



Westinghouse Electric Company  
Nuclear Power Plants  
P.O. Box 355  
Pittsburgh, Pennsylvania 15230-0355  
USA

U.S. Nuclear Regulatory Commission  
ATTENTION: Document Control Desk  
Washington, D.C. 20555

Direct tel: 412-374-6206  
Direct fax: 412-374-5005  
e-mail: sisk1rb@westinghouse.com

Your ref: Docket No. 52-006  
Our ref: DCP/NRC2468

May 13, 2009

Subject: AP1000 Response to Request for Additional Information (SRP 8)

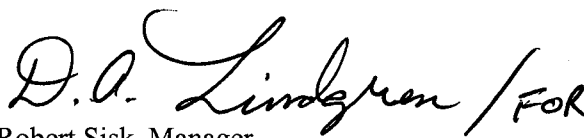
Westinghouse is submitting a response to the NRC request for additional information (RAI) on SRP Section 8. This RAI response is submitted in support of the AP1000 Design Certification Amendment Application (Docket No. 52-006). The information included in this response is generic and is expected to apply to all COL applications referencing the AP1000 Design Certification and the AP1000 Design Certification Amendment Application.

Enclosure 1 provides the response for the following RAI(s):

RAI-SRP8.3.2-EEB-07

Questions or requests for additional information related to the content and preparation of this response should be directed to Westinghouse. Please send copies of such questions or requests to the prospective applicants for combined licenses referencing the AP1000 Design Certification. A representative for each applicant is included on the cc: list of this letter.

Very truly yours,

  
Robert Sisk, Manager  
Licensing and Customer Interface  
Regulatory Affairs and Standardization

/Enclosure

1. Response to Request for Additional Information on SRP Section 8

D063  
NRO

cc: D. Jaffe - U.S. NRC 1E  
E. McKenna - U.S. NRC 1E  
B. Gleaves - U.S. NRC 1E  
T. Spink - TVA 1E  
P. Hastings - Duke Power 1E  
R. Kitchen - Progress Energy 1E  
A. Monroe - SCANA 1E  
P. Jacobs - Florida Power & Light 1E  
C. Pierce - Southern Company 1E  
E. Schmiech - Westinghouse 1E  
G. Zinke - NuStart/Entergy 1E  
R. Grumbir - NuStart 1E  
B. Seelman - Westinghouse 1E

ENCLOSURE 1

Response to Request for Additional Information on SRP Section 8

# AP1000 TECHNICAL REPORT REVIEW

## Response to Request For Additional Information (RAI)

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RAI Response Number: RAI-SRP8.3.2-EEB-07  
Revision: 0

**Question:**

DCD Section 8.3.2.1 indicates that the operating voltage range of the Class 1E batteries is 210 to 280 Vdc. Explain how battery room temperature will be maintained during loss of ac power? Battery performance is dependent on battery temperature. Provide assurance that the battery will perform its intended function without ac power to the battery room ventilation and air conditioning systems.

**Westinghouse Response:**

Room temperature will not be maintained during a loss of all ac event. Temperature will be dictated based on thermal mass and heat transfer from the building to the environment. The battery room normal operating temperatures are controlled by the VBS ventilation system within a normal temperature range of 70 F plus or minus 3 F. There is a technical specification limit of 60 F for the minimum battery room temperature when the rooms are cooled by VBS. On loss of AC power, the VBS is no longer available and the temperature in the battery rooms is determined by heat transfer to the concrete structure. All of the batteries are located below plant grade and thus will not be significantly influenced by weather conditions.

Reference(s):  
None

**Design Control Document (DCD) Revision:**  
None

**PRA Revision:**  
None

**Technical Report (TR) Revision:**  
None