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U.S. Nuclear Regulatory Commission
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Your ref: Docket No. 52-006
Our ref: DCP_NRC_003027

August 26, 2010

Subject: AP1000 Response to Request for Additional Information (SRP 23)

Westinghouse is submitting a response to the NRC request for additional information (RAI) on SRP Section 23. 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-DCP-CN05-SEB-01

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,

for Robert Sisk, Manager
Licensing and Customer Interface
Regulatory Affairs and Strategy

/Enclosure

1. Response to Request for Additional Information on SRP Section 23

D063
NRO

cc:	D. Jaffe	-	U.S. NRC	1E
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ENCLOSURE 1

Response to Request for Additional Information on SRP Section 23

AP1000 TECHNICAL REPORT REVIEW

Response to Request For Additional Information (RAI)

RAI Response Number: RAI-DCP-CN05-SEB-01
Revision: 0

Question:

The NRC has completed its review of the final information on proposed changes for the AP1000 Design Control Document (DCD), Revision 18, dated April 26, 2010. Based on a review of the information that was provided, additional information is needed to address the following considerations related to Change Number 5:

1. Provide an analysis, including design basis loadings used, to demonstrate that the 0.25 inch increased thickness from 1.5 inches thick to 1.75 inches thick in top plate of the crane girder is adequate to support the design basis loadings, or justify why this is not necessary.

2. Provide an analysis that demonstrates the new rail clip design on the bolted clip spacing is sufficient to meet design basis loads, including the seismic load demands, or justify why this is not necessary.

Westinghouse Response:

1. Westinghouse proprietary calculation number APP-MV50-S2C-020 contains the Polar Crane Girder Top Plate Analysis which justifies that the increase in plate thickness adequately supports the design basis loads. The NRC staff completed their audit of this calculation on August 25, 2010.
2. The proprietary vendor calculation "AP1000 Polar Crane Mechanical Calculations" (PR-08-5020, 70587483) uses subject matter expertise, appropriate industry standards, and AP1000-specific loading inputs from proprietary design document "AP1000 Polar Crane Seismic Analysis" (APP-MH01-S2C-006) to evaluate the adequacy of the mechanical components to function properly in operational and design-basis events. There is ample design detail to confirm that the new rail clip design is sufficient to meet the operational and design basis loads during an earthquake in accordance with industry codes and standards. The rail is held down by clamp plates and filler plates. The filler plates are welded to the crane girder and resist the lateral loads. On top of the filler plate, the clamp plate is bolted through to the crane girder using three (3) steel bolts. The clamp plate resists the overturning moment. The vendor calculation confirms that these and other supporting critical components meet the required acceptance criteria."

   The NRC staff completed their audit of the referenced vendor calculation (PR-08-5020, 70587483) and AP1000 design document (APP-MH01-S2C-006) on August 25, 2010.

Design Control Document (DCD) Revision:
None

AP1000 TECHNICAL REPORT REVIEW

Response to Request For Additional Information (RAI)

PRA Revision:
None

Technical Report (TR) Revision:
None