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TABLE OF CONTENTS
MINUTES OF THE 472nd ACRS MEETING

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	<u>Page</u>
I. <u>Chairman's Report</u> (Open)	1
II. <u>Initiatives Related to Risk-Informed Technical Specifications</u> (Open)	2
III. <u>Potential Revisions to the Pressurized Thermal Shock (PTS)</u> (Open)	5
IV. <u>Proposed Revision to Regulatory Guide 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis"</u> (Open)	6
V. <u>Proposed Regulatory Guide and Standard Review Plan (SRP) Section Associated with NRC Doe Reviews</u> (Open)	9
VI. <u>SECY-00-0062, Risk-Informed Regulation Implementation Plan</u> (Open)	10
VII. <u>Operating Event at E. I. Hatch Nuclear Power Plant, Unit 1</u> (Open)	11
VIII. <u>Physical Security Requirements for Power Reactors</u> (Open)	13
IX. <u>Executive Session</u> (Open)	15
A. Reconciliation of ACRS Comments and Recommendations	
B. Report on the Meeting of the Planning and Procedures Subcommittee Held on May 10, 2000 (Open)	
C. Future Meeting Agenda	

REPORTS AND MEMORANDA

REPORTS

- SECY-00-0053, "NRC Program on Human Performance in Nuclear Power Plant Safety" (Report to Richard A. Meserve, Chairman, NRC, from Dana A. Powers, Chairman, ACRS, dated May 23, 2000)

- Use of Defense in Depth in Risk-Informing NMSS Activities (Report to Richard A. Meserve, Chairman, NRC, from B. John Garrick, Chairman, ACNW, and Dana A. Powers, Chairman, ACRS, dated May 25, 2000)

MEMORANDA

- Proposed Final Revision 1 to Regulatory Guide 1.54, "Service Level I, II, and III Protective Coatings Applied to Nuclear Power Plants" (Memorandum to William D. Travers, Executive Director for Operations, NRC, from John T. Larkins, Executive Director, ACRS, dated May 19, 2000)
- Proposed Modifications to Regulatory Guidance Documents Regarding Use of Risk-Informed Decisionmaking in License Amendment Reviews (Memorandum to William D. Travers, Executive Director for Operations, NRC, from John T. Larkins, Executive Director, ACRS, dated May 22, 2000)
- Draft Regulatory Guide DG-1096, "Transient and Accident Analysis Methods" and Standard Review Plan, Section 15.0.1, "Review of Analytical Computer Codes" (Memorandum to William D. Travers, Executive Director for Operations, NRC, from John T. Larkins, Executive Director, ACRS, dated May 22, 2000)

OTHER

- Review and Evaluation of the Nuclear Regulatory Commission Safety Research Program (Report to Richard A. Meserve, Chairman, NRC, from Dana A. Powers, Chairman, ACRS, dated May 24, 2000)

APPENDICES

- I. Federal Register Notice
- II. Meeting Schedule and Outline
- III. Attendees
- IV. Future Agenda and Subcommittee Activities
- V. List of Documents Provided to the Committee

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MINUTES OF THE 472ND MEETING OF THE
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS
MAY 11-13, 2000
ROCKVILLE, MARYLAND

The 472nd meeting of the Advisory Committee on Reactor Safeguards (ACRS) was held in Conference Room 2B3, Two White Flint North Building, Rockville, Maryland, on May 11-13, 2000. Notice of this meeting was published in the *Federal Register* on April 21, 2000 (65 FR 21492) (Appendix I). The purpose of this meeting was to discuss and take appropriate action on the items listed in the meeting schedule and outline (Appendix II). The portion of the meeting concerning the status of revising the physical security requirements for power reactors was closed. The meeting was open to public attendance, but there were no written statements or requests for time to make oral statements from members of the public regarding the meeting.

A transcript of selected portions of the meeting was kept and is available in the NRC Public Document Room at the Gelman Building, 2120 L Street, N.W., Washington, D.C. [Copies of the transcript are available for purchase from Ann Riley & Associates, Ltd., 1025 Connecticut Avenue, N.W., Suite 1014, Washington, D.C. 20036, and on the ACRS/ACNW Web page at (www.NRC.gov/ACRS/ACNW).]

ATTENDEES

ACRS Members: Dr. Dana A. Powers (Chairman), Dr. George Apostolakis (Vice Chairman), Mr. John Barton, Dr. Mario V. Bonaca, Dr. Thomas S. Kress, Dr. William J. Shack, Dr. Robert L. Seale, Mr. John D. Sieber, Dr. Robert E. Uhrig, and Dr. Graham B. Wallis. For a list of other attendees, see Appendix III.

I. Chairman's Report (Open)

[Note: Dr. John T. Larkins was the Designated Federal Official for this portion of the meeting.]

Dr. Dana A. Powers, Committee Chairman, convened the meeting at 8:30 a.m. and reviewed the schedule for the meeting. He summarized the agenda topics for this meeting and discussed the administrative items for consideration by the full Committee.

II. Initiatives Related to Risk-Informed Technical Specifications (Open)

[Note: Mr. Michael T. Markley was the Designated Federal Official for this portion of the meeting.]

Introduction

Mr. Jack Sieber, Vice Chairman of the ACRS Subcommittee on Plant Operations, introduced the topic to the Committee. He stated that a joint meeting of the Subcommittees on Plant Operations and on Reliability and Probabilistic Risk Assessment met on April 28, 2000, to discuss NRC staff efforts in the area of risk-informed technical specifications and associated industry initiatives proposed by the Risk-Informed Technical Specification Task Force (RITSTF). He stated that the purpose of this meeting was to review RITSTF Initiative 2 on missed technical specification surveillance requirements and Initiative 3 on mode restraint flexibility. Mr. Sieber summarized the Subcommittees' discussions and noted that the staff was not requesting a report or letter from the Committee at this time.

Industry Presentation

Mr. Biff Bradley of the Nuclear Energy Institute (NEI) provided an overview presentation to the Committee. He stated that representatives of the Combustion Engineering Owners Group (CEOG), the Boiling Water Reactor Owners Group (BWROG), Southern California Edison Company, and EXCEL Consulting who participated in the meeting on April 28, 2000, of the joint Subcommittees were unable to attend, and he offered to respond to questions and concerns on their behalf. Significant points raised during the presentation include the following:

- NEI proposes to maximize the use of the maintenance rule in accordance with 10 CFR 50.65(a)(4). The goal is to make technical specifications and 10 CFR 50.65(a)(4) complementary.
- For Initiative 2, the industry proposes to allow extension of missed technical specification surveillances to the next available opportunity (i.e., the next available operating state or mode that would allow completion of the surveillance) or the duration of the next full surveillance interval (e.g., up to 18-24 months for outage-related tests). NEI stated that most missed surveillances were caused by administrative errors (e.g., procedure

changes) and emphasized that the industry proposal would not allow surveillances to be missed willfully.

- NEI stated that the licensee's corrective action program is a key element of the industry approach to risk-informed technical specifications. NEI noted that monitoring will be important and suggested that follow up verification should be part of the revised reactor oversight process (RROP).
- For Initiative 3, the industry proposes to make Technical Specification 3.0.4 a risk-informed process whereby licensees are allowed to change plant modes with equipment out of service. If licensees are unable to return the equipment to service within the technical specification allowed outage time, they would be required to comply with the normal technical specification required actions (e.g., commence a plant shutdown). The owners groups propose to use configuration risk management programs (CRMPs) and risk transition models to evaluate the potential risk for actions associated with this initiative.
- NEI is establishing an executive-level technical specification working group to provide policy guidance and coordination of risk-informed technical specification initiatives with CFR 50.65(a)(4) of the maintenance rule.

NRC Staff Presentation

Mr. Robert Dennig, NRR, led the discussions for the NRC staff. Ms. Nanette Gilles and Mr. Mark Reinhart, NRR, provided supporting discussion. Messrs. Scott Newberry and Richard Barrett, NRR, also participated. Significant points made during the presentation include the following:

- The staff summarized its view of concerns expressed by the joint Subcommittees on April 28, 2000, including (1) the need for details concerning the decision process for licensees' actions and NRC's verification of safety, (2) the need for quality in licensee probabilistic risk assessments (PRAs) and risk analysis tools, (3) the need for better understanding of how RROP will ensure that adequate safety is maintained, (4) the need for public involvement and support for initiatives, (5) the potential adverse effects on plant safety culture, and (6) the effectiveness of communication of proposed changes.

- Missed surveillances will continue to be reportable. The major change is that the risk-informed initiative will allow licensees to delay completion of technical specification required actions. In the current regulatory framework, licensees could request enforcement discretion for these requirements and continue to operate with NRC approval or simply comply with the required technical specification actions (i.e., shut down the plant within a specified time).
- In general, the staff supports Initiatives 2 and 3 proposed by the industry. However, formal action is deferred pending receipt of industry responses to staff requests for additional information. The staff is also considering issues noted by the ACRS and its Subcommittees regarding these matters.

Dr. Powers questioned how licensees would evaluate risk for missed surveillances. Dr. Kress questioned how licensees would address "risk spikes" and suggested that criteria be established to handle them. NEI reiterated its earlier statement that risk would be evaluated and managed in accordance with 10 CFR 50.65(a)(4) of the maintenance rule and the CRMP.

Mr. Sieber questioned the appropriateness of allowing a full surveillance interval when surveillances are missed. He expressed the view that equipment relied on to prevent or mitigate plant events and incidents could degrade without detection. Drs. Apostolakis and Kress stated that some plant conditions (i.e., operational modes and plant transitions) are not modeled well. Therefore, it may not be possible to calculate a change in the failure rate.

Dr. Apostolakis noted that the Subcommittees had requested and the CEOG had agreed to provide its risk transition model for review by individual ACRS members. Dr. Apostolakis noted that the CEOG had not yet provided the subject model and questioned when it might be available for ACRS review. NEI agreed to follow up on this matter. Drs. Apostolakis and Seale suggested and the Committee agreed that a Subcommittee meeting would be appropriate to review the broader issue of risk transition models.

The Committee extensively discussed issues related to operable versus functional plant equipment, qualitative versus quantitative risk assessment, the role of CRMPs, the relationship between technical specifications and 10 CFR 50.65(a)(4) of the maintenance rule, and the role of the RROP in verifying safety.

Conclusion

The Committee decided to continue its review of initiatives related to risk-informed technical specifications during future meetings. The Committee also decided to schedule a Subcommittee meeting in the near future to review risk transition models proposed by the Nuclear Steam Supply System (NSSS) Owners Groups.

III. Potential Revisions to the Pressurized Thermal Shock Acceptance Criterion

[Note: Mr. Noel F. Dudley was the Designated Federal Official for this portion of the meeting.]

Dr. Dana Powers, ACRS Chairman, introduced this session by calling on the staff to begin its presentation. Mr. Mark Cunningham, RES, presented a draft Commission paper that provided different approaches for reevaluating the pressurized thermal shock (PTS) screening criterion. He stated that the purpose of the paper is to obtain an early Commission review on the staff's intended direction with respect to revising one part of the screening criterion used in the PTS rule. Mr. Cunningham explained that the PTS rule issued in 1983 is an adequate protection rule with a PRA criterion of less than 5×10^{-6} through-wall cracks per reactor year. He described how the staff determined the value for the criterion. He noted that the rule assumes that a through-wall crack is equivalent to a large opening in a reactor vessel, which results in core damage.

Mr. Edwin Hackett explained that recent material research provides a better understanding of material properties, such as flaw distributions, irradiation embrittlement correlations, fracture toughness, and beltline fluence calculations. He described how improvements in the fracture mechanics computer code and in the understanding of material properties could result in a more accurate PTS screening criterion.

Mr. Cunningham presented the different regulatory approaches and assumptions that could be used to revise the PTS screening criterion. He explained that the staff plans to submit the draft Commission paper to the EDO by May 24, 2000.

The Committee members and the staff discussed the following:

- effects of stresses associated with PTS events and flaw characteristics on the reactor pressure vessel failure probability;

- relationship among the current PTS screening criterion, core damage frequency (CDF), large early-release frequency (LERF), and adequate protection;
- reevaluation of materials fracture toughness curves;
- use of qualitative adequate protection criteria versus quantitative safety goal criteria;
- application of defense in depth;
- use of absolute values of risk versus calculation of changes in risk;
- allocation of risk among accident scenarios;
- differences between CDF and LERF; and
- whether PTS events will result in containment bypass.

Conclusion

The Committee issued a report to Chairman Meserve on this matter on May 19, 2000.

IV. Proposed Revision to Regulatory Guide 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis"

[Note: Mr. Michael T. Markley was the Designated Federal Official for this portion of the meeting.]

Dr. George Apostolakis, Chairman of the ACRS Subcommittee on Reliability and Probabilistic Risk Assessment, introduced this topic to the Committee. He stated that the purpose of this meeting was to review the staff's efforts in response to the staff requirements memorandum (SRM) dated January 5, 2000 (SECY-99-246), concerning license amendments in which the amendment request complies with the regulations and other license requirements but the staff is concerned that a substantial hazard may exist. Dr. Apostolakis informed the Committee that the Subcommittee would consider the results of the staff's working with internal and external stakeholders to clarify what constitutes a "special circumstance" and the staff's proposed new appendix to NUREG-0800, "Standard Review Plan,"

Chapter 19, "Use of Probabilistic Risk Assessment in Plant-Specific, Risk-Informed Decisionmaking: General Guidance," and associated changes to Regulatory Guide (RG) 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis."

NRC Staff Presentation

Mr. Robert Palla, NRR, led the discussions for the NRC staff. Messrs. Gary Holahan and Richard Barrett, NRR, provided supporting discussion. Significant points raised during the staff presentation include the following:

- In October 1999, the staff issued SECY-99-246, "Proposed Guidelines for Applying Risk-Informed Decisionmaking in License Amendment Reviews," for consideration by the Commission. In that paper, the staff highlighted the need for using risk information in licensing actions that were not submitted to the NRC by licensees as risk-informed initiatives. The staff cited an example involving the electrosleeving steam generator repair at the Union Electric Company's Calloway nuclear plant.
- In an SRM dated January 5, 2000, the Commission approved the staff's approach for initial implementation. The Commission directed the staff to work with internal and external stakeholders to clarify what constitutes a "special circumstance" and to develop guidance that articulates this clarification in a clear and objective manner.
- The staff also issued Regulatory Issue Summary 2000-07 to inform licensees of the interim guidance on the use of risk information by the staff in its review of license amendment requests, including reviews of license amendment requests that are not risk informed.
- The staff proposes to issue the new appendix to SRP Chapter 19 and associated changes to RG 1.174 for public comment in May 2000 and plans to submit the proposed final version of these documents for consideration by the Commission in September 2000.

Industry Presentation

Mr. Biff Bradley of the NEI led the discussions for the industry. Mr. Al Passwater of the Union Electric Company provided supporting discussion. Significant points made during the industry presentation include the following:

- The industry is very sensitive about the potential for risk-informed regulation to be considered mandatory. In particular, the industry is concerned that there will be a proliferation of new regulatory requirements (i.e., additional regulatory burden) that the licensees will have difficulty in meeting with their existing resources (i.e., operating and risk analysis staffs).
- The definition of “special circumstances” needs to be clarified further. The current set of examples provided by the NRC focuses more on process rather than case studies highlighting acceptable/unacceptable conditions. Industry representatives suggested that the use of more examples would be helpful to licensees in better understanding when the NRC might want risk analysis to support a deterministic licensing submittal. Industry representatives also suggested clarifying the definition of responsibility in identifying who gets to decide when a special circumstance exists.

The Committee and the staff extensively discussed the issue of adequate protection. Dr. Apostolakis questioned why the criteria in RG 1.174 are not used as a trigger for agencywide decisions, or as a threshold for adequate protection. He also questioned why the use of risk information could not be considered mandatory. The staff stated that the purpose of this initiative is to address the need for a method to address “special circumstances” when a potential risk increase is posed by a requested licensee action, when the request is not presented as a risk-informed submittal. The staff described the proposed appendix and associated changes to the guidance as a screening tool for evaluating potential unanticipated increases in risk. The staff also noted that adequate protection is still considered to be protection that satisfies regulatory requirements.

Although Drs. Powers and Seale expressed concern that the proposed guidance could be misused or overused by the staff, the Committee expressed general agreement that the proposed guidance would help in making the use of risk information in licensing reviews more predictable. Dr. Powers suggested that the Committee support the staff’s proposed issuance of the subject documents for public comment.

Conclusion

The Committee authorized the ACRS Executive Director to issue a memorandum on this matter to the EDO dated May 22, 2000.

V. Proposed Regulatory Guide and Standard Review Plan (SRP) Section Associated with NRC Code Reviews

[Mrs. Maggalean W. Weston was the Designated Federal Official for this portion of the meeting.]

Dr. Graham B. Wallis, Chairman of the ACRS Subcommittee of Thermal-Hydraulic Phenomena, introduced this topic to the committee. He stated that the purpose of the meeting was to provide the full committee with a status of the development of draft Regulatory Guide DG 1096, "Generic Transient and Accident Analysis Methods" and Standard Review Plan (SRP), Section 15.0.1, "Review of Analytical Computer Codes." A presentation of this subject was made to the subcommittee on April 27, 2000. Dr. Wallis noted that because we do not have full-scale experiments on nuclear reactors, predictions that become a part of the decision making process regarding the results of accidents are based on computer models. Therefore, these models are, for obvious reasons, important.

NRC Staff Presentations

The presentation on DG 1096 was made by Mr. G. Norman Lauben, RES. Mr. Joseph Staudenmeier, NRR, made the presentation on the SRP. The presentation was a shortened version of the one made to the subcommittee on April 27, 2000. Specifically, the staff discussed with the Committee the revisions to the RG and SRP section based on comments made during the subcommittee meeting. The staff stated that issues discussed during the subcommittee meeting would be incorporated into the RG and SRP section, as appropriate. The staff also indicated that the draft guide transient and accident analysis methods address the findings of the Maine Yankee panels and other review groups. The Committee and staff discussed the generic applicability of the code review, and the use of or reference to Code Scaling, Applicability and Uncertainty (CSAU) study. The staff indicated that the RG would apply to other code reviews as well as thermal hydraulics. They also indicated that CSAU was done to evaluate code uncertainties in order to do best estimate calculations.

The staff will provide any revisions to the RG and SRP section to the Committee prior to their issuance for public comment.

Conclusion

The ACRS Executive Director issued a memorandum dated May 22, 2000, to the NRC Executive Director for Operations indicating that the Committee plans to

review the final version of the draft RG and SRP section after reconciliation of public comments and therefore, has no objection to staff publishing the draft RG and SRP for public comment.

VI. SECY-00-0062, "Risk-Informed Regulation Implementation Plan"

[Note: Dr. Medhat El-Zeftawy was the Designated Federal Official for this portion of the meeting.]

Dr. George Apostolakis stated that the NRC staff has provided the Commission with SECY-00-0062. This SECY describes a summary of the significant accomplishments in the risk informing of regulatory processes and practices since the 1999 update of the PRA implementation plan.

Mr. Thomas King, RES, stated that in March 1999, the General Accounting Office issued a report on the NRC's risk-informed regulation efforts in which it made the following recommendation:

"To help ensure the safe operation of plants and the continued protection of public health and safety in a competitive environment, we recommend that the Commissioners of NRC direct the staff to develop a comprehensive strategy that includes but is not limited to objectives, goals, activities, and time frames for the transition to risk-informed regulation; specifies how the Commission expects to define the scope and implementation of risk-informed regulation; and identifies the manner in which it expects to continue the free exchange of operational information necessary to improve the quality and reliability of risk assessments."

The NRC Chairman responded to this recommendation in a letter to Senator Fred Thompson and others June 18, 1999, indicating that the staff is developing, for Commission approval, a document describing the agency's strategy for risk-informed regulation that will specify the scope and approach for implementation.

Consistent with the NRC Chairman's response, the staff prepared SECY-00-0062, "Risk-Informed Regulation Implementation Plan," to provide the Commission with a summary of significant accomplishments in the risk informing of the regulatory processes and practices, an example of the form and content of the revised PRA implementation plan, and a description of issues that have affected or may affect the implementation of the Commission's risk-informed activities.

In SECY-99-211, the staff indicated that it would restructure the PRA implementation plan to more clearly describe the risk-informed activities and provide linkage to the agency's Strategic Plan. The staff revised the PRA implementation plan to change it to a risk-informed implementation plan (RIRIP). The name was changed to better characterize the nature and purpose of the plan. In SECY-00-0062, the staff noted that the RIRIP would accomplish the following:

- Be organized to track three principal arenas in the agency's Strategic Plan (Nuclear Reactor Safety, Nuclear Materials Safety, and Nuclear Waste Safety),
- Provide clear objectives and linkages to the PRA Policy Statement and to the agency's Strategic Plan,
- Identify criteria for the selection and prioritization of practices and policies to be risk informed and guidelines for implementation,
- Identify major pieces of work associated with these efforts and related major milestones, including plans for communicating information to stakeholders.

The staff envisions the RIRIP as improving the regulatory process through safety decisionmaking enhanced by the use of PRA insights; through more efficient use of agency resources; and through a reduction in unnecessary burden on licensees. In SECY-00-0062, the staff provided a specific implementation plan in the Nuclear Reactor Safety arena (e.g., modification of the safety goal policy and updating of RG 1.174, the reactor oversight process, 10 CFR Part 50, pressurized thermal shock, fire protection, etc.).

Conclusion

The Committee plans to continue its review of this matter and to follow up on the staff's progress during future meetings.

VII. Operating Event at E. I. Hatch Nuclear Power Plant, Unit 1

[Note: Mr. Amarjit Singh was the Designated Federal Official for this portion of the meeting.]

Mr. John J. Barton, Chairman of the Subcommittee on Plant Operations, introduced the topic to the Committee. He stated that the purpose of this session

was to discuss and hear presentations with the representatives of the NRC staff regarding the findings and recommendations of the Augmented Inspection Team (AIT), which investigated the reactor trip event January 26, 2000, at E.I. Hatch Nuclear Power Plant, Unit 1.

NRC Staff Presentations

Mr. Leonard Wert, Team Leader of the AIT, briefly presented the overall event sequence and the findings of the AIT. This event occurred during the shift change at Hatch Unit 1, when Hatch Unit 1 was at 100 percent power. The reactor pressure vessel water level began decreasing as a result of a substantial reduction in the reactor feedwater flow rate following an unexpected closure of the inlet valve to the high-pressure feedwater heater. Later it was determined that the valve closed because of a problem with the valve control switch. The valve closure caused a large reduction in feedwater flow, the reactor water level decreased, and an automatic reactor trip occurred as expected.

The high pressure coolant injection (HPCI) system and the reactor core isolation cooling (RCIC) system automatically actuated and injected water at large flow rates into the reactor as designed. The reactor vessel water level was rapidly recovered. The feedwater pumps and the RCIC system tripped on high level as expected. The HPCI system did not immediately trip on high level and continued to inject water into the reactor for about 1 minute before it tripped. The main steam isolation valves (MSIVs) were then shut by the operators. This action is required by the Emergency Operating Procedures and is intended to prevent water from flooding the main steamlines. However, the reactor vessel water level was high enough so that some water entered the main steamlines.

In accordance with procedures, an operator attempted to open safety relief valves (SRVs) to control reactor pressure, but the expected control panel indications were not received. Later it was determined that the SRVs had actually opened when actuated. The SRV tailpipe (discharge line) temperatures clearly showed that the valves had opened. During the transient, reactor pressure reached a maximum value that was just slightly above normal operating pressure.

The reactor water level was controlled by the operators using the HPCI and RCIC systems. Several attempts to restart the RCIC after it tripped on high level were unsuccessful. This turbine-driven pump tripped on overspeed several times. Water from the main steamlines had entered the line supplying steam to the turbine. The water affected the turbine control system. Procedural guidance and training were not adequate for restarting the tripped system under the existing conditions. The operators did not properly monitor reactor vessel water level and injection system operations. Mr. Wert stated that the AIT concluded that the Shift Technical Advisor did not provide timely assistance to operators when unexpected SRV indications were observed.

Mr. Wert also stated that the NRC staff is considering this event as a significant event that has potential generic complications. The NRC staff is requesting the following review of two issues, including interaction with the BWROG and General Electric as appropriate:

- To what degree should water be allowed to enter the main steamlines at BWRs? Should universal guidance be developed for BWRs with specific criteria directing when MSIVs should closed?
- What is the significance and specific impact of the water in the main steamlines relative to considerations in the design and licensing basis?

Industry Statement

Mr. Lewis Summer, Vice President of Nuclear Operations for E.I. Hatch Nuclear Power Plant, stated that the licensee had initiated broader corrective actions to address operations performance issues and had completed several corrective actions, including revision of the turnover process.

Conclusion

This briefing was held for information only. No action was required.

VIII. Physical Security Requirements for Power Reactors

[Note: Mr. Noel F. Dudley was the Designated Federal Official for this portion of the meeting.]

Introduction

Dr. Thomas S. Kress, Chairman of the Regulatory Policy and Practices Subcommittee, stated that assessing the risk of security events is difficult, even though these events may be risk dominant. He noted that design basis threats and a defense-in-depth philosophy are used to establish security requirements and that the staff and licensees conduct inspections and tests to verify compliance with these requirements.

Staff Presentation

Mr. Richard Rosano, NRR, presented a chronology of the staff's efforts to risk inform 10 CFR 73.55, "Requirements for physical protection of licensed activities in nuclear power reactors against radiological sabotage," and to develop a regulatory requirement for the conduct of inspections similar to the Operational Safeguards Response Evaluation (OSRE) program, which has ended. He described how a conditional probabilistic risk analysis can be used to determine the consequences of a security event. Mr. Rosano explained that the staff determined that by delineating performance criteria to be used as the basis for the new physical protection regulations, the staff could negate the need for defining radiological sabotage. He described the industry's Safeguards Performance Assessment (SPA) Program and how it would be used as an interim program until the proposed rulemaking is completed.

The Committee members and the staff discussed how actions taken by one knowledgeable individual who has access to the plant was used in the design concept. They also discussed security event response procedures, differences between the OSRE and SPA programs, licensees' ability to develop security event scenarios, and the use of computers to simulate and analyze armed intervention scenarios.

Nuclear Control Institute Presentation

Mr. Edwin S. Lyman, Nuclear Control Institute, stated that a robust security system must be retained by licensees and verified by the NRC through the use of an OSRE type inspection program. He explained that the staff's allowance of credit for operator actions must be demonstrated. Mr. Lyman stated his opposition to redefining the radiological sabotage in terms of 10 CFR Part 100, "Reactor Site Criteria," dose limits: to allowing the NEI to review and comment on the design basis threat; and to allowing licensees greater oversight of their self-assessment programs. He noted that public citizens cannot participate at the same level as NEI at public meetings because of their lack of resources. The ACRS members and Mr. Lyman discussed why the OSRE program was

canceled, preparation of security response plans, and detection of sabotage committed by an insider.

Nuclear Energy Institute Presentation

Mr. James Davis, NEI, compared the OSRE to baseline inspections. He described the core program and drill evaluations and evaluated exercises. He stated that the security regulations should be revised on the basis of performance insights gained from the OSRE process.

The Committee members and Mr. Davis discussed why licensees need to know the design basis threat, the motivation for recommending a performance-based rule, and examples of deterministic requirements that do not contribute to enhanced security. They also discussed developing defensive strategies against an intelligent adversary and the difficulties in using performance-based inspections to evaluate deterministic rules.

Design Basis Threat (Closed Session)

Ms. Roberta Warren, NMSS, presented the current design basis threat for nuclear reactors. She described how the design basis threat was developed and contrasted it to the design basis threat for production and Department of Energy facilities. Ms. Warren explained threat assessment activities and how they related to revising the design basis threat. The Committee members and Ms. Warren discussed the qualification of NRC threat assessment analysts, predictions for changes in the threat environment, and the threat of an intelligent insider.

Conclusion

This briefing was held for information only.

IX. Executive Session (Open)

[Note: Dr. John T. Larkins was the Designated Federal Official for this portion of the meeting.]

A. Reconciliation of ACRS Comments and Recommendations

[Note: Mr. Sam Duraiswamy was the Designated Federal Official for this portion of the meeting.]

- ! During the discussion of Future Activities, Dr. Wallis indicated that the Thermal-Hydraulic Phenomena Subcommittee is satisfied with the objectives, scope, and direction of the RES PTS thermal-hydraulic research program. The status of this program will be reviewed during a joint Material and Metallurgy/Thermal-Hydraulic Phenomena subcommittee meeting scheduled for September 22, 2000.

- ! The Committee discussed the response from the EDO dated April 18, 2000, to ACRS comments and recommendations included in its letter dated March 13, 2000, concerning proposed resolution of GI B-17, "Criteria for Safety-Related Operator Actions" and Generic Issue 27, "Manual vs Automated Actions"

The Committee decided it was satisfied with the EDO's response, but expressed concern regarding use of information from ANSI/ANS Standard ANSI/ANS 58.8 - 1994, "Time Response Design Criteria for Safety-Related Operator Actions".

- ! The Committee discussed the response from the EDO, dated April 21, 2000, to ACRS comments and recommendations included in the ACRS report dated March 13, 2000, concerning SECY-00-0007, "Proposed Staff Plan for Low-Power and Shutdown Risk Analysis Research to Support Risk-Informed Regulatory Decisionmaking."

The Committee decided that it was satisfied with the EDO's response. The Committee plans to continue to evaluate matters related to low-power and shutdown operations as plant incidents and regulatory activities indicate emergent risk significant issues of concern.

- ! The Committee discussed the response from the EDO, dated April 19, 2000, to ACRS comments and recommendations included in the ACRS report dated March 15, 2000, concerning the revised reactor oversight process (RROP).

The Committee decided that it was satisfied with the EDO's response. In accordance with the Staff Requirements Memorandum dated April 5, 2000, the Committee plans to continue its review the results of the use of performance indicators and the significance determination process subsequent to initial implementation of the RROP.

B. Report on the Meeting of the Planning and Procedures Subcommittee
(Open)

S Review of the Member Assignments and Priorities for ACRS Reports and Letters for the May ACRS Meeting

Member assignments and priorities for ACRS reports and letters for the May ACRS meeting were discussed. Reports and letters that would benefit from additional consideration at a future ACRS meeting were also discussed.

S Anticipated Workload for ACRS Members

The anticipated workload of the ACRS members through July 2000 was discussed. The objectives were: (1) to review the reasons for the scheduling of each activity and the expected work product and to make changes, as appropriate, (2) to manage the members' workload for these meetings, and (3) to plan and schedule items for ACRS discussion of topical and emerging issues. During this session, the Subcommittee discussed and developed recommendations on the items that require Committee decision.

S Mandatory Use of the Government Sponsored Charge Card

A copy of the April 28, 2000 NRC Yellow Announcement, "Mandatory Use of the Government Sponsored Charge Card for Travel," was discussed. This announcement supersedes all previous announcements on this matter. The mandatory use of the government sponsored charge card for official government travel became effective on May 1, 2000. This card must be used to pay for lodging expenses and for any other expenses that exceed \$75 while on official travel.

S Commission Paper on ACRS/ACNW Self Assessment

A proposed Commission paper on ACRS/ACNW self assessment and a summary matrix of the ACRS letters and reports was distributed to the members for review during the April 2000 ACRS meeting. Comments provided by some members have been incorporated into the final version of these documents. These documents were sent to the Commission on Friday, May 5, 2000. In the future, the Self Assessment, including the matrix of letters, will become a part of the ACRS/ACNW Operating Plan. In going through the process of preparing this document, the ACRS staff recognized the benefit of an ACRS Priority Plan and

recommended that the Committee endorse the preparation of a Priority Plan for CY 2001-2002.

S Division of Responsibilities Between ACRS and ACNW for Reviewing Decommissioning Activities

A paper outlining a division of responsibilities between ACRS and ACNW for reviewing the NRC staff activities in the area of decommissioning was discussed. The Committee agreed that members of the ACRS/ACNW Joint Subcommittee, review the proposal and recommend a course of action. The ACNW reviewed this paper during its March 2000 meeting and concurred with the proposed ACNW activities and assignments.

The NRC received a request from NEI to combine the integrated rulemaking plan (the single rulemaking that would address the issues on emergency planning, financial indemnity, safeguards/physical protection, operator staffing and training requirements, and Backfit Rule applicability that are now being addressed in separate rulemakings) and the rulemaking plan for the consolidation of decommissioning regulation into a single rulemaking. (All of these rulemaking actions are intended to be risk informed.) NEI proposed that the single risk-informed rulemaking consolidating all decommissioning regulations could be completed in about 24 months. The staff and NEI met and discussed the NEI request on May 9, 2000. In addition, it appears that some agreement states may implement decommissioning requirements that are more restrictive than the NRC requirements.

S Meeting with Stakeholders

During the January 2000 retreat, the ACRS discussed ways in which the Committee could interact with stakeholders, including NEI, INPO, and utilities, to obtain information on significant stakeholders' issues. As recommended by the Planning and Procedures Subcommittee, a proposal was developed for such an interaction. The full Committee considered the proposal during and members were requested to provide comments be prepared to agree on a course of action during the May meeting.

S Memorandum of Understanding

The existing Memorandum of Understanding (MOU) between the ACRS and the EDO has not been revised since 1988. Since the Committee practices have changed with regard to reviewing regulatory issues, there is a need to revise the

MOU to reflect the changes in the Committee practices. Accordingly, the current MOU has been revised to make it simpler, concise, and easy to follow. A draft of the revised MOU was sent to the EDO for initial feedback. Since the MOU deals with procedural issues and as the agency and Committee practices change, the MOU will be revised periodically to accommodate these changes, it is recommended that the MOU be signed by the ACRS/ACNW Executive Director.

S Power Uprate Review Guidance

Dr. Cronenberg, ACRS Senior Fellow, has prepared a report on the process being used by the staff in reviewing power uprate applications submitted by licensees. This report has been distributed to the members. In that report, Dr. Cronenberg recommended the need for a standardized and detailed process for use by the staff in reviewing power uprate applications. During the March 2000 meeting, the Planning and Procedures Subcommittee suggested that Dr. Cronenberg obtain information from the staff with regard to ongoing or planned staff activities for standardizing the power uprate review process.

Based on his conversation with the staff, Dr. Cronenberg learned that although some sort of standardized review guidance for power uprate applications was considered, NRR believes that the current process for reviewing such applications is adequate in light of the PWR and BWR Owner Groups' guidance to the licensees with regard to information to be included in the license renewal applications. However, in the future the staff may consider developing detailed guidance for reviewing the power uprate applications.

S Proposed Assignments for Reviewing License Renewal Guidance Documents

The staff is in the process of preparing a Standard Review Plan, Generic Aging Lessons Learned II (GALL II) Report, and a Regulatory Guide associated with license renewal. The Committee needs to complete its review of these documents in November 2000. Dr. Bonaca, Chairman of the Plant License Renewal Subcommittee, has proposed assignments for the members for reviewing these documents. These documents will be provided to the members during August 2000.

S Risk From Low Power and Shutdown

Dr. Savio has been tasked with providing an assessment of the ACRS activities and accomplishments in the area of low power shutdown risk and providing recommendations as to a strategy for future ACRS involvement in this area.

S NRC Annual Performance Report

The Government Performance and Results Act (GPRA) requires federal agencies to produce annual performance reports, the first of which was due by March 31, 2000. The purpose of these reports is to provide the Congress and the American public with information which can be used to assess the effectiveness of the particular agency. The Mercatus Center (George Mason University) has recently issued a report evaluating 24 agencies' reports and performance as described in the reports. The NRC, DOE, FEMA, and DOT were included in this group of agencies.

S Items Proposed by Dr. Powers

The following items, proposed by Dr. Powers, were discussed:

- a) Outstanding obligations to the Commission based on SRMs.
- b) ACRS report to the Commission on the NRC Safety Research Program
- c) License renewal workload (should we have two Subcommittees to handle workload?)

S Meeting with Individual Commissioners

Dr. Powers met with individual Commissioners to discuss items of mutual interest. He will provide a brief report to the Committee on topics discussed and follow-up items resulting from these meetings.

C. Future Meeting Agenda

Appendix IV summarizes the proposed items endorsed by the Committee for the 473rd ACRS Meeting, June 7-9, 2000.

The 472nd ACRS meeting was adjourned at 12:27 p.m. on May 13, 2000.

Non-Radiological Environmental Assessment

The licensee reviewed the non-radiological environmental impacts of power uprate based on information submitted in the Environmental Report—Operating License Stage to support original licensing of LaSalle, Units 1 and 2, the Final Environmental Protection Statement (NUREG-0486), the requirements of the Environmental Protection Plan and the National Pollutant Discharge Elimination System (NPDES) Permit. The proposed power uprate will not affect compliance with NPDES requirements.

As a result of power uprate to 105 percent of current licensed core power, normal heat loads to the cooling lake will increase primarily from an increase in heat load from the condenser and from other increased heat loads rejected by the plant service water system. An increase in steam and condensate flow will result in a corresponding increase in the net heat rejection to the cooling lake. Based on a condenser backpressure of 3.5 inches Hg, a 1 degree Fahrenheit rise in circulating water temperature is expected relative to the current temperature rise value of approximately 24 degrees Fahrenheit. This, in turn, will raise cooling lake temperature, thus, increasing circulating water inlet temperature to the condenser. The lake is expected to experience a 0.4 degree increase in temperature on a long-term basis. Based on this minimal temperature rise, thermal shock to the fish population of the lake is not expected. The effect on lake evaporation, makeup, and blowdown was evaluated and found to be acceptable. The effect on cooling lake total dissolved solids was determined to remain within the licensee's administrative limit of 750 ppm.

The LaSalle cooling lake discharges into the Illinois River. ComEd evaluated the effects of power uprate on the temperature of the water in the river in the vicinity of the cooling lake blowdown and concluded that significant margin exists between the maximum expected edge of mixing zone temperature and imposed regulatory limits.

ComEd also evaluated the noise effects due to operation at uprated power and determined that, because the turbine and reactor building supply and exhaust fans will continue to operate at current speeds and noise levels at uprated conditions, the overall noise level will not increase.

With regard to potential non-radiological impacts, the proposed action does not change the method of

generating electricity at LaSalle, Units 1 and 2, nor the methods of handling effluents from the environment or effluents to the environment. No changes to land use would result and the proposed action does not involve any historic sites. Therefore, no new or different types of non-radiological environmental impacts are expected. Accordingly, the Commission concludes that there are no significant non-radiological environmental impacts associated with the proposed action.

Alternatives to the Proposed Action

As an alternative to the proposed action, the staff considered denial of the proposed action (*i.e.*, the "no-action" alternative). Denial of the application would result in no significant change in current environmental impacts and would reduce the operational flexibility. The environmental impacts of the proposed action and the alternative action are similar.

Alternative Use of Resources

This action does not involve the use of any resources not previously considered in the Final Environmental Statement for LaSalle County Station, Units 1 and 2.

Agencies and Persons Consulted

In accordance with its stated policy, on March 23, 2000, the staff consulted with the Illinois State official, Mr. Frank Nizeolik of the Illinois Department of Nuclear Safety, regarding the environmental impact of the proposed action. The State official had no comments.

Finding of No Significant Impact

Based upon the environmental assessment, the Commission concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the Commission has determined not to prepare an environmental impact statement for the proposed action.

For further details with respect to the proposed action, see the licensee's letter dated July 14, 1999, as supplemented on January 21, February 15, February 23, March 10, March 24, March 31, and April 7, 2000, which are available for public inspection at the Commission's Public Document Room, The Gelman Building, 2120 L Street, NW., Washington, DC, and accessible electronically through the ADAMS Public Electronic Reading Room link at the NRC Web site (<http://www.nrc.gov>)

Dated at Rockville, Maryland this 12th day of April 2000.

For the Nuclear Regulatory Commission.

Anthony J. Mendiola,
Chief, Section 2, Project Directorate III,
Division of Licensing Project Management,
Office of Nuclear Reactor Regulation.

[FR Doc. 00-9961 Filed 4-20-00; 8:45 am]

BILLING CODE 7590-01-P

NUCLEAR REGULATORY COMMISSION

Advisory Committee on Reactor Safeguards; Meeting Notice

In accordance with the purposes of Sections 29 and 182b. of the Atomic Energy Act (42 U.S.C. 2039, 2232b), the Advisory Committee on Reactor Safeguards will hold a meeting on May 11-13, 2000, in Conference Room T-2B3, 11545 Rockville Pike, Rockville, Maryland. The date of this meeting was previously published in the *Federal Register* on Thursday, October 14, 1999 (64 FR 55787).

Thursday, May 11, 2000

8:30 A.M.-8:35 A.M.: *Opening Remarks by the ACRS Chairman* (Open)—The ACRS Chairman will make opening remarks regarding the conduct of the meeting.

8:35 A.M.-10 A.M.: *Initiatives Related to Risk-Informed Technical Specifications* (Open)—The Committee will hear presentations by and hold discussions with representatives of the NRC staff and industry groups regarding initiatives related to risk-informed technical specifications, initial industry submittals on risk-informed technical specifications, and related matters.

10:15 A.M.-11:45 A.M.: *Potential Revisions to the Pressurized Thermal Shock (PTS) Acceptance Criterion* (Open)—The Committee will hear presentations by and hold discussions with representatives of the NRC staff regarding a draft Commission Paper that describes potential revisions to the PTS acceptance criterion.

12:45 P.M.-2:15 P.M.: *Proposed Revision to Regulatory Guide 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis"* (Open)—The Committee will hear presentations by and hold discussions with representatives of the NRC staff regarding proposed revisions to Regulatory Guide 1.174 and associated guidance on the use of risk information in license amendment reviews.

2:30 P.M.-4:00 P.M.: *Proposed Regulatory Guide and Standard Review Plan (SRP) Section Associated with NRC Code Reviews* (Open)—The Committee

will hear presentations by and hold discussions with representatives of the NRC staff regarding proposed Regulatory Guide and SRP Section associated with the NRC staff's review of the analytical codes.

4 P.M.-5 P.M.: Break and Preparation of Draft ACRS Reports (Open)—Cognizant ACRS members will prepare draft reports for consideration by the full Committee.

5 P.M.-7 P.M.: Discussion of Proposed ACRS Reports (Open)—The Committee will discuss a proposed ACRS report on matters considered during this meeting. In addition, the Committee will discuss a proposed ACRS report on the Human Performance Program.

Friday, May 12, 2000

8:30 A.M.-8:35 A.M.: Opening Remarks by the ACRS Chairman (Open)—The ACRS Chairman will make opening remarks regarding the conduct of the meeting.

8:35 A.M.-10 A.M.: SECY-00-0062, Risk-Informed Regulation Implementation Plan (Open)—The Committee will hear presentations by and hold discussions with representatives of the NRC staff regarding a risk-informed regulation implementation plan described in SECY-00-0062.

10:15 A.M.-11:30 A.M.: Operating Event at E.I. Hatch Nuclear Power Plant, Unit 1 (Open)—The Committee will hear presentations by and hold discussions with representatives of the NRC staff regarding the findings and recommendations of the Augmented Inspection Team, which investigated the January 26, 2000 reactor trip event at E.I. Hatch Nuclear Power Plant, Unit 1.

11:30 A.M.-11:45 A.M.: Reconciliation of ACRS Comments and Recommendations (Open)—The Committee will discuss the responses from the NRC Executive Director for Operations (EDO) to comments and recommendations included in recent ACRS reports and letters. The EDO responses are expected to be made available to the Committee prior to the meeting.

12:45 P.M.-2:15 P.M.: Physical Security Requirements for Power Reactors (Open/Closed)—The Committee will hear presentations by and hold discussions with representatives of the NRC staff regarding the status of revising the physical security requirements for power reactors by incorporating insights gained from threat assessment activities being conducted by the staff in coordination with other Federal agencies.

Note: A portion of this session will be closed to discuss safeguards information.

2:30 P.M.-2:45 P.M.: Future ACRS Activities (Open)—The Committee will discuss the recommendations of the Planning and Procedures Subcommittee regarding items proposed for consideration by the full Committee during future meetings.

2:45 P.M.-3:30 P.M.: Report of the Planning and Procedures Subcommittee (Open)—The Committee will hear a report of the Planning and Procedures Subcommittee on matters related to the conduct of ACRS business.

3:30 P.M.-4:30 P.M.: Break and Preparation of Draft ACRS Reports (Open)—Cognizant ACRS members will prepare draft reports for consideration by the full Committee.

4:30 P.M.-7 P.M.: Discussion of Proposed ACRS Reports (Open)—The Committee will discuss proposed ACRS reports.

Saturday, May 13, 2000

8:30 A.M.-2 P.M.: Discussion of Proposed ACRS Reports (Open)—The Committee will continue its discussion of proposed ACRS reports.

1:30 P.M.-2 P.M.: Miscellaneous (Open)—The Committee will discuss matters related to the conduct of Committee activities and matters and specific issues that were not completed during previous meetings, as time and availability of information permit.

Procedures for the conduct of and participation in ACRS meetings were published in the *Federal Register* on September 28, 1999 (64 FR 52353). In accordance with these procedures, oral or written views may be presented by members of the public, including representatives of the nuclear industry. Electronic recordings will be permitted only during the open portions of the meeting and questions may be asked only by members of the Committee, its consultants, and staff. Persons desiring to make oral statements should notify Mr. Sam Duraiswamy, ACRS, five days before the meeting, if possible, so that appropriate arrangements can be made to allow necessary time during the meeting for such statements. Use of still, motion picture, and television cameras during this meeting may be limited to selected portions of the meeting as determined by the Chairman. Information regarding the time to be set aside for this purpose may be obtained by contacting Mr. Sam Duraiswamy prior to the meeting. In view of the possibility that the schedule for ACRS meetings may be adjusted by the Chairman as necessary to facilitate the conduct of the meeting, persons

planning to attend should check with Mr. Sam Duraiswamy if such rescheduling would result in major inconvenience.

In accordance with Subsection 10(d) P.L. 92-463, I have determined that it is necessary to close a portion of this meeting noted above to discuss safeguards information per 5 U.S.C. 552b(c)(3).

Further information regarding topics to be discussed, whether the meeting has been canceled or rescheduled, the Chairman's ruling on requests for the opportunity to present oral statements and the time allotted therefor, can be obtained by contacting Mr. Sam Duraiswamy (telephone 301/415-7364), between 7:30 a.m. and 4:15 p.m., EDT.

ACRS meeting agenda, meeting transcripts, and letter reports are available for downloading or viewing on the internet at <http://www.nrc.gov/ACRSACNW>.

Videoteleconferencing service is available for observing open sessions of ACRS meetings. Those wishing to use this service for observing ACRS meetings should contact Mr. Theron Brown, ACRS Audio Visual Technician (301-415-8066), between 7:30 a.m. and 3:45 p.m., EDT, at least 10 days before the meeting to ensure the availability of this service. Individuals or organizations requesting this service will be responsible for telephone line charges and for providing the equipment facilities that they use to establish the videoteleconferencing link. The availability of videoteleconferencing services is not guaranteed.

Date: April 17, 2000.

Andrew L. Bates,
Advisory Committee Management Officer.
[FR Doc. 00-9960 Filed 4-20-00; 8:45 am]
BILLING CODE 7890-01-P

SECURITIES AND EXCHANGE COMMISSION

Submission for OMB Review; Comment Request

Upon Written Request Copies Available From: Securities and Exchange Commission, Office of Filings and Information Services, Washington, DC 20549.

Survey on Reciprocal Subpoena Enforcement: SEC File No. 270-479, OMB Control No. 3235-new.

Notice is hereby given that, pursuant to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), the Securities and Exchange Commission ("Commission") has submitted to the Office of Management and Budget a



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

April 17, 2000

**SCHEDULE AND OUTLINE FOR DISCUSSION
472nd ACRS MEETING
MAY 11-13, 2000**

**THURSDAY, MAY 11, 2000, CONFERENCE ROOM 2B3, TWO WHITE FLINT NORTH,
ROCKVILLE, MARYLAND**

- 1) 8:30 - 8:35 A.M. Opening Remarks by the ACRS Chairman (Open)
 - 1.1) Opening statement (DAP/JTL/SD)
 - 1.2) Items of current interest (DAP/NFD/SD)
 - 1.3) Priorities for preparation of ACRS reports (DAP/JTL/SD)

- 2) 8:35 - 10:00 A.M. Initiatives Related to Risk-Informed Technical Specifications (Open) (JDS/GA/MTM)
 - 2.1) Remarks by the Subcommittee Chairman
 - 2.2) Briefing by and discussions with representatives of the NRC staff and industry groups regarding initiatives related to risk-informed technical specifications, initial industry submittals on risk-informed technical specifications, and related matters.

- 10:00 - 10:²⁰~~45~~ A.M. *****BREAK*****

- 3) 10:²⁰~~15~~ - 11:45 A.M. Potential Revisions to the Pressurized Thermal Shock (PTS) Acceptance Criterion (Open) (WJS/NFD)
 - 3.1) Remarks by the Subcommittee Chairman
 - 3.2) Briefing by and discussions with representatives of the NRC staff regarding a draft Commission Paper that describes potential revisions to the PTS acceptance criterion.

Representatives of the nuclear industry will provide their views, as appropriate.

- 11:45 - 12:45 P.M. *****LUNCH*****

- 4) 12:45 - 2:²⁵~~45~~ P.M. Proposed Revision to Regulatory Guide 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis" (Open) (GA/MTM)
 - 4.1) Remarks by the Subcommittee Chairman
 - 4.2) Briefing by and discussions with representatives of the NRC staff regarding proposed revision to Regulatory Guide 1.174 and an associated guidance on the use of risk information in license amendment reviews.

Representatives of the nuclear industry will provide their views, as appropriate.

²⁵
2:15 - ⁴⁰2:30 P.M.

BREAK

5) ⁴⁰2:30 - ⁰⁷4:00 P.M.

Proposed Regulatory Guide and Standard Review Plan (SRP)

Section Associated with NRC Code Reviews (Open) (GBW/PAB)

5.1) Remarks by the Subcommittee Chairman

5.2) Briefing by and discussions with representatives of the NRC staff regarding proposed Regulatory Guide and SRP Section associated with the NRC staff's review of the analytical codes.

6) ⁵⁰4:00 - ¹⁰5:00 P.M.

Break and Preparation of Draft ACRS Reports

Cognizant ACRS members will prepare draft reports for consideration by the full Committee.

7) ¹⁰5:00 - 7:00 P.M.

Discussion of Proposed ACRS Reports (Open)

Discussion of proposed ACRS reports on:

7.1) Risk-Informed Technical Specifications (JDS/GA/MTM)

7.2) Potential Revisions to the Pressurized Thermal Shock Acceptance Criterion (WJS/NFD)

7.3) Proposed Revision to Regulatory Guide 1.174 (GA/MTM)

7.4) Proposed Regulatory Guide and Standard Review Plan Section Associated with NRC Staff Code Reviews (GBW/PAB) - *Larkinsgram*

^{5:30-6:20} 7.5) Human Performance Program (GA/NFD)

Joint S/C letter
5:10-5:30
(draft final)

FRIDAY, MAY 12, 2000, CONFERENCE ROOM 2B3, TWO WHITE FLINT NORTH, ROCKVILLE, MARYLAND

8) 8:30 - 8:35 A.M.

Opening Remarks by the ACRS Chairman (Open) (DAP/SD)

9) 8:35 - ^{9:50}10:00 A.M.

SECY-00-0062, Risk-Informed Regulation Implementation Plan (Open) (GA/MME)

9.1) Remarks by the Subcommittee Chairman

9.2) Briefing by and discussions with representatives of the NRC staff regarding risk-informed regulation implementation plan that is described in SECY-00-0062.

Representatives of the nuclear industry will provide their views, as appropriate.

^{9:50}
10:00 - 10:15 A.M.

BREAK

10) 10:15 - ³⁵11:30 A.M.

Operating Event at E.I. Hatch Nuclear Power Plant, Unit 1 (Open) (JJB/AS)

10.1) Remarks by the Subcommittee Chairman

- 10.2) Briefing by and discussions with representatives of the NRC staff regarding the findings and recommendations of the Augmented Inspection Team, which investigated the January 26, 2000 reactor trip event at E. I. Hatch Nuclear Power Plant, Unit 1.

Representatives of the E. I. Hatch Licensee may provide their views, as appropriate.

- 11) 11:³⁵~~30~~ - 11:⁴³~~45~~ A.M.

Reconciliation of ACRS Comments and Recommendations (Open)
(DAP, et al./SD, et al.)

Discussion of the responses from the NRC Executive Director for Operations to comments and recommendations included in recent ACRS reports and letters.

11:45 - 12:45 P.M.

LUNCH

- 12) 12:45 - 12:³⁰~~45~~ P.M.

Physical Security Requirements for Power Reactors (Open/Closed)
(TSK/NFD)

- 12.1) Remarks by the Subcommittee Chairman
12.2) Briefing by and discussions with representatives of the NRC staff regarding the status of revising the physical security requirements for power reactors by incorporating insights gained from threat assessment activities being conducted by the staff in coordination with other Federal agencies.

[NOTE: A portion of this session will be closed to discuss safeguards information.]

12:15 - 2:⁰⁵~~30~~ P.M.

BREAK

- 13) 2:⁰⁵~~30~~ - 2:³⁰~~45~~ P.M.

Future ACRS Activities (Open) (DAP/JTL/SD)

Discussion of the recommendations of the Planning and Procedures Subcommittee regarding items proposed for consideration by the full Committee.

- 14) 2:⁴⁵~~30~~ - 3:¹⁰~~30~~ P.M.

Report of the Planning and Procedures Subcommittee (Open)
(DAP/JTL)

Report of the Planning and Procedures Subcommittee on matters related to the conduct of ACRS business.

- 15) 3:30 - 4:30 P.M.

Break and Preparation of Draft ACRS Reports

Cognizant ACRS members will prepare draft reports for consideration by the full Committee.

- 16) 4:¹⁰~~30~~ - 5:³⁰~~00~~ P.M.

Discussion of Proposed ACRS Reports

Discussion of proposed ACRS reports on:

- 16.1) Risk-Informed Regulation Implementation Plan (GA/MME)
16.2) Risk-Informed Technical Specifications (JDS/GA/MTM)

2:15-3:05
CLOSED

NRC STAFF (May 12, 2000)

R. Barrett, NRR
J. Hyslap, NRR
J. Lee, NRR
S. Dinsmore, NRR
S. West, NRR
E. McKenna, NRR
S. Wong, NRR
D. Terao, NRR
G. Thomas, NRR
G. Hammer, NRR
L. Olshan, NRR
T. Koshy, NRR
V. Hodge, NRR
D. O'Neal, NRR
L. Marsh, NRR
M. Jamcochian, NRR
B. Boger, NRR
G. Tracy, NRR
J. Rosenthal, RES
A. Ramey-Smith, RES
J. Mitchell, RES
D. Marksberry, RES
E. Christenberry, RES
L. Wert, Jr., RII
P. Brockman, NMSS
M. Weber, NMSS
R. Warren, NMSS
J. Davis, NMSS
A. Davis, NMSS

ATTENDEES FROM OTHER AGENCIES AND GENERAL PUBLIC

F. Saba, NUSIS/Scientech
L. Sunner, Southern Nuclear-Plant Hatch
A. Farruk, Southern Nuclear-Plant Hatch
J. Davis, NEI



UNITED STATES
NUCLEAR REGULATORY COMMISSION
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS
 WASHINGTON, D.C. 20555-0001
June 1, 2000

SCHEDULE AND OUTLINE FOR DISCUSSION
473rd ACRS MEETING
JUNE 7-9, 2000

**WEDNESDAY, JUNE 7, 2000, CONFERENCE ROOM 2B3, TWO WHITE FLINT NORTH,
 ROCKVILLE, MARYLAND**

- 1) 8:30 - 8:35 A.M. Opening Remarks by the ACRS Chairman (Open)
 1.1) Opening statement (DAP/JTL/SD)
 1.2) Items of current interest (DAP/NFD/SD)
 1.3) Priorities for preparation of ACRS reports (DAP/JTL/SD)

- 2) 8:35 - 10:00 A.M. Proposed Resolution of Generic Safety Issue-173A, "Spent Fuel
 Storage Pool for Operating Facilities" (Open) (TSK/MME)
 2.1) Remarks by the Subcommittee Chairman
 2.2) Briefing by and discussions with representatives of the NRC
 staff regarding the proposed resolution of Generic Safety
 Issue-173A.

Representatives of the nuclear industry will provide their views, as appropriate.

10:00 - 10:15 A.M. *BREAK*****

- 3) 10:15 - 11:45 A.M. Regulatory Effectiveness of the Station Blackout Rule (Open)
 (MVB/NFD/AS)
 3.1) Remarks by the Subcommittee Chairman
 3.2) Briefing by and discussions with representatives of the NRC
 staff regarding the results of the review performed by the staff
 to determine the regulatory effectiveness of the Station
 Blackout Rule.

Representatives of the nuclear industry will provide their views, as appropriate.

11:45 - 12:45 P.M. *LUNCH*****

- 4) 12:45 - 2:15 P.M. Proposed Final Standard Review Plan Section and Regulatory Guide
 Associated with the Revised Source Term Rule (Open)
 (TSK/PAB/MWW)
 4.1) Remarks by the Subcommittee Chairman
 4.2) Briefing by and discussions with representatives of the NRC
 staff regarding the proposed final Standard Review Plan
 Section and Regulatory Guide associated with the application
 of the revised source term for operating nuclear power plants.

Representatives of the nuclear industry will provide their views, as appropriate.

2:15 - 2:30 P.M. *BREAK*****

- 5) 2:30 - 4:30 P.M. Assessment of the Quality of Probabilistic Risk Assessments (PRAs) (Open) (GA/MTM)
- 5.1) Remarks by the Subcommittee Chairman
 - 5.2) Briefing by and discussions with representatives of the NRC staff regarding the staff's proposal to address PRA quality until the industrial standards have been completed, including the potential role of industry PRA certification process.

Representatives of the nuclear industry will provide their views, as appropriate.

- 6) 4:30 - 5:30 P.M. Break and Preparation of Draft ACRS Reports (Open)
Cognizant ACRS members will prepare draft reports, as needed, for consideration by the full Committee.

- 7) 5:30 - 7:00 P.M. Discussion of Proposed ACRS Reports (Open)
Discussion of proposed ACRS reports on:
- 7.1) Proposed Resolution of Generic Safety Issue-173A, "Spent Fuel Storage Pool for Operating Facilities" (TSK/MME)
 - 7.2) Proposed Final Standard Review Plan Section and Regulatory Guide Associated with the Revised Source Term Rule (TSK/PAB/MWW)
 - 7.3) Regulatory Effectiveness of the Station Blackout Rule (tentative) (MVB/NFD)

THURSDAY, JUNE 8, 2000, CONFERENCE ROOM 2B3, TWO WHITE FLINT NORTH, ROCKVILLE, MARYLAND

- 8) 8:30 - 8:35 A.M. Opening Remarks by the ACRS Chairman (Open) (DAP/SD)
- 9) 8:35 - 10:00 A.M. Performance-Based Regulatory Initiatives (Open) (JDS/MTM)
- 9.1) Remarks by the Subcommittee Chairman
 - 9.2) Briefing by and discussions with representatives of the NRC staff regarding a draft Commission Paper associated with performance-based regulatory initiatives and related matters.

Representatives of the nuclear industry will provide their views, as appropriate.

10:00 - 10:15 A.M. *BREAK*****

- 10) 10:15 - 11:30 A.M. Use of Industry Initiatives in the Regulatory Process (Open) (JJB/NFD)
- 10.1) Remarks by the Subcommittee Chairman
 - 10.2) Briefing by and discussions with representatives of the NRC staff regarding use of industry initiatives in the regulatory process.

Representatives of the nuclear industry will provide their views, as appropriate.

11) 11:30 - 12:00 Noon

Safety Culture at Operating Nuclear Power Plants (Open)
(GA/NFD/JS)

11.1) Remarks by the Subcommittee Chairman

11.2) Briefing by and discussions with Mr. Sorensen, ACRS Senior Fellow, regarding the safety culture at operating nuclear power plants.

Representatives of the NRC staff will provide their views, as appropriate.

12:00 - 1:00 P.M.

*****LUNCH*****

12) 1:00 - 1:30 P.M.

Visit to Davis Besse Nuclear Power Plant and Meeting with NRC Region III Personnel (Open) (JJB/AS)

12.1) Remarks by the Subcommittee Chairman

12.2) Briefing by and discussion with Mr. Singh, ACRS Senior Staff Engineer, regarding the proposed schedule for touring the Davis Besse Nuclear Power Plant, specific plant areas to be visited, proposed topics for discussion with representatives of the licensee, and the NRC Region III Office.

13) 1:30 - 2:00 P.M.

Proposed Plan and Assignments for Reviewing License Renewal Guidance Documents (Open) (MVB/NFD)

Discussion of the proposed plan and member assignments for reviewing the license renewal guidance documents (Standard Review Plan, Regulatory Guide, and Generic Aging Lessons Learned II Report).

14) 2:00 - 2:15 P.M.

Reconciliation of ACRS Comments and Recommendations (Open)
(DAP, et al./SD, et al.)

Discussion of the responses from the NRC Executive Director for Operations to comments and recommendations included in recent ACRS reports and letters.

15) 2:15 - 3:00 P.M.

Future ACRS Activities/Report of the Planning and Procedures Subcommittee (Open) (DAP/JTL/SD)

15.1) Discussion of the recommendations of the Planning and Procedures Subcommittee regarding items proposed for consideration by the full Committee during future ACRS Meetings.

15.2) Report of the Planning and Procedures Subcommittee on matters related to the conduct of ACRS business, and organizational and personnel matters relating to the ACRS.

16) 3:00 - 4:00 P.M.

Break and Preparation of Draft ACRS Reports (Open)

Cognizant ACRS members will prepare draft reports, as needed, for consideration by the full Committee.

- 17) 4:00 - 7:00 P.M. Discussion of Proposed ACRS Reports
 Discussion of proposed ACRS reports on:
- 17.1) Assessment of PRA Quality (GA/MTM)
 - 17.2) Proposed Resolution of Generic Safety Issue-173A, "Spent Fuel Storage Pool for Operating Facilities" (TSK/MME)
 - 17.3) Regulatory Effectiveness of the Station Blackout Rule (tentative) (MVB/NFD)
 - 17.4) Proposed Final Standard Review Plan Section and Regulatory Guide Associated with the Revised Source Term Rule (TSK/PAB/MWW)
 - 17.5) Performance-Based Regulatory Initiatives (tentative) (JDS/MTM)
 - 17.6) Use of Industry Initiatives in the Regulatory Process (JJB/NFD)
 - 17.7) Safety Culture at Nuclear Power Plants (tentative) (GA/NFD/JS)

FRIDAY, JUNE 9, 2000, CONFERENCE ROOM 2B3, TWO WHITE FLINT NORTH, ROCKVILLE, MARYLAND

- 18) 8:30 - 2:30 P.M. Discussion of Proposed ACRS Reports (Open)
 Continue discussion of proposed ACRS reports listed under Item 17.
- 12:00 - 1:00 P.M. *****LUNCH*****
- 19) 2:30 - 3:00 P.M. Miscellaneous (Open) (DAP/JTL)
 Discussion of matters related to the conduct of Committee activities and matters and specific issues that were not completed during previous meetings, as time and availability of information permit.

NOTE:

- **Presentation time should not exceed 50 percent of the total time allocated for a specific item. The remaining 50 percent of the time is reserved for discussion.**
- **Number of copies of the presentation materials to be provided to the ACRS - 35.**

APPENDIX V
LIST OF DOCUMENTS PROVIDED TO THE COMMITTEE
472nd ACRS MEETING
May 11-13, 2000

[Note: Some documents listed below may have been provided or prepared for Committee use only. These documents must be reviewed prior to release to the public.]

MEETING HANDOUTS

AGENDA
ITEM NO.

DOCUMENTS

- 1 Opening Remarks by the ACRS Chairman
 1. Items of Interest, dated May 11-13, 2000

- 2 Initiatives Related to Risk-Informed Technical Specifications
 2. TSTF 358 - Missed Surveillances presentation by NEI [Viewgraphs]
 3. Initiative 2 - Missed Surveillances presentation by NEI [Viewgraphs]
 4. Risk-Informed Technical Specifications, presentation by NRR [Viewgraphs]

- 3 Potential Revisions to the Pressurized Thermal Shock (PTS) Acceptance Criterion
 5. Potential Revisions to PTS Screening Criterion presentation by RES [Viewgraphs]

- 4 Proposed Revision to Regulatory Guide 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis"
 6. Guidelines for Using Risk Information in Regulatory Decisionmaking, presentation by NRR [Viewgraphs]
 7. Requests for Risk Information, presentation by NEI [Viewgraphs]

- 5 Proposed Regulatory Guide and Standard Review Plan (SRP) Section Associated with NRC Code Reviews
 8. SRP Development for T/H Code Reviews, presentation by J. Staudenmeier, NRR [Viewgraphs]
 9. Consultants Report, April 27, 2000, T/H Phenomena Subcommittee meeting, report from ACRS Consultant V. Schrock; excerpt from memorandum to G. Wallis from N. Zuber, ACRS Consultant, Subject: The Effect of Deregulation on NRC's Capabilities in the Field of Thermal-Hydraulics, dated April 6, 2000 [Handout 5-1]
 10. Draft Regulatory Guide DG-1096 Transient and Accident Analysis Methods for Chapter 15 Events presentation by N. Lauben, RES [Viewgraphs]

- 9 SECY-00-0062, Risk-Informed Regulation Implementation Plan
 11. Risk-Informed Regulation - Implementation Plan presentation by RES, NRR [Viewgraphs]
- 10 Operating Event at E. I. Hatch Nuclear Power Plant, Unit 1
 12. Hatch Unit 1 Scram with Complications (AIT) presentation by NRR, Region II [Viewgraphs]
- 11 Reconciliation of ACRS Comments and Recommendations
 13. Reconciliation of ACRS Comments and Recommendations [Handout #11.1]
- 12 Physical Security Requirements for Power Reactors
 14. Paper by Edwin Lyman, Nuclear Control Institute. "The Status of Reactor Safeguards Initiatives - Background: The OSRE Program and Public Confidence," revised May 9, 2000 [Handout 12.1]
 15. Overview presentation by NRR [Viewgraphs]
 16. Self-Assessment Program presentation by NEI [Viewgraphs]
- 13 Future ACRS Activities
 17. Future ACRS Activities - 473rd ACRS Meeting, June 7-9, 2000 [Handout #12.1]
- 14 Report of the Planning and Procedures Subcommittee
 18. Final Draft Minutes of Planning and Procedures Subcommittee Meeting - May 10, 2000 [Handout #14.1]

MEETING NOTEBOOK CONTENTS

TAB

DOCUMENTS

- 2 Initiatives Related to Risk-Informed Technical Specifications
 1. Table of Contents
 2. Proposed Schedule
 3. Status Report, dated May 11, 2000
 4. Letter dated November 17, 1999, from James W. Davis, Nuclear Energy Institute, to William D. Beckner, NRC, Subject: Letter forwarding Technical Specification Task Force Travelers
 5. Letter dated December 16, 1999, from James P. Riccio, Public Citizen, to ACRS Subcommittee on Reliability and Probabilistic Risk Assessment, Subject: Statement concerning Risk-Informed Technical Specifications

- 3 Potential Revisions to the Pressurized Thermal Shock (PTS) Acceptance Criterion
 6. Table of Contents
 7. Proposed Schedule
 8. Status Report dated May 11, 2000
 9. Draft SECY, "Reevaluation of the Pressurized Thermal Shock Rule (10 CFR 50.61) Screening Criterion," received April 20, 2000 [**predecisional information**]

- 4 Proposed Revision to Regulatory Guide 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis"
 10. Table of Contents
 11. Proposed Schedule
 12. Status Report dated May 11, 2000
 13. Memorandum dated April 3, 2000, from Gary M. Holahan, NRR, to John T. Larkins, Executive Director, ACRS, Subject: Modifications to Regulatory Guidance Documents Regarding Use of Risk-Informed Decisionmaking in License Amendment Reviews
 14. US Nuclear Regulatory Commission, Regulatory Issue Summary 2000-07, Use of Risk-Information in License Amendment Reviews
 15. Memorandum dated January 5, 2000, from Annette Vietti-Cook, Secretary, NRC, to William D. Travers, Executive Director for Operations, Subject: Staff Requirements - SECY-99-246 - Proposed Guidelines for Applying Risk-Informed Decisionmaking in License Amendment Reviews
 16. Report dated October 8, 1999, from Dana A. Powers, Chairman, ACRS, to

Greta Joy Dicus, Chairman, NRC, Subject: Draft Commission Paper Regarding Proposed Guidelines for Applying Risk-Informed Decisionmaking in License Amendment Reviews

17. Letter dated November 15, 1999, from William D. Travers, Executive Director for Operations, NRC, to Dana A. Powers, Chairman, ACRS, Subject: Draft Commission Paper Regarding Proposed Guidelines for Applying Risk-Informed Decisionmaking in License Amendment Reviews
- 5 Proposed Regulatory Guide and Standard Review Plan (SRP) Section Associated with NRC Code Reviews
18. Table of Contents
 19. Presentation Schedule
 20. Project Status Report
 21. Memorandum from G. Wallis, "Draft Comments on Draft Regulatory Guide DG-1096, 'Transient and Accident Analysis Methods,' dated April 25, 2000
 22. Working Copy, Minutes of April 27, 2000, T/H Phenomena Subcommittee Meeting, completed May 4, 2000
 23. Memorandum to J. T. Larkins, ACRS, from G. M. Holahan, NRR, transmitting draft Regulatory Guide and Standard Review Plan Section on Analytical Computer Codes, dated April 14, 2000
 24. Excerpt from Certified Copy of the Minutes of the November 17, 1999 meeting of the T/H/ Phenomena Subcommittee, dated December 1, 1999
 25. Excerpt from Certified Copy of the Minutes of the December 16-17, 1998 meeting of the T/H Phenomena Subcommittee, dated D\February 22, 1999
- 9 SECY-00-0062, Risk-Informed Regulation Implementation Plan
26. Table of Contents
 27. Proposed Schedule
 28. Status Report
 29. SECY-00-0062, Risk-Informed Regulation Implementation Plan, dated March 16, 2000
 30. SECY-99-211, Status Report on the Probabilistic Risk Assessment Implementation Plan, dated August 18, 1999
- 10 Operating Event at E. I. Hatch Nuclear Power Plant, Unit 1
31. Table of Contents
 32. Proposed Schedule
 33. Status Report
 34. NRC Augmented Inspection Team Report 50-321/00-01 and 50-366/00-01 dated February 28, 2000
 35. Licensee Event Report No. HL-5895, Subject: Reduction in Reactor

Feedwater Flow Results in Automatic Reactor Shutdown on Low Water Level dated February 25, 2000

- 36. Memorandum to Ledyard B. Marsh, Chief, Events Assessment, Generic Communications, and Non-Power Reactors Branch, NRR, from Loren R. Plisco, Director of Reactor Projects, Region II, Subject: Generic Issues Identified During the Hatch AIT on the January 26, 2000 Plant Trip dated April 14, 2000
- 37. NRC Information Notice 2000-01: Operational Issues Identified in Boiling Water Reactor Trip and Transient dated February 11, 2000

12 Physical Security Requirements for Power Reactors

- 38. Table of Contents
- 39. Proposed Schedule
- 40. Status Report
- 41. Memorandum dated April 12, 2000, from Annette Vietti-Cook, Secretary, NRC, to William D. Travers, Subject: Staff Requirements - SECY-00-0063 - Staff Re-evaluation of Power Reactor Physical Protection Regulations and Position on a Definition of Radiological Sabotage
- 42. SECY-00-0063, "Staff Re-evaluation of Power Reactor Physical Protection Regulations and Position on a Definition of Radiological Sabotage," dated March 9, 2000
- 43. Memorandum dated November 22, 1999, from Annette Vietti-Cook, Secretary, NRC, to William D. Travers, Subject: Staff Requirements - SECY-99-241 - "Rulemaking Plan, Physical Security Requirements for Exercising Power Reactor Licensees' Capability to Respond to Safeguards Contingency Events"
- 44. SECY-99-241, "Rulemaking Plan, Physical Security Requirements for Exercising Power Reactor Licensees' Capability to Respond to Safeguards Contingency Events," dated October 5, 1999