Westinghouse Electric Corporation
Energy Systems

Box 355
Pittsburgh Pennsylvania 15230-0355

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Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

ATTENTION: Mr. Samuel J. Chilk

SUBJECT: Westinghouse Comments on SECY-94-084, "Policy and Technical Issues Associated with the Regulatory Treatment of Non-Safety Systems in Passive Plant Designs"

Dear Mr. Chilk:

Westinghouse has reviewed, from an AP600 design perspective, SECY-94-084, "Policy and Technical Issues Associated with the Regulatory Treatment of Non-Safety Systems in Passive Plant Designs" dated March 28, 1994.

Westinghouse reviewed the draft paper issued in September 1993 and provided comments. Westinghouse is pleased to see that many of the comments provided to the staff are reflected SECY-94-084. However, some of the comments made have not been incorporated and remain valid.

The attachment provides the Westinghouse comments on the paper.

Please contact Brian A. McIntyre on (412) 374-4334 if you have any questions concerning this letter.

Nicholas J. Liparulo, Manager
Nuclear Safety Regulatory and Licensing Activities

/nja

cc:

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Westinghouse Comments on SECY-94-084,
"Policy and Technical Issues Associated with the Regulatory
Treatment of Non-Safety Systems in the Passive Plant Designs"

A. Regulatory Treatment of Non-Safety Systems

On page 6, item 5 specifies that the designer should establish graded safety classifications and graded requirements for I&C systems based on the importance to safety of their functional R/A missions. The purpose of the RTNSS process is to develop regulatory oversight for nonsafety-related SSCs, including I&C systems. It is unnecessary and inconsistent to specify this type of requirement for I&C systems. The resulting regulatory oversight specified by the RTNSS results includes the establishment of appropriate safety classifications.

At the conclusion of item 6 on page 7, the SECY states that "after the designer has completed these or related activities, the staff will apply appropriate regulatory oversight." The process outlined in the paper represents the complete process as agreed to by the industry and staff. Without the identification of specific "related activities", this statement allows the process to remain open-ended.

B. Definition of Passive Failure

Westinghouse has no comments on this section.

C. Safe Shutdown Requirements

The last paragraph on page 13, continuing onto page 14, identifies concerns relative to a passive RHR system "water pool" capability of only 72 hours along with a nonsafety system that replenishes the water pool to sustain long-term operation of the passive RHR system after 72 hours. In the AP600 design, makeup of inventory losses due to containment leakage (based on the anticipated containment leakage rate) is not expected to be needed for one month or more. The concern expressed in the SECY appears to be design specific, and as such is not appropriate. Such concerns should be identified during plant specific reviews that identify a need for nonsafety system makeup to sustain long-term operation of the passive RHR system.

D. Control Room Habitability

The SECY indicates that at least once each refueling cycle, the COL holder must demonstrate the adequacy of the control room pressurization system to pressurize the control room for a 72-hour period and maintain all other conditions. This requirement is unnecessary and inconsistent with the philosophy of streamlining the refueling process. Pressurization of the control room to demonstrate the capability should be required once to fulfill the ITAAC requirement. Westinghouse recommends that subsequent testing be performed once every ten years, consistent with the requirements for testing containment functions.

On page 16, the fourth complete paragraph states that the designer must demonstrate "the availability and capability of the backup air supplies." It is the responsibility of the COL applicant to demonstrate the availability and capability of the backup air supplies as stated in item 2 on page 17. Page 16 should be revised to be consistent with the underlined policy portion of this section.

E. Reliability Assurance Program

The staff position that O-RAP be applied to address corrective actions for design errors or operational errors that degrade nonsafety-related, risk significant SSCs is inconsistent with the RTNSS process for identifying regulatory oversight of nonsafety-related systems. Specifically, the process is used to identify specific nonsafety-related SSC missions and the appropriate regulatory oversight. The requirement to use the O-RAP to provide assurance of the design and operational quality of these SSCs presumes that such action will be necessary and beneficial. This defeats the goal of the process to define regulatory oversight to give reasonable assurance that the missions can be met during operation.

F. Station Blackout

Westinghouse has no comments on this section.

G. Electrical Distribution

Westinghouse has no comments on this section.

H. Inservice Testing of Pumps and Valves

Item 1 in this section specifies that the important nonsafety-related pumps and valves, as identified by the RTNSS process should be designed to accommodate testing in accordance with the ASME Code, Section XI requirements. This position, similar to that pertaining to the RAP, presupposes the appropriate regulatory oversight rather than permitting the RTNSS process to identify the risk-significant missions and the corresponding regulatory oversight. The specification of testing features should be an output of the RTNSS process, thereby allowing the process to determine the appropriate regulatory oversight that provides benefit without presuming regulatory oversight up front.

Item 3 in this section requires that the passive plant designs incorporate provisions to permit all critical check valves to be tested for performance in both forward and reverse flow directions. Westinghouse provided comments on this issue when proposed in the draft position paper (Westinghouse letter ET-NRC-93-3989, N. J. Liparulo to R. W. Borchardt, dated October 13, 1993). Westinghouse does not agree with this position. Specifically, inservice testing of the safety-related check valves should only include their safety-related functions. for example, check valves in the main feedwater lines have a safety function to close but their opening is not a safety-related function. Another example is the accumulator check valves which have a safety function to open but their closing is not a safety-related function. There is no justification for including nonsafety-related functions in the IST program. The inclusion of the additional testing requirements specified by the NRC position could add special test connections and valves that could malfunction and degrade the system reliability.