

Robert J. Duncan, II

Vice President Harris Nuclear Plant Progress Energy Carolinas, Inc.

Serial: HNP-08-061

10 CFR 50.90

MAY 2 9 2008

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

DOCKET NO. 50-400/LICENSE NO. NPF-63
REQUEST FOR LICENSE AMENDMENT TO ADOPT NFPA 805 PERFORMANCE-BASED
STANDARD FOR FIRE PROTECTION FOR LIGHT WATER REACTOR GENERATING PLANTS
(2001 EDITION)

Ladies and Gentlemen:

In accordance with the Code of Federal Regulations, Title 10, Part 50.90, "Application of License or Construction Permit," Carolina Power & Light Company (CP&L) doing business as Progress Energy Carolinas Inc. (PEC), requests an amendment to Facility Operating License No. NPF-63 for Shearon Harris Nuclear Power Plant, Unit No. 1 (HNP). Implementation of the regulatory actions presented in the attachments to this License Amendment Request (LAR) will 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.

As documented in this request, HNP has met all of the NRC's regulatory requirements for the transition of its fire protection licensing basis. In addition, the license amendment does not present a significant hazards consideration and the criteria have been met for a categorical exclusion from the need for an environmental assessment.

Information associated with HNP's transition is provided in the enclosed HNP Transition Report, including the technical and regulatory justifications required to support this LAR.

Enclosure 1 contains the Regulatory Commitments associated with this submittal.

Enclosure 2 contains a listing of the Transition Report sections for which HNP requests specific NRC approval.

Enclosure 3 to this letter provides HNP's Transition Report. Major topics in this Transition Report are presented as Attachments A through V, summarized as follows:

- Attachment A NEI 04-02 Table B-1 Transition of Fundamental FP Program and Design Elements (NFPA 805 Chapter 3) - Security Related Information
- 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 Security Related Information

400C

P.O. Box 165 New Hill, NC 27562 Serial: HNP-08-061

Page 2

- Attachment D NEI 04-02 Table F-1 Non-Power Operational Modes Transition—Security
 Related Information
- 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—Security Related Information
- Attachment K Existing Licensing Action Transition—Security Related Information
- Attachment L NFPA 805 Chapter 3 Requirements for Approval
- Attachment M License Condition Changes
- Attachment N Technical Specification Changes
- Attachment O Orders and Exemptions
- Attachment P Performance-Based Methods NFPA 805 Chapter 3 10 CFR 50.48.(c)(2)(vii)
- Attachment Q Risk-Informed, Performance-Based Alternatives to NFPA 805 10 CFR 50.48(c)(4)
- Attachment R FSAR Changes
- Attachment S Plant Modifications
- Attachment T Clarification of Prior NRC Approvals
- Attachment U No Significant Hazards Consideration
- Attachment V Environmental Consideration

In accordance with the guidance in Regulatory Position C.2.2 of Regulatory Guide 1.205, Revision 0, the total risk change associated with pre-transition fire protection program variances meeting the NFPA 805 performance-based approach (via the change evaluation process) were evaluated. Upon completion of the plant modifications, as referenced in the Transition Report section 4.8.3, the total change in risk associated with HNP's transition to NFPA 805 will be consistent with the acceptance guidelines in Regulatory Guide 1.174.

Serial: HNP-08-061

Page 3

The Transition Report provided in section 5.4 contains HNP's proposed implementation schedule for transitioning HNP to the new fire protection licensing basis. Based on this, HNP requests approval of this license amendment in accordance with the NRC's current schedule, with implementation to occur within 180 days of approval.

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 MAY 2 9 2008).

Sincerely,

R. J. Duncan, II Vice President Harris Nuclear Plant

RJD/kl

Enclosures:

- 1. HNP Regulatory Commitments
- 2. Specific Approval Requested in SER
- 3. HNP Transition Report, containing Attachments A through V

Cc (via CD-ROM):

Ms. B. O. Hall, N. C. DENR Section Chief

Mr. P. B. O'Bryan, NRC Sr. Resident Inspector

Mr. L. A. Reyes, NRC Regional Administrator, Region II

Ms. M. G. Vaaler, NRC Project Manager

Enclosure 1 to SERIAL: HNP-08-061

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

Commitment(s)	Scheduled Completion Date
HNP will complete modifications necessary to support the new licensing basis.	The end of Refueling Outage 16 currently scheduled for November 5, 2010

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

In accordance with 10 CFR 50.48(c)(3)(i), Harris Nuclear Plant (HNP), is submitting this License Amendment Request (LAR) to allow HNP to maintain a fire protection program that complies with NFPA 805 as an alternative to the current HNP fire protection license condition. The information provided in the Transition Report contains the information required for submittal, as well as information to facilitate the Nuclear Regulatory Commission (NRC) review and approval of the license amendment.

As stated in Regulatory Position C.2.2 of Regulatory Guide 1.205, HNP requests that certain portions of the Transition Report be reviewed for explicit approval in the HNP 10 CFR 50.48(c) License Amendment/associated Safety Evaluation Report. HNP believes this review and approval will help provide clarity to the new fire protection licensing basis and facilitate future program maintenance and NRC inspection activity.

The following table provides a listing of Transition Report Sections, the Topic, applicable NEI and NRC requirements and guidance, and whether specific approval by the NRC is requested in the License Amendment/associated Safety Evaluation Report.

LAR/TR Reference	Topic	Requirement/Guidance	Specific Approval Requested in SER
Section 4.1.2.1 Attachment A	B-1 Table	RG 1.205 (C.2.4), NEI 04-02(2.3, 4.3.1, B.1), FAQ 07-0036	Yes
Section 4.2.1.2	Nuclear Safety Capability Assessment - Methodology (B- 2 Table)	NEI 04-02 (4.3.2, B.2), FAQ 07-0039	Yes
Section 4.2.2.3, 4.8.1	Nuclear Safety Capability Assessment - Fire Area – by - Fire Area Review	NEI 04-02 (4.3.2, B.2), FAQ 07-0039	Yes (1)
Attachment C	Nuclear Safety Capability Assessment - Fire Area – by - Fire Area Review (B-3 Table)	NEI 04-02 (4.3.2, B.2), FAQ 07-0039	No
Section 4.3 Attachment D	Non Power Operations (F-1 Table)	NEI 04-02 (4.3.3, F), FAQ 07-0040	Yes
Section 4.4 Attachment E	Radioactive Release (G-1 Table)	NEI 04-02 (4.3.4, G)	Yes
Section 4.5	Change Evaluations	NFPA 805, RG 1.205 (C.3.2), NEI 04-02 (5.3, App I)	Yes (2)
Section 4.8.2.1 Attachment F	Fire-Induced Multiple Spurious Operations resolution methodology	RG 1.205 (C.3.3), NEI 04-02 (B.2), FAQ 07- 0038	Yes
Section 4.8.2.2 Attachment G	Operator Manual Actions – Transition to Recovery Actions	RG 1.205 (C.2.2), NEI 04-02 (B.2), FAQ 06- 0012, FAQ 07-0030	Yes

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

LAR/TR Reference	Topic	Requirement/Guidance	Specific Approval Requested in SER
Section 3.4 Attachment H	FAQ Summary Table. (info only)	10 CFR 50.71(e), NEI 04-02 (4.6.1)	No
Section 4.1.3 Attachment I	Definition of Power Block	NFPA 805, FAQ 06-0019	Yes
Section 4.2.2.2.1 Attachment J	Existing Engineering Equivalency Evaluations	RG 1.205 (C.2.3), FAQ 07-0033	Yes
Section 4.2.2.2.2 Attachment K	Licensing Action Transition	NEI 04-02 (4.3.2, B.2), RG 1.205 (C.2.4), FAQ 07-0039	Yes
Section 4.1.2.2 Attachment L	NFPA 805 Chapter 3 Requirements to be included in the LAR	NEI 04-02 (2.3, 4.3.1), RG 1.205 (C.2.4), FAQ 07-0036	Yes
Section 5.2.1 Attachment M	License Condition Changes	10 CFR 50.48(c)(3)(i), 10 CFR 50.90, RG 1.205 (C.3.1), NEI 04-02 (4.6.1)	Yes
Section 5.2.2 Attachment N	Technical Specification Changes	10 CFR 50.48(c)(3)(i), 10 CFR 50.90, RG 1.205 (C.2.2), NEI 04-02 (4.6.1)	Yes
Section 5.2.3 Attachment O	Orders and Exemptions	10 CFR 50.48(c)(3)(i), 10 CFR 50.90, RG 1.205 (C.2.2), NEI 04-02 (4.6.1)	Yes
Attachment P	Performance Based Methods	10 CFR 50.48(c)(2)(vii), RG 1.205 (C.2.2, C.3.2.3), NEI 04-02 (2.3, 2.4), FAQ 06-0008	Yes
Attachment Q	Risk-Informed, Performance Based Alternatives to NFPA 805	10 CFR 50.48(c)(4), RG 1.205 (C.2.2, C.3.2.3), NEI 04-02 (2.3, 4.6.1)	Yes
Attachment R	FSAR Changes (Governed by 10 CFR 50.71(e))	RG 1.205 (C.2.2), NEI 04-02 (4.6.1)	Yes (3)
Section 4.8.3 Attachment S	Plant Modifications	RG 1.205 (C.2.2), NEI 04-02 (4.6.1)	No
Attachment T	Clarification of Prior NRC Approval	NEI 04-02 (2.3, B.2), RG 1.205 (C.2.2)	Yes
Section 5.3.1 Attachment U	No Significant Hazards Consideration	10 CFR 50.91, NEI 04-02 (4.6.1, H)	Yes
Section 5.3.2 Attachment V	Environmental Consideration	10 CFR 51.22(b), NEI 04-02 (H)	Yes
Section 4.5.1	Fire PRA Peer Review High Level Findings	RG 1.205 (C.4.3)	Yes
Section 5.4	Transition Schedule	RG 1.205 (C.2.2), NEI 04-02 (4.6.1)	Yes

Enclosure 2 to SERIAL: HNP-08-061

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

Note 1: Request NRC acceptance of the NSCA results based on the Methodology described in Attachment 2. Acceptance does not preclude self approval of future Fire Protection changes per the FP license condition that is provided in this LAR.

Note 2: Request NRC acceptance of the Change Evaluation results. Acceptance does not preclude self approval of future Fire Protection changes per the FP license condition that is provided in this LAR.

Note 3: Request NRC to approve in concept the level of detail proposed for the FSAR.