

June 5, 2003

Mr. W. E. Cummins, Director  
AP600 & AP1000 Projects  
Westinghouse Electric Company  
P.O. Box 355  
Pittsburgh, PA 15230-0355

Dear Mr. Cummins:

As you are aware, the U.S. Nuclear Regulatory Commission (NRC) staff is preparing the draft safety evaluation report (DSER) for the AP1000 design certification application submitted by Westinghouse Electric Company (Westinghouse) on March 28, 2002. The staff expects to issue the DSER in June, 2003. As of this date, the staff has identified three potential open items for DSER Chapter 16, "Technical Specifications," which are enclosed for your information. Please note that the staff's review of the application will continue during preparation of the DSER, which may result in changes to the potential open items identified in the enclosure, or the addition of other open items.

The three potential open items in the enclosure do not have requests for additional information associated with them. If the staff cannot resolve the potential open items before the issuance of the DSER, these items will be issued as DSER open items and be tracked with a corresponding open item number.

Previously, Westinghouse committed to provide responses to all identified open items within 9 weeks after the issuance of the DSER. The staff will be prepared to review your responses to the open items and have conference calls and meetings with your staff, as appropriate, after the DSER is issued. If Westinghouse chooses to address some or all of these open items before the issuance of the DSER, the staff may not have sufficient time to evaluate every response to the potential open items that Westinghouse submits to the NRC and make changes to the DSER before the scheduled DSER issuance in June, 2003.

Please contact one of the following members of the AP1000 project management team if you have any questions or comments concerning this matter: Mr. John Segala (Lead Project Manager) at (301) 415-1858 or [jps1@nrc.gov](mailto:jps1@nrc.gov), Mr. Joseph Colaccino at (301) 415-2752 or [jxc1@nrc.gov](mailto:jxc1@nrc.gov), or Ms. Joelle Starefos at (301) 415-8488 or [jls1@nrc.gov](mailto:jls1@nrc.gov).

Sincerely,

*/RA/*

James E. Lyons, Director  
New Reactor Licensing Project Office  
Office of Nuclear Reactor Regulation

Docket No. 52-006

Enclosure: As stated

cc: See next page

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**Westinghouse AP1000  
Draft Safety Evaluation Report  
Potential Open Items  
Chapter 16  
Technical Specifications**

Open Item Number: 16.2-1

Original RAI(s): None

Summary of Issue: The AP1000 Technical Specification (TS) 3.4.10 on reactor coolant system specific activity omits standard technical specification (STS) surveillance requirement (SR) 3.4.16.3. This surveillance requires, on a 184-day frequency, determining E, the average disintegration energy, from a sample taken in Mode 1 after a minimum of 2 effective full power days and 20 days of Mode 1 operation have elapsed since the reactor was last subcritical for  $\geq 48$  hours. Although E is not used in the AP1000 TS, Westinghouse should explain why an equivalent surveillance using dose equivalent Iodine -131 is not proposed. This is identified as draft safety evaluation report (DSER) Open Item 16.2-1.

Open Item Number: 16.2-2

Original RAI(s): None

Summary of Issue: The TS action requirements for the core makeup tank, passive residual heat removal, and incontainment refueling water storage tank passive core cooling (PXS) subsystems allow 72 hours for loss of a redundancy, which is consistent with STS 3.5.2; however, the Bases for the PXS limiting condition for operations (LCOs) seem to indicate that only one subsystem at a time is affected. The AP1000 TS do not consider what the appropriate actions are in the event the plant does not meet two or more PXS specifications (e.g., 3.5.1, 3.5.2, 3.5.4 and 3.5.6) concurrently. The Bases for the PXS LCOs also seem to indicate that design basis accident assumptions regarding emergency core cooling system functions may not be met in such cases. Pending clarification of the Bases, staff review of the PXS TS action requirements is considered incomplete. This is DSER Open Item 16.2-2.

Enclosure

Open Item Number: 16.2-3

Original RAI(s): None

Summary of Issue: The time interval between the time the reactor was last critical and the initial movement of an irradiated fuel assembly from the reactor core is a key assumption in AP1000 design basis fuel handling accident analysis dose consequence estimates, and spent fuel pool cooling requirements. As such, this decay time satisfies Criterion 3 of 10 CFR 50.36(c)(2)(ii), and is required to be included in an LCO in AP1000 TS, preferably in TS Section 3.9. Westinghouse did not propose a decay time specification in the AP1000 TS. This is DSER Open Item 16.2-3.

AP 1000

cc:

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