



NUCLEAR POWER

SYSTEMS DIVISION

MFN-052-82

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April 20, 1982



U.S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Washington, DC 20555

Attention: Mr. D. G. Eisenhower, Director
Division of Licensing

Gentlemen:

SUBJECT: GESSAR II OPERATING THERMAL LIMITS

Reference: Letter to D. G. Eisenhower (NRC) from G. G. Sherwood (GE),
"In the Matter of 238 Nuclear Island General Electric
Standard Safety Analysis Report (GESSAR II); Docket
No. STN 50-447", dated February 25, 1982

The purpose of this letter is to clarify the significance of the thermal operating limits specified in Appendix 6A of GESSAR II. Appendix 6A, which was submitted to the NRC under the referenced cover letter, contains the technical basis for a BWR loss-of-coolant accident (LOCA) decay heat correlation based on the ANSI/ANS 5.1-1979 revised decay heat standard.

The details of Appendix 6A were discussed last year with both the ACRS Subcommittee on Emergency Core Cooling and the NRC regulation staff previous to the document submittal in December 1981. With their concurrence, GE committed to provide upper bound "speed limits" above which the improved decay heat correlation would not be applied to BWR's for ECCS analysis. The bounding values of 14.4 kW/ft, 57 kW/l, and 28 kW/kgU, were chosen to envelope all current BWR product lines, both foreign and domestic.

The BWR/6 238 Nuclear Island described in GESSAR II is limited to 13.4 kW/ft and 54.1 kW/l at rated power. These limits are specified in Table 4.4-1 in Chapter 4 of the document and they must be satisfied for any ECCS analysis performed using the improved decay heat correlation for a GESSAR II system. The core average specific power for the GESSAR II system is within the envelope value outlined in Appendix 6A.

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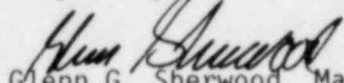
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If you have any further questions regarding this subject, please contact either J. N. Fox on (408) 925-5039 or D. K. Dennison on (408) 925-3302 of my staff.

Very truly yours,



Glenn G. Sherwood, Manager
Nuclear Safety and Licensing Operation

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