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Docket No.: STN-52-003

May 31, 1996

Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

ATTENTION: T. R. QUAY

SUBJECT: MEETING TO REVIEW FINAL DESIGN AND SEISMIC ANALYSES FOR
NUCLEAR ISLAND STRUCTURES AND FOUNDATION BASEMAT

Reference: Letter from Diane Jackson (NRC) to Nicholas Liparulo (Westinghouse),
5/2/96

Dear Mr. Quay:

The above reference identifies subjects to be discussed at the proposed meeting at the Bechtel offices in San Francisco scheduled during the week of June 17-21. We confirm that we are ready for the meeting on seismic analysis. As discussed last week with Diane Jackson and Tom Cheng, we have not yet completed the work on the nuclear island basemat and propose that it be the subject of a separate meeting to be held in Pittsburgh in the August timeframe.

The proposed agenda for the seismic meeting in San Francisco is shown in Attachment 1. Attachment 2 is a summary of the status of open items related to seismic analysis not yet classified as closed or resolved by the NRC. The meeting in San Francisco should proceed since we are ready to close out all open items related to the seismic analyses.

If you have any questions, please contact D. A. Lindgren at (412) 374-4856.

Brian A. McIntyre, Manager
Advanced Plant Safety and Licensing

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Attachment

cc: D. Jackson, NRC
T. Cheng, NRC

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ATTACHMENT 1

AGENDA

A. Introduction

Purpose and objectives of meeting

B. AP600 seismic design (SSAR Sections 2.5, 2A, 2B, 2C, 3.7)

1. Review of DSER open items

Attachment 2 identifies the open items on SSAR subsection 3.7 to be addressed during the meeting. It is based on your letter dated April 4, 1996 and summarizes the status of each open item. Each item will be discussed as follows:

- presentations by Westinghouse on significant items
- update status based on SSAR Revision 7
- identify design documents to be audited

2. SSAR Revision 7, Sections 3.7

3. Audit of seismic analysis documentation

4. Results of audit and close out of DSER open items

C. Nuclear Island Foundation Mat Status

D. Major issues documented in the 2/20/96, NRC letter

ATTACHMENT 2

DSER OPEN ITEMS			
Item #	DSER OI #	Subject	Status
		SSAR SECTION 3.7.2	
621	3.7-1	Classification of adjacent buildings	Covered under OIs 3.7.2.8-3 and -5.
622	3.7.1.1-1	Site specific time history	Information provided in SSAR Rev 7, subsection 2.5.4.5.5.
623	3.7.1-2	Damping for cable trays	Reopened in 4/15/96 letter. To be discussed in meeting.
625	3.7.1-4	Adequacy of 6' basemat	Issue is addressed under OIs in 3.8.5. Will be covered in meeting on basemat design.
626	3.7.1-5	Key structural dimensions	Technically resolved subject to SSAR update. Information provided in SSAR Rev 7, Figure 3.7.2-12.
636	3.7.2.3-3	Vertical modes of containment vessel	Additional information available for review during meeting
639	3.7.2.3-6	Rigid links	Information provided in SSAR Rev 7, Figure 3.7.2-13.
640	3.7.2.3-7	Vertical modes of containment vessel (same as OI 3.7.2.3-3)	See open item 3.7.2.3-3
647	3.7.2.4-5	Soil degradation curves	Technically resolved subject to SSAR update. Information provided in SSAR Rev 7, subsection 3.7.1.4.
649	3.7.2.4-7	Effect of adjacent buildings on lateral earth pressures Pounding between buildings	Information provided in SSAR Rev 7, Appendix 2C. Covered under OIs 3.7.2.8-3 and -5.
650	3.7.2.4-8	Parabolic soil profile	Technically resolved subject to SSAR update. Information provided in SSAR Rev 7, subsection 3.7.1.4.

651	3.7.2.4-9	Poisson's ratio	Technically resolved subject to SSAR update. Information provided in SSAR Rev 7, Appendix 2B and subsection 3.7.2.4.
654	3.7.2.4-12	Adequacy of selected soil conditions	Results of updated analyses with four soil cases included in SSAR revision 7. NRC independent analyses are consistent with updated results.
656	3.7.2.6-1	Combination of directions	Technically resolved subject to SSAR update. Information provided in SSAR Rev 7, Table 3.7.2-16.
657	3.7.2.7-1	Combination of modes	Technically resolved subject to SSAR update. Information provided in SSAR Rev 7, Table 3.7.2-16.
659	3.7.2.8-2	Classification of adjacent buildings	Annex building classified as seismic Category II. See OIs 3.7.2.8-3 and -5 for other buildings
660	3.7.2.8-3	Classification of radwaste building	Additional information available for review in meeting
661	3.7.2.8-4	Category II structural acceptance criteria	Revised in SSAR Rev 7 to use seismic Category I allowables.
662	3.7.2.8-5	Classification of turbine building	Additional information available for review in meeting
664	3.7.2.8-7	Seismic margin of turbine building	To be addressed in seismic margin report
668	3.7.2.12-1	Comparison of responses	Information provided in SSAR Rev 7, Table 3.7.2-18.
670	3.7.2.16-1	Site specific COL applicant analyses	Additional information provided in SSAR Rev 7, subsection 2.5.4.5.5.
1885	3.7.2.16-1	COL applicant commitment for site specific analyses	Additional information provided in SSAR Rev 7, subsection 2.5.4.5.5. COL applicant requirement unnecessary.
479	Mtg OI	Comparison of responses	Covered by RAI 230.96
480	Mtg OI	Shield building roof model	Design documentation available for review

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2007 2008	OI 50	Top 50 Open items for seismic analysis and design	These were closed by W after Management meeting on top 50 and should also be closed by NRC.
3245	230.96	Compare FEM and stick model results	Additional information available for review in meeting.
3248	230.99	Earth pressures for wall design Design of external walls below grade	Additional information provided in SSAR Rev 7. To be addressed concurrent with basemat design
		SSAR Section 3.7.3 and 3.7.4	
672	3.7.3.2-2.	Equivalent static analyses	Additional information provided in SSAR Rev 7.
1786	3.7.3.5-1	Large tanks	Additional information provided in SSAR Rev 7.
1886	3.7.4-1	3 seconds of pre-event signal	Addressed in SSAR Rev 2.
1887	3.7.4-2	Post earthquake plan	Addressed in SSAR Rev 2.
		SSAR Section 3.8.5	
759	3.8.5-1	Key structural dimensions	Technically resolved subject to SSAR update. Information provided in SSAR Rev 7, Figure 3.7.2-12.
762	3.8.5-4	Buoyancy in stability calculations	Information provided in SSAR Rev 7, subsection 3.8.5.5.4.