



AUG 30 2011

U.S. Nuclear Regulatory Commission
ATTENTION: Document Control Desk
Washington, DC 20555

SHEARON HARRIS NUCLEAR POWER PLANT, UNIT NO. 1
DOCKET NO. 50-400/RENEWED LICENSE NO. NPF-63
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION
REGARDING MEASUREMENT UNCERTAINTY RECAPTURE
LICENSE AMENDMENT REQUEST

- References:
1. Letter from B. Mozafari, Nuclear Regulatory Commission, to W. Jefferson, "Shearon Harris Nuclear Power Plant, Unit 1 – Request for Additional Information Regarding Measurement Uncertainty Recapture Power Uprate (TAC No. ME6169)," dated August 5, 2011. (ADAMS Accession ML11214A174)
 2. Email from B. Mozafari, Nuclear Regulatory Commission, to J. Caves, "MUR RAI (HP-HPB).docx", dated July 29, 2011
 3. Letter from C. L. Burton to the Nuclear Regulatory Commission (Serial: HNP-11-001), "Shearon Harris Nuclear Power Plant, Unit 1, Docket No. 50-400/Renewed License No. NPF-63, Request for License Amendment, Measurement Uncertainty Recapture Power Uprate," dated April 28, 2011. (ADAMS Accession ML1124A180)

Ladies and Gentlemen:

On July 29, 2011, the Harris Nuclear Plant (HNP) received a request from the NRC (Reference 2) for additional information needed to facilitate the review of the License Amendment Request to increase the rated thermal power (RTP) level from 2900 megawatts thermal (MWt) to 2948 MWt, and make Technical Specification changes as necessary to support operation at the uprated power level. The proposed change is an increase in RTP of approximately 1.66%. The proposed uprate is characterized as a measurement uncertainty recapture (MUR) using the Cameron Leading Edge Flow Meter CheckPlus System to improve plant calorimetric heat balance measurement accuracy. This original request was submitted as Serial: HNP-11-001 (Reference 3).

The Enclosure to this submittal contains HNP's response to the NRC's request for additional information.

This document contains no new Regulatory Commitment.

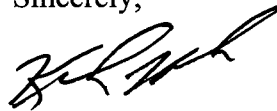
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MUR

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

Please refer any questions regarding this submittal to Mr. David Corlett, Supervisor – HNP Licensing/Regulatory Programs, at (919) 362-3137.

I declare under penalty of perjury that the foregoing is true and correct. Executed on
[8-29-11].

Sincerely,



Keith Holbrook
Manager – Support Services
Harris Nuclear Plant

RKH/kab

Enclosure: Response to Request for Additional Information

cc: Mr. J. D. Austin, NRC Sr. Resident Inspector, HNP
Mr. W. L. Cox, III, Section Chief, N.C. DENR
Mr. V. M. McCree, NRC Regional Administrator, Region II
Mrs. B. L. Mozafari, NRC Project Manager, HNP

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Summary

By letter dated April 28, 2011, (ADAMS Accession No. ML11124A180), Carolina Power & Light Company (CP&L), now doing business as Progress Energy Carolinas, Inc., submitted a proposed amendment for the Shearon Harris Nuclear Power Plant, Unit 1 (HNP). The proposed amendment will increase the rated thermal power (RTP) level from 2900 megawatts thermal (MWt) to 2948 MWt, and make Technical Specification (TS) changes as necessary to support operation at the uprated power level. The proposed change is an increase in RTP of approximately 1.66%. The proposed uprate is characterized as a measurement uncertainty recapture (MUR) using the Cameron Leading Edge Flow Meter CheckPlus System to improve plant calorimetric heat balance measurement accuracy. The proposed change will revise Renewed Operating License NPF-63 Maximum Power Level; Appendix A, TS definition of RTP; Reactor Core Safety Limits; Reactor Trip System Instrumentation; Minimum Allowable Power Range Neutron Flux high setpoint with Inoperable Steam Line Safety Valves; and TS Bases Section 3/4.7.1 to reflect the uprated reactor core power level.

The U.S. Nuclear Regulatory Commission (NRC) staff has reviewed the information submitted by the licensee, and based on this review determined the following information is required to complete the evaluation of the subject amendment request:

Request 1:

Operator Actions (RIS 2002-03 Section VII.1)

The submittal states, "There is no reduction in time for required operator actions." Clarify whether this statement refers to the time required for the operator to complete the operator actions credited in your analysis and/or the time available to operators as it is outlined in the procedures and accident scenario analysis.

Response:

A review of the design basis events where operator response times are credited determined that operator actions are not impacted by the MUR power uprate. The time required for the operator to complete the operator actions as well as the time available to operators are not impacted by the MUR power uprate.

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Request 3:

Control Room Controls, Displays (Including the Safety Parameter Display System), and Alarms (RIS 2002-03 Section VII.2.B)

Describe how effective the Leading Edge Flow Meter (LEFM) electronic cabinet output performance will be due to its display having two different purposes.

Response:

Per telephone discussion with the NRC on August 11, 2011, a response to this question is no longer required from HNP.