Progress Energy

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NOV 0 2 2005

Serial: HNP-05-129
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U.S. Nuclear Regulatory Commission
ATTENTION: Document Control Desk
Washington, DC 20555

SHEARON HARRIS NUCLEAR POWER PLANT, UNIT NO. 1
DOCKET NO. 50-400/LICENSE NO. NPF-63

RESPONSE TO THE REQUEST FOR ADDITIONAL INFORMATION ON THE PROPOSED LICENSE AMENDMENT REQUEST TO TECHNICAL SPECIFICATIONS (TS) 3/4.4.7 TEMPERATURE LIMIT FOR REACTOR COOLANT SYSTEM (RCS) DISSOLVED OXYGEN

Ladies and Gentlemen:

On September 26, 2005, the NRC requested additional information to facilitate the review of the proposed change to Technical Specification (TS) 3.4.7 and TS Surveillance Requirement (SR) 4.4.7 for the Harris Nuclear Plant (HNP).

Attachment 1 provides the requested additional information.

This document contains no new regulatory commitment.

Please refer any question 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 NOV 0 2 2005).

Sincerely,

CJG/khv

A001

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Attachments:

1. Response to the Request for Additional Information on the Proposed License Amendment Request to Technical Specification (TS) 3.4.7 and TS Surveillance Requirement (SR) 4.4.7 for the Harris Nuclear Plant (HNP)

c:
Mr. R. A. Musser, NRC Senior Resident Inspector
Ms. B. O. Hall, N.C. DENR Section Chief
Mr. C. P. Patel, NRC Project Manager
Dr. W. D. Travers, NRC Regional Administrator

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Request: 1. *In the submittal, the licensee stated that the reason for not needing to measure the concentration of the dissolved oxygen in the primary coolant on or below 250 degrees F is that there is insignificant change in the stress corrosion cracking and general corrosion between 180 degrees F and 250 degrees F. Please provide a more detailed justification for this statement.*

Response:

Harris Nuclear Plant (HNP) justifies this statement since it is consistent with industry guidance and practice, which indicate that the mechanisms of stress corrosion cracking and general corrosion do not prevail at temperatures below 250 degrees F. To further support this conclusion, HNP refers to Safety Evaluation issued in response to Seabrook Station Submittal dated November 29, 1995 (TAC M92524) which states, "The staff agrees that below 250 degrees F, the influence of dissolved oxygen in the reactor coolant is not significant with regard to stress corrosion cracking and general corrosion of RCS components."

Request: 2. *In the submittal, the licensee claims that the requested amendment is consistent with other Westinghouse plants of similar size and vintage listed in the submittal. Does it mean that the technical specifications for these plants don't have a requirement to measure the concentration of the dissolved oxygen in the primary coolant below 250 degrees F?*

Response:

Yes. Consistent with Standard Westinghouse Technical Specifications, the Technical Specifications, and therefore the Surveillance Requirements, for RCS dissolved oxygen are only applicable when temperatures are above 250 degrees F. In practice, HNP monitors for dissolved oxygen throughout the startup process from cold shutdown, in accordance with plant procedures. This allows the plant to monitor the oxygen removal process and ensure the dissolved oxygen is reduced to acceptable levels prior to exceeding the temperature where the Technical Specification for dissolved oxygen becomes applicable.