ENCLOSURE

SAFETY EVALUATION REPORT
MCGUIRE NUCLEAR STATION, UNITS 1&2
DOCKET NOS. 50-369/370
GENERIC LETTER 83-28, ITEM 2.2.1
EQUIPMENT CLASSIFICATION
PROGRAMS FOR ALL SAFETY-RELATED COMPONENTS

1.0 INTRODUCTION

Generic Letter 83-28 was issued by the NRC on July 8, 1983 to indicate actions to be taken by licensees and applicants based on the generic implications of the Salem ATWS events. Item 2.2.1 of that letter states that licensees and applicants shall describe in considerable detail their program for classifying all safety-related components other than RTS components as safety-related on plant documents and in information handling systems that are used to control plant activities that may affect these components. Specifically, the licensee/applicant's submittal was required to contain information describing (1) The criteria used to identify these components as safety-related; (2) the information handling system which identifies the components as safety-related; (3) the manner in which station personnel use this information handing system to control activities affecting these components; (4) management controls that are used to verify that the information handling system is prepared, maintained, validated, and used in accordance with approved procedures; and (5) design verification and qualification testing requirements that are part of the specifications for procurement of safety-related components.

The licensee for the McGuire Nuclear Station, Units 1&2 submitted responses to Generic Letter 83-28, Item 2.2.1 in submittals dated November 4, 1983, February 1, 1984 and March 30, 1987. We have evaluated these responses and find that they are acceptable.

2.0 EVALUATIONS AND CONCLUSIONS

In these sections the licensee's responses to the program and each of five sub-items are individually evaluated against guidelines developed by the staff and conclusions are drawn regarding their individual and collective acceptability.

1. Identification Criteria

Guideline: The licensee's response should describe the criteria used to identify safety-related equipment and components. (Item 2.2.1.1)

Evaluation:

The licensee's response contains criteria for identifying safety-related equipment and components which state that a component is considered safety-related if it is required to assure: (a) the integrity of the reactor coolant system pressure boundary, (b) the capability to achieve and maintain a safe shutdown or (c) the capability to prevent or to mitigate the consequences of an accident that could result in potential offsite exposures. Additionally, the licensee has identified other considerations and guidance that are used in determining the safety-related status for structures, systems and components.

Conclusion:

We find the stated criteria meet the staff's requirements and are acceptable.

2. Information Handling System

Guideline: The licensee's response should confirm that the equipment classification program includes an information handling system that is used to identify safety-related equipment and components. Approved procedures which govern its development, maintenance, and validation should exist. (Item 2.2.1.2)

Evaluation:

The licensee's response described how the information handling system (component identification) was prepared, verified, and approved. The safety listing was originally prepared during the station design phase. Changes to the station design are controlled, such that new safety-related items are identified in accordance with the same quality assurance program that identified these items in the original station design. The procedures for revising the component list are contained in the Quality Standards Manual.

Conclusion:

We conclude that this description of the licensee's information handling system show that it meets the staff requirements and is acceptable.

3. Use of Information Handling System

Guideline: The licensee response should confirm that their equipment classification program includes criteria and procedures which govern the use of the information handling system to determine that an activity is safety-related and that safety-related procedures for maintenance, surveillance, parts replacement and other activities defined in the introduction to 10CFR50, Appendix B, are applied to safety related components. (Item 2.2.1.3)

Evaluation:

The licensee's response provided a description of the station personnel's use of the McGuire Nuclear Station Quality Standards Manual for Structures, Systems and Components. This manual contains the equipment classification listings or directs the user to supplemental component lists. A criteria checklist for the determination of equipment classification was also

included. The procedures for preparing a work request (a prerequisite for maintenance work) require the use of the equipment classification information handling system to determine the safety classification of the equipment involved and the identification of the plant instructions and procedures which are to be used for maintenance work, routine surveillance testing, accomplishment of design changes, and in the performance of special tests or studies.

Conclusion:

We conclude that the licensee has described plant administrative controls and procedures which meet the staff requirements for this item and which are acceptable.

4. Management Controls

Guideline: The licensee/applicant should confirm that management controls used to verify that the procedures for preparation, validation, and routine utilization of the information handling system have been and are being followed. (Item 2.2.1.4)

Evaluation:

The licensee's response to this item addresses the original preparation and verification of the station manual, the revision process, and the management procedures and controls that cover the utilization of the station manual (and all quality stnadards documents). The licensee states that an item is considered safety-related unless it is shown to be non-safety related. Further, the licensee states that reviews and audits are performed on documentation packages for safety-related structures, systems and components.

Conclusion:

We find this description of the licensee's program of management control meets the staff requirements and is acceptable.

5. Design Verification and Procurement

Guideline: The licensee/applicant's response should document that past usage demonstrates that appropriate design verification and qualification testing is specified for the procurement of safety-related components and parts. The specifications should include qualification testing for expected safety service conditions and provide support for licensee's receipt of testing documentation which supports the limits of life recommended by the supplier. If such documentation is not available, confirmation that the present program meets these requirements should be provided. (Item 2.2.1.5)

Evaluation:

The licensee's response shows that the procurement specifications require suppliers to include explicit verification of design capability and the evidence of testing specified in the procurement specifications. The licensee addresses surveillance activities and preventative maintenance that verifies that components do not exceed their service life. The licensee states that replacement safety-related components and parts are purchased as a direct replacement item, whether from the original or an alternate vendor, or by use of an industry standard part number.

Conclusion:

We find this information describes the licensee's program which meets staff requirements and is acceptable.

6. "Important To Safety" Components

Guideline: Generic Letter 83-28 states that licensee/applicant equipment classification programs should include (in addition to the safety-related components) a broader class of components designated as "Important to Safety." However, since the generic letter does not require licensee/applicant to furnish this information as part of their response, staff review of this sub-item will not be performed. (Item 2.2.1.6)

7. Program

Guideline: Licensees/applicants should confirm that an equipment classification program exists which provides assurance that all safety-related components are designated as safety-related on plant documents such as drawings, procedures, system descriptions, test and maintenance instructions, operating procedures, and information handling systems so that personnel who perform activities that affect such safety-related components are aware that they are working on safety-related components and are guided by safety-related procedures and constraints. (Item 2.2.1)

Evaluation:

The licensee's response to these requirements was contained in submittals dated November 4, 1983, February 1, 1984 and March 30, 1987. These submittals describe the licensee's program for identifying and classifying safety-related equipment and components which meets the staff requirements as indicated in the preceding sub-item evaluations.

Conclusion:

We conclude that the licensee's program addresses the staff concerns regarding equipment and component classification and is acceptable.

Mr. H. B. Tucker
Duke Power Company

McGuire Nuclear Station

cc:
Mr. A.V. Carr, Esq.
Duke Power Company
P. O. Box 33189
422 South Church Street
Charlotte, North Carolina 28242

County Manager of Mecklenburg County
720 East Fourth Street
Charlotte, North Carolina 28202

Mr. Robert Gill
Duke Power Company
Nuclear Production Department
P. O. Box 33189
Charlotte, North Carolina 28242

J. Michael McGarry, III, Esq.
Bishop, Liberman, Cook, Purcell
and Reynolds
1200 Seventeenth Street, N.W.
Washington, D. C. 20036

Senior Resident Inspector
c/o U.S. Nuclear Regulatory Commission
Route 4, Box 529
Hunterville, North Carolina 28078

Regional Administrator, Region II
U.S. Nuclear Regulatory Commission,
101 Marietta Street, N.W., Suite 2900
Atlanta, Georgia 30323

L. L. Williams
Area Manager, Mid-South Area
ESSD Projects
Westinghouse Electric Corporation
MNC West Tower - Bay 239
P. O. Box 355
Pittsburgh, Pennsylvania 15230

Dr. John M. Barry
Department of Environmental Health
Mecklenburg County
1200 Blythe Boulevard
Charlotte, North Carolina 28203

Mr. Dayne H. Brown, Chief
Radiation Protection Branch
Division of Facility Services
Department of Human Resources
701 Barbour Drive
Raleigh, North Carolina 27603-2008