

ENCLOSURE 1

SAFETY EVALUATION REPORT
GENERIC LETTER 83-28, ITEM 2.1 (PARTS 1 AND 2)
PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3
DOCKET NOS. 50-277/278

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 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 staff to investigate and report on the generic implications of these occurrences at Unit 1 of the Salem Nuclear Power Plant. The result of the staff's inquiry into the generic implications of the Salem, Unit 1 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) 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 Philadelphia Electric Company, the licensee for the Peach Bottom Atomic Power Station Units 2 and 3, for Item 2.1 (Parts 1 and 2) of Generic Letter 83-28. The actual documents reviewed as part of this evaluation are listed in the references 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:

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 vendor or with the vendors of each of the components of the Reactor Trip System which includes:

- o periodic communication between the licensee/applicant and the NSSS vendor or the vendors of each of the components of the Reactor Trip System, and,
- o a system of positive feedback which confirms receipt by the licensee/applicant of transmittals of vendor technical information.

2.0 EVALUATION

The licensee for Peach Bottom Atomic Power Station Units 2 and 3 provided responses to Generic Letter 83-28, Item 2.1 (Parts 1 and 2) in submittals dated November 4, 1983 and April 23, 1984. In their submittals all systems that contribute to the reactor trip function have been identified as being in the current Q-List. The Peach Bottom Q-list is comprised of safety-related items by entire system or by functional components. Consequently, all components on the identified systems, unless specifically excluded, are subject to the quality assurance program. Certain components and subcomponents contained within a system listed as safety-related, may not be safety-related in themselves. Under the current Q-list, if the entire system is listed as safety-related, the licensee stated that the component in question must be analyzed to determine if it is safety-related. In accordance

with approved Peach Bottom Administrative Procedures and Engineering and Research Departmental Procedures regarding procurement, each item or service to be procured must be reviewed to determine whether or not it is safety-related. This determination is guided as appropriate by the applicable codes and standards, the Engineer-Contractor, and the NSSS supplier.

Regarding Vendor Interface, the licensee is continuing its participation in the BWR Owners' Group Evaluation to update those manuals associated with the reactor protection systems. Also, the licensee has taken action to ensure that vendor information is included in plant instructions and procedures. The licensee is preparing procedures for the independent review of information supplied by the NSSS Supplier for the ongoing vendor interface program to assure that vendor manuals are maintained current for the life of the plant and that plant procedures are in accordance with vendor recommendations. For reactor trip function components, this procedure will be utilized to address the following types of General Electric Company technical reporting: Service Information Letter (SILs), Customer Communications, Service Advice Letter (SAL), and Application Information Document (AID). As a further improvement in the control of vendor manuals, the licensee is treating the vendor manuals as drawings. By doing this, the vendor manual becomes part of the drawing file and is subject to the licensee's Engineering and Research Department Procedures regarding drawing control. This requires updating of the manuals just as drawings are updated following any modification work.

3.0 CONCLUSION

Based on our review of the licensee's responses, we find that a program exists for identifying, classifying, and treating components as safety-related that are required for the successful performance of the reactor trip function; and that a vendor interface program exists with the NSSS vendor for the required components. These programs meet the requirements of Item 2.1 (Parts 1 and 2) of Generic Letter 83-28 and are, therefore, acceptable.

4.0 REFERENCES

1. NRC Letter, D. G. Eisenhut to all Licensees of Operating Reactors, Applicants for Operating Licenses, and Holders of Construction Permits, "Required Actions Based on Generic Implications of Salem ATWS Events (Generic Letter 83-28)," July 8, 1983.
2. Letter, S. L. Daltroff, Philadelphia Electric Company to D. B. Vassallo, NRC, D. G. Eisenhut, NRC November 4, 1983.
2. Letter, S. L. Daltroff, Philadelphia Electric Company to D. B. Vassallo, NRC, D. G. Eisenhut, NRC April 23, 1984.