

April 29, 2003

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

FROM: Joelle L. Starefos, Project Manager */RA/*
New Reactor Licensing Project Office
Office of Nuclear Reactor Regulation

SUBJECT: APRIL 1, 2003, AP1000 TELEPHONE CONFERENCE CALL SUMMARY

On Tuesday, April 1, 2003, a telephone conference call was held with Westinghouse Electric Company (Westinghouse) representatives and Nuclear Regulatory Commission (NRC) staff to discuss the following AP1000 Requests for Additional Information (RAIs): 251.024, 251.025, 251.026, and 251.027. Westinghouse submitted responses to these RAIs on November 26, 2002 (ADAMS Accession No. ML023360097) and March 25, 2003 (ADAMS Accession No. ML030870010). A list of call participants is included in Attachment 1.

The following is a brief summary of the discussions regarding the identified RAIs:

RAI 251.024

The NRC staff wanted to confirm that Westinghouse recognized that their criteria was conservative with respect to the NRC standard review plan guidance. Westinghouse confirmed that they are aware of this.

Also, the NRC staff provided some discussion regarding inconsistencies of fracture toughness criteria that existed between the AP1000 Design Control Document (DCD) and NRC Standard Review Plan (SRP) 10.2.3. The NRC staff's question, regarding whether the DCD criteria is acceptable, still remains unresolved.

RAIs 251.025, 251.026, 251.027

In response to an NRC staff inquiry, Westinghouse confirmed that no additional analysis had been performed beyond WCAP 15783, "Analysis of the Probability of the Generation of Missiles from Fully Integral Nuclear Low Pressure Turbines." This question was resolved.

RAI 251.026

The NRC staff determined that an NRC staff update to the RAI was appropriate and communicated this to Westinghouse during the call. Subsequently, the following comment was sent to Mr. Michael Corletti of Westinghouse via electronic mail on April 23, 2003:

In your response to RAI 251.026 dated March 25, 2003, regarding the vibratory stresses, you referred to WCAP-15783 and stated that "(t)he vibratory stress when passing through critical speeds during startups and shutdowns is not included in the evaluation of low cycle fatigue (LCF). This is because the bending stress for this condition is greatest on the surface of the rotor and negligibly small on the rotor bore surface, which is the point where maximum stress of low cycle fatigue appears." The NRC staff considers this to be appropriate because the vibratory stress occurred at a different location, not the place where LCF effect is evaluated. However, the response has not provided adequate justification to conclude that rotor resonant stresses resulting from passing through rotor critical speeds are insignificant. Please provide this information.

Docket No. 52-006

Attachment: As stated

In your response to RAI 251.026 dated March 25, 2003, regarding the vibratory stresses, you referred to WCAP-15783 and stated that "(t)he vibratory stress when passing through critical speeds during startups and shutdowns is not included in the evaluation of low cycle fatigue (LCF). This is because the bending stress for this condition is greatest on the surface of the rotor and negligibly small on the rotor bore surface, which is the point where maximum stress of low cycle fatigue appears." The NRC staff considers this to be appropriate because the vibratory stress occurred at a different location, not the place where LCF effect is evaluated. However, the response has not provided adequate justification to conclude that rotor resonant stresses resulting from passing through rotor critical speeds are insignificant. Please provide this information.

Docket No. 52-006

Attachment: As stated

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APRIL 1, 2003
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