December 12, 2002

MEMORANDUM TO: Marsha Gamberoni, Deputy Director
New Reactor Licensing Project Office
Office of Nuclear Reactor Regulation

FROM: Lawrence J. Burkhart, AP1000 Project Manager ***/RA/***
New Reactor Licensing Project Office
Office of Nuclear Reactor Regulation

SUBJECT: NOVEMBER 22, 2002, TELEPHONE CONFERENCE CALL SUMMARY

On Friday, November 22, 2002, a telephone conference call was held with Westinghouse Electric Company (Westinghouse) representatives and Nuclear Regulatory Commission (NRC) staff to discuss responses to requests for additional information (RAIs) 210.009, 210.021, 210.023, and 210.026. Westinghouse submitted its responses to these RAIs on October 2, 2002 (ADAMS Accession No. ML022810450). The purpose of the telephone conference call was to follow up with Westinghouse representatives on those RAIs that require further clarification. A list of participants is included in Attachment 1. Attachment 2 contains NRC staff comments regarding the subject RAIs that were sent to Mr. Mike Corletti of Westinghouse on November 20, 2002, and that were used to facilitate discussion during the telephone conference call.

With respect to RAI 210.026, and in response to the comments contained in Attachment 2, Westinghouse representatives stated that the design and acceptance criteria used in the design of the energy-absorbing, elastic-plastic devices in the secondary core support were not those stated in American Society of Mechanical Engineers (ASME) Code, Section III, Subsection NG but were Westinghouse-specific design requirements. Westinghouse established its own design requirements for these components (Westinghouse representatives state that this approach is similar to that used for the design of similar components in currently-operating Westinghouse plants). These requirements include consideration of the effects of a postulated core drop accident (even though this postulated accident is not part of the AP1000 design basis). This clarified the response to RAI 210.026. However, the NRC staff stated that this response may lead to some confusion regarding Westinghouse's response to RAI 210.021. As a result, the staff believes that a clarification regarding the design requirements used (ASME Section III, Subsection NG or other Westinghouse-specific design requirements) for these energy-absorbing elastic plastic devices in the secondary core support is desirable. Westinghouse agreed to clarify its response to RAI 210.021 in this area.

With regard to Comment B contained in Attachment 2 for RAI 210.026, Westinghouse stated that there is no test data applicable to the performance of the secondary core support but that supporting design documentation is available for NRC staff review at the Westinghouse facilities. The staff stated that review of these documents may be the subject of a future meeting with Westinghouse.

With respect to RAI 210.023, and the comments contained in Attachment 2, Westinghouse representatives stated that they would consider clarification of Table 3.9-14 in response to

Comment 210.023(A). Westinghouse representatives agreed to make the changes discussed in Attachment 2 (210.023 (B) and (C)).

Westinghouse representatives stated that the issue raised in Attachment 2 regarding RAI 210.009 should be addressed in the topical report on the AP1000 reactor vessel internal flow-induced vibration assessment that is scheduled to be issued in early December 2002. The NRC staff stated that they would review the topical report for resolution of this issue.

Docket No. 52-006

Attachment: As stated

Westinghouse representatives stated that the issue raised in Attachment 2 regarding RAI 210.009 should be addressed in the topical report on the AP1000 reactor vessel internal flow-induced vibration assessment that is scheduled to be issued in early December 2002. The NRC staff stated that they would review the topical report for resolution of this issue.

Docket No. 52-006

Attachment: As stated

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ACCESSION NUMBER: ML023370501 *See previous concurrence

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NOVEMBER 22, 2002
TELEPHONE CONFERENCE CALL SUMMARY
LIST OF PARTICIPANTS

| Nuclear Regulatory Commission | Westinghouse |
|---|---|
| Larry Burkhart | Mike Corletti |
| Dave Terao | Dave Altman |
| Pat Sekerak | Dale Wizeman |
| Belkys Sosa | Al Kuenzel |

Attachment 1

Westinghouse AP1000
Design Certification Review

Request for Additional Information (RAI)
Category 210 - Mechanical Engineering

Subject: Review of Westinghouse Responses to RAI Questions

210.026P

Reference Westinghouse (W) RAI Response Number 210.026P.

The response provided design details (W proprietary information) illustrating the manner in which the energy-absorbing members of the reactor pressure vessel (RPV) secondary core supports dissipate impact energy by tensile deformation. These elastic-plastic members are considered RPV internal structures designed to the requirements of American Society of Mechanical Engineers (ASME) Code, Section III, Subsection NG (Reference W RAI Response Number 210.021).

Please identify:

(A) the design and acceptance criteria used from ASME III, Subsection NG which governs the design of an energy-absorbing, elastic-plastic device.

(B) test data, if any, demonstrating the actual performance of the secondary core supports in terms of meeting the design objective stated in design control document (DCD) Section 3.9.5.3.2.

210.023

Reference W RAI Response Number 210.023, revised Table 3.9-14.

(A) On the third line under the heading Upper Core Barrel, the radial outward (non-uniform) allowable deflection is not clearly defined, because it is stated as a percentage of annulus area, which is not a linear deflection (as required by the column heading in the table). Please include in the table the allowable deflection of the core barrel which would result in <10% blockage of the annulus area.

(B) (Editorial) The first line under the heading Upper Core Barrel, should read, 'Radial inward,' instead of 'Radial outward.'

(C) (Editorial) On the last line of the table, "Rod cluster guide tubes," please include the direction, i.e., lateral, of the allowable deflection.

210.009

Reference DCD Section 3.9.2.4, and W RAI Response Number 210.009.

It is stated that the acceptance standard for the reactor internals vibration predictions is related to the ASME Code allowables for long term steady-state conditions.

Please identify the specific allowable values, including ASME Code references, established as acceptance standards for the RPV internals vibration prediction. Alternatively, include these allowable values as part of the acceptance criteria in the AP1000 Vibration Assessment Report, WCAP-15949, proposed in the W RAI Response Number 210.001.