Lewis Sumner Vice President Hatch Project Support

Southern Nuclear Operating Company, Inc. 40 Inverness Parkway Post Office Box 1295 Birmingham, Alabama 35201

Tel 205 992 7279 Fax 205 992 0341



December 19, 2002

Docket Nos. 50-321 50-366

HL-6328

U.S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, D.C. 20555

Edwin I. Hatch Nuclear Plant Request for License Amendment <u>Measurement Uncertainty Recapture Power Uprate</u>

Ladies and Gentlemen:

In accordance with the provisions of 10 CFR 50.90, Southern Nuclear Operating Company (SNC) hereby requests a change to Renewed Facility Operating License (OL) Nos. DPR-57 and NFP-5, and Appendices A thereto for the Edwin I. Hatch Nuclear Plant Unit 1 and Unit 2, respectively. Both Hatch units are currently licensed for a maximum rated thermal power (RTP) of 2763 MWt. Based upon the implementation of more accurate feedwater flow measurement instrumentation and the corresponding determination of improved core thermal power level (CTP) uncertainty values, approval is sought to increase the licensed maximum RTP by 1.5 % to 2804 MWt.

The 1.5% power uprate is based upon reducing margin that is assumed in analyses to account for the measurement uncertainties associated with calculating the CTP of each unit. Plant Hatch's current accident and transient analyses include a minimum 2% margin on RTP to account for power measurement uncertainty. In 2000, the Nuclear Regulatory Commission (NRC) amended 10 CFR 50, Appendix K, to provide licensees the option of maintaining a 2% power margin or applying a reduced margin based on the improved measurement uncertainties resulting from incorporation of more accurate feedwater flow measurement instrumentation.

The Plant Hatch request to increase the maximum RTP was developed using the guidance set forth in NRC Regulatory Issue Summary (RIS) 2002-03, "Guidance on the Content of Measurement Uncertainty Recapture Power Uprate Applications" (RIS 2002-03).

The feedwater flow measurement system to be installed at Plant Hatch is the CrossflowTM ultrasonic flow meter. The topical report detailing the design of this advanced flow measurement system was submitted to the NRC by ABB Combustion Engineering Nuclear Power, Inc. (ABB-CE) by letters dated January 6, January 25, March 8, and March 13, 2000. By letter dated March 20, 2000, the NRC approved the topical report for referencing in license applications for measurement uncertainty recapture power uprates.

Enclosure 1 contains the 10 CFR 50.92 Significant Hazards Evaluation and the Environmental Assessment. This enclosure provides the bases for the conclusion that the amendment request involves no significant hazards consideration and meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9).

A90

U.S. Nuclear Regulatory Commission Page 2

Enclosure 2 provides a detailed description of the specific Operating License and Technical Specifications proposed changes necessary for measurement uncertainty recapture power uprate operation, as well as the technical bases for the changes. Enclosure 3 provides the page change instructions for incorporating the changed pages into the applicable documents. The changed Technical Specifications pages follow the page change instructions. The changed Bases pages are also provided for information only. Finally, please note that changed pages of the Operating Licenses are not provided, since the NRC maintains the master electronic files. Enclosure 4 provides the marked-up Operating License and Technical Specifications pages. Mark-ups of the Bases pages are provided for information only.

Enclosure 5 identifies the Plant Hatch actions to which SNC has committed as a result of the power uprate. Enclosure 6 is a cross-reference identifying which submittal enclosure addresses each specific guidance item in Attachment 1 to NRC RIS 2002-03. Enclosure 7 provides the details of the CrossflowTM system implementation, as well as other physical plant changes necessary for measurement uncertainty recapture power uprate operation.

The Plant Hatch measurement uncertainty recapture power uprate safety analysis follows the format and content for Boiling Water Reactor (BWR) Thermal Power Optimization (TPO) licensing reports documented in NEDC-23938P, "Generic Guidelines and Evaluations for General Electric Boiling Water Reactor Thermal Power Optimization." This safety analysis report is provided in Enclosure 8. Enclosure 9 is the GE Affidavit for withholding proprietary information contained in Enclosure 8. Enclosure 10 contains the non-proprietary version of the safety analysis report included in Enclosure 8 and is provided for public disclosure.

SNC requests approval of this amendment request by June 15, 2003, with a 60-day implementation period to support a mid-cycle uprate for Unit 1 and a near beginning-of-cycle uprate for Unit 2.

Mr. H. L. Sumner, Jr. states he is Vice President of Southern Nuclear Operating Company and is authorized to execute this oath on behalf of Southern Nuclear Operating Company, and to the best of his knowledge and belief, the facts set forth in this letter are true.

Respectfully submitted,

ewin Sume

H. L. Sumner, Jr.

Sworn to and subscribed before me this _	19	day of	December	2002
--	----	--------	----------	------

My Commission Expires: 7/27/05

TWL/sp



U.S. Nuclear Regulatory Commission Page 3

Enclosures:

- 1. 10 CFR 50.92 Significant Hazards Evaluation and Environmental Assessment
- 2. Bases for Change Request
- 3. Page Change Instructions and Changed Pages for Technical Specifications and Bases
- 4. Marked-Up Pages for Operating Licenses, Technical Specifications, and Bases
- 5. Licensing Commitments
- 6. NRC Regulatory Issue Summary 2002-03 Reconciliation
- 7. Plant Modifications
- 8. NEDC-33085P, "Safety Analysis Report for Edwin I. Hatch Units 1 and 2 Thermal Power Optimization," dated December 2002
- 9. GE Affidavit
- 10. NEDO-33085, "Safety Analysis Report for Edwin I. Hatch Units 1 and 2 Thermal Power Optimization," dated December 2002
- cc: Southern Nuclear Operating Company

Mr. P. H. Wells, Nuclear Plant General Manager SNC Document Management (R-Type A02.001)

U.S. Nuclear Regulatory Commission, Washington, D.C. Mr. Joseph Colaccino, Project Manager - Hatch

U.S. Nuclear Regulatory Commission, Region II Mr. L. A. Reyes, Regional Administrator Mr. J. T. Munday, Senior Resident Inspector - Hatch