



Progress Energy

Serial: RNP-RA/04-0027

FEB 27 2004

ATTN: Document Control Desk
Director, Spent Fuel Project Office
Office of Nuclear Material Safety and Safeguards
United States Nuclear Regulatory Commission
Washington, DC 20555

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
INDEPENDENT SPENT FUEL STORAGE INSTALLATION
DOCKET NO. 72-3/LICENSE NO. SNM-2502
REQUEST FOR RENEWAL OF
INDEPENDENT SPENT FUEL STORAGE INSTALLATION LICENSE

Ladies and Gentlemen:

Pursuant to 10 CFR 72.42(b) and (c), Carolina Power and Light (CP&L) Company, now doing business as Progress Energy Carolinas (PEC), Inc., hereby submits an application for renewal of the H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2, Independent Spent Fuel Storage Installation (ISFSI) license. The current license expires on August 31, 2006. Based on the expected duration of the HBRSEP, Unit No. 2, Operating License and the estimated time needed to remove the storage casks from the site, PEC is requesting a license renewal period of 40 years. An exemption request to support the license renewal period is provided as Attachment II. The application for renewal of the ISFSI license, Attachment III, was prepared in accordance with applicable provisions of 10 CFR 72, Subpart B, and the Preliminary NRC Staff Guidance for 10 CFR Part 72 License Renewal.

The application is being submitted on CD-ROM. It should be noted that the CD-ROM also contains an informational copy of the HBRSEP, Unit No. 2, ISFSI Safety Analysis Report for reference purposes.

If you have any questions concerning this matter, please contact Mr. C. T. Baucom at the letterhead address, phone: 843-857-1253, or e-mail: Chuck.Baucom@pgnmail.com.

Sincerely,

J. F. Lucas
Manager - Support Services - Nuclear

JSK/jsk

N1M5001

United States Nuclear Regulatory Commission

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Attachments:

- I. Affirmation
- II. Request for Exemption from 10 CFR 72.42(a)
- III. Application for Renewed Site-Specific Materials License for the H. B. Robinson Steam Electric Plant, Unit No. 2, Independent Spent Fuel Storage Installation

The enclosed CD-ROM contains a file:

001_RNP_ISFSI_LRA.pdf, approximately 34.5 MB, publicly available

- c:
- Mr. T. P. O'Kelley, Director, Bureau of Radiological Health (SC)
 - Mr. L. A. Reyes, NRC, Region II
 - Mr. C. P. Patel, NRC, NRR
 - NRC Resident Inspectors, HBRSEP
 - Attorney General (SC)
 - Mr. R. M. Gandy, Division of Radioactive Waste Management (SC)
 - Mr. H. J. Porter, Division of Radioactive Waste Management (SC)
 - Mr. Chris Regan, NRC, NMSS

AFFIRMATION

The information contained in letter RNP-RA/04-0027 is true and correct to the best of my information, knowledge and belief; and the sources of my information are officers, employees, contractors, and agents of Progress Energy Carolinas, Inc., formerly known as Carolina Power and Light Company. I declare under penalty of perjury that the foregoing is true and correct.

Executed on: 27 Feb. 2004



J.W. Moyer
Vice President, HBRSEP, Unit No. 2

**H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
INDEPENDENT SPENT FUEL STORAGE INSTALLATION
REQUEST FOR EXEMPTION FROM 10 CFR 72.42(a)**

In accordance with the provisions of 10 CFR 72.7, "Specific exemptions," Carolina Power and Light (CP&L) Company, now doing business as Progress Energy Carolinas (PEC), Inc., requests an exemption from certain requirements of 10 CFR 72.42, "Duration of License; Renewal." Specifically, PEC requests exemption from the Independent Spent Fuel Storage Installation (ISFSI) license renewal period in 10 CFR 72.42(a), which the NRC has interpreted in a November 7, 2000, letter from Mr. E. William Brach, NRC, to Mr. W. R. Matthews, Virginia Electric and Power Company, to be 20 years. PEC is requesting a license renewal period of 40 years.

The spent fuel pool at H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2, is nearing usable storage capacity. Operation of HBRSEP, Unit No. 2, is now dependent on the continued ability of the ISFSI to store spent fuel, and the construction of an additional ISFSI. Spent fuel storage at the ISFSI is, and will continue to be, necessary since the United States Department of Energy (DOE) has not begun, and is not soon to be able, to take spent nuclear fuel as it was required to do under the provisions of the Nuclear Waste Policy Act. Therefore, the license renewal period for the ISFSI must consider future operation of HBRSEP, Unit No. 2. Absent approval of an extended period for license renewal, PEC will be required to request a second license renewal for the ISFSI over the course of plant operations. This would be an unnecessary diversion of PEC and NRC resources.

This request for an exemption is based on the need for a longer license renewal period and is supported by a technical justification that demonstrates the ability of the ISFSI to safely perform its intended function for a 40 year license renewal period.

Need For 40 Year License Renewal Period

The current Operating License for HBRSEP, Unit No. 2, expires on July 31, 2010. PEC applied for a 20 year renewal of the HBRSEP, Unit No. 2, Operating License on June 14, 2002, and assuming that license renewal is granted, the renewed Operating License would expire on July 31, 2030.

The current ISFSI license expires on August 31, 2006. A license renewal of only 20 years would expire on August 31, 2026, which is approximately four years before the plant Operating License is expected to expire. During that time, PEC anticipates that the ISFSI will be required for spent fuel storage in concert with the HBRSEP, Unit No. 2, spent fuel pool, and the additional ISFSI currently being planned. In addition, it is assumed that the spent fuel pool will be emptied prior to all fuel being removed from the ISFSI. Therefore, the ISFSI license will need to be retained until the last fuel assembly is shipped offsite to a permanent storage facility.

Based on the assumption that the DOE will begin taking spent fuel in 2010, it is unlikely that the HBRSEP, Unit No. 2, spent fuel pool would be emptied before 2026. Further, assuming that the

HBRSEP, Unit No. 2, Operating License is renewed, the spent fuel shipments would not be completed until an even later date. PEC is requesting a renewal period of 40 years, which would allow the ISFSI to continue to store spent fuel until 2046.

Technical Justification

The technical justification that the ISFSI will be able to fulfill its safety functions over a license renewal period of 40 years is provided in the application for renewed site-specific license, which is included as Attachment III. The ISFSI license renewal application (LRA) addresses the applicable provisions of 10 CFR 72, Subpart B, as required by 10 CFR 72.42(b). The systems, structures, and components (SSCs) that were within the scope of license renewal, and the required evaluations, were identified. Aging management reviews were performed on these SSCs to determine the materials and environments to which these SSCs are exposed, as well as any aging effects requiring aging management. Time-limited aging analyses were also performed to determine time-limited aging effects on the SSCs within the license renewal scope. Aging management activities were identified that provide reasonable assurance that SSCs within the scope of license renewal will continue to perform their intended functions consistent with the current licensing basis for the renewal period. This is consistent with the request for renewal of the HBRSEP, Unit No. 2, Operating License for a total operational period of 60 years.

Requirements of Section 72.7

The specific requirements for granting an exemption from 10 CFR 72 regulations are set forth in 10 CFR 72.7. Under 10 CFR 72.7, the NRC is authorized to grant an exemption upon demonstration that the exemption: (i) is authorized by law, (ii) will not endanger life or property or the common defense and security, and (iii) is in the public interest. The following addresses each of these requirements and demonstrates that the NRC should grant the exemption request.

A. The Exemption Request is Authorized by Law

The NRC's authority to grant an exemption from 10 CFR 72 is established by law as discussed in 10 CFR 72.7. Therefore, granting an exemption is explicitly authorized by the NRC's regulations.

B. The Exemption Request Will Not Endanger Life or Property or the Common Defense and Security

Continued operation does not endanger life or property, as discussed in the Environmental Report Supplement, which is provided as Appendix E to the ISFSI LRA (Attachment III). A 40 year license renewal period has been evaluated in the ISFSI LRA and it has been determined that new and existing monitoring activities provide reasonable assurance that SSCs within the scope of license renewal will continue to perform their intended functions. The common defense and security of the United States is not endangered by the renewal of the ISFSI license for 40 years. A 40 year ISFSI license renewal period will support continued operation of HBRSEP, Unit No. 2, until 2030, assuming plant license renewal is granted. Since the spent fuel pool at

HBRSEP, Unit No. 2, is nearly at usable storage capacity, continued operation of the plant is dependent on an operational ISFSI. The continued safe operation of nuclear power plants, including HBRSEP, Unit No. 2, enhances the common defense and security of the United States by providing dependable, low-cost electricity.

C. The Exemption is in the Public Interest

The subject exemption would allow HBRSEP, Unit No. 2, to continue operation for the duration of the proposed renewed Operating License (until 2030) without having to repeat the ISFSI license renewal process. The granting of this exemption would conserve both PEC and NRC resources, permitting more focused attention to areas of nuclear safety significance.

Conclusion

The requested exemption from the NRC's accepted 20 year ISFSI license renewal period has no adverse impact on safety. Since operation of HBRSEP, Unit No. 2, is now dependent on the continued ability of the ISFSI to store spent fuel, the ISFSI must be available to store spent fuel for the expected duration of the plant Operating License. In addition, the ISFSI must be available to store spent fuel until the last fuel assembly is removed from the site. The ISFSI is, therefore, required until the DOE is able to accept all of the spent fuel stored at HBRSEP, Unit No. 2.

Since there is a clear need for the ISFSI, subsequent renewal of the license for a third period is an unnecessary use of PEC and NRC resources. Technical justification provided in the ISFSI LRA establishes that new and existing monitoring activities provide reasonable assurance that SSCs within the scope of license renewal will continue to perform their intended functions.

Therefore, because the requested exemption for the ISFSI license renewal period is authorized by law, will not endanger life or property or the common defense and security, is in the public interest, and is requested for good cause, PEC requests that, in accordance with the provisions of 10 CFR 72.7, the NRC grant the requested exemption.