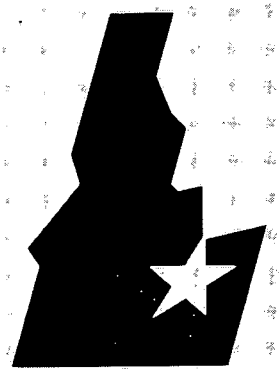

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EGG-NTA-7647
June 1987

INFORMAL REPORT

CONFORMANCE TO GENERIC LETTER 83-28, ITEM 2.2.2--VENDOR INTERFACE PROGRAMS FOR ALL OTHER SAFETY-RELATED COMPONENTS: ROBINSON-2

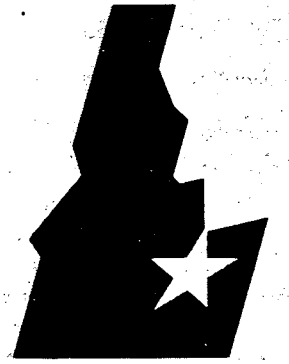
Alan C. Udy

EG&G Idaho

Work performed under DOE Contract No. DE-AC07-76ID01570

Prepared for the
U.S. NUCLEAR REGULATORY COMMISSION

DISCLAIMER



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TECHNICAL EVALUATION REPORT

CONFORMANCE TO GENERIC LETTER 83-28, ITEM 2.2.2-- VENDOR INTERFACE PROGRAMS FOR ALL OTHER SAFETY-RELATED COMPONENTS: ROBINSON-2

Docket No. 50-261

Alan C. Udy

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ABSTRACT

This EG&G Idaho, Inc., report provides a review of the submittals from the Carolina Power & Light Company regarding conformance to Generic Letter 83-28, Item 2.2.2, for the H. B Robinson Steam Electric Plant, Unit No. 2.

Docket No. 50-261
TAC No. 53710

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 Engineering and System Technology, by EG&G Idaho, Inc., NRR and I&E Support Branch.

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Docket No. 50-261
TAC No. 53710

CONTENTS

CONFORMANCE TO GENERIC LETTER 83-28, ITEM 2.2.2-- VENDOR INTERFACE PROGRAMS FOR ALL OTHER SAFETY-RELATED COMPONENTS: ROBINSON-2

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, 1983[1]) 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 Carolina Power & Light Company, the licensee for the H. B. Robinson Steam Electric Plant, Unit No. 2, 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 Unit No. 2 of the H. B. Robinson Steam Electric Plant responded to these requirements with submittals dated November 7, 1983[2] and May 22, 1985.[3] These submittals include information that describes 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 the information submitted and note the following.

The licensee's response states that they actively participate in the Nuclear Utility Task Action Committee (NUTAC) program. The Vendor Equipment Technical Information Program (VETIP) was developed by NUTAC. VETIP includes interaction with the NSSS vendor and with other electric utilities. NSSS vendor (Westinghouse) contact with the licensee is through technical

bulletins. Updated lists of bulletins are provided to the licensee and bulletin receipt is acknowledged to Westinghouse. The licensee also states that new or revised procedures to implement the NUTAC/VETIP program were being implemented. Additional equipment technical information is derived from vendor recommendations; INPO's Nuclear Plant Reliability Data System, Significant Event Evaluation and Information Network, NOTEPAD, Significant Operating Event Reports, Significant Event Reports, Operating Event Reports and Operating and Maintenance Reports; and NRC Bulletins, Notices and Circulars.

The licensee has controls and procedures that require the review of safety-related equipment technical information to verify that it is incorporated into plant procedures and instructions. Vendor technical manuals are controlled documents.

One of the VETIP implementation responsibilities is to seek assistance and equipment technical information from the vendors of safety-related equipment (other than the NSSS vendor) when the licensee's evaluation of an equipment problem or an equipment technical information problem concludes that such interaction is necessary or would be beneficial. The licensee states that they comply with this NUTAC implementation requirement. However, the guidelines for Section 2.2.2 of the generic letter states that formal vendor interfaces should be established with vendors besides the NSSS vendor. The licensee has not indicated that any formal interface program has been established with vendors other than the NSSS vendor.

3.3 Conclusion

We conclude that, with the exception of interaction with the vendors of other safety-related equipment, the licensee's response regarding program description is complete and, therefore, acceptable. The licensee should establish a program to periodically contact vendors of key components (such as auxiliary feedwater pumps, safety-related batteries, ECCS pumps and safety-related valve operators) to facilitate the exchange of current technical information. In the case of the diesel generator and safety-related electrical switchgear vendors, the licensee should establish a formal interface similar to that with the NSSS vendor, if practicable.

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. The use of the NUTAC/VETIP program, instead 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

The licensee provided a brief description of the vendor interface program. Their description references the NUTAC/VETIP program. The licensee stated that plant instructions and procedures would be modified 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, 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, in Significant Operating Experience Reports and as Operations and Maintenance Reminders. Upon receipt of these documents, the licensee, as part of his implementation of the NUTAC/VETIP program, evaluates the information to determine applicability to the facility. This evaluation is then documented and corrective actions taken as determined necessary.

4.3 Conclusion

We find that the licensee's response to this concern is adequate and acceptable. This finding is based on the understanding that the licensee's commitment to implement the VETIP program includes the implementation of the enhancements described in Section 3.2 of the NUTAC/VETIP program to the extent that the licensee can control or influence the implementation of these recommendations.

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's response commits to implement the NUTAC/VETIP program. They further state that their present and revised programs and procedures adequately implement this program. The VETIP guidelines include implementation procedures for the internal handling of vendor services.

5.3 Conclusion

We find the licensee's commitment to implement the VETIP recommendations acceptable, with the understanding that the licensee's commitment includes the objective for "Internal Handling of Vendor Services" described on page 23 of the March 1984 NUTAC report.

6. CONCLUSION

Based on our review of the licensee's response to the specific requirements of item 2.2.2 for Robinson-2, we find that the licensee's interface program with its NSSS supplier (but not with vendors of other safety-related equipment), its internal handling of vendor-supplied services, along with the licensee's commitment to implement the NUTAC/VETIP program, acceptable. This is based on the understanding that the licensee's commitment to implement the NUTAC/VETIP program includes the objective for "Internal Handling of Vendor Services" described on Page 23 of the March 1984 report and includes the enhancements described in Section 3.2 of the report to the extent that the licensee can control or influence such enhancements.

The licensee should establish a program to periodically contact vendors of key components (such as auxiliary feedwater pumps, safety-related batteries, ECCS pumps and safety-related valve operators) to facilitate the exchange of current technical information. In the case of the diesel generator and safety-related switchgear vendors, a formal interface, such as that established with the NSSS vendor, should be established, if practicable.

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, Carolina Power & Light Company (A. B. Cutter) to NRC (D. G. Eisenhut), "Generic Implications of Salem ATWS Events," November 7, 1983, Serial: LAP-83-517.

3. Letter, Carolina Power & Light Company (S. R. Zimmerman) to NRC (S. A. Varga), "Additional Information Regarding Generic Letter 83-28, Items 2.1 and 2.2.2," May 22, 1985, Serial: NLS-85-164.

4. Vendor Equipment Technical Information Program, Nuclear Utility Task Action Committee on Generic Letter 83-28, Section 2.2.2, March 1984, INPO 84-010.

NRC FORM 335 (2-84) NRCM 1102, 3201, 3202

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This EG&G Idaho, Inc., report provides a review of the submittals from the Carolina Power and Light Company regarding conformance to Generic Letter 83-28, Item 2.2.2, for Unit No. 2 of the H. B. Robinson Steam Electric Plant.

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