



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
WASHINGTON, D. C. 20555

September 11, 1984

Mr. William J. Dircks  
Executive Director for Operations  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555

Dear Mr. Dircks:

SUBJECT: EPRI CATEGORIZATION OF GENERIC SAFETY AND LICENSING ISSUES

In a memorandum to Mr. R. F. Fraley dated April 20, 1984, Mr. Harold Denton, Director, Office of Nuclear Reactor Regulation, requested ACRS review and comment on the correctness of the proposed categorization of generic safety and licensing issues, identifying which issues impact future LWR standardized plant designs. This categorization results from a cooperative effort between the NRC Staff and the Electric Power Research Institute (EPRI) and is part of the EPRI LWR Standardized Plant Design Evaluation Program.

In our review of this matter during the 293rd meeting, September 6-8, 1984, we had the benefit of discussions with representatives of the NRC, EPRI, and the Atomic Industrial Forum (AIF), and of the documents referenced. We also had the benefit of a subcommittee meeting held on September 5, 1984.

We believe that the general approach of attempting to categorize safety and licensing issues into groups applicable or inapplicable to new LWR designs, as EPRI now envisages such designs, should be useful in several ways. It helps to provide a mechanism for identifying those issues warranting attention for resolution and is leading to a useful exchange of information and ideas between the NRC Staff and industry. We support continuation of this effort.

EPRI and the AIF plan to attempt to develop proposed means for resolution of the issues EPRI has identified as unresolved and applicable to new LWR designs. The EPRI program is intended to lead to accepted means of resolving currently identified issues and minimizing the chance of backfit for future LWRs. If the ambitious EPRI plan for the resolution of such issues for future LWRs is to receive adequately informed review and evaluation by the NRC Staff, a very considerable allocation of NRC resources will be required in addition to the current NRC effort on unresolved safety issues and high priority generic issues focused on plants in operation and under construction.

We wish to note a few other caveats with regard to the program:

- . Many previous issues have been "resolved" by modifications to plant designs which were required to compensate for fundamental

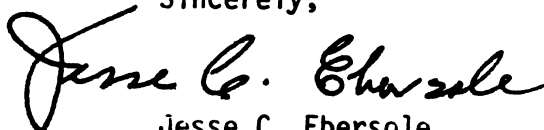
September 11, 1984

weaknesses in the overall design approach; thus, reviewing future designs against only the outstanding issues without considering how previous issues were resolved would not disclose undesirable design compromises which should not be perpetuated.

- . It is to be expected that the new LWR designs contemplated by EPRI may introduce new safety issues.
- . Care is needed in tracking all portions of each issue as they are categorized, resolved, dropped, etc. to be sure that significant matters do not get misplaced or lost.
- . It will be important to ascertain that issues previously treated as resolved in terms of existing designs and existing Standard Review Plan requirements do not reemerge in terms either of new design considerations or changed views of safety requirements when one goes beyond the old standard design basis accidents and the single failure criterion.
- . Some matters now categorized as licensing issues may remain subject to considerable uncertainty. It is possible that research and future experience will lead to changes in requirements.
- . The NRC Staff noted that an archive of all issues will be maintained by the NRC, including those that have been dropped or resolved. Such an archive should be useful, and proponents of new designs should review the archive to assure that a change in design does not restore a formerly resolved issue to one of significance.

We have not reviewed in detail the categorizations developed up to this time. The ACRS expects to examine this matter when this work is nearer to completion.

Sincerely,



Jesse C. Ebersole  
Chairman

References:

1. U. S. Nuclear Regulatory Commission, "A Prioritization of Generic Safety Issues," USNRC Report NUREG-0933, dated December 1983
2. S. Levy Incorporated, Draft Interim Report, SLI-8410, "LWR Standardized Plant Design Evaluation," dated April 1984 and Revised June 1984
3. Memorandum from Harold R. Denton, Director, Office of Nuclear Reactor Regulation, to Raymond F. Fraley, Executive Director, ACRS, Subject: Generic Safety and Licensing Issues - A Categorization to Identify Which Issues Impact LWR Standardized Future Plant Design dated April 20, 1984