UNITED STATES
NUCLEAR REGULATORY COMMISSION
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS
WASHINGTON, DC 20555 - 0001

June 12, 2007

MEMORANDUM TO: Thomas S. Kress, Chair
Future Plant Designs Subcommittee

FROM: David C. Fischer, Senior Staff Engineer **/RA/**

SUBJECT: ANALYSIS OF EDO RESPONSE TO ACRS LETTER ON THE TECHNOLOGY-NEUTRAL FRAMEWORK FOR FUTURE PLANT LICENSING

Attached is a copy of the EDO's May 31, 2007, letter of response to the ACRS's April 20, 2007, letter on the Technology-Neutral Framework for Future Plant Licensing. A copy of the Committee's letter is also attached.

Committee Letter

In its April 20, 2007, report to the Chairman on the Technology-Neutral Framework for Future Plant Licensing, the Committee recommended:

1. The staff should complete work on a technology-neutral framework rather than proceed with the development of technology-specific frameworks.

2. The completed framework should be tested on the Pebble Bed Modular Reactor (PBMR) design.

EDO Response

1. With regard to the recommendation to complete the technology-neutral framework (rather than proceed with the development of technology-specific frameworks), the EDO's response indicated that the staff is reviewing the stakeholder comments and the views expressed by the ACRS to determine whether the Framework should be revised. In general, stakeholders indicate that the approach is reasonable, although they do suggest some specific changes and request clarification to better understand the criteria and guidance in the Framework.

   The Framework's primary objective is to demonstrate the feasibility of a possible risk-informed and performance-based approach that would serve as the technical basis for licensing a reactor employing any technology. The staff believes that this objective will be accomplished with publication of the Framework. The staff plans to publish the Framework in 2007.

   The staff will summarize stakeholders' comments and staff's responses in an appendix to the Framework report. The staff has offered to meet and further discuss issues with the ACRS prior to the publication of the Framework report.

2. The staff agreed with the ACRS that the PBMR pre-application and licensing activity is a logical choice on which to test the concepts presented in the Framework. At the time of licensing, the staff will have the applicant's probabilistic risk assessment available and the staff anticipates that the Framework concepts could be used in the review of the

PBMR design. This licensing activity would be in addition to the testing already completed for a light water reactor, which is documented in Appendix E of the Framework report.

Analysis

1. The EDO response to the Committee's first recommendation is satisfactory because the staff indicated that it is reviewing stakeholder comments and the ACRS views to determine whether the Framework should be revised. Furthermore, staff offered to meet with the Committee to further discuss issues of concern to the ACRS prior to the publication of the Framework report. However, the EDO's response indicates that the primary objective of the framework would be met with the publication of the framework, which they planned to do sometime in 2007. The staff made no commitment to complete the technology-neutral Framework, to the ACRS's satisfaction, prior to publication or prior to proceeding with the development of technology-specific frameworks.

2. The EDO response to the Committee's second recommendation is satisfactory because the staff agreed that the PBMR design is a logical choice on which to test the technology-neutral Framework concepts (i.e., during pre-application and licensing activity).

Attachments: As stated

cc: ACRS Members
F. Gillespie
S. Duraiswamy
C. Santos