

SAFETY EVALUATION REPORT
GENERIC LETTER 83-28, ITEM 2.1 (PART 1)
EQUIPMENT CLASSIFICATION (RTS COMPONENTS)
PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNITS 1,2
DOCKET NOS. 50-282/306

INTRODUCTION AND SUMMARY

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, 1983¹) 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 Northern States Power Company, the licensee for the Prairie Island Nuclear Generating Plant, Units 1,2 for Item 2.1 (Part 1) of Generic Letter 83-28. The actual documents reviewed as part of this evaluation are listed in the references at the end of this 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:

Licenses 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.

EVALUATION

The licensee for the Prairie Island Nuclear Generating Plant, Units 1,2 responded to the requirements of Item 2.1 (Part 1) with a submittal dated November 4, 1983². The licensee stated in this submittal that all components that are required to perform the reactor trip function were reviewed to verify that these components are classified as safety-related equipment. The licensee also stated that the turbine stop valve limit switches and turbine auto stop oil pressure switches which provide input to the RTS but which are not required to perform the reactor trip function and are not safety-related are not included in this list of

safety-related RTS components. The licensee further stated that relevant plant documents were reviewed for conformance to the requirements of this item of G.L. 83-28.

CONCLUSION

Based on our review of these responses, 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. We also find that exemption of the turbine trip components from the listing is acceptable since they are not relied on to provide the reactor trip function. This program meets the requirements of Item 2.1 (Part 1) of the Generic Letter 83-28, and is therefore acceptable.

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, D. M. Musolf, Northern States Power Co., to Director of Nuclear Reactor Regulation, NRC, November 4, 1983.