

February 7, 2005

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

Dear Mr. Stramback:

Mr. Richard Lobel of the NRC staff has, on several occasions, discussed with you and other GE Nuclear Energy (GENE) staff, the feasibility of a topical report describing a new approach to the calculation of available net positive suction head (NPSH) for emergency core cooling system pumps during postulated boiling water reactor (BWR) accidents. These calculations are part of BWR design basis calculations. We consider the new approach to have potential merit since it attempts to explicitly define the uncertainties and the degree of conservatism in the process of determining NPSH. This, in turn, would make the basis for these calculations clearer to all stakeholders.

The last several discussions have dealt with the scope of the NRC review of a GENE topical report on this subject. We envision the scope of this review to be limited to your proposed new approach to calculating available NPSH. It is our understanding that you would use the GENE SHEX computer code for the containment response calculations which would be part of the method. GENE has used SHEX to support many licensing actions approved by the NRC. On two occasions, as part of extended power uprate reviews, the staff has performed independent calculations using the NRC containment computer code CONTAIN 2.0. The agreement between SHEX and CONTAIN 2.0 was good in both cases. Therefore, we do not consider it necessary to review SHEX as part of any review of new NPSH methods proposed by GENE.

If you have any questions on the technical issues, please contact Mr. Richard Lobel at 301-415-2865. Questions on the topical report process should be addressed to Mr. Mel Fields at 301-415-3062.

Sincerely,

/RA/
Herbert N. Berkow, Director
Project Directorate IV
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Project No. 710

cc: See next page

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GE Nuclear Energy

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