



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

April 8, 1994

Docket No. 52-004

Mr. Patrick W. Marriott, Manager
Advanced Plant Technologies
GE Nuclear Energy
175 Curtner Avenue
San Jose, California 95125

Dear Mr. Marriott:

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION (RAI) REGARDING THE SIMPLIFIED
BOILING WATER REACTOR (SBWR) DESIGN (Q900.63-Q900.64)

The staff has determined that it needs additional information to support its review activities related to the SBWR design certification. Some additional information on SBWR fuel bundle testing in the ATLAS facility is needed (Q900.63-Q900.64)* to support the staff's review of Chapters 4, 6, and 15 of the SBWR standard safety analysis report. Please respond to the enclosed questions within 90 days of the date of this letter.

You have previously requested that portions of the information submitted in the August 1992, application for design certification of the SBWR plant, as supplemented in February 1993, be exempt from mandatory public disclosure. The staff has not completed its review of your request in accordance with the requirements of 10 CFR 2.790; therefore, that portion of the submitted information is being withheld from public disclosure pending the staff's final determination. The staff concludes that this RAI does not contain those portions of the information for which you are seeking exemption. However, the staff will withhold this letter from public disclosure for 30 calendar days from the date of this letter to allow GE Nuclear Energy the opportunity to verify the staff's conclusions. If, after that time, you do not request that all or portions of the information in the enclosure be withheld from public disclosure in accordance with 10 CFR 2.790, this letter will be placed in the NRC's Public Document Room.

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*The numbers in parentheses designate the tracking numbers assigned to the questions.

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Mr. Patrick W. Marriott

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This request for additional information affects nine or fewer respondents, and therefore, is not subject to review by the Office of Management and Budget under P.L. 96-511.

If you have any questions regarding this matter, please contact me at (301) 504-1178 or Mr. Son Ninh at (301) 925-1125.

Sincerely,

(Original signed by)

Melinda Malloy, Project Manager
Standardization Project Directorate
Associate Directorate for Advanced Reactors
and License Renewal
Office of Nuclear Reactor Regulation

Enclosure:
RAI on the SBWR Design

cc w/ enclosure:
See next page

Distribution (w/enclosure):

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DATE	04/4/94	04/4/94	04/5/94	04/7/94	04/ /94	04/8/94

DOCUMENT NAME: SBWR9421.MM

Mr. Patrick W. Marriott
GE Nuclear Energy

Docket No. 52-004

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REQUEST FOR ADDITIONAL INFORMATION (RAI) ON THE
SIMPLIFIED BOILING WATER REACTOR (SBWR) DESIGN

Fuel Performance Testing

900.63 In a letter dated October 8, 1993 (MFN No. 164-93), GE Nuclear Energy (GE) responded to the staff's request for additional information (RAI) Q900.1 regarding fuel performance testing. Contrary to the position stated in Q900.1 that the staff considers the ATLAS tests to be part of the testing program for SBWR design certification, GE's response asserts that this testing is not part of the certification testing program.

The staff reaffirms that it considers the ATLAS tests to be part of the testing program required by 10 CFR 50.47(b)(2) for SBWR design certification and requires GE to revise its documentation on the SBWR testing program to include the ATLAS tests.

900.64 GE's response to RAI Q900.1 (MFN No. 164-93, October 8, 1993) does not include the details necessary for the staff to perform an evaluation. Please provide, in much greater detail, the following information:

- a. Detailed information to support GE's conclusion that the code and the model are applicable over the range of geometric (e.g., fuel length, pitch, diameter, spacer configuration) and the thermal-hydraulic (e.g., mass flow rate, power profile) parameter, representative of the SBWR fuel design.
- b. Provide details of the planned testing, including the test specification, test matrix, and test schedule.
- c. Provide details of the analyses planned in conjunction with the fuel performance test program, including documentation for the thermal-hydraulic correlations to be validated for use in SBWR safety analyses.
- d. Provide verification that the ATLAS facility is able to match approximately the appropriate thermal-hydraulic conditions for SBWR fuel. In particular, how will ATLAS simulate the natural circulation flow behavior that will exist in the SBWR?

Enclosure