



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

GENERIC LETTER 83-28, ITEM 2.1 (PART 1) -

EQUIPMENT CLASSIFICATION - RTS COMPONENTS

GENERIC LETTER 83-28, ITEM 2.1 (PART 2) -

VENDOR INTERFACE PROGRAM - RTS COMPONENTS

KANSAS GAS & ELECTRIC COMPANY

KANSAS CITY POWER AND LIGHT COMPANY

KANSAS ELECTRIC POWER COOPERATIVE, INC.

WOLF CREEK GENERATING STATION

DOCKET NO. 50-482

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 83-29 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 responses submitted by the Wolf Creek Nuclear Operating Company, the licensee for the Wolf Creek Generating Station for Item 2.1 (Part 1) and (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 1) requires the licensee to confirm that all reactor trip system components are identified, classified and treated as safety-related as indicated in the following statement:

Licensees and applicants shall confirm that all components whose functioning is required to trip the reactor are identified as safety-related on documents, procedures, and information handling systems used in the plant to control safety-related activities, including maintenance, work orders, and parts replacement.

Item 2.1 (Part 2) requires the licensee to confirm 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.

## 2.6: EVALUATION

### Item 2.1 (Part 1)

The licensee for the Wolf Creek Generating Station, Unit 1 responded to the requirements of Item 2.1 (Part 2) with a submittal dated February 29, 1984<sup>2</sup>. The licensee stated in this submittal that Westinghouse is the NSSS for the Wolf Creek Generating Station, Unit 1 and that the RTS is included as part of the Westinghouse interface program established for this plant. The response also confirms that this interface program includes both periodic communication between Westinghouse and the licensee and positive feedback from the licensee in the form of signed receipts for technical information transmitted by Westinghouse.

### Item 2.1 (Part 2)

The licensee for the Wolf Creek Generating Station responded to the requirements of Item 2.1 (Part 1) with submittals dated November 15, 1983<sup>3</sup>, February 29, 1984 and May 29, 1987<sup>4</sup>. The initial submittal stated that the licensee was developing a list identifying all of the safety-related components that are required to function to trip the reactor and confirmed that this list would be used to verify that these components were identified as safety related in documents, procedures, and information handling systems. The February 29, 1984 response stated that the program would be completed by fuel load. The May 29, 1987 response stated that the program had been implemented and that the Q-list approval process had been changed to provide that the Nuclear Plant Engineering Division now has the responsibility for approving all changes, additions, and revision to the Q-List.

### 3.0 CONCLUSION

#### Item 2.1 (Part 1)

Based on our review, we find the licensee's statements confirm that a program exists for identifying, classifying and treating components that are required for performance of the reactor trip function as safety related. This program meets the requirements of Item 2.1 (Part 1) of Generic Letter 83-28, and is therefore acceptable.

#### Item 2.1 (Part 2)

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 Generic Letter 83-28, and is therefore acceptable.

### 4.0 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. Letter, Kansas Gas & Electric Company (G. L. Koester) to NRC (H. R. Denton), February 29, 1984.
3. Letter, Kansas Gas & Electric Company (G. L. Koester) to NRC (H. R. Denton), November 15, 1983.
4. Letter, Wolf Creek Nuclear Operating Corporation (B. D. Withers) to NRC, May 29, 1987.

Dated: September 1, 1988

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