

June 29, 2001

APPLICANT: Westinghouse Electric Company

FACILITY: AP 1000 Standard Plant Design

SUBJECT: NOTES OF A TELEPHONE DISCUSSION ON USE OF DESIGN ACCEPTANCE CRITERIA HELD ON MAY 24, 2001

The purpose of the discussion was to clarify the extent of AP1000 review of the use of Design Acceptance Criteria and Westinghouse's (W) intent for future stages. Participants in the telephone discussion included G. Imbro, J. Wilson, T. Cheng, M. Hartzman, and K. Manoly from NRC and R. Orr and M. Corletti from Westinghouse.

It was confirmed that the key questions to be addressed by NRC staff reviewers during the current pre-application review of the AP1000 reactor design are as follows:

1. Is it acceptable to use appropriately defined Design Acceptance Criteria for seismic, structural and piping design for AP1000?
2. Is the type, style and extent of information set out in Appendix A of Westinghouse report WCAP 15614, AP1000 Seismic and Structural Design Activities sufficient to support the Design Acceptance Criteria with respect to seismic topic? (Note that staff are not being asked to conduct a technical review of the seismic topic at this time.)
3. Does NRC have any further issues regarding the AP1000 seismic analysis (Appendix B to WCAP 15614) that would need to be addressed in a Part 52 Design Certification Review?
4. Is the methodology that W used to analyze AP600 for soil sites acceptable for analyzing a future AP1000 soil site application?

Westinghouse confirmed to staff that it was their intent to produce a full Design Control Document for the AP1000 design certification application. While this would retain the standard chapter layout, they intended to change the content in a number of areas, deferring some detail work to a future Combined License stage.

As a result of the discussion the following agreements were reached:

1. Westinghouse report WCAP-15614 as submitted for review provides only the approach and an illustration of Design Acceptance Criteria to be applied to the AP1000 seismic and structural design activities. In the pre-application review Westinghouse is requesting that staff;
  - (i) review Sections 1, 2, 3, and 4 of the WCAP and
  - (ii) determine the feasibility of, and endorse the DAC approach.

2. In support of this, Appendix A to WCAP-15614 provides the sample draft of AP1000 Design Control Document, and Appendix B provides the preliminary seismic analysis results of AP1000 nuclear island founded on hard rock site. For the pre-application review these are for information only and Westinghouse does not request NRC to perform any detailed review of the technical information contained within these two appendices.
3. Westinghouse will base any future Design Certification application for the AP1000 on a nuclear island founded on a hard rock site. In this application Westinghouse will;
  - (i) submit the AP1000 Design Control Document including Tier 1 material i.e. Inspection Test and Acceptance Criteria and Design Acceptance Criteria, and Tier 2 information for the hard rock site. The Design Acceptance Criteria will be submitted as part of Inspection, Test and Acceptance Criteria,
  - (ii) submit detailed seismic analysis results of nuclear island structures and identify critical sections (locations) but
  - (iii) not submit any design details of critical sections under seismic loads or combined load conditions, nor the evaluation results of design feasibility of critical sections under design loads. (This may not be acceptable to the staff.)
4. Westinghouse expects the staff to review the information listed above and grant the design certification for AP1000 for hard rock site applications only.
5. For sites other than the hard rock site, the Design Certification-Design Control Document is for information only. It will be the responsibility of any subsequent COL applicant referencing the AP1000 design to demonstrate the suitability of the designs.

**/RA/**

Alan C. Rae, AP1000 Project Manager  
Future Licensing Organization  
Office of Nuclear Reactor Regulation

Project No. 711

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2. In support of this, Appendix A to WCAP-15614 provides the sample draft of AP1000 Design Control Document, and Appendix B provides the preliminary seismic analysis results of AP1000 nuclear island founded on hard rock site. For the pre-application review these are for information only and Westinghouse does not request NRC to perform any detailed review of the technical information contained within these two appendices.
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**/RA/**

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\*See previous concurrence  
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