PROCEDURE FOR DOCUMENTATION OF DEVIATIONS FROM THE STANDARD REVIEW PLAN

Introduction

The staff review of nuclear plant designs described in Safety Analysis Reports is performed within the guidelines established by the Standard Review Plan (NUREG-75/087), issued in September 1975, and as since amended. Use of the acceptance criteria of the Standard Review Plan as a measure of the acceptability of plant design features assures both a consistent evaluation of proposed plant designs and an acceptable level of safety for all plants licensed. The Standard Review Plan also describes and documents the acceptability of specific design approaches to satisfy certain of the acceptance criteria. We recognize, however, that alternate design approaches may satisfy these acceptance criteria equally well. Further, we recognize that, with proper justification, applicants may be able to demonstrate that particular provisions of the acceptance criteria need not be met at all.

Currently, significant difficulties arise when the Standard Review Plan is used during the operating license review of a plant design. These difficulties stem from the fact that the plant design at its construction permit stage of licensing was reviewed and approved against different guidelines due to the lack of the Standard Review Plan at that earlier stage of review; some future reviews will encounter the same difficulties due to the same reason or to changes to the Standard Review Plan that have occurred during the intervening period. In either event,

deviations will exist in the plant design relative to the then current Standard Review Plan, and the staff is or will be faced with licensing decisions regarding the acceptability of the design described in the Final Safety Analysis Report.

In the past, applicants have expended considerable efforts justifying, and the staff has spent considerable time evaluating, particular plant design features to assure an acceptable level of safety. Often these efforts have not been properly documented to clearly indicate the bases for acceptability of the design. To improve the usefulness of our Safety Evaluation Reports as a record of such decisions and to minimize the need for future reassessments of operating plants to demonstrate adequate levels of safety relative to current criteria, it is desirable that the bases for such licensing decisions be clearly documented in the Safety Evaluation Reports that summarize the staff review of the Final Safety Analysis Report. To this end, any deviations from current Standard Review Plan acceptance criteria will need to be listed and justified in the Final Safety Analysis Report and in the staff's Safety Evaluation Report prior to completion of the operating license stage of review.

A problem of similar type but of much less magnitude may exist with respect to some construction permit and standard design applications and associated staff reviews. Since all new applications for construction permits or for preliminary design approval of standard designs must address the information needs identified in Revision 2 to the Standard Format and Content of Safety Analysis Reports, deviations from the

acceptance criteria of the Standard Review Plan are expected to be non-existent or minimized. However, alternate design approaches may be proposed by the applicant, and it is possible that deviations may arise during the course of the review. In any event, any deviations or alternate design approaches, whether initially proposed or developed during the course of the staff review, will need to be listed and justified in the Preliminary Safety Analysis Report and in the staff's Safety Evaluation Report prior to completion of this stage of review.

This document presents the procedures that should be followed (1) by applicants and (2) by staff reviewers and Licensing Project Managers to assure that adequate documentation of deviations and alternate approaches in plant designs relative to the Standard Review Plan is provided in Safety Analysis Reports and in Safety Evaluation Reports, respectively.

Definition of Deviation

For the purposes of this procedure, a deviation is defined as a lack of conformance of a plant design feature to one or more provisions of the acceptance criteria given in the Standard Review Plan. An alternate and acceptable design approach to satisfying the Standard Review Plan acceptance criteria is not considered to be a deviation, but the bases for acceptability must also be documented in the Safety Analysis Report and in the Safety Evaluation Report.

Procedure

The procedure for documenting deviations from the Standard Review Plan requires the applicant initially to identify the deviation and provide the bases for acceptability. This information should be included in the Safety Analysis Report and reviewed by the staff as a part of the normal review process. The results of the review should be described in the Safety Evaluation Report to provide clear documentation of all deviations, including the bases for acceptability. The same procedure should be followed for alternate design approaches. The procedure is based on the implicit assumption that a program will be established whereby plants licensed for operation will be maintained continuously up-to-date with regard to changes in licensing requirements (i.e., at the time a new staff position is developed, a decision regarding its applicability on a generic basis or on each plant, on a case-by-case basis, will also be made and implemented).

The specific steps in the procedure for a new application are:

1. The applicant will identify and provide bases for all deviations from the acceptance criteria given in the Standard Review Plan. The information should be contained in those Safety Analysis Report sections that describe the systems, components, or structures in which the deviations exist. In addition, the applicant should provide in Chapter 1 a summary listing of the deviations and an identification of the sections in the Safety Analysis Report wherein the deviations are described and justified.

2. During the acceptance review of the Safety Analysis Report, the staff should determine that this information has been provided and should inform the applicant of any obvious deficiencies.

3. Following docketing of the Safety Analysis Report, the staff should perform a review of the deviations and their bases, identify other deviations that should be discussed in the Safety Analysis Report, and request additional information as necessary at the first round request for additional information (Q-1) stage of review.

4. At the second round request for additional information (Q-2) stage of review, the staff should inform the applicant of its positions on the deviations and their bases.

5. Following review of the applicant's response, draft Safety Evaluation Report inputs should be prepared that describe each deviation and the results of the staff review of the bases for their acceptability; the Safety Evaluation Report inputs should also include a general statement denoting acceptability of the applicant's design relative to the grouping of acceptance criteria given in the Standard Review Plan sections. As stated previously, the Safety Evaluation Report inputs should also include discussions of any alternate approaches to staff positions that have been adopted by the applicant and the bases for acceptability.

6. The Licensing Project Manager should include a section in the Safety Evaluation Report that notes that the review has been made using the Standard Review Plan criteria as of the application docket date, tabulates all deviations from those criteria, and identifies the location in the Safety Evaluation Report where the discussion may be found.

The procedural steps given above relate to future applications. Modifications to these procedural steps will be made in order to implement the procedure for applications currently in the licensing process. Specific steps will be taken to assure that the implementation will be consistent with the Commission's standardization and replication policies.

IMPLEMENTATION

1. Plants Currently Under Review for Operating Licenses

Three plants have Safety Evaluation Report issuance dates currently scheduled beyond January 1, 1977. These are Shoreham (March 1977), Zimmer 1 (July 1977), and Hatch 2 (December 1977). We will request the applicants for Shoreham and Zimmer to submit their listing of deviations with justification in our second round requests for additional information scheduled for September 1976. Reviewers should begin independent reviews of these plants at this time to permit completion of effort in time for Safety Evaluation Report issuance. A letter will be sent to the applicant for Hatch to request submittal of the needed information.

One plant, Watts Bar 1/2, has recently been tendered for docketing. The request for the list of deviations with justification will be included in our initial request for additional information.

One plant, Fermi 2, will have its Safety Evaluation Report issued late this year. However, it will be incomplete since operation is not contemplated until 1980. A major supplement will be issued a year or so before operation. A letter to the applicant will inform him that the matter of deviations will be included at that time. Other plants currently under review will not be considered even though schedule changes may slip the Safety Evaluation

Reports beyond January 1, 1977. These plant include Davis Besse-1, Arkansas -2, and McGuire 1/2.

2. Plants with Construction Permits and Which Will Apply for Operating Licenses

The LaSalle 1/2 and WPPSS 2 applications are scheduled for FSAR submittal in September and October 1976, respectively. We can implement the procedure for these plants at the acceptance review stage.

For the other 27 plants beyond these two that currently have a construction permit, a letter will request inclusion of the deviation information in the Final Safety Analysis Report.

3. Plants Currently Under Review for Construction Permits

Letters will be sent to applicants for plants which have issuance dates for Safety Evaluation Reports, or major supplements to update delayed plants, currently scheduled beyond August 1, 1977, to inform them that their Safety Analysis Reports or supplements and our Safety Evaluation Reports will need to contain the listing of deviations and justification. No non-delayed plant is in this status. The delayed plants include Douglas Point 1/2, Greenwood 2/3, Allens Creek 1/2, Montague 1/2, and Barton 1/2. New England 1/2 has been tendered for docketing. The requirement on the list of deviations and justification will be included in our initial request for additional information.

Other plants (25 in number, 15 of which are in the post-ACRS stage) will not be considered at this time even though schedule changes may slip the Safety Evaluation Reports or supplements beyond May 1, 1977.

4. Future Construction Permit Applications

The requirement for the list of deviations and justification will be included in our acceptance review letter for those applications submitted within six months of issuance of the change to the Standard Format discussed in item 6 below. The information will be expected to be in a Safety Analysis Report submitted after such a period of time.

5. Construction Permit Applications Referencing Approved Standard Designs or Replicating Base Plants

The requirement for providing the list of deviations and justification in the Preliminary Safety Analysis Report will be implemented only for those portions of the Preliminary Safety Analysis Report that require a de novo review in accordance with the Standardization Policy or the Replication Policy, as applicable. The requirement will be applied fully to the reviews of reference designs for which the scheduled issuance date of the Safety Evaluation Report is beyond August 1, 1977.

6. General

A change to the Standard Format will be processed to require the inclusion of the listing of deviations and justification in Safety Analysis Reports.