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Your ref: Docket No. 52-006
Our ref: DCP_NRC_002685

November 4, 2009

Subject: AP1000 Response to Request for Additional Information (SRP 7)

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 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-SRP7.1-ICE-04 R2

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,

A handwritten signature in black ink, appearing to read 'R. Sisk' followed by a flourish.

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

/Enclosure

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

cc: D. Jaffe - U.S. NRC 1E
E. McKenna - U.S. NRC 1E
S. Mitra - 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 7

AP1000 TECHNICAL REPORT REVIEW

Response to Request For Additional Information (RAI)

RAI Response Number: RAI-SRP7.1-ICE-04

Revision: 2

Question (Revision 0):

Demonstrate to what quality standards the Westinghouse NPP organization will hold its employees, and any subcontractor organizations, throughout the project plan and design process for any AP1000 safety-related software system.

Several documents listed as proof of completion of the Design Requirements Phase are actually documents detailing the relationship between Westinghouse RRAS and Westinghouse NPP (for example, RRAS AP1000 NuStart I&C Program Project Plan (WNA-PN-00031-GEN) and RRAS AP1000 NuStart I&C Program Project Quality Plan (WNA-PQ-00166-GEN)). While the documents reveal how the subcontractor (Westinghouse RRAS) interfaces with the parent organization (Westinghouse NPP), they do not provide information detailing how Westinghouse NPP interfaces, and holds accountable, Westinghouse RRAS, employees, and other subcontractors. The response to this question should outline the standards used by Westinghouse NPP and how it ensures subordinate organizations, or persons, comply with those standards.

Westinghouse Response (Revision 0):

Quality Management System

The Westinghouse quality policy is entitled "Quality Management System" (QMS). It has been developed to comply with regulatory, industry, and customer quality requirements imposed by customers or regulatory agencies for items and services provided by Westinghouse world-wide operations. The QMS describes the Westinghouse commitments to the quality assurance requirements of ISO 9001; ISO 9000-3; 10CFR50, Appendix B; ASME NQA-1; and IAEA 50-C-QA.

The QMS applies to all Westinghouse (including NPP, RRAS, Services, and Fuel) activities that affect the quality of items and services supplied by Westinghouse. It defines the basic requirements applicable to customer contracts and is a commitment to our customers. It serves as a directive for all functions in establishing necessary policies and procedures that comply with the requirements of ISO 9001:2000 and ISO 9000-3:1997; and in addition, as applicable for safety-related activities, 10CFR50, Appendix B; ASME NQA-1-1994 Edition; and IAEA 50-C-QA, Revision 1.

AP1000 TECHNICAL REPORT REVIEW

Response to Request For Additional Information (RAI)

AP1000 Nuclear Power Plants Program Operating Procedures (APP-GW-GAP-100)

Aligned with the Quality management System is the AP1000 Nuclear Power Plants Program Operating Procedures. This document encompasses all the procedures utilized by NPP for maintaining operational control. Included in those procedures are the following:

- QA Program
- Design Control (including change control)
- Procurement Document Control
- Document Control (including control of document preparation, review, and approval)
- Inspection
- Test Control
- Corrective Action
- Interface Agreements

These are just a sampling of the procedures in place to maintain operational control.

Westinghouse REVISED Response based on NRC comments from the January 29-30 meeting (Revision 1, 2):

In addition to the Revision 0 response, the following information is provided per discussions at the January 29-30 meeting. (Revision 2 changes per additional NRC discussion):

(Markup off Revision 1 here, clear text repeated below)

- "Repair, Replacement, and Automation Services (RRAS), part of the Westinghouse Electric Company's Nuclear Services Business Unit is the acknowledged expert and sole supplier of the AP1000 safety system. ~~They are to the Westinghouse Nuclear Power Plants (NPP) Business Unit.~~ RRAS is held accountable, as an NPP supplier, to comply with all the applicable standards associated with developing a safety system. RRAS is responsible for all aspects of system development, including ~~system~~ design, ~~system~~ licensing, ~~procurement~~ and ~~system~~ implementation, and delivery. RRAS, as an NPP supplier and as a member of Westinghouse Electric Company, is also governed by and held accountable to the Quality Management System of the Westinghouse Electric Company."
- The requirements for qualifying Commercial Off The Shelf (COTS) software are found in Section 11 of the Common Q Topical Report (WCAP-16096-P-A).
- RRAS is the sole supplier of the safety system to NPP. RRAS procures not only the CIM, but the AC160 and Flat Panel Display Systems from sub-suppliers under our Westinghouse Level II and RRAS Level III Quality Procedures.

(Clear text of above changes)

- "Repair, Replacement, and Automation Services (RRAS), part of the Westinghouse Electric Company's Nuclear Services Business Unit is the acknowledged expert and sole

AP1000 TECHNICAL REPORT REVIEW

Response to Request For Additional Information (RAI)

supplier of the AP1000 safety system to the Westinghouse Nuclear Power Plants (NPP) Business Unit. RRAS is held accountable, as an NPP supplier, to comply with all the applicable standards associated with developing a safety system. RRAS is responsible for all aspects of system development, including design, procurement and implementation, and delivery. RRAS, as an NPP supplier, is also governed by and held accountable to the Quality Management System of the Westinghouse Electric Company."

- RRAS is the sole supplier of the safety system to NPP. RRAS procures not only the CIM, but the AC160 and Flat Panel Display Systems from sub-suppliers under our Westinghouse Level II and RRAS Level III Quality Procedures.

Design Control Document (DCD) Revision:

None

PRA Revision:

None

Technical Report (TR) Revision:

None