

NRC INSPECTION MANUAL

RLEP

MANUAL CHAPTER 2516

POLICY AND GUIDANCE FOR THE LICENSE RENEWAL INSPECTION PROGRAMS

2516-01 PURPOSE

The purpose of MC 2516 is to document policy and guidance for review and inspection activities associated with the License Renewal Inspection Program (LRIP). The LRIP is the process used by Nuclear Regulatory Commission (NRC) staff, region, and consultants to verify the accuracy of the aging management programs and activities associated with an applicant's request for a renewed license for a commercial nuclear power plant beyond the initial licensing period under Title 10 of the Code of Federal Regulation, (10 CFR) Part 54.

2516-02 POLICY AND OBJECTIVES

02.01 The basic policies, excerpted from the Statements of Consideration of the License Renewal Rule, and objectives used in the development and implementation of the LRIP are as follows:

- a. The NRC exists to assure that the public health and safety, the common defense and security, and the environment are protected.
- b. With respect to license renewal of a commercial nuclear power plant, the NRC has established the following two basic principles:
 1. The first principle of license renewal is that with the exception of age-related degradation and possibly a few other issues related to safety only during extended operation of nuclear power plants, the existing regulatory process is adequate to ensure that the licensing bases of all currently operating plants provide and maintain an acceptable level of safety so that operation will not be inimical to public health and safety or common defense and security.
 2. The second and equally important principle of license renewal holds that the plant-specific licensing basis must be maintained during the renewal term in the same manner and to the same extent as during the original licensing term. This would be accomplished, in part, through a program of age-related degradation management.
- c. An applicant for license renewal should rely on the plant's current licensing basis (CLB), actual plant-specific experience, industry-wide operating experience, as appropriate, and existing engineering evaluations to determine those systems, structures, and components that are the initial focus of the license renewal review.

- d. The detrimental effects of aging affecting passive structures and components are less apparent than the detrimental effects of aging affecting structures and components that perform their intended functions with moving parts or a change in configuration or properties (active structures and components). Therefore, the aging management review of passive structures and components is needed to provide reasonable assurance that their intended functions are maintained consistent with the CLB during the period of extended operation.
- e. For the purpose of license renewal, an applicant can generically exclude, from its integrated plant assessment, the aging management review of the following: (1) active structures and components, and (2) structures and components that are replaced, based on qualified life or specified time period, when the replacement frequency is less than 40 years ("short-lived"). In addition, some components are both active and passive. Components that are passive, or both active and passive, must be included within the scope of components requiring an aging management review based on the intended function(s) that is performed without moving parts or change in configuration or properties.
- f. Postulated failures that could result from system interdependencies that are not part of the CLB and that have not been previously experienced, need not be considered as part of a license renewal application (LRA). However, for some license renewal applicants, postulated failures that are part of the CLB may require consideration of more than the first level support systems.

02.02 The objectives of the LRIP are as follows:

- a. The LRIP will provide the guidance for the inspection of license renewal programs, documentation, and activities necessary for the staff to make a finding that an applicant's LRA, aging management programs (AMPs), implementation activities, and on-site documentation provide reasonable assurance that the effects of aging will be effectively managed consistent with the CLB during the period of extended operation.
- b. The LRIP will also provide the guidance for assessing the adequacy of implemented AMPs to effectively manage the effects of aging, consistent with the licensee's CLB, after the renewed license is issued.

2516-03 DEFINITIONS

Current licensing basis is the set of NRC requirements applicable to a specific plant and a licensee's written regulatory commitments for ensuring compliance with and operation within applicable NRC requirements and the plant-specific design basis (including all modifications and additions to such commitments over the life of the license) that are docketed and in effect. The CLB includes the NRC regulations contained in 10 CFR Parts 2, 19, 20, 21, 26, 30, 40, 50, 51, 54, 55, 70, 72, 73, 100 and appendices thereto; orders; license conditions; exemptions; and technical specifications. It also includes the plant-specific design-basis information defined in 10 CFR 50.2 as documented in the most recent final safety analysis report (FSAR) as required by 10 CFR 50.71; and the licensee's commitments remaining in effect that were made in docketed licensing correspondence such as licensee responses to NRC bulletins, generic letters, and enforcement actions, as well as licensee commitments documented in NRC safety evaluations or licensee event reports.

Regulatory Commitment is an explicit statement made by a licensee (or applicant) to take a specific action agreed to or volunteered by a licensee, and that has been submitted in writing on the docket to the Commission.

Integrated Plant Assessment (IPA) is a licensee assessment that demonstrates that a nuclear power plant facility's structures and components requiring aging management review in accordance with §54.21(a) for license renewal have been identified and that the effects of aging on the functionality of such structures and components will be managed to maintain the CLB such that there is an acceptable level of safety during the period of extended operation.

Nuclear power plant means a nuclear power facility of a type described in 10 CFR 50.21(b) or 50.22.

2516-04 RESPONSIBILITIES AND AUTHORITIES

04.01 Director of Nuclear Reactor Regulation (NRR) is responsible for approving and issuing the renewed license for a period beyond the current licensing term.

04.02 Regional Administrators (RAs) are responsible for the following:

- a. Managing and supervising the implementation of license renewal inspection programs and activities at their respective regions.
- b. Making recommendations for the approval/disapproval of a request for a renewed license by an applicant from their region, on the basis of the inspection results.

04.03 The Responsible Regional Division Director or designee is responsible for the approval of license renewal inspection plans within its region.

04.04 Division of Regulatory Improvement Programs (DRIP), NRR is responsible for the following:

- a. Overall development and implementation of staff programs and activities associated with 10 CFR Part 54.
- b. Coordination of the staff's final recommendation for the approval/disapproval of a request for a renewed license.
- c. Ensuring adequate training is developed and made available to NRR staff and regions.

04.05 License Renewal and Environmental Impacts Program (RLEP), NRR is responsible for the following:

- a. Development and control of the license renewal Standard Review Plan (SRP-LR), Regulatory Guides, and LRIP.
- b. Coordination of LRA reviews.
- c. Technical and inspection support for the review and inspection of license renewal applicants' programs and activities.
- d. Development of an adequate training program for NRC license renewal activities.

2516-05 GENERAL POLICIES

05.01 Authority. NRR is assigned the responsibility to establish the foundation on which the reactor inspection program is structured, and to confer on the regions the authority to

inspect activities over which the NRC has jurisdiction. For the purpose of license renewal, NRR/DRIP, will be responsible for the development and oversight of the LRIP, while the regions will be responsible for the implementation of the LRIP. Any follow-up and future inspection needs relating to license renewal after the renewed license is granted will be integrated into the Reactor Oversight Program under Manual Chapter (MC) 2515. The responsibility for these inspections will be maintained by the regions.

05.02 Applicant Responsibility. It is emphasized that it is the applicant's responsibility to maintain and operate the facility safely and in compliance with the CLB and regulatory requirements. NRC inspections are not designed to duplicate or substitute for an applicant's management controls established as a part of its quality verification system.

05.03 Communications. In implementing the inspection program set forth by this manual chapter, frequent communications between RLEP, the regions and other offices within the NRC are encouraged. An inspection plan, based on the requirements of IP 71002 and subject to the approval of the responsible Regional Division Director or designee, will be developed early in the inspection process by the inspection team leader for each applicant with assistance from RLEP. The region will implement this plan with assistance from RLEP and other supporting organizations.

2516-06 LICENSE RENEWAL INSPECTION PROGRAM

06.01 Purpose. The fundamental task of the LRIP is to ensure that there is reasonable assurance that the effects of aging will be managed consistent with the CLB during the period of extended operation. The program objectives derived from that task are as follows:

- a. To provide a basis for recommending issuance or denial of a renewed license.
- b. To identify weaknesses within an applicant's overall license renewal program or an individual AMP that fail to provide reasonable assurance that the applicable aging effects will be adequately managed during the period of extended operation.
- c. To determine the status of compliance with 10 CFR Part 54 and other areas relating to maintaining and operating the plant such that the continued operation beyond the current licensing term will not be inimical to the public health and safety.

06.02 Independent Inspection Policy. These inspections should be conducted in accordance with inspection procedure IP 71002. However, it is not possible to anticipate all the unique circumstances that might be encountered during the course of a particular inspection and, therefore, individual inspectors are expected to exercise initiative in conducting inspections based on their expertise and experience to assure that all the inspection objectives are met.

If in the course of conducting an inspection, current potential safety concerns or compliance issues outside the scope of the procedure being executed are identified, the concerns should be pursued to the extent necessary to understand the issue and then they will be turned over to the Senior Resident Inspector for further follow-up inspection.

06.03 License Renewal Review Program. The license renewal review program consists of an LRA review and site inspections. The LRA review is primarily a headquarters review performed by NRR to ensure that the applicant meets the technical and regulatory requirements of the rule, and to verify that the format and content of the application meet the requirements of the rule. The regional staff and inspection team members will become familiar with the LRA in preparation for inspections to provide operational and performance input in the application review, to assess the applicant's commitments against their past

performance and experience, and in preparation to provide a regional recommendation to grant or deny approval for the applicant's request for a renewed license.

06.04 Site-Inspections. The site inspections are assessments of an applicant's implementation of and compliance with 10 CFR Part 54 requirements. All inspection teams will be led by the regions and any NRR supporting staff will be detailed to the region for the period of time necessary to prepare, inspect, and document inspection activities. The site inspections will be performed by a team inspection in the areas of the scoping and screening activities, observation of the condition of plant equipment, and implementation of the aging management programs and review of associated documentation. By observing the current condition of plant equipment in the scope of license renewal, inspectors may identify the effects of aging not previously recognized. Such observations allow the inspectors to evaluate the success of previously implemented plant programs which are being credited for license renewal AMPs. The site-inspection activities will be performed using IP 71002 "License Renewal Inspections."

06.05 Post Renewal Site-Inspections. Site inspections of AMP implementation conducted after the approval of the renewed license will be conducted in accordance with IP 71003 "Post-Approval Site Inspection for License Renewal." These inspections will verify the licensee's continued compliance with 10 CFR Part 50 and implementation of commitments related to the LRA.

06.06 Inspection Documentation. Inspections will be documented with inspection reports sent to the applicant and made publicly available in ADAMS. Attachments to IMC 2516 provide guidance on the preparation of documents related to the site inspection. Attachment 1, "Region Notification of Plant Readiness For License Renewal," provides a region with guidance on how to prepare its overall evaluation of inspection activities performed on an applicant for license renewal. Attachment 2, "Sample License Renewal Inspection Letter," is a sample letter of an overall evaluation of the inspection completion. The results of site team inspections will provide major input for the staff and regional recommendations to grant or deny an applicant's request for a renewed license.

END

Attachments:

1. Region Notification of Plant Readiness for License Renewal
2. Sample License Renewal Inspection Letter

Attachment 1

REGION NOTIFICATION OF PLANT READINESS FOR LICENSE RENEWAL

OBJECTIVES

1. Provide a status of the license renewal inspection program and findings.
2. Provide a summary status of the applicant's license renewal program compliance with 10 CFR Part 54.

NOTIFICATION

Approximately 30 days before the scheduled issuance of a renewed license, the regional office will provide an overall evaluation of inspection activities to assess the applicant's readiness for relicensing for an extended period of operation. The evaluation will be transmitted by memorandum to the Office Director, Office of Nuclear Reactor Regulation (NRR). It will include the region's evaluation as to whether or not the applicant has adequately documented and implemented license renewal programs and activities consistent with the rule such that there is reasonable assurance that the effects of aging will be managed consistent with the current licensing basis (CLB) throughout the period of extended operation. This evaluation will be based on sample inspections of the applicant's scoping, screening, and aging management programs and activities relating to license renewal to verify, with reasonable assurance, that these programs and activities have been implemented effectively and the associated procedures and records have been documented consistent with the rule, and site approved programs and procedures.

The status report will address the following areas, as appropriate:

- a. Inspection Program. Review the status of inspections required by IP 71002 and identify all outstanding inspection items and the reason(s) for their incompleteness.
- b. Other Items. Identify any other items relative to the applicant's readiness to operate for the period of extended operation requested by the applicant.

ATTACHMENT 2

SAMPLE LICENSE RENEWAL INSPECTION LETTER

MEMORANDUM TO: James E. Dyer, Director
Office of Nuclear Reactor Regulation

FROM: Luis A. Reyes, Regional Administrator

SUBJECT: V. C. SUMMER LICENSE RENEWAL APPLICATION

South Carolina Electric & Gas Company (SCE&G), by letter dated August 6, 2002, requested license renewal of V. C. Summer Nuclear Station in accordance with Title 10 of the Code of Federal Regulations Part 54 (10 CFR 54). We have completed inspections at Summer in accordance with the guidance contained in Inspection Manual Chapter 2516 and Inspection Procedure 71002, closely coordinating with the Office of Nuclear Reactor Regulation (NRR) to confirm the scope and timing of the inspections. The inspections verified that SCE&G implemented the scoping and screening methodology and established aging management programs in conformance with the descriptions contained in SCE&G's application for license renewal. Sampling inspections verified, with reasonable assurance, the acceptability of the existing and planned aging management programs. The inspections also verified the documentation used to support the application to be in an auditable and retrievable form. The inspections also reviewed license renewal corrective actions for issues raised by the NRC. Details of the scope of our inspections and results are contained in Inspection Reports 50-395/2003-07 dated June 13, 2003, 2003-08 dated September 29, 2003, and 2003-09 dated December 11, 2003.

We have determined that SCE&G programs and activities related to the license renewal of Summer have been or will be completed in substantial agreement with docketed commitments and regulatory requirements prior to the date of expiration of the current 40 year operating license. SCE&G demonstrated the capability to manage the effects of aging during the period of extended operation. We, therefore, conclude that there is reasonable assurance that SCE&G's aging management programs provide an adequate foundation for renewing the license for Summer for an additional twenty years.

Should you have any questions concerning this letter, please contact me at (404) 562-4410.

Docket No. 50-395
License No. NPF-12