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November 22, 1999

Mr. N. J. Liparulo, Manager  
Equipment Design and  
Regulatory Engineering  
Nuclear Services Division  
Westinghouse Electric Corporation  
Box 355  
Pittsburgh, Pennsylvania 15230-0355

SUBJECT: DOCUMENTATION OF TOPICAL REPORT WCAP-12945(P), "WESTINGHOUSE CODE QUALIFICATION DOCUMENT FOR BEST ESTIMATE LOSS OF COOLANT ANALYSIS," (TAC NO. MA7032)

- References:
1. WCAP-14449(P)(A), Revision 1, "Application of Best Estimate Large Break LOCA Methodology to Westinghouse PWRs with Upper Plenum Injection," October 1999.
  2. WCAP-12945(P)(A), "Westinghouse Code Qualification Document for Best Estimate Loss of Coolant Analysis," March 1998.

Dear Mr. Liparulo:

Enclosed with a letter dated October 29, 1999, Mr. H. A. Sepp of your staff, provided the NRC with proprietary and non-proprietary (under separate cover) versions of documentation (Reference 1) describing the approved Westinghouse best estimate large break (LB) loss-of-coolant accident (LOCA) evaluation model (EM) adaptation for Westinghouse upper plenum injection (UPI) plants. This methodology is a specialized adaptation of the approved Westinghouse best estimate LBLOCA evaluation model (Reference 2). As such, both Westinghouse and the NRC staff have considered documentation of the UPI version (Reference 1) as an addendum to the general version (Reference 2) approved for 3- and 4-loop Westinghouse plants.

Section 4, "Staff Conclusions," documentation plan condition (b) of the staff's safety evaluation report (SER) approving the methodology requires as follows: "WCAP-14449 will be structured consistent with the 2-loop UPI EM adaptation of the methodology. The WCAP will provide up front a road map describing the overall 2-loop UPI EM approach and comparing it to the acceptable CSAU approach. It should also provide in an orderly and understandable fashion descriptions of the approved individual correlations and how they were determined to be appropriate, descriptions of the as-approved validations performed on the code, and description of the approved uncertainty evaluation process. It should be indexed such that information is readily located, and contain in appendices historical review information, such as questions and accepted responses, and original report pages that were replaced. This approved version of WCAP-14449 should be provided for staff review in both proprietary and non-proprietary versions...."

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The staff considered the information presented in the documentation, and also conducted confirmatory spot checks of the documentation in performing the review to assure that the objectives of SER condition (b) were met. In the spot checks, the only deviation from condition (b) that the staff noted was that "original report pages that were replaced" were not included in appendices as the condition literally requires, but instead were referenced as included in previously docketed information in the appendices. The staff intended the condition (b) requirement to submit replaced pages to address potential longer term needs. The staff concludes that this requirement may be appropriately satisfied by reference to already docketed information. The staff finds that the Westinghouse documentation plan meets the intent of the near-term requirement of condition (b), in that the material can be accessed as needed. Therefore, based on its review, the staff concludes that condition (b) is satisfied. We request that Westinghouse append this letter to the staff's SER in the WCAP.

To avoid confusion, in referencing the methodology in licensing documentation, we recommend that licensees identify the methodology by the date of the (P)(A) version, October 1999.

Sincerely,

/s/

Stuart A. Richards, Director  
 Project Directorate IV and Decommissioning  
 Division of Licensing Project Management  
 Office of Nuclear Reactor Regulation

Project No. 694

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Stuart A. Richards, Director  
Project Directorate IV and Decommissioning  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

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Westinghouse Owners Group

Project No. 694

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