

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

October 11, 1979

Honorable Joseph M. Hendrie  
Chairman  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

SUBJECT: SYSTEMATIC EVALUATION PROGRAM

Dear Dr. Hendrie:

During its 213th meeting, January 5-7, 1978, the Advisory Committee on Reactor Safeguards (ACRS) received a presentation from the Nuclear Regulatory Commission (NRC) Staff concerning the Systematic Evaluation Program (SEP) as planned. This program was intended to examine many safety-related aspects of eleven of the older light water reactors (LWR). The purposes of the program were to ascertain the degree to which these reactors complied with current LWR safety criteria and standards, and to enable evaluation in a systematic way of the possible need for backfitting, after the review of each reactor was completed. The program also included the potential for identification of significant deficiencies which might warrant separate, earlier action prior to completion of the review.

The SEP appeared to be generally responsive to the ACRS recommendation for a periodic, comprehensive (10-year) review of older reactors, first made by the Committee in 1966. An important difference was that the ACRS had recommended that the licensee perform the detailed safety analysis of his plant and report his results and conclusions to the NRC Staff for their review and evaluation, while in the SEP the NRC Staff performs the detailed review.

In January 1978, the NRC Staff estimated that the SEP, as they planned it, would take about three years.

During its 233rd meeting, September 6-8, 1979, the ACRS was again briefed on the status of the SEP by the NRC Staff. The Staff reported that progress had been far slower than expected and that the earliest completion date was now three to three and one-half years in the future even if the currently available manpower resources were not diverted to other jobs. The NRC Staff stated that, thus far, they had identified only a few potentially significant deficiencies and stated that no criteria existed for identification of such deficiencies by the Staff.

The ACRS believes that the pace of the SEP has been too slow and that the currently expected completion date is later than desirable, in view of the fact that most of the plants being reviewed in this program were designed prior to the development of the first draft General Design Criteria and otherwise reflect an early era in the evolution of safety criteria.

The ACRS still believes that the SEP should be carried out in a manner similar to the safety reviews at the OL stage; that is, the licensee should prepare a Safety Analysis Report for those portions of the plant being reviewed, this analysis should be reviewed and evaluated by the NRC Staff, and appropriate actions should be required to remedy any significant deficiencies. The Committee believes also that criteria appropriate to the nature and intent of the SEP be developed on which to base the judgment of potentially significant safety deficiencies.

The Committee recognizes that the SEP is in an intermediate stage wherein a reformulation of the responsibility for the safety reevaluation is not straightforward. However, in view of the potential importance of the safety reevaluation of the reactors under review, and in view of the importance of developing a suitable process for other reactors, the ACRS recommends that the NRC undertake an early reevaluation of the current structure of the SEP.

Sincerely,

A handwritten signature in black ink, appearing to read "Max W. Carbon". The signature is fluid and cursive, with the first name "Max" and last name "Carbon" clearly distinguishable.

Max W. Carbon  
Chairman