

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

OCT 28 1980

Mr. James H. Taylor Licensing Manager Babcock & Wilcox Company Power Generation Group P. O. Box 1260 Lynchburg, VA 24505

Dear Mr. Taylor:

In a letter  $(\underline{1})$  dated September 5, 1980, you wrote to us on the subject of B&N's TAFY and TACO codes as used for fuel and ECCS analyses. That letter presented a plan for resolution of our concerns over the B&W fuel code dichotomy and consisted of two major elements.

- 1. A complete transition will be made from TAFY to TACO-2 for fuel and ECCS analyses upon completion of the TACO-2 review by NRC.
- Until a transition to TACO-2 can be effected, an early-in-life reduction in the LOCA kW/ft limits will be used to account for time-dependent fuel densification. The current and revised LOCA limits were given in your letter.

In concept, we agree with the elements of the action plan as presented. There are, however, some additional comments which should be made on the application of your proposal.

- 1. A derivation of the revised LOCA limits and the time during which they are effective was not provided in your letter of September 5. Based upon earlier documentation (2, 3) on this subject, we assume that the revised limits reflect a direct TAFY/TACO-1 comparison without trade-offs. Should this be the case, we would find this comparison acceptable because the TACO-1 code (unlike TACO-2) has been approved for LOCA analysis.
- 2. We understand that the current TAFY analysis, coupled with the revised LOCA kW/ft limits, provides conservative LOCA predictions relative to the asapproved TACO-1 code for exposures from 0 to 42,000 MWd/mtU (4). Furthermore, the TAFY analysis provides conservative fuel rod internal pressure predictions relative to the as-approved TACO-1 code over the same exposure range. Therefore, we will require, for future B&W reload applications, that each licensee:
  - a. State that the understanding in 1 and 2 above is correct and applicable to the licensee's plant for the proposed cycle of operation;
  - b. State that the revised LOCA kW/ft limits will be used for the proposed cycle of operation and proyide revised Technical Specification limits to reflect this use.

3. Barring major technical difficulties with the TACO-2 code, we will complete the review and approval of this code by March 1981. In order to meet this date, we have found that it will be necessary to subcontract part of the review process to Battelle Pacific Northwest Laboratories. This will entail transmittal of B&W proprietary information (5, 6) to the contractor, who agrees to withhold this information from public disclosure under the provisions of 10 CFR 2.790. We have discussed this item with Mr. John Willse of your staff and believe that you will find the provision acceptable.

Should you require further information on this subject, please call John Voglewede of my staff on 301-492-9444.

L. S. Rubenstein, Assistant Director for Coré and Containment Systems Division of Systems Integration

- 1. J. H. Taylor (B&W) letter to L. S. Rubenstein (NRC) dated September 5, 1980.
- 2. J. H. Taylor (B&W) letter to R. P. Denise (NRC) dated April 2, 1980.
- 3. J. H. Taylor (B&W) letter to R. P. Denise (NRC) dated April 14, 1980.
- 4. J. H. Taylor (B&W) letter to P. S. Check (NRC) dated July 18, 1978.
- 5. J. H. Taylor (B&W) letter to S. A. Varga (NRC) dated January 31, 1979.
- 6. J. H. Taylor (B&W) letter to R. L. Tedesco (NRC) dated January 17, 1979.