March 17, 2004

Mr. James F. Klapproth, Manager
Engineering & Technology
GE Nuclear Energy
175 Curtner Avenue
San Jose, CA 95125

SUBJECT: CORRECTION TO REQUEST FOR ADDITIONAL INFORMATION – LICENSING TOPICAL REPORT NEDC-33006P, REVISION 1, "GENERAL ELECTRIC BOILING WATER REACTOR MAXIMUM EXTENDED LOAD LIMIT ANALYSIS PLUS" (TAC NO. MB6157)

Dear Mr. Klapproth:

On February 20, 2004, the NRC staff issued a request for additional information (RAI) relating to core and fuel performance and emergency core cooling system loss-of-coolant accident on Licensing Topical Report NEDC-33006P, Revision 1. The RAI contained both proprietary and non-proprietary versions. Page 10 of the RAI contained an error. In Question 24, line 4, "the generic anticipatory reactor trip system" should read "APRM rod block TS." A corrected page 10 is enclosed for the proprietary version and the non-proprietary version.

We apologize for any inconvenience this may have caused.

Sincerely,

/RA/

Alan Wang, Project Manager, Section 2
Project Directorate IV
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Project No. 710

Enclosures: 1. Revised Page 10 (Proprietary)
2. Revised Page 10 (Non-proprietary)

cc w/encl 2: See next page

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cc:
Mr. George B. Stramback
Regulatory Services Project Manager
GE Nuclear Energy
175 Curtner Avenue
San Jose, CA 95125

Mr. Charles M. Vaughan, Manager
Facility Licensing
Global Nuclear Fuel
P.O. Box 780
Wilmington, NC 28402

Ms. Margaret Harding, Manager
Fuel Engineering Services
Global Nuclear Fuel
P.O. Box 780
Wilmington, NC 28402

Mr. Glen A. Watford, Manager
Technical Services
GE Nuclear Energy
175 Curtner Avenue
San Jose, CA 95125

the ATWS stability performance of the new GE fuel or legacy fuel for the EPU/MELLLA+ operation needs to be provided. The new ATWS instability analyses can be provided as supplement to the MLTR or as an Appendix to the plant-specific application.

e. If a new GE fuel or another vendor's fuel is loaded at the plant, analyses supporting the EPU/MELLLA+ application will be based on core specific configuration or bounding core conditions. In addition, any principle topics that are generically dispositioned or reduced in scope will be demonstrated to be applicable or new analyses based on the transition core conditions or bounding conditions would be provided.

f. If a new GE fuel or another vendor's fuel is loaded at the plant, the plant-specific application will reference the fuel-specific stability detect and suppress method supporting the EPU/MELLLA+ operation. The plant-specific application will demonstrate that the analyses and evaluation supporting the stability detect and suppress method are applicable to the fuel loaded in the core.

g. For EPU/MELLLA+ operation, instability is possible in the event of transient or plant maneuvers that place the reactor at high power/low flow condition. Therefore, plants operating at the EPU/MELLLA+ condition must have an NRC reviewed and approved instability detect and suppress method operable. In the event the stability protection method is inoperable, the applicant must employ NRC reviewed and approved backup stability method or must operate the reactor at a condition in which instability is not possible in the event of transient. The licensee will provide technical specification changes that specify the instability method operability requirements for EPU/MELLLA+ operation.

24. Reactor Safety Performance Evaluations. From the AOO audit, the staff determined that (1) GENE did not provide statistically adequate sensitivity studies that demonstrate the impact of EPU/MELLLA+ operation, **[ ]** (3) the generic APRM rod block TS (ARTS) response may not be applicable for all BWR applications, and (4) the EPU/MELLLA+ impact was not insignificant. The staff also finds that it is not acceptable to makes safety findings on two major changes (20 percent uprate based on the CPPU approach and MELLLA+) without reviewing the plant-specific results. **[ ]** EPU/MELLLA+ applications must provide plant-specific fuel thermal margin and AOO evaluations and results. The following discussion summarizes the staff's bases for concluding that the plant-specific EPU/MELLLA+ application must provide a plant-specific thermal limits assessment and plant-specific transient analyses results.

a. EPU/MELLLA+ Core Design. Operation in the MELLLA+ domain will require significant changes to the BWR core design. Expected changes include (1) adjustments to the pin-wise enrichment distribution to flatten the local power distribution, reduce the r-factor, and increase CPR margin; (2) increased gadolinium (Gd) loading in the bottom of the fuel bundle to reduce the axial