



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

SL-0396

PDR 9/25/92

August 13, 1992

The Honorable Ivan Selin  
Chairman  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Chairman Selin:

SUBJECT: SUMMARY REPORT - THREE HUNDRED AND EIGHTY-SEVENTH MEETING  
OF THE ADVISORY COMMITTEE ON REACTOR SAFEGUARDS, JULY 9-  
11, 1992, AND OTHER RELATED ACTIVITIES OF THE COMMITTEE

During its 387th meeting, July 9-11, 1992, the Advisory Committee  
on Reactor Safeguards discussed several matters and completed the  
report and memoranda noted below:

REPORT

- Integral System and Separate Effects Testing in Support of the Westinghouse AP600 Plant Design Certification (Report to Chairman Selin, dated July 17, 1992)

MEMORANDA

- SECY-92-224, Revised Implementation Procedures for Issuance of Generic Communications (Memorandum for James M. Taylor, Executive Director for Operations, from Raymond F. Fraley, Executive Director of the ACRS, dated July 20, 1992)
- Draft Rulemaking Revising 10 CFR Part 50, "Production and Utilization Facilities; Emergency Planning and Preparedness" (Memorandum for Eric S. Beckjord, Director, Office of Nuclear Regulatory Research, from Raymond F. Fraley, Executive Director of the ACRS, dated July 21, 1992)

HIGHLIGHTS OF KEY ISSUES CONSIDERED BY THE COMMITTEE

1. Westinghouse AP600 Passive Plant Design

Representatives of the staff and Westinghouse continued their discussions with the Committee on this matter, including the test programs proposed by Westinghouse and the NRC staff to support certification of the Westinghouse AP600 reactor plant design.

The Committee completed a report on this matter to you as noted above.

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2. Status of Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Program

Representatives of the staff briefed the Committee on the status of the development of ITAAC for the certified standard design, including SECY-92-214, which was issued on June 11, 1992, regarding instructions for the development of ITAAC for the GE ABWR design.

Time did not permit completion of a Committee report during this meeting; discussion of the Committee report has been scheduled for further consideration at the August 1992 ACRS meeting.

3. Severe Accident Research Program

Dr. Kerr, Chairman, Severe Accidents Subcommittee, reported that the staff had recently provided the updated Severe Accident Research Program (SARP) Plan in draft NUREG-1365, Revision 1, and that the Subcommittee had held meetings in October 1991 and May and June 1992 to discuss elements of the SARP Plan and the updated SARP Plan document.

Representatives of the staff presented an overview of the updated SARP Plan including a discussion on the key issues that were resolved or nearly resolved, and those that required further research. The staff also discussed programs regarding core melt progression and direct containment heating.

Due to time constraints, the Committee did not develop a report on the SARP at this meeting, but will consider this matter further during its August 1992 meeting.

4. Meeting with Director, NRC Office for Analysis and Evaluation of Operational Data (AEOD)

Mr. E. Jordan, Director of the Office of Analysis and Evaluation of Operational Data (AEOD), briefed the Committee on several matters involving AEOD's activities.

This was a briefing for information only. No ACRS action was taken.

5. EPRI Requirements for Evolutionary Plants

Mr. Wylie briefed the Committee on the meeting of the Improved Light Water Reactors Subcommittee that was held June 17-18, 1992 to review and discuss the EPRI Requirements Document on evolutionary light water reactors and the NRC staff's Safety Evaluation Report (SER).

Representatives of the NRC staff briefed the Committee on the results of the staff's review and noted that the final SER is scheduled to be published in August 1992. Representatives of EPRI briefed the Committee on the goals of their program.

The Committee did not prepare a report on this matter during this meeting. A proposed Committee report on this matter will be discussed at its August 1992 meeting.

6. Proposed Resolution of Generic Issue 106, Piping and Use of Highly Combustible Gases in Vital Areas

Representatives of the NRC staff briefed the Committee on Generic Issue 106.

A Committee report on the proposed resolution of Generic Safety Issue 106, "Piping and the Use of Highly Combustible Gases in Vital Areas," was not completed due to insufficient time to discuss the report at this meeting; discussion has been scheduled for the August 1992 ACRS meeting.

7. Policy Issues for Certification of Evolutionary and Passive Plant Designs

This was a report writing session. Representatives of the NRC staff were available to discuss policy issues they had identified in a draft SECY Paper, dated February 7, 1992, regarding certification of evolutionary and passive LWR power plant designs. Recommendations and resolution schedules regarding the following certification issues for the passive light water reactors were discussed:

- I. SECY-90-016 Issues
  - E. Fire Protection
  - F. Intersystem LOCA
  - G. Hydrogen Generation and Control
  - I. High-Pressure Core Melt Ejection
  - J. Containment Performance
  - K. Dedicated Containment Vent Penetration
  - L. Equipment Survivability
  - N. In-Service Testing of Pumps and Valves

III.E. Control Room Habitability

The Committee discussed a draft report on the issues noted above and their relationship to current regulatory requirements. The Committee will continue its preparation of a report on this matter at its August 1992 meeting.

8. Proposed Standard Review Plan and Associated Regulatory Guide for Plant License Renewal

Mr. Ward briefed the Committee on the July 7, 1992 joint meeting of the ACRS Subcommittees on Plant License Renewal/Materials and Metallurgy, at which the Subcommittees reviewed and discussed the staff's proposed Standard Review Plan and associated regulatory guide for plant license renewal, as well as the Proposed Branch Technical Position (BTP) on Fatigue Evaluation Procedures. (See item 9 below.)

Representatives of the NRC staff and NUMARC briefed the Committee on the draft Interim Standard Review Plan and the associated regulatory guide for plant license renewal.

The Committee will consider a draft report on this matter, including the issue of fatigue evaluation, at its August 1992 meeting.

9. Proposed Branch Technical Position (BTP) on Fatigue Evaluation Procedures

Dr. Shewmon briefed the Committee regarding the review and discussion of the staff's proposed BTP on Fatigue Evaluation Procedures for plant license renewal. The joint Subcommittees on Plant License Renewal/Materials and Metallurgy had been briefed by the staff on this matter at a meeting held July 7, 1992.

Representatives of the NRC staff and NUMARC briefed the Committee on the Branch Technical Position on Fatigue.

The Committee expects to consider comments on this matter with regard to the plant license renewal issue, discussed in Section 8 above, during its August 1992 meeting.

10. Appointment of ACRS Members

Comments on Legal Considerations with Regard to the Appointment of ACRS Members

Mr. T. Rothschild, Office of the General Counsel, discussed legal considerations with regard to specific individuals currently being considered for ACRS membership. This was a useful exchange of information.

### Recommendations for Appointment

The Committee agreed to a list of names of prospective members to remain under active consideration for future openings. Members proposed that several names should be dropped from active consideration and letters sent to the individuals to inform them of this decision.

The Committee agreed to a list of five recommended names to send to you for consideration to fill two vacant ACRS positions. (See R. Fraley memorandum to Chairman Selin dated August 4, 1992.)

#### 11. Reconciliation of ACRS Comments and Recommendations

Responses from the Executive Director for Operations (EDO) regarding several Committee reports and specific recommendations were provided to the Committee members.

Time did not permit specific discussion by the members.

#### 12. Other

The Committee members discussed the following matters:

- SECY-92-224, Revised Implementation Procedures for Issuance of Generic Communications

The Committee decided not to review this matter. The Committee agreed that R. Fraley should send a memorandum to J. Taylor as noted above.

- Draft Rulemaking Revising 10 CFR Part 50, "Production and Utilization Facilities; Emergency Planning and Preparedness"

The Committee decided not to review this matter. The Committee agreed that R. Fraley should send a memorandum to E. Beckjord as noted above.

#### 13. Subcommittee Meetings

During the period between the June 4-6 and the July 9-11, 1992 ACRS meetings, the following Subcommittee meetings were held:

- Computers in Nuclear Power Plant Operations/Reliability and Quality, June 16, 1992

The Subcommittees reviewed the NRC research activities for environmental qualification of digital instrumentation and control systems.

- Improved Light Water Reactors, June 17, 1992

The Subcommittee reviewed Chapter 1 of the Electric Power Research Institute's (EPRI's) Requirements Document (Vols. II and III) for evolutionary and passive plant designs.

- Improved Light Water Reactors, June 18, 1992

The Subcommittee reviewed the Final Safety Evaluation Report (FSER) of the Electric Power Research Institute's (EPRI's) Requirements Document for evolutionary plant designs.

- Thermal Hydraulic Phenomena, June 23, 1992

The Subcommittee discussed the Westinghouse Electric Corporation's and the NRC staff's proposed test programs in support of the AP600 passive plant design certification effort.

- Severe Accidents, June 25, 1992

The Subcommittee discussed the revision to NUREG-1365, Severe Accident Research Program Plan.

- Plant License Renewal/Materials and Metallurgy, July 7, 1992

The Subcommittees discussed the proposed Standard Review Plan for License Renewal, the proposed Regulatory Guide on the Form and Content of a License Renewal Application, and the proposed Branch Technical Position on Reactor Component Fatigue Considerations for License Renewal.

- Auxiliary and Secondary Systems, July 8, 1992

The Subcommittee discussed the proposed resolution of Generic Issue 106, "Piping and Use of Highly Combustible Gases in Vital Areas."

- Planning and Procedures, July 8, 1992

The Subcommittee discussed proposed ACRS activities and related matters, including qualifications of candidates nominated for appointment to the ACRS.

#### 14. Anticipated ACRS Activities

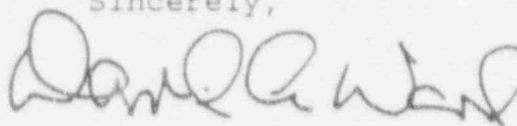
The Committee agreed to discuss the following during its 388th meeting, August 6-8, 1992:

- A. Supplement to Generic Letter 83-28, Required Actions Based on Generic Implications of Salem ATWS Events - Briefing by and discussion with representatives of the NRC staff regarding this proposed supplement to Generic Letter 83-28 and a Differing Professional Opinion regarding this matter.
- B. Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Review and report on selected ITAACs submitted for design certification of the GE Advanced Boiling Water Reactor. Representatives of the NRC staff and the nuclear industry will participate, as appropriate.
- C. Elimination of Requirements Marginal to Safety - Review and report on NRC plans to eliminate or modify regulatory requirements that have marginal importance to safety including matters related to items such as the main steam isolation valve leakage control system, combustible gas control systems, containment leak rate testing, and ECCS analytical models. Representatives of the NRC staff and the nuclear industry will participate, as appropriate.
- D. Meeting with Director, NRC Office of Nuclear Reactor Regulation (NRR) (Tentative) - Meeting with Director, NRR, to discuss items of mutual interest, including the status of the GE ABWR design certification review, status of the Regulatory Impact Survey (RIS) implementation and related regulatory matters.
- E. Revision 3 to Regulatory Guide 1.101 - Briefing by and discussion with representatives of the NRC staff regarding Revision 3 to Regulatory Guide 1.101, "Emergency Planning and Preparedness for Nuclear Reactors."
- F. EPRI Requirements for Evolutionary Plants - Review and report on proposed EPRI requirements for evolutionary light-water reactors and the associated NRC staff's Safety Evaluation Report. Representatives of the NRC staff and the nuclear industry will participate, as appropriate.
- G. Future ACRS Activities - Discuss topics proposed for consideration by the full Committee.
- H. Resolution of ACRS Comments/Recommendations - Discuss NRC Executive Director for Operations (EDO's) proposed resolution of ACRS comments and recommendations.
- I. Appointment of ACRS Members - Discuss qualifications of candidates nominated for appointment to the ACRS and the current status of appointment/reappointment.
- J. Subcommittee Activities - Reports on and discussion of assigned subcommittee activities including those related to conduct of ACRS activities and use of computers in nuclear power plants.

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- K. Miscellaneous - Complete discussion matters which were not completed at previous meetings including topics such as the NRC Severe Accident Research Program Plan; Generic Safety Issue 106, Piping and the Use of Highly Combustible Gases in Vital Areas; Issues Pertaining to Evolutionary and Passive Light Water Reactors and their Relationship to Current Regulatory Requirements; and proposed ACRS plan for reviewing the application for certification of the GE ABWR design.

Sincerely,

A handwritten signature in dark ink, appearing to read "David A. Ward". The signature is fluid and cursive, with the first name "David" being the most prominent.

David A. Ward  
Chairman