

May 29, 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 one potential open item for DSER Chapter 8, "Electric Power Systems" which is 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 item identified in the enclosure, or the addition of other open items.

The potential open item in the enclosure is a new issue. If the staff cannot resolve the potential open item before the issuance of the DSER, the item will be issued as a DSER open item 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 8  
Electric Power Systems**

Open Item Number: 8.2.3.1-1

Original RAI(s): None

Summary of Issue: The staff concludes that the electrical features described in the AP1000 DCD can provide power to the RCPs following a turbine trip for a minimum of 3 seconds, either from the main generator or from the grid. Because of certain electrical failures (such as a loss of isophase bus) power from the generator or grid may not be available to the RCPs for a minimum of 3 seconds following a turbine trip. The COL applicant must perform a failure modes and effects analysis (FMEA) to ensure that the design provides power to the RCPs for a minimum of 3 seconds following a turbine trip. If the power to the RCPs cannot be maintained for 3 seconds, then the DCD Tier 2 Chapter 15 analysis should be re-analyzed and provided to the staff for review. This COL information needs to be included in the DCD. Therefore, this is Open Item 8.2.3.1-1 and COL Action Item 8.2.3.1-3.

AP 1000

cc:

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