



**Global Nuclear Fuel**

*A Joint Venture of GE, Toshiba, & Hitachi*

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Document Control Desk  
US Nuclear Regulatory Commission  
Washington, DC 20555-0001

Attention: J. L. Wermiel

Subject: **Summary of Changes and Errors in ECCS Evaluation Models**

Reference: Letter, G. A. Watford to the Document Control Desk (J. L. Wermiel), *Reporting of Changes and Errors in ECCS Evaluation Models*, dated June 30, 1999 (MFN-004-99).

The purpose of this letter is to summarize the impact of changes and errors in the methodology used by GE/GNF-A to demonstrate compliance with the Emergency Core Cooling System (ECCS) requirements of 10 CFR 50.46. This report covers the period from the last report (Reference) to the present. It is noted that Peak Cladding Temperature (PCT) variations resulting from system or fuel changes are not addressed in this letter. These should be treated, as appropriate, on a plant specific basis in accordance with other sections of 10CFR50.

A summary of the changes and errors is provided in the attached table. The table describes the approved methodology affected, the range of applicability of the change/error, a brief description of the change/error and the estimated impact.

All utilities using these evaluation models have been notified of these changes/errors to assist them in reporting, in accordance with 10CFR50.46 (a) (3) (ii).

If you have any questions, please call me at (910) 675-5446.

Sincerely,

Glen A. Watford, Manager  
Nuclear Fuel Engineering

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*Summary of Changes and Errors in ECCS Evaluation Models  
July 1999 through June 2000*

Error/ Change	Approved Methodology	Applicability	Description	Impact
Error	NEDC-32950P, Compilation of Improvements to GENE's SAFER ECCS-LOCA Evaluation Model," January 2000.	BWR/6 plants	The reactor pressure vessel thermal response is simulated in the SAFER code as several heat slabs for which the one-dimensional radial conduction equation is solved (Reference). A logic error was discovered in an automated SAFER/GESTR basedeck generation procedure that calculated the heat transfer areas for the vessel heat slabs. As a result of this logic error, the heat transfer areas for the vessel heat slabs in the downcomer region were incorrectly specified for BWR/6 plants. This error affects the steam generation in the vessel during the reflooding stage of the event once the lower plenum fills and water spilling over from the jet pumps comes into contact with the vessel wall in the downcomer region.	0 to -45°F