



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: 724-940-8505
e-mail: sisk1rb@westinghouse.com

Your ref: Docket No. 52-006
Our ref: DCP_NRC_003026

August 26, 2010

Subject: AP1000 Response to Request for Additional Information (TR44)

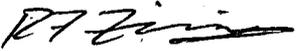
Westinghouse is submitting a response to the NRC request for additional information (RAI) on SRP Section TR44. This RAI response is submitted in support of the AP1000 Design Certification Amendment Application (Docket No. 52-006). The information included in this response is generic and is expected to 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-TR44-010 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,


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

/Enclosure

1. Response to Request for Additional Information on SRP Section TR44

DD63
NRD

cc: D. Jaffe - U.S. NRC 1E
E. McKenna - U.S. NRC 1E
P. Buckberg - U.S. NRC 1E
T. Spink - TVA 1E
P. Hastings - Duke Energy 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
D. Lindgren - Westinghouse 1E

ENCLOSURE 1

Response to Request for Additional Information on SRP Section TR44

AP1000 TECHNICAL REPORT REVIEW

Response to Request For Additional Information (RAI)

RAI Response Number: RAI-TR44-010
Revision: 2

Question:

The Westinghouse Report APP-GW-GLR-026, Revision 0, appears to be a summary type report. However, to adequately perform a technical review of the analysis and design of the new fuel rack, a more detailed report should be submitted. Therefore, provide a detailed new fuel storage rack report/calculation for review.

Staff Assessment: The staff needs to review References 2 and 3 at the next audit, either at Westinghouse Energy Center, or at Westinghouse's office in Rockville, MD. Response similar to response for spent fuel racks. See RAI-TR54-16.

Westinghouse Response:

New Response: (Revision 2)

This response is provided to update information and be consistent with the current new fuel rack design and analysis. It supersedes RAI Revision 0 and 1 responses and various technical report changes as noted below.

The Westinghouse non-proprietary report APP-GW-GLR-026, Revision 3, May 2010, "New Fuel Storage Rack Structural/Seismic Analysis," (Technical Report Number 44, TR44) is a summary report based on the details of analyses presented in calculation APP-FS01-S3C-001, Revision 3, May 2010, "AP1000 New Fuel Storage Rack Structural/Seismic Analysis".

These two documents incorporated the updated AP1000 seismic analysis and spectra results from early 2010. These documents were presented, used, and reviewed during the June 2-4, 2010 NRC technical audit to answer various NRC questions regarding new fuel assembly handling, new fuel rack design, and seismic rack loading.

AP1000 TECHNICAL REPORT REVIEW

Response to Request For Additional Information (RAI)

Response: (Revision 0 and 1) *(Superseded by Revision 2)*

~~The Westinghouse Report APP-GW-GLR-026, Revision 0, is a summary type report. This report is based on calculation APP-FS01-S3C-001, Revision 0 "New Fuel Storage Rack Structural/Seismic Analysis" and APP-FS02-Z0C-001, Revision 0, "Analysis of AP1000 Fuel Storage Racks subjected to Fuel Drop Accidents." The calculation can be reviewed in the Westinghouse Energy Center or Westinghouse Rockville Office prior to the NRC mid-April audit. Please advise Westinghouse of your plan for review of these documents.~~

Westinghouse Supplemental Response following May 21 and 22, 2008 Technical Review:

~~Revision 0 of Westinghouse Report APP-GW-GLR-026 is a summary type report based on Revision 0 of APP-FS01-S3C-001 and Revision 0 of APP-FS02-Z0C-001. These two calculations have been revised to incorporate the new seismic spectra and the change in cell height. Revision 1 of TR44 incorporates the changes made in Revision 1 of APP-FS01-S3C-001, "New Fuel Storage Rack Structural/Seismic Analysis" and Revision 1 of APP-FS02-Z0C-001, "Analysis of AP1000 Fuel Storage Racks Subjected to Fuel Drop Accidents".~~

~~In the May 21 and 22, 2008 technical review, the NRC staff reviewed Revision 1 of APP-FS02-Z0C-001, "Analysis of AP1000 Fuel Storage Racks Subjected to Fuel Drop Accidents" and the equivalent structural/seismic analysis for the spent fuel racks, APP-FS02-S3C-002, "Spent Fuel Storage Racks Structural/Seismic Analysis" and found them to be technically acceptable.~~

~~Westinghouse applied the same approach for the new fuel rack design. In addition, the NRC staff has already reviewed and accepted Revision 1 of APP-FS02-Z0C-001, which also applies to the new fuel rack. Therefore, Westinghouse considers this item to be technically acceptable for the new fuel rack as well.~~

References:

- ~~1. APP-GW-GLR-026, Revision 0, "New Fuel Storage Rack Structural/Seismic Analysis," (Technical Report Number 44)~~
- ~~2. APP-FS01-S3C-001, Revision 1, "New Fuel Storage Rack Structural/Seismic Analysis"~~
- ~~3. APP-FS02-Z0C-001, Revision 1, "Analysis of AP1000 Fuel Storage Racks subjected to Fuel Drop Accidents"~~
- ~~4. APP-FS02-S3C-002, Revision 1, "Spent Fuel Storage Racks Structural/Seismic Analysis"~~

AP1000 TECHNICAL REPORT REVIEW

Response to Request For Additional Information (RAI)

Design Control Document (DCD) Revision:

None

PRA Revision:

None

Technical Report (TR) Revision:

None