AUG 0 7 1989

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Dr. Daniel R. Wilkins, Program General Manager Advanced Boiling Water Reactor Program GE Nuclear Energy (MC 782) General Electric Company 175 Curtner Avenue San Jose, California 95125

Dear Dr. Wilkins:

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07/24/89

4/89

SUBJECT: ADVANCED BOILING WATER REACTOR CONTAINMENT PERFORMANCE CRITERIA

This letter is to provide clarification and further guidance concerning one item of the Advanced Boiling Water Reactor (ABWR) Licensing Review Bases (LRB) document dated August 7, 1987. The item of note is defined in the LRB by Item 7.5.3(2) which states the following goal:

"The containment design is to assure that the containment conditional failure probability [(CCFP)] is less than one in ten when weighted over credible core damage sequences."

During a meeting in your office on March 13-14, 1989, the staff agreed to provide additional guidance related to this issue. The staff's interpretation of the containment performance goal in the LRB is that, given the onset of severe core damage conditions, the probability that the subsequent course of the accident will lead to uncontrollable leakage substantially greater than the design basis, due to loss of containment integrity, should be less than one in ten.

Based on our review to date, the staff believes that it is possible for ABWR to meet a CCFP goal of 0.1 as well as the other performance goals specified in the LRB. We recognize, however, that strict adherence to the use of a probabilistic criterion for containment performance can pose difficulties in making design trade-offs between accident prevention and mitigation. If you wish NRC to consider an alternative containment performance goal that is deterministic in nature but that offers a level of protection comparable to that of the probabilistic goal defined above, please advise us whether you desire to change the LRB.

Please feel free to call if you have any questions on this matter.

Sincerely,

Original signed by Thomas E. Murley

DOCUMENT NAME: CONTAINMENT FAILURE

Thomas E. Murley, Director Office of Nuclear Reactor Regulation

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UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON D. C. 20555

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Thomas E. Murley, Director Office of Nuclear Reactor Regulation