 1983.
3. Georgia Power Company letter to NRC, L. T. Gucwa to Director of Nuclear Reactor Regulation, "Status Report on Salem Generic Requirements," November 7, 1983.
4. Georgia Power Company letter to NRC, L. T. Gucwa to Director of Nuclear Reactor Regulation, "Response to Generic Letter 83-28, Salem Requirements," February 29, 1984.
5. Georgia Power Company letter to NRC, L. T. Gucwa to Director of Nuclear Reactor Regulation, "Response to Request for Additional Information," June 3, 1985.
6. Northeast Utilities letter to NRC, E. E. Mroczka to Document Control Desk, "Generic Letter 83-28, Item 2.1.2," January 16, 1987.

NRC FORM-335 12-841 NRCM 1102 3231, 3202		U.S. NUCLEAR REGULATORY COMMISSION		1. REPORT NUMBER (Assigned by TIDC, add Vol. No., if any)  EGG-NTA-7591	
BIBLIOGRAPHIC DATA SHEET					
SEE INSTRUCTIONS ON THE REVERSE					
2. TITLE AND SUBTITLE CONFORMANCE TO ITEM 2.1 (PART 2) OF GENERIC LETTER 83-28 REACTOR TRIP SYSTEM VENDOR INTERFACE, HATCH-1 AND -2, MILLSTONE-1				J. LEAVE BLANK	
5. AUTHOR(S) F. G. Farmer				4. DATE REPORT COMPLETED MONTH: April YEAR: 1987	
7. PERFORMING ORGANIZATION NAME AND MAILING ADDRESS (Include Zip Code) EG&G Idaho, Inc. P. O. Box 1625 Idaho Falls, ID 83415				6. DATE REPORT ISSUED MONTH: April YEAR: 1987	
10. SPONSORING ORGANIZATION NAME AND MAILING ADDRESS (Include Zip Code) Division of PWR Licensing A Office of Nuclear Reactor Regulation U.S. Nuclear Regulatory Commission Washington, DC 20555				8. PROJECT/TASK/WORK UNIT NUMBER  9. PIN OR GRANT NUMBER  D6001/D6002	
12. SUPPLEMENTARY NOTES				11a. TYPE OF REPORT  b. PERIOD COVERED (Inclusive dates)	
13. ABSTRACT (200 words or less)  This EG&G Idaho, Inc. report presents the results of our evaluation of the submittals of some of the Westinghouse nuclear plants for conformance to Generic Letter 83-28, Item 2.1 (Part 2).					
14. DOCUMENT ANALYSIS - KEY WORDS/DESCRIPTORS  d. IDENTIFIERS/OPEN-ENDED TERMS				15. AVAILABILITY STATEMENT Unlimited	
				16. SECURITY CLASSIFICATION (This paper) Unclassified (This report) Unclassified	
				17. NUMBER OF PAGES	
				18. PRICE	



Mr. James P. O'Reilly  
Georgia Power Company

Edwin I. Hatch Nuclear Plant,  
Units Nos. 1 and 2

cc:  
G. F. Trowbridge, Esq.  
Skaw, Pittman, Potts and Trowbridge  
2300 N Street, N. W.  
Washington, D.C. 20037

Mr. L. T. Gucwa  
Engineering Department  
Georgia Power Company  
P. O. Box 4545  
Atlanta, Georgia 30302

Nuclear Safety and Compliance Manager  
Edwin I. Hatch Nuclear Plant  
Georgia Power Company  
P. O. Box 442  
Baxley, Georgia 31513

Mr. Louis B. Long  
Southern Company Services, Inc.  
P. O. Box 2625  
Birmingham, Alabama 35202

Resident Inspector  
U.S. Nuclear Regulatory Commission  
Route 1, P. O. Box 279  
Baxley, Georgia 31513

Regional Administrator, Region II  
U.S. Nuclear Regulatory Commission  
101 Marietta Street, Suite 2900  
Atlanta, Georgia 30323

Mr. Charles H. Badger  
Office of Planning and Budget  
Room 610  
270 Washington Street, S.W.  
Atlanta, Georgia 30334

Mr. J. Leonard Ledbetter, Commissioner  
Department of Natural Resources  
270 Washington Street, N.W.  
Atlanta, Georgia 30334

Chairman  
Appling County Commissioners  
County Courthouse  
Baxley, Georgia 31513