

August 9, 2002

APPLICANT: Westinghouse Electric Company

PROJECT: AP1000 Standard Plant Design

SUBJECT: SUMMARY OF MEETING HELD ON JULY 17, 2002, REGARDING THE USE OF PIPING DESIGN ACCEPTANCE CRITERIA FOR THE AP1000 DESIGN

The Nuclear Regulatory Commission (NRC) hosted a Category 1 public meeting on July 17, 2002, at NRC Headquarters to discuss Westinghouse Electric Company's (Westinghouse's) use of piping design acceptance criteria (DAC) for the AP1000 design. This meeting was the first of potentially several discussions regarding implementation of the piping DAC approach. An agenda and list of attendees are provided as Enclosures 1 and 2.

The staff sent comments and questions to Westinghouse prior to the meeting for the purpose of facilitating a productive discussion of the subject. The staff sent its questions on July 12 and July 17, 2002 (Enclosures 3 and 4, respectively), via electronic mail to Mr. Michael Corletti on reactor vessel internals and piping DAC. These questions are not considered official requests for additional information (RAIs) at this time but are areas where the staff may need additional clarifying information. The staff will forward official RAIs to Westinghouse if additional clarification is necessary in order to make a safety finding.

The staff and Westinghouse discussed the historical use of DAC in the piping design area for design certification and Westinghouse's proposed use of piping DAC. In order to facilitate discussions of the historical use of piping DAC, the NRC staff distributed a table summarizing the differences and similarities of piping DAC implementation for the three previously certified designs (Enclosure 5). Westinghouse also provided a proposed AP1000 piping DAC (Enclosure 6). Enclosures 3, 5 and 6 can be accessed through the NRC's Agencywide Documents Access and Management System (ADAMS) under Accession No. ML022140416.

Prior to the conclusion of the meeting, it was decided that a subsequent meeting would be necessary in order to further discuss these issues and will be scheduled sometime in middle or late August 2002. In addition, the staff stated that it will continue to formulate its RAIs to define any additional information necessary for the staff to complete its review.

/RA/

Lawrence J. Burkhart, AP1000 Project Manager
New Reactor Licensing Project Office
Office of Nuclear Reactor Regulation

Docket No. 52-006

Enclosures: As stated

cc w/encls: See next page

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ADAMS ACCESSION NUMBER: ML022140401-Pkg.

OFFICE	PM:NRLPO	DD:NRLPO
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DATE	8/7/02	8/7/02

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Distribution for Meeting Summary dated August 9, 2002

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DTerao

KManoly

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Agenda for Meeting to Discuss Issues
Associated with the Use of
Piping Design Acceptance Criteria (DAC)
for the AP1000 Standard Design

Introduction/Purpose	NRC/Westinghouse	15 minutes
Historical use of piping DAC - Approach used for ABWR and System 80+ - NRC Approach/Expectations for reviewing piping DAC	NRC	30 minutes
Westinghouse Discussion of Proposed Approach for AP1000	Westinghouse	1 hour
Related/Other Issues - Leak Before Break (PWSCC, etc.) - Reactor Internals Design - Environmental impact on fatigue design	NRC/Westinghouse	45 minutes
Summary	NRC/Westinghouse	15 minutes
Public Comment		15 minutes
Conclusion		5 minutes

ATTENDEES OF THE JULY 17, 2002, MEETING
TO DISCUSS THE USE OF PIPING DESIGN ACCEPTANCE CRITERIA
FOR THE AP1000 DESIGN

<u>Attendee/Participant</u>	<u>Organization</u>
Ed Cummins (by telephone)	Westinghouse
Mike Corletti	Westinghouse
Dulal C. Bhowmick	Westinghouse
T. H. Liu	Westinghouse
Kevin Accornero (by telephone)	Westinghouse
Jerry Wilson	NRC/NRR
Larry Burkhart	NRC/NRR
David Terao	NRC/NRR
Keith Wichman	NRC/NRR
Matthew Mitchell	NRC/NRR
Simon Sheng	NRC/NRR
Ken Chang	NRC/NRR
Kamal Manoly	NRC/NRR
Goutam Bagchi	NRC/NRR
Thomas Cheng	NRC/NRR
Brett Rini	NRC/NRR
Charles Greene	NRC/RES
Rob Tregoning	NRC/RES
Guiliano DeGrassi (by telephone)	Brookhaven National Laboratory
Todd Oswald	Framatome - ANP

Enclosure 2

Topics for Discussion at the 7/17/02

Enclosure 4

AP1000 Piping DAC Meeting

- How does W plan to address the following issues:
 - * LBB (PWSCC, minimum pipe size, material, material testing, Operating experience, inspection, etc.)
 - * Reactor internal design (flow induced vibration, fluid-solid interaction, Calculations, ect.)
 - * Environmental impact on fatigue design
- How much and when actual piping/support design and analysis will be completed before certification?
- What computer codes will be used for piping, supports, and components design and analysis?
- Which piping systems will be changed most as compared to the AP600 such that they could be good candidates for piping bench mark problems?
- PSARV discharge piping design, analysis and testing
- ASME Code dates and primary stress limits

AP 1000

cc:

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