

TECHNICAL EVALUATION REPORT

CONFORMANCE TO GENERIC LETTER 83-28, ITEM 2.2.2,
VENDOR INTERFACE PROGRAMS (ALL OTHER SAFETY-RELATED COMPONENTS),
CALLAWAY PLANT

Docket No. 50-483

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ABSTRACT

This EG&G Idaho, Inc., report provides a review of the submittals from the Union Electric Company regarding conformance to Generic Letter 83-28, Item 2.2.2 for the Callaway Plant.

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FOREWORD

This report is supplied 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 being conducted for the U.S. Nuclear Regulatory Commission, Office of Nuclear Reactor Regulation, Division of PWR Licensing-A, by EG&G Idaho, Inc., NRR and I&E Support Branch.

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1. 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 startup. 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 NRC 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, 1983¹) all licensees of operating reactors, applicants for an operating license, and holders of construction permits to respond to the generic issues raised by the analyses of these two ATWS events.

This report is an evaluation of the responses submitted by the Union Electric Company, the licensee for the Callaway Plant, for Item 2.2.2 of Generic Letter 83-28. The documents reviewed as a part of this evaluation are listed in the references at the end of this report.

2. REVIEW CONTENT AND FORMAT

Item 2.2.2 of Generic Letter 83-28 requests the licensee or applicant to submit, for the staff review, a description of their programs for interfacing with the vendors of all safety-related components including supporting information, in considerable detail, as indicated in the guideline section for each case within this report.

These guidelines treat cases where direct vendor contact programs are pursued, treat cases where such contact cannot practically be established, and establish responsibilities of licensees/applicants and vendors that provide service on safety-related components or equipment.

As previously indicated, the cases of Item 2.2.2 are evaluated in a separate section in which the guideline is presented; an evaluation of the licensee's/applicant's response is made; and conclusions about the programs of the licensee or applicant for their vendor interface program for safety-related components and equipment are drawn.

3. ITEM 2.2.2 - PROGRAM DESCRIPTION

3.1 Guideline

The licensee or applicant response should describe their program for establishing and maintaining interfaces with vendors of safety-related components which ensures that vendors are contacted on a periodic basis and that receipt of vendor equipment technical information (ETI) is acknowledged or otherwise verified.

This program description should establish that such interfaces are established with their NSSS vendor, as well as with the vendors of key safety-related components such as diesel generators, electrical switchgear, auxiliary feedpumps, emergency core cooling system (ECCS) pumps, batteries, battery chargers, and valve operators, to facilitate the exchange of current technical information. The description should verify that controlled procedures exist for handling this vendor technical information which ensure that it is kept current and complete and that it is incorporated into plant operating, maintenance and test procedures as is appropriate.

3.2 Evaluation

The licensee for the Callaway Plant responded to these requirements with submittals dated November 18, 1983,² March 12, 1984,³ May 21, 1984,⁴ December 27, 1984⁴ and May 17, 1985.⁶ These submittals include information that describe their past and current vendor interface programs. In the review of the licensee's response to this item, it was assumed that the information and documentation supporting this program is available for audit upon request. We have reviewed this information and note the following.

The licensee states that they have implemented the Nuclear Utility Task Action Committee (NUTAC) Vendor Equipment Technical Information Program (VETIP). This is supported by the following administrative procedures:

APA-ZZ-00530, QS-21, APA-ZZ-00141, APA-ZZ-00101, PDP-ZZ-00001 and 00002, PDP-ZZ-00004, EDP-ZZ-04012 and APA-ZZ-00401. These procedures are briefly described in Reference 6.

The licensee also describes an interface program with Westinghouse, the NSSS supplier. It consists of controlled distribution of Westinghouse technical bulletins, acknowledgement of receipt and implementation as appropriate by the licensee.

3.3 Conclusion

We conclude that the licensee's response regarding program description is complete and, therefore, acceptable.

4. PROGRAM WHERE VENDOR INTERFACE CANNOT PRACTICABLY BE ESTABLISHED

4.1 Guideline

The licensee/applicant response should describe their program for compensating for the lack of a formal vendor interface where such an interface cannot be practicably established. This program may reference the NUTAC/VETIP program, as described in INPO 84-010, issued in March 1984. If the NUTAC/VETIP program is referenced, the response should describe how procedures were revised to properly control and implement this program and to incorporate the program enhancements described in Section 3.2 of the NUTAC/VETIP report. It should also be noted that the lack of either a formal interface with each vendor of safety-related equipment or a program to periodically contact each vendor of safety-related equipment will not relieve the licensee/applicant of his responsibility to obtain appropriate vendor instructions and information where necessary to provide adequate confidence that a structure, system or component will perform satisfactorily in service and to ensure adequate quality assurance in accordance with Appendix B to 10 CFR Part 50.

4.2 Evaluation

In Reference 6, the licensee provided a brief description of the vendor interface program. Their description references the NUTAC/VETIP program. The licensee states that plant instructions and procedures are now in place to assure that the VETIP program is properly controlled and implemented.

VETIP is comprised of two basic elements related to vendor equipment problems; the Nuclear Plant Reliability Data System (NPRDS) and the Significant Event Evaluation and Information Network (SEE-IN) programs. VETIP is designed to ensure that vendor equipment problems are recognized, evaluated and corrective action taken.

Through participation in the NPRDS program, the licensee submits engineering information, failure reports and operating histories for review under the SEE-IN program. Through the SEE-IN program, the Institute of Nuclear Power Operations (INPO) reviews nuclear plant events that have been reported through the NPRDS programs and Nuclear Network and NRC reports. Based on the significance of the event, as determined by the screening review, INPO issues a report to all utilities outlining the cause of the event, related problems and recommends practical corrective actions. These reports are issued in Significant Event Reports, and Significant Operating Experience Reports and as Operations and Maintenance Reminders. Upon receipt of these documents, the licensee evaluates the information to determine applicability to the facility. This evaluation is documented and corrective actions are taken as determined necessary.

The licensee's response states that procedures now exist to review and evaluate incoming equipment technical information and to incorporate it into existing procedures.

- 4.3 Conclusion

We find that the licensee's response to this concern is adequate and, therefore, acceptable.

5. RESPONSIBILITIES OF LICENSEE/APPLICANT AND VENDOR
THAT PROVIDE SERVICE ON SAFETY-RELATED EQUIPMENT

5.1 Guideline

The licensee/applicant response should verify that the responsibilities of the licensee or applicant and vendors that provide service on safety-related equipment are defined such that control of applicable instructions for maintenance work on safety-related equipment are provided.

5.2 Evaluation

The licensee, in Reference 6, committed to implement the NUTAC/VETIP program. They further state that their present and planned future practices and activities adequately implement this program. The VETIP program includes implementation procedures for the internal handling of vendor services.

5.3 Conclusion

We find the licensee's commitment to implement and use the VETIP program acceptable.

6. CONCLUSION

Based on our review of the licensee's response to the specific requirements of Item 2.2.2, "Vendor Interface Programs for All Other Safety-Related Components," we find that the information provided by the licensee to resolve the concerns of this program meet the requirements of Generic Letter 83-28 and is acceptable.

7. REFERENCES

1. Letter, NRC (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. Letter, Union Electric Company (D. F. Schnell) to NRC (H. R. Denton), "Response to Generic Letter 83-28," November 18, 1983, ULNRC-687.
3. Letter, Union Electric Company (D. F. Schnell) to NRC (H. R. Denton), "Additional Responses to Generic Letter 83-28," March 12, 1984, ULNRC-763.
4. Letter, Union Electric Company (D. F. Schnell) to NRC (H. R. Denton), "Implementation of Generic Letter 83-28," May 21, 1984, ULNRC-829.
5. Letter, Union Electric Company (D. F. Schnell) to NRC (H. R. Denton), "Generic Letter 83-28," December 27, 1984, ULNRC-1002.
6. Letter, Union Electric Company (D. F. Schnell) to NRC (H. R. Denton), "Generic Letter 83-28," May 17, 1985, ULNRC-1098.