

April 16, 2001

Dr. William D. Travers
Executive Director for Operations
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Dear Dr. Travers:

SUBJECT: INTERIM LETTER RELATED TO THE LICENSE RENEWAL OF
EDWIN I. HATCH NUCLEAR STATION, UNITS 1 AND 2

During the 481st meeting of the Advisory Committee on Reactor Safeguards, April 5-7, 2001, we reviewed the NRC staff's Safety Evaluation Report (SER) Related to the License Renewal of Edwin I. Hatch Nuclear Station, Units 1 and 2. Our Subcommittee on Plant License Renewal also reviewed this matter on March 28, 2001. During our review, we had the benefit of discussions with representatives of the NRC staff and the Southern Nuclear Operating Company, Inc. (SNC), and of the documents referenced.

Conclusions

1. The staff performed an extensive and thorough review of the license renewal application for Hatch, Units 1 and 2. Although a number of open issues are yet to be resolved, the staff has concluded that SNC has implemented adequate processes to identify structures, systems, and components (SSCs) subject to an aging management review and to manage age-induced degradation of these SSCs. We concur with the staff.
2. SNC incorporated by reference several Boiling Water Reactor Vessel and Internals Project (BWRVIP) topical reports into the Hatch license renewal application. We agree with the staff that the guidelines in the BWRVIP topical reports effectively support license renewal.

Discussion

By letter dated February 29, 2000, SNC submitted the license renewal application for Hatch, Units 1 and 2, in accordance with 10 CFR Part 54. SNC requested renewal of the operating licenses for the Hatch units for a period of 20 years beyond the current license expiration dates of August 6, 2014, for Unit 1 and June 13, 2018, for Unit 2.

The SER documents the results of the staff's review of the Hatch license renewal application and additional information submitted by SNC through January 31, 2001. The staff's review included verification of the completeness of the identification of the SSCs within the scope of the License Renewal rule, the validation of the plant assessment

process, the identification of the possible aging mechanisms associated with each passive long-lived component, and the adequacy of the aging management programs. The staff also conducted onsite inspections to verify the adequacy of the implementation of the programs described in the application. The staff's review of the license renewal application for Hatch was extensive and thorough.

The SNC approach to the identification of SSCs that are within the scope of the rule is function based rather than system based as was the case in previous applications. This approach led to correct identification of SSCs within the scope of the rule. However, as implemented, this approach made it difficult for the reviewers to ascertain which SSCs were in scope and which were not. This experience emphasizes the importance of a proper choice of scoping and screening processes in facilitating the review process and in making the application more scrutable, especially to interested members of the public.

To confirm the adequacy of the methodology, the staff had to rely heavily on the review of supporting documents located at the site and on requests for additional information. The staff also performed a "walkthrough" of the process for three systems at Hatch. This review was thorough, provided adequate evidence that SNC had identified SSCs in scope, and identified improvements in supporting procedures to enhance the repeat- ability of the scoping and screening processes.

The BWRVIP has developed topical reports that provide guidelines for inspection, evaluation, repair, and mitigation of aging degradation of vessels and the internals in BWRs. This program was expanded to include explicit consideration of provisions for license renewal. This extensive program is documented in over 20 topical reports. The staff has reviewed and approved most of these reports. Approval of the remaining reports awaits closure of related open items.

Hatch has used the guidance provided in the BWRVIP topical reports in the development of many of its aging management programs. Indications of cracking in several reactor vessel internal components identified at Hatch have been dispositioned either by repair or by monitoring according to BWRVIP guidelines. The large number of BWR licensees committed to the BWRVIP program provide a continuous flow of new inspection and evaluation data that either confirm the adequacy of the programmatic initiatives or will provide an early warning system should unexpected degradation occur.

We reviewed BWRVIP topical reports 26, 41, and 75 that address the top guide, the jet pump assembly, and inspection procedures and schedules for piping. We concur with the staff that these topical reports provide an acceptable demonstration that the effects of aging on these components can be adequately managed during the period of extended operation.

Sincerely,

/RA/

George E. Apostolakis
Chairman

References:

1. U. S. Nuclear Regulatory Commission, "Safety Evaluation Report With Open Items Related to the License Renewal of Edwin I. Hatch, Units 1 and 2," February 2001.
2. Letter from H. L. Sumner to the U. S. Nuclear Regulatory Commission, "Edwin I. Hatch Nuclear Plant Application for Renewed Operating Licenses," dated February 29, 2000.
3. Topical Report BWRVIP-26, "Top Guide - Inspection and Flaw Evaluation Guidelines," dated December 27, 1996.
4. Topical Report BWRVIP-41, "BWR Jet Pump Assembly - Inspection and Flaw Evaluation Guidelines," dated October 15, 1997.
5. Topical Report BWRVIP-75, "Technical Basis for Revisions to Generic Letter 88-01 Inspection Schedules (NUREG-0313)," dated October 27, 1999.