Mr. James F. Klapproth, Manager
Engineering & Technology August 12, 2002
GE Nuclear Energy
175 Curtner Ave
San Jose, CA 95125

SUBJECT: REVIEW OF GE NUCLEAR ENERGY LICENSING TOPICAL REPORT, NEDC-33004P, REVISION 1, "CONSTANT PRESSURE POWER UPRATE" (TAC NO. MB2510)

Dear Mr. Klapproth:

GE Nuclear Energy (GENE) has previously submitted for staff review and approval Topical Reports supporting power uprates for boiling water reactors (BWR). These have been reviewed and approved by the NRC staff. Based on the recent extended power uprate experience, GENE developed a new approach to uprate reactor power that maintains the current plant reactor dome pressure constant. By letter dated July 26, 2001, and supplements dated December 3, December 18, and December 21, 2001, GENE provided the subject licensing topical report documenting the basis for the approach to be used for GE-prepared BWR constant pressure power uprate (CPPU) safety analysis reports. By performing the power uprate with no pressure increase, the effect on the plant's safety analyses and system performance is reduced. GENE stated the CPPU process would streamline both the analyses that need to be performed by the applicant and the review process performed by the staff for a power uprate.

On June 20, 2002, the staff issued its safety evaluation (SE) regarding NEDC-33004P, Revision 1, to GENE with a 10-day hold before release to the public. We informed you that this was to provide GENE an opportunity to comment on the proprietary aspects before making the SE public. In subsequent calls with your staff, GENE informed the NRC staff that substantive concerns existed regarding the content of the SE. By letter dated July 18, 2002, GENE formally documented comments regarding the proprietary and technical content of the SE. The staff has conducted a preliminary review of the issues raised in the July 18, 2002, letter. However, the staff will not develop a response to this letter until the issue discussed below is resolved.

During a meeting with the Browns Ferry licensee on July 10, 2002, the staff learned that GENE and TVA intended to apply the CPPU topical report in a way that did not reflect the NRC staff's understanding and basis for the acceptability of the topical report for licensing applications. In telephone discussions with GENE on July 15, and 22, 2002, the staff confirmed that our understanding about the manner in which the CPPU topical report could be applied and the restrictions on the use of the CPPU topical report is significantly different from GENE's. Therefore, the staff is withdrawing the SE that had concluded the proposed approach in NEDC-33004P, Revision 1, was acceptable for referencing in licensing applications. The basis for this decision is stated below.

To streamline the review process for power uprates, the CPPU topical report describes, on page 1-1, a number of changes to a plant's licensing basis which are excluded from consideration as part of the CPPU process. However, this list is preceded by a sentence which you believe allows those changes to be reviewed and implemented, in parallel with the CPPU process, as separate licensing actions.

The NRC staff does not agree with your interpretation. The exclusions listed on page 1-1 of NEDC-33004P, Revision 1, are integral to the staff's technical basis for approving the topical report. These exclusions provided the basis to allow the CPPU review to focus on issues that relate only to the power uprate itself. For example, in relation to fuel-related analysis, the staff considered: (1) the information that would be submitted under a CPPU application, (2) the methods that would be used by GENE, as described in the GESTAR-II topical report, to perform the actual reload licensing calculations, and (3) the inter-relationships between this information and the method. We did not consider how, or whether, other changes specifically excluded by the topical report could fit into the CPPU process. Our SE had stated that:

> The CPPU cycle-specific reload analyses and safety analyses will be performed in accordance with NRC-approved GE analytical methodologies described in the latest approved version of GESTAR-II.

We believe that GENE's position would significantly reduce the efficiency gains of applying this topical report by requiring the staff to conduct extensive plant-specific analyses to support power uprates. We believe that the CPPU process is viable but due to the basic nature of our differences on how the CPPU methodology can be implemented, we regretfully withdraw the approval of the CPPU process as described in the current version of the topical report. One possible solution is for GENE to revise and resubmit the topical report to remove the described ambiguities. If you have any questions or suggestions on how we can resolve our differences, please contact Alan B. Wang at (301) 415-1445.

Sincerely,

/RA/

John A. Zwolinski, Director
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Project No. 710

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