



James E. Quinn  
Projects Manager, LMR and SBWR Programs

Advanced Reactor Programs  
General Electric Company  
175 Curtner Ave., M/C 165  
San Jose, CA 95125-1088  
408 925-1005, Dial Comm: 8\*425-1005  
Fx: 408 925-3991, Email: QuinnJ@sjcpo2.ne.ge.com

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MFN 216-95  
Docket STN 52-004

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U.S. Nuclear Regulatory Commission  
Washington DC 20555

Attention: T. E. Quay, Director  
Standardization Project Directorate

Subject: **SBWR - Vacuum Breaker Single Failure Exemption**

- References
1. Letter, J. H. Wilson (NRC) to J.E. Quinn (GE), Staff Review of GE Request for Exception to Single-Failure Criterion for Drywell-to-Wetwell Vacuum Breakers, dated August 22, 1995.
  2. Letter MFN 021-95, J.E. Quinn (GE) to R.W. Borchardt (NRC), Request for Exemption of the SBWR Drywell to Wetwell Vacuum Breaker from the Single Failure Criteria, dated February 16, 1995.
  3. Letter MFN 113-94, T.R. McIntyre (GE) to R.W. Borchardt (NRC) Responses to the Referenced Letters, dated September 26, 1994.
  4. Letter MFN 065-94, J.E. Leatherman (GE) to R.W. Borchardt (NRC), NRC Requests for Additional Information (RAIs) on the Simplified Boiling Water Reactor (SBWR) Design, dated May 1994.

This letter is written in response to the Reference 1 letter, which was in response to the Reference 2 letter.

We will respond to Reference 1 in two parts: the vacuum breaker testing program and the request for single failure exemption. With regard to the former, there has been a significant investment by NRC and the GE team in the testing program. We request that you provide a letter stating that the program results are valid and acceptable for use in licensing and meet the defined testing program objectives. This would in no way relate to the exemption question.

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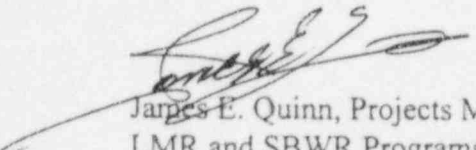
We need NRC's closure regarding the testing performed on the SBWR vacuum breaker since the test facility will soon be dismantled due to a relocation of the testing agency, and GE needs to disposition the test article. As indicated by References 3 and 4, and several NRC visits to the test facility in Europe, both the staff and GE have made a substantial investment in developing and reviewing the SBWR vacuum breaker design, test performance, and test results. We need closure on this part of the technology program while the people who participated in the program are available to address questions. Deferring action will likely make it difficult for the NRC to recreate the familiarity that presently exists from the close association with the test program, in addition to the inefficiency and expense required to restart the effort later. Your cooperation in completing the review of the vacuum breaker test data is needed so that GE has confidence that the vacuum breaker testing conducted was adequate and sufficient.

Concerning the Vacuum Breaker Single Failure Exemption Request, GE understands the NRC position that the SBWR PRA needs updating and that the TRACG review needs to be more mature before coming to a decision. The PRA update and completion of the design will come after completion of the Technology Program. GE agrees to delay further action on the exemption request decision until resumption of the Design Phase. However, GE firmly believes that the SBWR can meet all of the requirements noted in the attachment to Reference 1:

- Parametric studies of the SBWR behavior with a qualified TRACG code will adequately demonstrate that the duty required of the SBWR vacuum breaker, is bounded by testing already performed on the valve and that the vacuum breaker reliability demonstrated supports the SBWR PRA conclusions.
- The SBWR PRA will demonstrate that the SBWR is acceptable using the demonstrated SBWR vacuum breaker reliability numbers plus appropriate data from other sources.

Your prompt action regarding the Test Program review would be appreciated.

Sincerely,



James E. Quinn, Projects Manager  
LMR and SBWR Programs

cc: (1 paper copy plus E-Mail)  
P. A. Boehnert(NRC/ACRS)  
I. Catton (ACRS)  
S.Q. Ninh (NRC)  
J.H. Wilson (NRC)

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bcc: (E-Mail except as noted below)

J.A. Beard  
P.F. Billig  
R.H. Buchholz  
T. Cook (DOE) (1 paper copy plus E-Mail)  
J.D. Duncan