



52-003

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

November 28, 1995

MEMORANDUM TO: Chairman Jackson
Commissioner Rogers

FROM: James M. Taylor *James L. Milhiser for*
Executive Director for Operations

SUBJECT: REVISED REVIEW SCHEDULE FOR THE AP600 DESIGN CERTIFICATION APPLICATION

In a memorandum to the Commission dated September 28, 1995, I informed the Commission that the staff was working with Westinghouse to develop a revised review schedule for the AP600 design certification application. The revised schedule would consider the availability of the required staff at both Westinghouse and the NRC to issue the supplement to the draft safety evaluation report (DSER), close issues, issue the final SER, issue the final design approval, and initiate design certification rulemaking.

The staff has been conducting working-level meetings with Westinghouse to (1) identify the additional information it needs to make its safety decisions and (2) fully understand Westinghouse's plans for submitting specific technical information. The review status of each technical review area was discussed during these meetings.

On October 12, 1995, senior managers of the NRC staff met with representatives of Westinghouse to discuss the status, schedule, and estimates for NRC resources for the review of the AP600 application through the preparation of the final safety evaluation report (FSER). It was evident that the Westinghouse resources that were available to support the expected review fees were inconsistent with the staff's estimated review effort, and that the FSER could not be prepared on the schedule provided in the July 14, 1994, memorandum to the Commission. As a result of the information provided during the October 12, 1995 meeting, Westinghouse elected to prioritize the work it wanted performed by the staff.

In a letter dated November 13, 1995 (copy attached), Westinghouse indicated specific areas on which it would like the near-term staff certification review effort to focus. Westinghouse's highest priority is obtaining the supplementary DSER on the acceptability of the testing program and the complementary validation and verification of computer codes.

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PDR per Tom Kenyan

Additionally, Westinghouse will continue support in other areas in which design-related activities depend on issue resolution. These areas include Regulatory Treatment of Non-Safety-Related Systems (RTNSS) issues such as thermal-hydraulic uncertainty, level 1 probabilistic risk assessment (PRA), post-72-hour actions, and adverse systems interactions. Some severe accident performance issues, instrumentation and control reviews, and engineered safety feature functional design and performance reviews are also being continued. Westinghouse will also be requesting the staff's input on several pilot inspection, test, analysis, and acceptance criteria (ITAACs). Resources will also be devoted to the review of a substantial amount of Westinghouse proprietary information and related issues.

Accordingly, the staff will focus its review efforts on the specific technical areas of the AP600 design requested by Westinghouse and will reduce its current review efforts in other technical areas that are not referenced in Westinghouse's November 13, 1995 letter. The staff will formally document the current status of its safety review of these other technical areas using documentation, submittals, and related application materials that have already been supplied by Westinghouse. These internal status reports are not intended to be used as inputs to a draft or final SER because the documents will not receive the level of management review necessary to support public release of such information. Rather, these status reports will be used to document the current status of the review to facilitate future review activities when the level of effort is increased. When this short-term effort is completed, the staff will reassign resources to other review tasks within the Office of Nuclear Reactor Regulation.

The staff will focus its review efforts on resolving concerns on the testing and code work. As a result of outstanding responses to requests for additional information and ongoing technical discussion with Westinghouse, the staff expects to issue a supplement to the DSER on testing and codes later in fiscal year 1996 than previously scheduled. As the review progresses, and as Westinghouse determines its available resources, the staff will establish a revised schedule and resume the review activities that have been curtailed. The timing of resumption of these activities will depend on the availability of technical staff who are knowledgeable with the unique aspects of the design. If experienced personnel are not available, staff members not acquainted with the design may be assigned to the review and trained accordingly.

The staff expects that the approach proposed by Westinghouse will increase the overall review effort, including review costs, and will delay the review schedule due to the interruption and reinitiation of the review. The staff

will work closely with Westinghouse to develop a review schedule beyond the supplement to the DSER. The staff will provide the status of this scheduling effort by January 31, 1996, when Westinghouse knows more precisely what resources are available to support the AP600 design certification program.

Attachment: As stated

cc w/attachment:

SECY

OGC

OPA

OCA

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Energy Systems

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NTD-NRC-95-4597
DCP/NRC0431
Docket No.: STN-52-003

November 13, 1995

Mr. Dennis Crutchfield
Director
Division of Reactor Program Management
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

SUBJECT: AP600 DESIGN CERTIFICATION REVIEW PRIORITIES CLARIFICATION

Dear Mr. Crutchfield:

You are aware that considerable effort is being expended to define the federal budgets for fiscal year 1996, that a federal budget has not yet been established and that the government is working on a continuing resolution basis. Since the AP600 design certification program is funded, in part, by the Department of Energy, Westinghouse does not know at this time, precisely the resources that will be available to support the AP600 design certification program this fiscal year.

During our resource planning meeting on October 12, 1995, the staff provided Westinghouse with an estimate of the resources needed to complete the design certification review up to the final safety evaluation report preparation. Westinghouse has reviewed that input and has established the following priorities that will result in the most efficient utilization of resources for the AP600 design certification review for FY96.

As previously mentioned, the most immediate need continues to be completion of the supplemental draft safety evaluation report that addresses the acceptability of the testing program, the validation and verification of the computer codes and the application of the safety analysis codes to the AP600 design. Completion of this activity will ensure that there are no modifications to the AP600 design necessary to compensate for difficulties encountered as a part of the safety analysis calculation review. This activity includes the review of the NOTRUMP, LOFRAN, WCOBRA/TRAC long term cooling WGOthic and the WCOBRA/TRAC code applicability document as well as the requisite ACRS meetings.

Progress has been made in implementing the path to resolution for Regulatory Treatment of Nonsafety Systems. Presently the focus is on how the uncertainty in the thermal hydraulic computer codes would affect the determination of the success criteria for the probabilistic risk assessment. This activity, along with a review of the revised AP600 level 1 probabilistic risk assessment, is essential to determining how regulatory control will be applied to the nonsafety systems in the AP600 that were safety related systems in conventional plant designs. The post-72 hour and adverse systems interaction subissues need to also be worked as a part of this review. A number of design related activities depend on resolution of this issue. Westinghouse will submit the PRA insights and fire PRA for NRC review.

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Attachment

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November 13, 1995

The review of the safety system function, design and performance (Chapters 6, 7 and 15) is necessary to finalize a number of the other design certification review activities, such as support system design, initial test program and the inspections, tests, analyses and acceptance criteria (ITAAC).

While the final ITAAC cannot be developed until the system design review is completed, it is prudent that Westinghouse receive staff feedback on the pilot ITAAC that are being developed for several sample systems. This feedback will be factored into the final ITAAC development program which will be initiated once the design of the systems is assured.

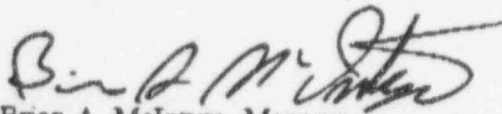
Westinghouse is continuing to develop responses to the NRC letters concerning the classification of proprietary information in the AP600 Standard Safety Analysis Report (SSAR), PRA, responses to NRC requests for additional information and presentation material. This activity will be completed to support NRC requirements and to allow Westinghouse to initiate development of the AP600 Design Control Document.

The requests for additional information on the severe accident mitigation design alternatives (SAMDA) should be completed and transmitted to Westinghouse. The MELCOR, hydrogen control, in-vessel retention and shutdown risk areas of Chapter 19 should be brought to closure to assure that any impacts on the design are accounted for in a timely manner.

Providing a near term focus on these areas will optimize the use of resources for both Westinghouse and the NRC staff.

Based on input received from your staff at our October 12, 1995 review meeting, efforts in other areas of the AP600 review should formally document the status of the review based on documentation, submittals and related application materials supplied by Westinghouse. Westinghouse recognizes that the schedule associated with this approach will depend on timing of our submittals and will extend beyond the dates in SECY-94-117. Westinghouse and the NRC are in the process of working together to develop the logic and schedule to complete the AP600 review. Westinghouse also recognizes the estimated cost of the NRC review activities will depend on timing the review tasks for maximum effectiveness and may increase beyond the estimates provided by the NRC on October 12, 1995.

Please contact me if you require further information concerning these review priorities.



Brian A. McIntyre, Manager
Advanced Plant Safety and Licensing

/nja

cc: W. T. Russell - NRC
H. J. Bruschi - W
N. J. Liparulo - W