

## INTRODUCTION

The Standard Review Plan for License Renewal (SRP-LR) provides guidance to staff reviewers in the Office of Nuclear Reactor Regulation in performing safety reviews of applications to renew licenses of nuclear power plants in accordance with 10 CFR Part 54. The principal purposes of the SRP-LR are to assure the quality and uniformity of staff reviews and to present a well-defined base from which to evaluate applicant programs and activities for the period of extended operation. The SRP-LR is also intended to make information about regulatory matters widely available and to improve communication with interested members of the public and the nuclear power industry and improve their understanding of the staff review process.

The safety review is primarily based on the information provided by an applicant in a license renewal application. The Commission's regulation, in 10 CFR 54.21, requires that each application for a renewed license for a nuclear power facility shall include an integrated plant assessment (IPA), current licensing basis (CLB) changes during NRC review of the application, an evaluation of time-limited aging analyses (TLAAs), and a final safety analysis report (FSAR) supplement. In addition to the technical information required by 10 CFR 54.21, an application for license renewal must contain general information (10 CFR 54.19), necessary technical specification changes (10 CFR 54.22), and environmental information (10 CFR 54.23). The license renewal application must be sufficiently detailed to permit the staff to determine whether there is reasonable assurance that the activities authorized by the renewed license will continue to be conducted in accordance with the CLB, and whether any changes made to the plant's CLB to comply with Part 54 are in accord with the Act and the Commission's regulations. Before submission of a license renewal application, an applicant should have analyzed its plant to conclude that actions have been identified and have been or will be taken with respect to (1) managing the effects of aging during the period of extended operation on the functionality of structures and components that are within the scope of license renewal which require an aging management review, and (2) time-limited aging analyses. The license renewal application is the principal document in which the applicant provides the information needed to understand the basis upon which this conclusion has been reached.

10 CFR 54.21 specifies, in general terms, the technical information to be supplied in the license renewal application. Draft Regulatory Guide DG-1104, "Standard Format and Content for Applications to Renew Nuclear Power Plant Operating Licenses," proposes to endorse the Nuclear Energy Institute (NEI) guidance in NEI 95-10, Rev. 2, "Industry Guideline for Implementing the Requirements of 10 CFR Part 54 - The License Renewal Rule." NEI 95-10 provides guidance on the format and content of a license renewal application. The SRP-LR sections are keyed to the Standard Format, and the SRP-LR sections are numbered according to the section numbers in the Standard Format.

During the staff review of the initial license renewal applications, the staff and the applicants have found that most of the aging management programs credited for license renewal are existing programs. In a staff paper, SECY 99-148, "Credit for Existing Programs for License Renewal," dated June 3, 1999, the staff described options and provided a recommendation for crediting existing programs to improve the efficiency of the license renewal process. By a staff requirements memorandum (SRM) dated August 27, 1999, the Commission approved the staff recommendation, and directed the staff to focus the staff review guidance in the SRP-LR on areas where existing programs should be augmented for license renewal. The SRP-LR would reference a "Generic Aging Lessons Learned" (GALL) report, which evaluates existing programs generically, to document the basis for determining under what conditions existing programs are adequate to manage identified aging effects without change and when existing programs should

be augmented for this purpose. The GALL report (NUREG-xxxx) should be treated in the same manner as an approved topical report. The staff should not repeat its review of a matter described in the GALL report. Rather, the staff should find an application acceptable with respect to such a matter when the application references the GALL report and the evaluation of the matter in the GALL report applies to the plant. However, the staff should ensure that the material presented in the GALL report is applicable to the specific plant involved. The staff should also verify that the applicant has identified specific programs as described and evaluated in the GALL report if they are relied on for license renewal.

The SRP-LR is divided into four major chapters: 1. Administrative Information; 2. Scoping and Screening Methodology for Identifying Structures and Components Subject to Aging Management Review, and Implementation Results; 3. Aging Management Review Results; and 4. Time-Limited Aging Analyses. An appendix to the SRP-LR contains branch technical positions. The SRP-LR covers various site conditions and plant designs and provides complete procedures for all of the areas of review pertinent to each of the SRP-LR sections. For any specific application, staff reviewers may select and emphasize particular aspects of each SRP-LR section, as appropriate for the application. In some cases, the major portion of the review of a plant program or activity may be done on a generic basis with the owners' group of that plant type rather than in the context of reviews of particular applications from utilities. In other cases, a plant program or activity may be sufficiently similar to that of a previous plant so that a complete review of the program or activity is not needed. For these and other similar reasons, the staff may not carry out in detail all of the review steps listed in each SRP-LR section in the review of every application.

The individual SRP-LR sections address who performs the review, the matters that are reviewed, the basis for review, how the review is accomplished, and the conclusions that are sought. One of the objectives of the SRP-LR is to assign review responsibilities to the appropriate NRR branches. Each SRP-LR section identifies the branch that has the primary review responsibility for that section. In some review areas, the primary branch may require support, and the branches that are assigned these secondary review responsibilities are also identified for each SRP-LR section.

Each SRP-LR section is organized into six subsections, consistent with NUREG-0800, as follows:

## **1. Areas of Review**

This subsection describes the scope of review, that is, what is being reviewed by the branch having primary review responsibility. This subsection contains a description of the systems, structures, components, analyses, data, or other information that is reviewed as part of the license renewal application. It also contains a discussion of the information needed or the review expected from other branches to permit the primary review branch to complete its review.

## **2. Acceptance Criteria**

This subsection contains a statement of the purpose of the review, an identification of which NRC requirements are applicable, and the technical basis for determining the acceptability of programs and activities within the area of review of the SRP-LR section. The technical bases consist of specific criteria such as NRC Regulatory Guides, Codes and Standards, Branch Technical Positions, and other criteria.

Consistent with the approach in NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants," (July 1981), the technical bases for some sections of the SRP-LR can be provided in Branch Technical Positions or Appendices as they are developed and be included in the SRP-LR.

### **3. Review Procedures**

This subsection discusses how the review is accomplished. The section is generally a step-by-step procedure that the reviewer goes through to provide reasonable verification that the applicable acceptance criteria have been met.

### **4. Evaluation Findings**

This subsection presents the type of conclusion that is sought for the particular review area. For each section, a conclusion of this type is included in the staff's safety evaluation report (SER) in which the staff publishes the results of its review. The SER also contains a description of the review, including such subjects as which aspects of the review were selected or emphasized; which matters were modified by the applicant, required additional information, will be resolved in the future, or remain unresolved; where the applicant's program deviates from the criteria stated in the SRP-LR; and the bases for any deviations from the SRP-LR or exemptions from the regulations.

### **5. Implementation**

This subsection discusses the NRC staff's plans for using the SRP-LR section.

### **6. References**

This subsection lists the references used in the review process.

This SRP-LR incorporates the staff experience from the review of the initial license renewal applications. The SRP-LR may be considered a part of a continuing regulatory framework development activity that documents current methods of review and provides a basis for orderly modifications of the review process in the future. The SRP-LR will be revised and updated periodically, as the need arises, to incorporate experience gained during future reviews, to clarify the content or correct errors, to reflect changes in relevant regulations, and to incorporate modifications approved by the Director of the Office of Nuclear Reactor Regulation. A revision number and publication date are printed at a lower corner of each page of each SRP-LR section. Since individual sections will be revised as needed, the revision numbers and dates will not be the same for all sections. The table of contents indicates the revision numbers of the currently effective sections. Comments and suggestions for improvement should be sent to the Director, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001. Notices of errors or omissions should also be sent to the same address.