U.S. NUCLEAR REGULATORY COMMISSION

STANDARD REVIEW PLAN

OFFICE OF NUCLEAR REACTOR REGULATION

1.8 INTERFACES FOR STANDARD DESIGNS

REVIEW RESPONSIBILITIES

Primary - All review branches (except Quality Assurance Branch (QAB))

Secondary - None

I. AREAS OF REVIEW

The areas of review include all the safety-related interfaces important to the staff review for safety that exist between the systems, components, and structures within a standard design as they relate to matching systems, components, and structures within the remaining unspecified portion of the plant design. Also included is the implementation of interface requirements in the design of matching safety-related systems, components, and structures. The specific interfaces identified for the nuclear steam supply system (NSSS) and for the balance-of-plant (BOP) portions of a nuclear plant design are given in "Interfaces for Standard Designs," Appendix A to Regulatory Guide 1.70.

II. ACCEPTANCE CRITERIA

The acceptance criteria for interfaces, as appropriate, are contained in the sections of the SRP applicable to the particular area under review. While these acceptance criteria are not specifically identified as pertinent to interfaces, they nevertheless apply to the interfaces that are encompassed by the review area to which the criteria apply.

III. REVIEW PROCEDURES

The reviewer in each responsible review branch will select and emphasize material from this review plan, as may be appropriate for a particular case. The particular interfaces to be addressed in SSARs describing standard NSSS and BOP designs and in SARs describing the entire plant design in support of licenses are presented in Regulatory Guide 1.70, Appendix A.

1. Standard designs for the NSSS are reviewed to assure that the applicable safety-related interfaces to, and in several instances assumed for, the

matching, but unspecified, BOP, site, and utility portions are identified and defined.

2. Standard designs for the BOP are reviewed to assure that (a) those applicable safety-related interfaces established for the NSSS are addressed, (b) those interfaces assumed by the NSSS are compatible with the BOP design, and (c) the applicable safety-related interfaces to the matching, but unspecified, site and utility portion are identified and defined.

3. Utility applications are reviewed to assure that the applicable safety-related interfaces established for the referenced standard NSSS design alone, or the referenced standard NSSS and BOP designs combined, are addressed.

IV. EVALUATION FINDINGS

Each review branch verifies that sufficient interface information has been provided and properly implemented, as appropriate, and that the review is adequate to support conclusions of the following type, to be included in the staff's safety evaluation report:

For standard design reviews:

Interfaces provide the means for assuring that the standard design and other unspecified portions of the plant design are compatible with regard to the performance of all safety-related systems, components, and structures under all modes of operation and shutdown. The scope of our review included an evaluation of the interfaces defined by the applicant in accordance with the regulation in 10 CFR, the guidelines given in Regulatory Guide 1.70, Appendix A, and the applicable criteria for acceptance given in the appropriate sections of the SRP. Based on our evaluation, we find the interface information provided in the standard design application acceptable.

For applications referencing standard designs:

Interfaces established for the standard design are addressed in the referencing application to demonstrate the compatibility of the standard design with the remaining portions of the plant design regarding the performance of all safety-related systems, components, and structures under all modes of operation and shutdown. The scope of our review included an evaluation of the matching safety-related systems, components, and structures to assure compatibility in accordance with the regulations in 10 CFR and the applicable criteria for acceptance given in the appropriate sections of the SRP. Based on our evaluation, we find that the interfaces have been properly addressed and that compatibility of the standard design with the remaining portions of the plant design can be achieved.

V. REFERENCES

1. "Interfaces for Standard Designs," Regulatory Guide 1.70, Appendix A.