

May 20, 2010

Mr. Robert Sisk, Manager
Licensing and Customer Interface
Regulatory Affairs and Strategy
Westinghouse Electric Company
P.O. Box 355
Pittsburgh, PA 15230-0355

SUBJECT: ADVANCED FINAL SAFETY EVALUATION REPORT FOR CHAPTER 4
TITLED "REACTOR," OF NUREG-1793, SUPPLEMENT 2 – AP1000
DESIGN CERTIFICATION AMENDMENT

Dear Mr. Sisk:

This letter transmits the Advanced Final Safety Evaluation Report (AFSER) for Chapter 4 titled, "Reactor," of the United States Nuclear Regulatory Commission (NRC) staff's NUREG-1793, "Final Safety Evaluation Related to Certification of the AP1000 Standard Design," Supplement 2.

By letter dated April 23, 2009, the NRC transmitted to Westinghouse the Safety Evaluation Report with Open Items (SER/OIs) for Chapter 4 that reflected the proposed changes in the AP1000 Design Control Document (DCD), through Revision 17. At that time, Chapter 4 of the SER/OIs partially addressed the previously un-reviewed changes that were incorporated into Revision 17 to the DCD. Since the April 23, 2009, transmittal of Chapter 4, communications with Westinghouse and subsequent NRC staff evaluation have resulted in the issuance of the Chapter 4 AFSER, which reflects all proposed changes through Revision 17 of the DCD and addresses the resolution of the OIs. This chapter will be supplemented prior to finalization due to the need to resolve confirmatory items and to address any additional proposed changes to the DCD.

R. Sisk

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Please feel free to contact Phyllis Clark, the Project Manager for Chapter 4, at (301) 415-6447 or phyllis.clark@nrc.gov, with any comments, concerns or questions.

Sincerely,

/RA/

Eileen M. McKenna, Chief
AP1000 Projects Branch 2
Division of New Reactor Licensing
Office of New Reactors

Docket No. 52-006

Enclosure:
Safety Evaluation Report, Chapter 4, NUREG-1793, Supplement 2

cc: See next page

R. Sisk

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Safety Evaluation Report Chapter 4, NUREG-1793, Supplement 2

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