

May 31, 2008

Serial: HNP-07-088
10 CFR 50.90

U.S. Nuclear Regulatory Commission
ATTENTION: Document Control Desk
Washington, D.C. 20555-0001

SHEARON HARRIS NUCLEAR POWER PLANT, UNIT NO.1
DOCKET NO. 50-400/LICENSE NO. NPF-63
LICENSE AMENDMENT REQUEST TO ADOPT NFPA 805 PERFORMANCE-BASED
STANDARD FOR FIRE PROTECTION FOR LIGHT WATER REACTOR GENERATING
PLANTS (2001 EDITION)

Ladies and Gentlemen:

Pursuant to 10 CFR 50.90, Carolina Power & Light Company (CP&L), doing business as Progress Energy Carolinas, requests the Nuclear Regulatory Commission (NRC) issue the following amendments to License No. NPF-63 for the Shearon Harris Nuclear Power Plant (HNP) and to take the additional regulatory actions presented in the attachments to enable HNP to adopt a new fire protection licensing basis which complies with the requirements in 10 CFR 50.48(a) and (c) and the guidance in Revision 0 of Regulatory Guide (RG) 1.205.

For the reasons discussed below, HNP believes that it has met all of the NRC's regulatory requirements for the transition of its fire protection licensing basis, that the license amendment does not present a significant hazards consideration, and the criteria for a categorical exclusion from the need for an environmental assessment have been met.

Information associated with the transition is provided in the enclosed HNP Transition Report, which includes the technical and regulatory assessments associated with this license amendment request (LAR).

The following provides a summary of major topics addressed in the enclosed HNP Transition Report (References to Transition Report Attachments are provided below)

- Attachment A – NEI 04-02 Table B-1 - Transition of Fundamental FP Program and Design Elements (NFPA 805 Chapter 3)
- Attachment B – NEI 04-02 Table B-2 – Nuclear Safety Capability Assessment - Methodology Review
- Attachment C – NEI 04-02 Table B-3 – Fire Area Transition
- Attachment D – NEI 04-02 Table F-1 Non-Power Operational Modes Transition
- Attachment E – NEI 04-02 Table G-1 – Radioactive Release Transition
- Attachment F – Fire-Induced Multiple Spurious Operations – Resolution Methodology
- Attachment G – Operator Manual Actions – Transition to Recovery Actions
- Attachment H – NEI 04-02 Frequently Asked Question – Summary Table

- Attachment I – Definition of Power Block
- Attachment J – Existing Engineering Equivalency Evaluation Transition
- Attachment K – Existing Licensing Action Transition
- Attachment L – NFPA 805 Chapter 3 Requirements to be Included in LAR
- Attachment M - License Condition Changes
- Attachment N – Technical Specification Changes
- Attachment O - Orders and Exemptions
- Attachment P – Performance-Based Methods - NFPA 805 Chapter – 10 CFR 50.48.(c)(2)(vii)
- Attachment Q – Risk-Informed, Performance-Based Alternatives to NFPA 805 – 10 CFR 50.48(c)(4)
- Attachment Q – UFSAR Changes
- Attachment R – Plant Modifications
- Attachment S – Clarification of Prior NRC Approvals
- Attachment T – Significant Hazards Consideration
- Attachment U – Environmental Consideration

In accordance with the guidance in Regulatory Position C.2.2 of RG 1.205, Revision 0, the total risk change associated with pre-transition fire protection program variances that will meet the NFPA 805 performance-based approach (via the change evaluation process) was estimated with the following results:

- Less than $X \times 10^{-X}$ change in core damage frequency/year (Δ CDF/yr)
- Less than $X \times 10^{-X}$ change in large early release frequency/year (Δ LERF/yr)

In accordance with the guidance in Regulatory Position C.2.2 of RG 1.205, Revision 0, the total risk change associated with NFPA 805 transition was estimated with the following results:

- Less than $X \times 10^{-X}$ change in core damage frequency/year (Δ CDF/yr)
- Less than $X \times 10^{-X}$ change in large early release frequency/year (Δ LERF/yr)

In addition, the changes associated with transition to NFPA 805 have been assessed for impact on fire protection defense-in-depth and safety margin. Defense-in-depth and safety margins are maintained.

In accordance with the guidance Regulatory Position C.2.2 of RG 1.205, Revision 0, the estimated change in risk associated with the HNP transition to NFPA 805 is consistent with the acceptance guidelines of RG 1.174, and therefore, considered acceptable.

Finally, based on the transition schedule including as part of the Transition Report enclosed with this letter, HNP respectfully requests the NRC issue the license amendment by December 31, 2008.

In accordance with 10 CFR 50.91(b), HNP is providing the state of North Carolina with a copy of the proposed license amendment.

Please refer any questions regarding this submittal to Mr. Dave Corlett at (919) 362-3137.

I declare, under penalty of perjury, that the attached information is true and correct

(Executed on _____)

Sincerely,

Enclosure:

A – HNP Transition Report

C :

XXXXX, NRC Senior Resident Inspector

XXXXX, N.C. DENR Section Chief

XXXXX, NRC Project Manager

XXXXX, NRC Regional Administrator