



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

February 6, 2008

MEMORANDUM TO: George E. Apostolakis, Chair  
Reliability and PRA Subcommittee

FROM: Girija S. Shukla, Senior Program Manager **/RA/**  
Reactor Safety Branch, ACRS

SUBJECT: ANALYSIS OF EDO RESPONSE TO ACRS LETTER ON DRAFT  
FINAL NUREG-1829, "ESTIMATING LOSS-OF-COOLANT ACCIDENT  
(LOCA) FREQUENCIES THROUGH THE ELICITATION PROCESS,"  
AND DRAFT NUREG-XXXX, "SEISMIC CONSIDERATIONS FOR THE  
TRANSITION BREAK SIZE"

Attached is a copy of the January 30, 2008 EDO letter of response to the December 20, 2007 ACRS letter on the subject draft NUREG reports related to loss-of-coolant accident (LOCA) frequencies. A copy of the Committee's letter is also attached.

#### **Committee Letter**

In its December 20, 2007 letter the ACRS recommended that:

- NUREG-1829 on estimating LOCA frequencies through the expert elicitation process, and the NUREG report on seismic considerations for the transition break size (TBS) should be published.
- Regulatory decisions should be based on the totality of the results from the sensitivity studies rather than the results from individual methods of expert judgment aggregation.
- A set of consistent guidelines should be established for the elicitation and aggregation of expert judgments including the performance of sensitivity studies. These guidelines should be used throughout the agency.

#### **EDO Response**

The EDO response stated that the staff agrees with the Committee's recommendations, as follows, and that both reports are expected to be publicly available in February 2008.

The staff selected the proposed TBS in the draft rule by considering typical reactor coolant pressure boundary piping sizes to ensure an acceptably low break frequency after accounting for uncertainties in the NUREG-1829 LOCA frequency estimates. Risk contributions associated with factors not considered in the NUREG-1829 study were also addressed to ensure that the failure propensity beyond the TBS remains low.

The staff also agrees that it may be beneficial to establish guidance for conducting elicitations and aggregating expert judgments. Any additional effort will build on relevant existing guidance. RES will coordinate with other program offices to determine the need for further guidance.

In addition, on August 10, 2007, Commission provided the staff with additional guidance for developing the risk-informed revision to the ECCS rule. In addition to addressing the Commission Guidance as part of this revision, the staff will also address many of the recommendations from the Committee's letter dated November 20, 2006. The staff will also brief the Committee on this revised rule before releasing it for public comment. A revised schedule for this rulemaking is currently scheduled to be sent to the Commission in March 2008.

### **Analysis**

The EDO's response is satisfactory.

Attachments: As stated

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