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Your ref: Docket No. 52-006  
Our ref: DCP/NRC2315

December 9, 2008

Subject: AP1000 Response to Request for Additional Information (SRP7)

Westinghouse is submitting a response to the NRC request for additional information (RAI) on SRP Section 7. This RAI response is submitted in support of the AP1000 Design Certification Amendment Application (Docket No. 52-006). The information included in the 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:

RAI-SRP7.2-ICE-08

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,

*D. L. Lindgren / FOR*  
Robert Sisk, Manager  
Licensing and Customer Interface  
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/Enclosure

1. Response to Request for Additional Information on SRP Section 7

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ENCLOSURE 1

Response to Request for Additional Information on SRP Section 7

# AP1000 TECHNICAL REPORT REVIEW

## Response to Request For Additional Information (RAI)

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RAI Response Number: RAI-SRP7.2-ICE-08  
Revision: 0

### **Question:**

Demonstrate how WCAP-16361-P "Westinghouse Setpoint Methodology for Protection Systems - AP1000" satisfies the requirement of COL Action Item 7.2.7-1 to provide the NRC with a calculation of setpoints for protective functions.

WCAP-16361-P concludes that setpoint calculations cannot be given until the final design of the power plant has been completed. However, in Westinghouse AP1000 DCD, Revision 16, Tier 2, Chapter 7, Subsection 7.1.6.1, states that all requested information on the subject of setpoint methodology and final setpoint calculations have been completely addressed and require no further action by the Combined License Applicant.

### **Westinghouse Response:**

WCAP-16361-P, Westinghouse Setpoint Methodology for Protection Systems – AP1000, provides preliminary instrument uncertainty calculations for the Reactor Trip System (RTS) and Engineered Safeguards Features Actuation System (ESFAS) functions for the AP1000 plant. The Combined License Applicant is to use these preliminary calculations for submission with Combined Operating License (COL) applications. The WCAP includes typical industry uncertainty values and assumptions that reflect the AP1000 Instrumentation and Control (I&C) design, to the extent that is required to support a COL application.

Prior to initial fuel load, the applicant is to reconcile this setpoint study against the final design for each plant, as required by the AP1000 Inspection, Test, and Analysis Acceptance Criteria (ITAAC) (AP1000 DCD Tier 1 Table 2.5.2-8, item 10). The applicant has the action to provide a calculation of setpoints for protective functions. These calculations are to be consistent with WCAP-16361. The COL Applicant must also provide a plant-specific setpoint study when the specific instrumentation equipment is obtained. Westinghouse will produce a document on behalf of the COL applicant to meet this need.

### **Reference(s):**

1. WCAP-16361-P, "Westinghouse Setpoint Methodology for Protection Systems - AP1000"
2. Westinghouse AP1000 DCD (APP-GW-GL-700), Revision 17

# AP1000 TECHNICAL REPORT REVIEW

## Response to Request For Additional Information (RAI)

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**Design Control Document (DCD) Revision:**

None

**PRA Revision:**

None

**Technical Report (TR) Revision:**

None