

UNITED STATES NUCLEAR REGULATORY COMMISSION ADVISORY COMMITTEE ON REACTOR SAFEGUARDS WASHINGTON, D. C. 20655

SL-0411 PDR 8/25/94

November 17, 1993

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

Dear Chairman Selin:

SUBJECT: SUMMARY REPORT - FOUR HUNDRED SECOND MEETING OF THE ADVISORY COMMITTEE ON REACTOR SAFEGUARDS, OCTOBER 7-8, 1993, AND OTHER RELATED ACTIVITIES OF THE COMMITTEE

During its 402nd meeting, October 7-8, 1993, the Advisory Committee on Reactor Safeguards (ACRS) discussed several matters and completed the following reports noted below. In addition, the Committee authorized Dr. Larkins, ACRS Executive Director, to issue the memorandum noted:

Reports

Proposed Rule and Draft Regulatory Guide to Address Resolution of Generic Issue 23, "Reactor Coolant Pump Seal Failure" (Report to James M. Taylor, Executive Director for Operations, from J. Ernest Wilkins, Jr., ACRS Chairman, dated October 14, 1993)

Proposed Final Amendments to 10 CFR Part 55 on Renewal of Licenses and Requalification Requirements for Licensed Operators (Report to Chairman Selin from J. Ernest Wilkins, Jr., ACRS Chairman, dated October 14, 1993)

### Memorandum

Proposed Final Rule on Modifications to Fitness-for-Duty Program Requirements (Memorandum to Frank J. Congel, Director, Division of Radiation Safety and Safeguards, NRR, from John T. Larkins, Executive Director, ACRS, dated October 15, 1993.)

Consistent with the Committee's decision, Dr. Larkins informed Mr. Congel that the Committee decided not to review the proposed final rule on modifications to the Fitness-for-Duty Program requirements concerning the random drug testing rate. The Committee has no objection to the staff's proposal for issuing these modifications to the rule.

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# The Honorable Ivan Selin 2 November 17, 1993

# HIGHLIGHTS OF KEY ISSUES CONSIDERED BY THE COMMITTEE

#### 1. EPRI Passive Light Water Reactor Requirements Document

Mr. Charles J. Wylie, Chairman of the Improved Light Water Reactor (ILWR) Subcommittee, indicated that the subcommittee met with the NRC staff and EPRI on October 6, 1993, to discuss the EPRI Utility Requirement Document (URD) for Passive LWRs and the associated NRC staff's Safety Evaluation Report. The meeting emphasized how the policy issues related to the passive nuclear power plant designs have been dealt with in the EPRI document. Mr. Wylie noted that the staff review was based on the fact that the URD does not have legal standing and does not conflict with the regulations.

### Conclusion

The Committee is planning to issue its letter to the Commission in December 1993.

Proposed Resolution of Generic Issue 23, "Reactor Coolant Pump 2 . Seal Failure"

The Committee reviewed and commented on the proposed rule and accompanying draft regulatory guide to address the resolution of Generic Issue-23. Representatives of the NRC staff, Northeast Utilities and NUMARC participated.

# Conclusion

The Committee indicated that it was dissatisfied with the proposed resolution. The Committee believes that additional dialogue between the NRC staff and the industry is needed on this matter. A report to the EDO was issued that recommends that the proposed rule and draft regulatory guide not be issued for public comment in their present form.

#### Severe Accident/PRA Issues for the ABWR Design 3.

The Committee heard a briefing by and held discussions with representatives of General Electric Nuclear Energy (GE) regarding severe accident and PRA issues associated with the GE ABWR design certification review.

# Conclusion

This briefing was part of the Committee's review of the ABWR design. The Committee will address this matter after hearing the NRC staff's presentation on the Supplemental Safety Evaluation Reports.

# The Honorable Ivan Selin 3 November 17, 1993

#### Reconciliation of ACRS Comments and Recommendations 4.

The responses of the Executive Director for Operations (EDO) to the comments and recommendations included in previous ACRS reports were discussed as follows:

EDO letter, dated September 22, 1993, responding to the ACRS report dated August 11, 1993, concerning ACRS Comments on the Proposed Resolution of Generic Issue 57, "Effects of Fire Protection System Actuation on Safety-Related Equipment"

### Conclusion

The above EDO letter satisfactorily addressed the Committee's comments. However, the Auxiliary and Secondary Systems Subcommittee plans to hold a meeting in the future to discuss any residual concerns of the Committee related to this matter as well as other fire-related issues.

EDO letter, dated September 22, 1993, responding to the ACRS report dated August 11, 1993, concerning ACRS Comments on Proposed Resolution of Generic Issue 143, "Availability of Chilled Water System and Room Cooling"

### Conclusion

The Committee decided to discuss this matter further during the November 18, 1993 meeting of the Individual Plant Examinations Subcommittee.

### 5. Steam Generator Tube Rupture Event at Palo Verde Nuclear Power Plant, Unit 2

The Committee heard a briefing by and held discussions with representatives of the NRC staff regarding the issues arising from the steam generator tube rupture event that occurred at the Palo Verde Nuclear Power Plant, Unit 2, on March 14, 1993.

### Conclusion

This briefing was for information only. No action was taken by the Committee.

#### 6. Proposed Final Amendments to 10 CFR Part 55

The Committee reviewed and commented on the proposed final amendments to 10 CFR Part 55 regarding renewal of license and regualification requirements for licensed operators. Representatives of the NRC staff participated. The current

# The Honorable Ivan Selin /

schedule calls for a CRGR review and submittal to the EDO by the end of October. The staff plans to publish these amendments in mid to late December after the Commission review.

### Conclusion

The Committee provided a report on this matter dated October 14, 1993, to Chairman Selin.

## 7. Subcommittee Meetings

During the period from September 11 to October 7, 1993, the following Subcommittee meetings were held:

 <u>Severe Accidents</u> - September 22-24, 1993 (Portland, Oregon)

The Subcommittee continued its review of the severe accident and PRA issues associated with the GE ABWR design certification.

 <u>Thermal Hydraulic Phenomena</u> - September 21, 1993 (Corvallis, Oregon)

The Subcommittee continued its review of the Westinghouse integral systems test programs being conducted in support of the AP600 design certification. The meeting discussion focused on the Oregon State University integral systems test facility program. (Members of the Subcommittee and representatives of the NRC staff toured the OSU facility on September 20, 1993.)

Mechanical Components - October 5, 1993

The Subcommittee discussed the status of the ongoing NRC and industry activities associated with motor-operated valves, check valves, butterfly valves, and other related matters.

Decay Heat Removal Systems - October 5, 1993

The Subcommittee reviewed the proposed resolution of Generic Safety Issue-23, "Reactor Coolant Pump Seal Failure."

Improved Light Water Reactors - October 6, 1993

The Subcommittee met with the NRC staff and EPRI to discuss the EPRI Utility Requirements Document (URD) for Passive LWRs and the associated NRC staff's Safety Evaluation Report.

November 17, 1993

Planning and Procedures - October 6, 1993

The Subcommittee discussed proposed ACRS activities, practices and procedures for conducting the Committee business.

#### 8. Future ACRS Activities

- The Committee agreed to review the proposed supplement to Generic Letter 86-10 on Fire Endurance Testing during the 404th ACRS meeting.
- Dr. Catton suggested that the Committee explore the details of the analyses required pursuant to the procedures of the PTS Rule, in light of the actions surrounding the shutdown of the Yankee Rowe Nuclear Power Plant. The focus of these discussions should be on the specifics of the thermal hydraulic phenomena analyses. It was suggested that a joint meeting of the Thermal Hydraulics Phenomena, Materials and Metallurgy, and PRA Subcommittees be held, subject to availability of time and resources.
- Professor Gören Dahlen, Chairman of the advisory committee RSN, Swedish Nuclear Power Inspectorate, is scheduled to meet with Dr. Wilkins in the ACRS office on November 3, 1993, to discuss generic issues, programmable equipment, and other issues of mutual interest.

#### Future Meeting Agenda 9.

The Committee agreed to consider the following during the 403rd ACRS Meeting, November 4-6, 1993, Bethesda, Maryland:

PRA Working Group Final Report - Review and comment on the proposed PRA Working Group Final Report and an associated Commission paper. Representatives of the NRC staff will participate.

Revised Security Requirements - Review and comment on the proposed Commission paper on Internal Threat, SECY-93-270, "Proposed Amendments to 10 CFR Part 73 to Protect Against Malevolent Use of Vehicles at Nuclear Power Plants," and safeguards and security requirements for the GE ABWR design. Representatives of the NRC staff will participate.

NRC-RES ROSA AP600 Confirmatory Test Program - Review and comment on the adequacy of the proposed text matrix and modifications and additions to the ROSA test facility prior to initiation of the RES test program in support of the AP600

design certification review. Representatives of the NRC staff will participate.

Preapplication Safety Evaluation Report (PSER) for the PRISM Design - Review and comment on the NRC staff's draft PSER for the PRISM liquid-metal-cooled reactor design. Representatives of the NRC staff will participate.

Instrumentation and Control Systems and Certified Design Material for the ABWR Design - Review and comment on Chapter 7, "Instrumentation and Control Systems," of the Standard Safety Analysis Report for the ABWR design and Certified Design Material for the Instrumentation and Control Systems, Human Factors, Radiation Protection, and Piping Design. Representatives of the NRC staff and GE Nuclear Energy will participate.

Regulatory Treatment of Non-Safety Systems - Review and comment on the proposed NRC staff positions on issues related to the regulatory treatment of non-safety systems. Representatives of the NRC staff will participate.

Technical Training Programs - Hear a briefing by and hold discussions with representatives of the NRC's Office for Analysis and Evaluation of Operational Data (AEOD) on the technical training programs being developed by AEOD for the Technical Training Center in Chattanooga, Tennessee.

Westinghouse Experimental Programs Related to the AP600 Passive Plant Design Certification - Hear briefings by and hold discussions with representatives of the Westinghouse Electric Corporation and the NRC staff regarding the Westinghouse experimental programs related to the AP600 passive plant design certification effort.

Resolution of ACRS Comments and Recommendations - Discuss responses from the NRC Executive Director for Operations to recent ACRS comments and recommendations.

Report of the Planning and Procedures Subcommittee - Hear a report of the Planning and Procedures Subcommittee on matters related to the conduct of ACRS business.

ACRS Subcommittee Activities - Hear a report and hold a discussion regarding the activities of the Advanced Boiling Water Reactors Subcommittee.

Future Activities - Discuss topics proposed for consideration by the full Committee during future meetings.

Miscellaneous - Discuss miscellaneous matters related to the conduct of Committee activities and complete discussion of matters and specific issues that were not completed during previous meetings, as time and availability of information permit.

Sincerely,

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J. Ernest Wilkins Jr. Chairman