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FEBRUARY 3-5, 2000

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REPORTS, LETTERS, AND MEMORANDA

REPORTS

- SECY-00-0011, "Evaluation of the Requirement for Licensees to Update Their Inservice Inspection and Inservice Testing Programs Every 120 Months" (Report to Richard A. Meserve, Chairman, NRC, from Dana A. Powers, Chairman, ACRS, dated February 8, 2000)
- Importance Measures Derived from Probabilistic Risk Assessments (Report to Richard A. Meserve, Chairman, NRC, from Dana A. Powers, Chairman, ACRS, dated February 11, 2000)
- Impediments to the Increased Use of Risk-Informed Regulation (Report to Richard A. Meserve, Chairman, NRC, from Dana A. Powers, Chairman, ACRS, dated February 14, 2000)

LETTER

- Revision of Appendix K, "ECCS Evaluation Models," to 10 CFR Part 50 (Letter to William D. Travers, Executive Director for Operations, NRC, from Dana A. Powers, Chairman, ACRS, dated February 11, 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

469th ACRS Meeting
February 3-5, 2000

MINUTES OF THE 469TH MEETING OF THE
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS
FEBRUARY 3-5, 2000
ROCKVILLE, MARYLAND

The 469th meeting of the Advisory Committee on Reactor Safeguards (ACRS) was held in Conference Room 2B3, Two White Flint North Building, Rockville, Maryland, on February 3-5, 2000. The purpose of this meeting was to discuss and take appropriate action on the items listed in the following meeting minutes. The meeting was open to public attendance. 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. Technical Aspects Associated with the Revised Reactor Oversight Process and Related Matters (Open)

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

Mr. John Barton, Chairman of the ACRS Subcommittee on Plant Operations, introduced the topic to the Committee. He stated that the Subcommittee had met on January 20, 2000, to discuss the technical components of the reactor oversight process, including the Performance Indicators (PIs) and Significance Determination Process (SDP). During that meeting, the staff informed the Subcommittee that the proposed Commission paper associated with the reactor oversight process will not be available for ACRS review until mid-February 2000. The Subcommittee identified a number of issues for the staff to address during the ACRS meeting ON February 3-5, 2000. These issues and questions were provided to the NRC staff in a memorandum dated January 27, 2000.

Mr. Barton also noted that the Director of the Office of Nuclear Reactor Regulation (NRR) requested the Committee to review selected technical components of the reactor oversight process. In a staff requirements memorandum (SRM) dated December 17, 1999, the Commission requested the ACRS to review the technical adequacy of the PIs (current and proposed) for the new reactor oversight process, which includes an assessment of the extent to which the PIs, collectively, provide meaningful insights into those areas of plant operations that are most important to safety. Mr. Barton noted that the ACRS response to the Commission is due March 15, 2000.

NRC Staff Presentation

Mr. Michael Johnson, NRR, led the discussion for the NRC staff. Messrs. Frank Gillespie, William Dean, Alan Madison, and Gareth Parry, NRR, provided supporting discussion. Significant points raised during the staff presentation include the following:

- The PIs and baseline inspection program provide a sound technical framework to ensure that reactor safety is maintained. The process is more objective and focuses on risk-significant issues. The revised reactor oversight process is ready for initial implementation at all plants.

- The current reactor oversight process relies heavily on inspection in which PIs have a minor role, and assessments are completed every 18-24 months. The revised reactor oversight process continuously integrates PIs with inspection and assessment.
- PI thresholds are used to identify performance levels above which increased NRC attention is warranted. PI results are not ranked or trended.
- The SDP evaluates risk on a plant-specific basis, using the individual plant examination (IPE) and/or probabilistic risk assessment (PRA).
- The revised reactor oversight process continues to be a work in progress. The staff expects to complete a containment SDP, screening tools for shutdown operations and external events in April 2000. The staff plans to continue to evaluate and modify the program, as appropriate.

Committee members raised the following significant points:

- Dr. Apostolakis questioned the objectives of the PIs in identifying adverse changes in performance. In particular, he questioned whether the objective was to ensure safety or to verify the plant's operation as licensed. Dr. Apostolakis stated that PIs should be plant-specific. The staff stated that the objectives are to verify that licensee performance is below certain thresholds. The staff stated that licensee performance relative to these thresholds would be used to determine inspection allocation relative to the baseline inspection program that all plants receive.
- Dr. Bonaca and Mr. Barton questioned the technical bases, sensitivity, and adequacy of thresholds. The staff stated that the technical bases were demonstrated in the feasibility study conducted for plants as noted in SECY-99-007A. The staff stated that the PIs use thresholds for regulatory action below which licensees have flexibility in managing activities using the corrective action program. The staff stated that the PIs serve as triggers for a diagnostic mode for further evaluation. Dr. Bonaca expressed the view that the PIs are not sensitive to change and will not provide early warning of declining performance.
- Drs. Apostolakis and Kress questioned the use of a 95th percentile criterion. Dr. Apostolakis stated that this criterion allows a plant to increase risk and

still maintain "green" PI status. Dr. Kress noted that the value is arbitrary and suggested that it could have been 25 or 50 percent. The staff stated that the intent is to identify plants that are extreme outliers in performance relative to the overall population of plants.

- Dr. Apostolakis questioned the sufficiency of using generic PIs and noted that design- and plant-specific considerations affect the application of thresholds. He reiterated his concern regarding collective risk from approaching thresholds in multiple areas rather than crossing a single threshold. He noted that a plant's performance could degrade and not be detected by the NRC PIs. The staff stated that most licensees use lower thresholds to manage their activities in order to maintain sufficient margin from NRC thresholds. The staff stated that it is likely that the NRC would consider increased inspection for plants that approach thresholds. The staff also stated that inspection is an integral element in addition to PIs and would weigh heavily in the final assessment (i.e., color coding).
- Drs. Powers and Apostolakis questioned what research might be needed for Phase 3 decisionmaking to compensate for inadequacies in IPEs and PRAs. The staff stated that the oversight process was sufficient to support decisionmaking and that no immediate research was needed before initial implementation. The staff reiterated that the oversight was sufficient to identify adverse or declining licensee performance and areas needing additional inspection.

At the conclusion of the meeting, the staff reemphasized that the revised reactor oversight program is a work in progress and that additional changes would likely be made as more experience is gained. The staff stated that it would be requesting Commission approval for initial implementation, with a possible reexamination in about a year.

Conclusion

The Committee decided to continue its review during the ACRS meeting of March 2-4, 2000, when the proposed Commission paper would be available for review.

III. Proposed Final Amendment to 10 CFR 50.72 and 50.73 (Open)

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

Dr. Mario V. Bonaca, Chairman of the Plant License Renewal Subcommittee, reviewed the objectives of the proposed final amendment and noted the number of public meetings and the workshop that the staff had conducted. He stated that the Committee reviewed an earlier draft of the proposed amendment and commented on it in a letter issued on March 23, 1999. Dr. Bonaca requested that the staff address the significance of the added reporting requirement concerning degraded components and its relationship to 10 CFR Part 21 reporting requirements.

Mr. Dennis Allison, NRR, presented the objectives of and the principle changes made by the amendment. He explained that the requirement to report conditions outside the design basis of a plant would be deleted. However, a new requirement would be added for reporting degraded components that could be precursors to common-cause failures. Mr. Scott Newberry, NRR, explained that the staff planned to explain the new requirement to stakeholders during a public workshop. Other changes presented by Mr. Allison included the following:

- inclusion of a list for reportable system actuations
- eliminating report requirements for invalid actuations
- changes to required reporting times
- placing a time limit on reporting historical problems
- eliminating the requirement for reporting a late surveillance test

The Committee members and the staff discussed the relationship between the new requirement for reporting degraded components and the 10 CFR Part 21 reporting requirements. They also discussed the list of system actuations and its relationship to engineered safety feature systems contained in final safety analysis reports.

Mr. James Davis, Nuclear Energy Institute (NEI), noted that the staff had used a well-developed process to discuss the proposed rule changes with the industry. The process focused on the operability of the safety functions of systems and components. He objected to the new reporting requirement for degraded components. With the exception of the new reporting requirement, Mr. Davis stressed that the industry supported the proposed final amendment.

The Committee members, Mr. Davis, and the staff discussed the process used to develop the proposed amendment and when the staff would reach a final position concerning the wording of the requirement to report degraded components.

Conclusion

The Committee decided to review this matter after the staff holds a public workshop.

IV. Proposed Regulatory Guide and Associated NEI Document 96-07, "Guidelines for 10 CFR 50.59 Safety Evaluations" (Open)

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

Mr. J. D. Sieber, ACRS Member, stated that the Committee would hear presentations by and hold discussions with representatives of the NRC and NEI concerning NEI document 96-07, "Guidelines for 10 CFR 50.59 Safety Evaluations," and the proposed regulatory guide.

Mr. Sieber noted that the NRC regulation 10 CFR 50.59 defines the conditions under which reactor licensees may make changes to their facilities or procedures, or may conduct tests or experiments without prior NRC approval. Generally, these changes, tests, or experiments may be carried out unless they would involve a change to the technical specifications, or an unreviewed safety question. In 1999, the NRC revised 10 CFR 50.59 to provide for more flexibility, primarily by allowing changes that have minimal safety impact to be made without prior NRC approval. The final rule was approved on June 22, 1999, and was published on October 4, 1999.

Ms. Eileen McKenna, NRR, and Mr. R. Bell, NEI, stated that NEI prepared the NEI 96-07 document (final draft, dated January 18, 2000) that provides guidance for implementing the revised rule and is requesting NRC endorsement in a regulatory guide. The rule revisions become effective 90 days after approval of the guidance.

Currently, the staff is still in the process of reviewing the NEI 96-07 document, and several open issues need to be resolved. The open issues include the following:

- Fire protection plan changes - Generic Letter 86-10 regarding a license condition uses 10 CFR 50.59. The proposal is to use a license condition on its own without 10 CFR 50.59.
- Methods - Clarifications are still needed on "essentially the same," and guidance is needed on plant-specific approvals.
- Design basis limits for fission product barriers - The "subordinate" limits concept is not accepted by the staff.
- Screening on design function needs to be defined.
- Numerical values - Additional clarification is still needed.
- Relationship to maintenance assessments - NEI is proposing that "changes associated with maintenance" be covered by the maintenance rule (a)(4) assessments and not by 10 CFR 50.59. Details of the proposal are still being reviewed by the staff.

Conclusion

The Committee believes that the staff has revised "Guidelines for 10 CFR 50.59 Safety Evaluations" to the point that further review of this material by ACRS would not add value.

V. Proposed Revision of the Commission's Safety Goal Statement for Reactors

[Note: Mr. Paul A. Boehnert was the Designated Federal Official for this portion of the meeting.]

Dr. T. Kress, Chairman, Severe Accident Management Subcommittee, introduced this topic to the Committee. He noted that the Committee has met on this matter previously and that the staff had identified a set of nine issues that were to be evaluated with regard to revising the Safety Goal Policy Statement (SGPS). Further, the Committee had agreed that these issues appeared to be an appropriate set for this purpose. Dr. Kress said that the Committee will attempt to draft a letter on this matter during the meeting in March 2000.

Mr. J. Murphy, Office of Nuclear Regulatory Research (RES), discussed the proposed revisions to the SGPS. These revisions were categorized into eight topic areas. These topic areas and a summary of the proposed changes are as follows:

- Reflection of Current Agency Policy

(1) Add the following "Five Principles" to clarify and reflect current practice:

- Plants are expected to meet current regulations and any applicable exemptions
- Maintain defense-in-depth philosophy
- Maintain sufficient safety margins
- Increases in risk of core damage frequency should be small relative to the safety goals
- Plant performance should be monitored using performance measurement strategies

(2) Incorporate positions taken in on a SRM dated June 15, 1999, that safety goals establish a level of safety considered safe enough and they represent a risk level to strive for by utilizing the provisions of the backfit rule.

- Treatment of Core Damage Frequency as a Fundamental Goal

(1) Elevate the qualitative statement in Section 2 of the policy statement that the Commission has as its objective that a severe core-damage accident will not occur at a U.S. nuclear power plant to the status of a qualitative goal

(2) Retain a quantitative value of 10^{-4} per reactor-year as a useful subsidiary performance objective.

- Treatment of Uncertainty: Reference in the policy statement (Section IV) the appropriate section of Regulatory Guide 1.174 (Section 2.2.5) and incorporate the more general portions, as appropriate.

- Defense in Depth: Incorporate the relative portion of the Commission's White Paper dealing with the role of defense in depth in a risk-informed regulatory framework. Take note that "the ACRS and ACNW are developing

additional recommendations to the Commission in the area of defense in depth.”

- **Safety Goal Structure and Adequate Protection:** The staff recommends that no change be made to the SGPS relative to the Committee’s recommendations in this regard. (The argument made is that a structure similar to that recommended by the Committee already exists in the regulations and other implementing documents.) Consistent with Commission guidance in the SECY-99-191 SRM, the staff will consider revising the “reasonable assurance of adequate protection” guidance, as well as regulatory and backfit analyses after experience is gained with the use of risk information in regulatory practices.
- **Frequency of Large Release of Radioactive Material:** Delete reference to the “General Performance Guideline” (a housekeeping chore because this effort was terminated by SECY-93-138) and incorporate a large early release frequency (LERF) subsidiary goal of 10^{-5} per reactor-year (consistent with the ACRS recommendation in its report of May 11, 1998).
- **Societal Risk:** Two issues were considered:
 - (1) Should the policy statement or the Regulatory Analysis Guidelines be modified?
 - (2) Should these two documents be made consistent relative to treatment of societal dose?

The staff argued that both documents serve different purposes and the use of a 10-mile zone in the SGPS and a 50-mile zone in the Regulatory Analysis Guidelines should not be changed.
- **Land Contamination and Overall Societal Impact:** The staff recommends that a qualitative goal be added for protection of the environment. The current tools (PRAs and IPEs) are not sufficiently robust for determination of the extent of land contamination and the resulting societal impact. Development of the needed tools will be considered pursuant to the agency’s normal planning, budgeting, and performance management process.

- Temporary Changes in Risk: Temporary changes in risk are already covered in principle. To make it clear, however, the staff suggests the SGPS be clarified as it applies to temporary changes, as well as to average annual risk.

The SGPS is still undergoing internal management review, and the staff is scheduled to provide its recommendations to the Commission by March 30, 2000.

During the discussion, the following key points were noted:

- In response to questions from Drs. Kress and Wallis, Dr. Murphy said that the safety goal has influenced the development of regulations by way of the Regulatory Analysis Guidelines. Mr. King, RES, said that on the basis of evaluation of the IPEs, most plants meet the safety goals.
- The term "adequate protection" was extensively discussed, as referenced in the SGPS, as well as development of a more quantitative definition. Drs. Kress and Apostolakis proposed exploring the use of core damage frequency (CDF) and LERF as surrogates to the high-level goals in the policy statement to achieve this end. Dr. Murphy indicated that the staff will consider this matter in the context of possible future revisions to the SGPS for the issue of adequate protection as experience is gained with use of risk-informed regulation.
- Dr. Kress recommended revisions to the "Five Generalized Principles" to properly reflect their status as high-level goals. Dr. Murphy indicated his agreement with these suggested revisions.
- Dr. Powers suggested that NRC explore setting some cap on the amount of acceptable dose to the public with regard to limiting the dose dispersion calculations relative to land contamination considerations.

Conclusion

The Committee will continue its discussion of this matter during the ACRS meeting in March 2000.

VI. Impediments to the Increased Use of Risk-Informed Regulation and Use of Importance Measures in Risk-Informing 10 CFR Part 50

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

Dr. George Apostolakis, Chairman of the Subcommittee on Reliability and Probabilistic Risk Assessment, introduced the topic to the Committee. He stated that the purpose of this session was to discuss with representatives of the NRC staff, NEI, and the industry invited experts the impediments to the increased use of risk-informed regulation and the use of importance measures in the risk informing of 10 CFR Part 50.

NRC Staff Presentation

Mr. Thomas L. King led the discussions for the staff. He stated that there are six key elements of the risk-informed regulation: (1) policy, (2) strategy, (3) knowledgeable staff, (4) decisionmaking, (5) tools, and (6) communication. The staff has been involved in working on the reactor safety policy and the Commission has directed the Office of Nuclear Material Safety and Safeguards (NMSS) staff to develop safety goals and an approach for risk informing in NMSS activities. There will certainly be key challenges in the development of safety goals for the non-reactor activities because they have a number of different areas that affect risk and have different levels of risk. In the area of strategy, the staff has a different PRA implementation plan because the staff was criticized by the General Accounting Office for not having a real strategy for the risk informing of agency activities. The staff is in the process of developing a strategy to cover the risk-informing PRA implementation plan. The third item is staffing, which also includes the licensee staffing. We have training programs and continue to review the training needs and the staffing level in this area. The fourth area is decisionmaking, which basically provides guidance documents both for the industry and the staff to utilize. In the area of improving tools in PRA methods, this could be classified as one of the impediments in the use of risk-informing regulation. Finally, in the area of communication, the pilot programs are a very effective way of communicating with the industry and the stakeholders, and they also have internal panel sessions that will educate the staff.

Industry Presentations

Mr. Thomas G. Hook, San Onfre Nuclear Generating Station, presented the following significant points regarding the impediments to risk-informed regulation:

- Difficulty in quantifying costs and benefits
- Variations in PRA quality and scope
- Duration of the regulatory review process
- Lack of PRA standards to establish quality

He also stated that the importance measures are acceptable only when augmented by the sensitivity analyses, and uncertainty analysis is underutilized by most licensees.

Mr. Rick C. Grantom, South Texas Project, presented the following significant issues in the areas of regulatory impediments, cultural impediments, and PRA institutional impediments.

Regulatory Impediments

- No regulatory limits exist for establishing the importance or the non-importance of components.
- There is no differentiation between design basis events and events that are likely to occur during plant life.
- There is no mechanism available or path to change safety-related component classification on the basis of risk information.
- Where is a lack of clarity or criteria in the degree to which risk-informed applications could be approved using only qualitative approaches versus those that use quantitative methods or both.

Cultural Impediments

- There is a lack of training that demonstrates the complementary effect of blending deterministic and probabilistic approaches in decisionmaking.
- There is a misconception that PRA analyses are too expensive relative to the benefits.

PRA Institutional Impediments:

- Where is limited availability of PRA practitioners for both NRC and utilities.
- Risk-ranking methods uncertainty analyses need further development.

Mr. Robert A. White, Palisades Nuclear Plant, briefly presented the following issues and alternatives in the area of importance measures:

- Importance measures can identify what is important but do not necessarily identify what is not important.
- Regardless of the methods used, sensitivity studies should be performed following classification of components into risk significance categories to confirm the classification.

Mr. White stated that there is a significant uncertainty regarding what it costs and how long it takes to obtain approval for a risk-informed submittal; even post-pilot plant submittals have taken significant resources.

Conclusion

The Committee issued reports to Chairman Meserve on importance measures and impediments dated February 11 and 15, 2000, respectively.

VII. Proposed Final Revision of Appendix K to 10 CFR Part 50

[Note: Mr. Paul A. Boehnert was the Designated Federal Official for this portion of the meeting.]

Dr. Uhrig noted that he is performing research that complements the work of the Caldon Corporation. Mr. Boehnert noted that on the basis of an e-mail from Mr. J. Szabo (Office of the Counsel) dated July 16, 1999, no conflict exists for Dr. Uhrig on this matter.

Dr. Wallis, Chairman of the Thermal-Hydraulic Phenomena Subcommittee, introduced this topic to the Committee. He noted that this issue involves revision of Appendix K to 10 CFR Part 50 to eliminate the requirement that licensees assume a core power level of 1.02 for emergency core cooling system analysis.

Licensees will now be able to propose a reduced value on the basis of the use of highly accurate flow instrumentation. Dr. Wallis noted that in a letter on the review of the proposed version of this rule, the Committee recommended that the staff ensure that this revision of Appendix K did not conflict with other requirements in the regulations and that the staff consider the impact of the reduction in uncertainties relative to regulatory margins for cases other than this rule version.

Mr. J. Donoghue, NRR, discussed the proposed final version of the revised Appendix K rulemaking. He recounted the key points of the Committee's review of the proposed version of the rulemaking. The proposed rule version was issued for public comment on October 1, 1999. The public comment period ended on December 15, 1999.

Six public comments were received. All responses were positive; clarifications were added to the Federal Register notice for the final rule version in response to these comments. No changes were made to the language of the rule, however.

During the discussion, Dr. Wallis opined that the staff needs to issue written guidance to licensees to account appropriately for power measurement uncertainty in their safety analyses for use of the new highly accurate flow measurement instrumentation. In response to questions from Dr. Kress, Mr. Wermiel, NRR, noted that RES has an effort underway to evaluate Appendix K for additional revisions. One of these areas is the requirement pertaining to decay heat analysis.

In response to Dr. Wallis, Mr. Wermiel said that the staff performed a search to ensure that this rule revision does not conflict with any other requirements of 10 CFR Part 50. Dr. Bonaca noted that his initial concern with this rule revision is that the staff should ensure consistent treatment of uncertainties for both pressurized water reactors and boiling water reactors.

Mr. H. Estrada, Caldon Corporation, provided remarks on the rule revision. He urged the staff to issue written guidance for implementation of this rule with regard to proper accounting of measurement uncertainties for use of the new flow instrumentation, noting that few engineers are skilled in measurement science. He also noted that Caldon had provided written comments to the staff and the ACRS during last year's review of this rule that included some suggested methodologies for combining uncertainties and for ensuring a rigorous demonstration of power measurement, including the bounding of modeling uncertainties.

Conclusion

The Committee provided a report on this matter to the Executive Director for Operations, dated February 11, 2000.

VIII. Subcommittee Report

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

Dr. George Apostolakis, Chairman of the Subcommittee on Reliability and Probabilistic Risk Assessment, provided a report regarding matters discussed during its meeting on December 15, 1999. He stated that the purpose of the meeting was to discuss the staff's programs for risk-based analysis of reactor operating experience, including special studies for common-cause failure analysis, system and component analyses, accident sequence precursor analyses, and related matters. On December 16, 1999, the Subcommittee discussed NRC staff efforts in the area of risk-informed technical specifications and associated industry initiatives proposed by the Risk-Informed Technical Specification Task Force.

Dr. Apostolakis recommended that the Committee consider preparing a letter on the staff's programs for risk-based analysis during future meetings. He also recommended that the Committee schedule briefings on risk-informed technical specification initiatives as the submittals become available. The Committee agreed to both recommendations.

IX. NRC Safety Research Program Report to the Commission

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

The Committee discussed its final draft of the ACRS Year 2000 report to the Commission on the NRC Safety Research Program.

Conclusion

The Committee finalized its final draft report on this matter and sent an advance copy to the Commission on February 7, 2000.

X. 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.]

- The Committee discussed the response from the NRC Executive Director for Operations (EDO) dated January 13, 2000, to the ACRS comments and recommendations included in the ACRS report dated December 8, 1999, concerning a draft Commission paper regarding elimination of the 120-month update requirement from 10 CFR 50.55a, "Codes and standards."

The Committee was not satisfied with the EDO response. The Committee decided to prepare a reply to the EDO that would restate the Committee's recommendation that the 120-month update be retained.

- The Committee discussed the response from the NRC Executive Director for Operations (EDO) dated January 24, 2000, to the ACRS comments and recommendations included in the ACRS report dated December 10, 1999, concerning the safety aspects of the license renewal application for Calvert Cliffs Nuclear Power Plant.

The Committee was satisfied with the EDO response.

- The Committee discussed the response from the NRC Executive Director for Operations dated January 20, 2000, to comments and recommendations of the joint ACRS/ACNW report dated November 17, 1999, concerning implementing a framework for risk-informed regulation in the Office of Nuclear Material Safety and Safeguards.

The Committee referred this item to the ACRS/ACNW Joint Subcommittee for evaluation. The Committee plans to review the ACRS/ACNW Joint Subcommittee's recommendations during a future meeting.

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

The Committee heard a report from Dr. Powers and the Executive Director, ACRS, on the Planning and Procedures Subcommittee meeting held on February 2, 2000. The following items were discussed:

- Review of the Member Assignments and Priorities for ACRS Reports and Letters for the February ACRS Meeting

Member assignments and priorities for ACRS reports and letters for the February ACRS meeting were discussed. Reports and letters that would benefit from additional consideration at a future ACRS meeting were also discussed. The Committee completed its response to the issues raised by the Commission in the SRM dated December 17, 1999, regarding: Impediments to the Increased Use of Risk-Informed Regulation; Use of Importance Measures in Risk-Informing 10 CFR Part 50; and Technical Components of the Revised Reactor Oversight Process, including the Technical Adequacy of the current and proposed performance indicators. The Committee completed its report regarding the 120-month ISI/IST update requirement in response to EDO comments. In addition, the Committee completed the annual report to the Commission on the NRC Safety Research Program and response to questions raised by individual Commissioners following the ACRS meeting with the Commission on November 4, 1999.

- Anticipated Workload for ACRS Members

The anticipated workload of the ACRS members through April 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.

- Meeting with the Commission

The ACRS will meet with the NRC Commissioners on March 2, 2000, to discuss risk-informing 10 CFR Part 50 and related matters.

- Schedule for the March ACRS Meeting

The March ACRS meeting is scheduled for March 2-4, 2000. Several letters scheduled for the February meeting were deferred to the March meeting. There are other matters that will be reviewed by the Committee during the March meeting. In view of the heavy workload for the March meeting, the Committee will consider extending this meeting.

- Follow-up Items Resulting from the January 27-29, 2000 ACRS Retreat

The positions agreed to during the ACRS retreat and the follow-up items resulting from the retreat were discussed.

- Status of Selecting Candidates for Potential ACRS Membership

In response to solicitation of candidates for ACRS membership, we received approximately 20 applications. The ACRS Member Candidate Screening Panel reviewed all of the applications. The Panel selected four best-qualified candidates for interview by the Panel and the ACRS members. A schedule for the members and the Panel to interview three of these candidates during the March ACRS meeting was discussed.

- ACRS Self-Assessment Matrix

In an SRM dated August 6, 1999, the Commission stated that "the periodic self-assessment report and the ACRS and ACNW Operating Plans can be combined into one annual report to the Commission that should include self-assessment summary matrices." In order to prepare the matrix, the ACRS staff needs to summarize the comments and recommendations included in the ACRS reports, which may result in interpreting the Committee positions. The Committee will approve the matrix and self-assessment report to preclude any

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ambiguities and delegate the ACRS Executive Director to authorize or interpret Committee comments and recommendations.

- Change in Travel Requirements for Federal Employees

Effective March 1, 2000, all Federal employees (including members) will be required to use their government issued credit card for all government travel expenses exceeding \$75.

C. Future Meeting Agenda

Appendix IV summarizes the proposed items endorsed by the Committee for the 470th ACRS Meeting, March 1-4, 2000.

The 469th ACRS meeting was adjourned at 1:30 p.m. on February 5, 2000.

Environmental Impacts of the Proposed Action

The Commission has completed its evaluation of the proposed action and concludes that the modifications to TSs are administrative in nature.

The proposed action will not increase the probability or consequences of accidents, no changes are being made in the types of any effluents that may be released offsite, and there is no significant increase in occupational or public radiation exposure. Therefore, there are no significant radiological environmental impacts associated with the proposed action.

With regard to potential nonradiological impacts, the proposed action does not involve any historic sites. It does not affect nonradiological plant effluents and has no other environmental impact. Therefore, there are no significant nonradiological environmental impacts associated with the proposed action.

Accordingly, the NRC concludes that there are no significant 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 change in current environmental impacts. 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 the Vermont Yankee Nuclear Power Station.

Agencies and Persons Consulted

In accordance with its stated policy, on December 13, 1999, the staff consulted with the Vermont State official, William Sherman, of the Vermont Department of Public Service regarding the environmental impact of the proposed action. The State official had no comments.

Finding of No Significant Impact

On the basis of the environmental assessment, the NRC concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the NRC 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 October 21, 1999, which is available for public inspection at the Commission's Public Document Room, The Gelman Building, 2120 L Street, NW., Washington, DC. Publically available records will be accessible electronically from the ADAMS Public Library component on the NRC Web site, <http://www.nrc.gov> (the Electronic Reading Room).

Dated at Rockville, Maryland, this 5th day of January 2000.

For the Nuclear Regulatory Commission.
Richard P. Croteau,

Project Manager, Section 2, Project Directorate I, Division of Licensing Project Management, Office of Nuclear Reactor Regulation.

[FR Doc. 00-610 Filed 1-10-00; 8:45 am]

BILLING CODE 7890-01-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 February 3-5, 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, February 3, 2000

8:30 a.m.-8:45 a.m.: Opening Remarks by the ACRS Chairman (Open)—The ACRS Chairman will make opening remarks regarding the conduct of the meeting.

8:45 a.m.-10:45 a.m.: Technical Aspects Associated with the Revised Reactor Oversight Process and Related Matters (Open)—The Committee will hear presentations by and hold discussions with representatives of the NRC staff regarding the technical aspects associated with the revised reactor oversight process, including the updated significance determination process, plant performance indicators, and related matters.

11 a.m.-12 Noon: Proposed Final Amendment to 10 CFR 50.72 and 50.73 (Open)—The Committee will hear presentations by and hold discussions with representatives of the NRC staff and the Nuclear Energy Institute (NEI) regarding the proposed final amendment to 10 CFR 50.72, "Immediate Notification Requirements for Operating Nuclear

Power Reactors," and 50.73, "Licensee Event Report System."

1 p.m.-2:30 p.m.: Proposed Regulatory Guide and Associated NEI Document 96-07, "Guidelines for 10 CFR 50.59 Safety Evaluations" (Open)—The Committee will hear presentations by and hold discussions with representatives of the NRC staff and NEI regarding the proposed Regulatory Guide, which endorses guidance in NEI 96-07, associated with the implementation of the revised 10 CFR 50.59 process.

2:45 p.m.-4:15 p.m.: Proposed Revision of the Commission's Safety Goal Policy Statement for Reactors (Open)—The Committee will hear presentations by and hold discussions with representatives of the NRC staff regarding proposed revision of the Commission's Safety Goal Policy Statement for reactors and related matters, including industry views.

4:15 p.m.-5:15 p.m.: Break and Preparation of Draft ACRS Reports (Open)—Cognizant ACRS members will prepare draft reports for consideration by the full Committee.

5:15 p.m.-7:00 p.m.: Discussion of Proposed ACRS Reports (Open)—The Committee will discuss proposed ACRS reports on matters considered during this meeting. In addition, the Committee will discuss proposed ACRS reports on: Low-Power and Shutdown Operations Risk Insights Report; License Renewal Process; and Response to Follow-up Questions Resulting from the ACRS Meeting with the Commission on November 4, 1999.

Friday, February 4, 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.-10:30 a.m.: Impediments to the Increased Use of Risk-Informed Regulation and Use of Importance Measures in Risk-Informing 10 CFR Part 50 (Open)—The Committee will hear presentations by and hold discussions with representatives of NEI, the NRC staff as needed, and invited experts regarding impediments associated with the increased use of risk-informed regulation and use of importance measures in risk-informing 10 CFR Part 50, and related matters.

10:45 a.m.-11:30 a.m.: Proposed Final Revision of Appendix K to 10 CFR Part 50 (Open)—The Committee will hear presentations by and hold discussions with representatives of the NRC staff regarding the proposed

final revision of Appendix K, "ECCS Evaluation Models," to 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities."

11:30 a.m.—11:45 a.m.: *Subcommittee Report (Open)*—The Committee will hear a report by the Chairman of the Reliability and Probabilistic Risk Assessment Subcommittee regarding matters discussed during the December 15–16, 1999 meeting.

11:45 a.m.—12:00 Noon: *Report of the Joint ACRS/ACNW Subcommittee*—The Committee will hear a report on matters discussed during the January 13–14, 2000 meeting of the Joint ACRS/ACNW Subcommittee.

1:00 p.m.—3:00 p.m.: *NRC Safety Research Program Report to the Commission (Open)*—The Committee will discuss the proposed final report to the Commission on the NRC Safety Research Program and related matters.

3:15 p.m.—3:30 p.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.

3:30 p.m.—3:45 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.

3:45 p.m.—4:30 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.

4:30 p.m.—5:30 p.m.: *Break and Preparation of Draft ACRS Reports (Open)*—Cognizant ACRS members will prepare draft reports for consideration by the full Committee.

5:30 p.m.—7:15 p.m.: *Discussion of Proposed ACRS Reports (Open)*—The Committee will discuss proposed ACRS reports.

Saturday, February 5, 2000

8:30 a.m.—2 p.m.: *Discussion of Proposed ACRS Reports (Open)*—The Committee will continue its discussion of proposed ACRS reports.

2 p.m.—2:30 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 5 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.

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., EST. 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. EST 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.

Dated: January 5, 2000.

Andrew L. Bates,
Advisory Committee Management Officer.
[FR Doc. 00-608 Filed 1-10-00; 8:45 am]
BILLING CODE 7890-01-P

NUCLEAR REGULATORY COMMISSION

Advisory Committee on Reactor Safeguards; Subcommittee Meeting on Planning and Procedures

The ACRS Subcommittee on Planning and Procedures will hold a meeting on January 27–29, 2000, Radisson Suite Resort, Cedarwood #2 Room, 1201 Gulf Boulevard, Clearwater, Florida.

The entire meeting will be open to public attendance, with the exception of a portion that may be closed pursuant to 5 U.S.C. 552b(c) (2) and (6) to discuss organizational and personnel matters that relate solely to internal personnel rules and practices of ACRS, and information the release of which would constitute a clearly unwarranted invasion of personal privacy.

The agenda for the subject meeting shall be as follows:

Thursday, January 27, 2000—8:30 a.m. Until the Conclusion of Business

The Subcommittee will discuss issues related to PRA quality, including development of industrial standards; use of importance measures in risk-informing 10 CFR Part 50; impediments to the increased use of risk-informed regulation; technical aspects of the revised reactor oversight process, including technical adequacy of the current and proposed performance indicators; and safety culture.

Friday, January 28, 2000—8:30 a.m. Until the Conclusion of Business

The Subcommittee will discuss best estimate computer codes, technical quality of codes, and how they are used at the NRC. It will also discuss industry views of ACRS activities, self-assessment of ACRS performance in CY 1999, potential operational areas for improved effectiveness, other activities related to the conduct of ACRS business, and proposed response to follow-up questions resulting from the ACRS meeting with the Commission on November 4, 1999.

Saturday, January 29, 2000—8:30 a.m. Until 12:00 Noon

The Subcommittee will discuss ACRS positions on PRA issues, technical adequacy of the current and proposed performance indicators for the revised reactor oversight process, and potential future ACRS review activities.



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

January 6, 2000

**SCHEDULE AND OUTLINE FOR DISCUSSION
469TH ACRS MEETING
FEBRUARY 3-5, 2000**

**THURSDAY, FEBRUARY 3, 2000, CONFERENCE ROOM 2B3, TWO WHITE FLINT NORTH,
ROCKVILLE, MARYLAND**

- 1) 8:30 - 8:³⁵45 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) 8:³⁵45 - 10:⁰⁰45 A.M. Technical Aspects Associated with the Revised Reactor Oversight Process and Related Matters (Open) (JJB/MVB/MTM)
 2.1) Remarks by the Subcommittee Chairman
 2.2) Briefing by and discussions with representatives of the NRC staff regarding the technical aspects associated with the revised reactor oversight process, including the updated significance determination process, technical adequacy of the current and proposed plant performance indicators, and related matters.
- Representatives of the nuclear industry will provide their views, as appropriate.
- 3) 11:00 - 11:¹²12
~~10:45 - 11:00~~ A.M. *****BREAK*****
 11:¹²12 - 12:¹⁰10
 11:00 - 12:00 Noon Proposed Final Amendment to 10 CFR 50.72 and 50.73 (Open) (MVB/NFD)
 3.1) Remarks by the Subcommittee Chairman
 3.2) Briefing by and discussions with representatives of the NRC staff and the Nuclear Energy Institute (NEI) regarding the proposed final amendment to 10 CFR 50.72, "Immediate Notification Requirements for Operating Nuclear Power Reactors," and 50.73, "Licensee Event Report System."
- 4) 12:¹⁰10 - 1:¹²12 P.M. *****LUNCH*****
 1:¹²12 - 2:³⁷37 P.M. Proposed Regulatory Guide and Associated NEI Document 96-07, "Guidelines for 10 CFR 50.59 Safety Evaluations" (Open) (JDS/JJB/MME)
 4.1) Remarks by the Cognizant ACRS member
 4.2) Briefing by and discussions with representatives of the NRC staff and NEI regarding the proposed Regulatory Guide, which endorses guidance in NEI 96-07 associated with the implementation of the revised 10 CFR 50.59 process.

^{40 - 55}
2:30 - 2:45 P.M.

BREAK

5) ^{55 - 35}
2:45 - 4:15 P.M.

Proposed Revision of the Commission's Safety Goal Policy Statement for Reactors (Open) (GA/PAB)

- 5.1) Remarks by the Subcommittee Chairman
5.2) Briefing by and discussions with representatives of the NRC staff regarding proposed revision of the Commission's Safety Goal Policy Statement for reactors and related matters, including industry views.

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

4:35 - 5:15 pm Power Uprate Applications & Potential Synergistic Safety

~~6) 4:15 - 5:15 P.M.~~

~~Break and Preparation of Draft ACRS Reports~~

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

5:30 - 5:42 Discussion of Upcoming Commission Meeting in March

7) ^{5:15 - 7:15 P.M.}
5:42

Discussion of Proposed ACRS Reports (Open)

Discussion of proposed ACRS reports on:

- 7.1) ~~Low Power and Shutdown Operations Risk Insights Report (GA/MTM)~~
7.2) ~~Technical Aspects Associated with the Revised Reactor Oversight Process (JJB/MVB/MTM)~~
7.3) ~~Proposed Final Amendment to 10 CFR 50.72 and 50.73 (MVB/NFD)~~
7.4) ~~Proposed Regulatory Guide and Associated NEI Document 96-07, "Guidelines for 10 CFR 50.59 Safety Evaluations" (JDS/JJB/MME)~~
7.5) ~~License Renewal Process (MVB/RLS/NFD)~~
7.6) ~~Response to Follow-up Questions Resulting from the ACRS Meeting with the Commission on November 4, 1999 (DAP/NFD/SD)~~

- Impediment Letter

- Importance Measures

- Follow On Questions

- Research Report

FRIDAY, FEBRUARY 4, 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 - 10:⁴⁵~~30~~ A.M.

Impediments to the Increased Use of Risk-Informed Regulation and Use of Importance Measures in Risk-Informing 10 CFR Part 50 (Open) (TSK/GA/AS)

- 9.1) Remarks by the Subcommittee Chairman
9.2) Briefing by and discussions with representatives of NEI as well as invited experts regarding impediments associated with the increased use of risk-informed regulation and use of importance measures in risk-informing 10 CFR Part 50, and related matters.

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

45 - 11:00
10:30 - 10:45 A.M.

BREAK

11:00 - 11:30
10) 10:45 - 11:30 A.M.

Proposed Final Revision of Appendix K to 10 CFR Part 50 (Open)
(GBW/PAB)

- 10.1) Remarks by the Subcommittee Chairman
- 10.2) Briefing by and discussion with representatives of the NRC staff regarding the proposed final revision of Appendix K, "ECCS Evaluation Models," to 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities."

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

49 - 12:05
11) 11:30 - 11:45 A.M. P.M.

Subcommittee Report (Open) (GA/MTM)

Report by the Chairman of the Reliability and Probabilistic Risk Assessment Subcommittee regarding matters discussed during the December 15-16, 1999 meeting.

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

37 - 11:49 AM
12) 11:45 - 12:00 Noon

Report of the Joint ACRS/ACNW Subcommittee (Open)
(TSK/GA/MTM)

Report on matters discussed during the January 13-14, 2000 meeting of the Joint ACRS/ACNW Subcommittee.

12:00 - 1:00 P.M.

LUNCH

05 20
13) 1:00 - 3:00 P.M.

NRC Safety Research Program Report to the Commission (Open)
(GBW/MME)

- 13.1) Remarks by the Subcommittee Chairman
- 13.2) Discussion of the annual ACRS report to the Commission on the NRC Safety Research Program.

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

20 40
3:00 - 3:15 P.M.

BREAK

40 4:00
14) 3:45 - 3:30 P.M.

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

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

15) ^{4:00 - 4:25}
~~3:30 - 3:45~~ 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.

16) ^{4:25 - 35}
~~3:45 - 4:30~~ 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.

17) ^{35 - 35}
4:30 - 5:30 P.M.

Break and Preparation of Draft ACRS Reports

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

18) ^{40 05}
~~5:30 - 7:45~~ P.M.

Discussion of Proposed ACRS Reports (Open)

Discussion of proposed ACRS reports on:

- 2/4/00
5:45-6:16 120-Month letter (F)
2/5/00
9:50-10:00
8:30-8:40 Importance (F)
10:02-10:18 Measures
11:10-11:25
11:25-12:30 Impediments (F)
10:26-11:10 PIs
- 18.1) Impediments to the Increased Use of Risk-Informed Regulation and Use of Importance Measures in Risk-Informing 10 CFR Part 50 (GA/TSK/AS)
18.2) Technical Aspects Associated with the Revised Reactor Oversight Process (JJB/MVB/MTM)
18.3) NRC Safety Research Program (GBW/MME)
18.4) Response to Follow-up Questions Resulting from the ACRS Meeting with the Commission on November 4, 1999 (DAP/NFD/SD)
18.5) Low-Power and Shutdown Operations Risk Insights Report (GA/MTM)
18.6) Proposed Final Amendment to 10 CFR 50.72 and 50.73 (MVB/NFD)
18.7) Proposed Regulatory Guide and Associated NEI Document 96-07, "Guidelines for 10 CFR 50.59 Safety Evaluations" (JDS/JJB/MME)
18.8) Proposed Revision of the Commission's Safety Goal Policy Statement for Reactors (GA/PAB)
18.9) License Renewal Process (MVB/RLS/NFD)
6:33-6:40 18.10) Proposed Final Revision of Appendix K to 10 CFR Part 50 (GBW/PAB) (F)

① Dana-gram
② Vote-agreed

SATURDAY, FEBRUARY 5, 2000, CONFERENCE ROOM 2B3, TWO WHITE FLINT NORTH, ROCKVILLE, MARYLAND

19) ^{1:30}
8:30 - ~~2:00~~ P.M.
(12:00-1:00 P.M. - LUNCH)

Discussion of Proposed ACRS Reports (Open)

Continue discussion of proposed ACRS reports listed under Item 18.

~~20) 2:00 - 2:30 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 III: MEETING ATTENDEES

469TH ACRS MEETING
FEBRUARY 3-5, 2000

NRC STAFF (February 3, 2000)

A. Levin, OCM/RAM
B. Ott, OEDO
J. Shea, OEDO
A. Madison, NRR
S. Stein, NRR
B. Dean, NRR
G. Parry, NRR
D. Hickman, NRR
C. Holden, NRR
S. Sanders, NRR
S. Dinsmore, NRR
T. Boyce, NRR
D. Allsopp, NRR
M. Pohida, NRR
T. Frye, NRR
S. Magruder, NRR
M. Malloy, NRR
D. Fischer, NRR
D. Allison, NRR
A. Spector, NRR
S. Long, NRR
F. Akstulewicz, NRR
S. Wong, NRR
E. McKenna, NRR
S. West, NRR
R. Aulude, NRR
J. Andersen, NRR
T. Wof, RES
D. Yielding, RES
B. Brady, RES
R. Spence, RES
J. Ibarra, RES
J. Mitchell, RES
T. King, RES
J. Murphy, RES
P. Brockman, NMSS

ATTENDEES FROM OTHER AGENCIES AND GENERAL PUBLIC

F. Mashburn, TVA
R. Huston, Licensing Support Services
D. Raleigh, SERCH, Bechtel Power
T. Houston, NEI
B. Post, NEI
J. Davis, NEI
R. Bell, NEI
C. Amoruso, NUS
N. Chapman, SERCH/Bechtel
H. Fonticella, VA Power
P. Negus, GE
B. Bradley, NEI

NRC STAFF (February 4, 2000)

M. Drouin, RES
J. Flack, RES
J. Costello, RES
T. Jackson, RES
J. Mitchell, RES
A. Thadani, RES
F. Eltawila, RES
M. Virgilio, NMSS
R. Boyle, NMSS
S. Wong, NRR
G. Parry, NRR
M. Cheok, NRR
S. Dinsmore, NRR
S. West, NRR
R. Aulude, NRR
F. Akstulewicz, NRR
J. Williams, NRR
J. Donoghue, NRR
R. Caruso, NRR
J. Wermiel, NRR
N. Gilles, NRR

ATTENDEES FROM OTHER AGENCIES AND GENERAL PUBLIC

B. Bogan, CMS Energy, Palisades
R. Huston, Licensing Support Services
B. Youngblood, ISL, Inc.

H. Fonticella, VA Power
B. Horin, Winston & Strawn
J. Regan, Key Technologies, Inc.
P. Negus, GE
S. Rosen, STPNOC



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

Appendix IV

February 11, 2000

SCHEDULE AND OUTLINE FOR DISCUSSION
470TH ACRS MEETING
MARCH 1-4, 2000

WEDNESDAY, MARCH 1, 2000, CONFERENCE ROOM 2B3, TWO WHITE FLINT NORTH,
ROCKVILLE, MARYLAND

- 1) 1:00 - 1:15 P.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) 1:15 - 3:15 P.M. Development of Risk-Informed Revisions to 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities" (Open) (GA/MTM)
 - 2.1) Remarks by the Subcommittee Chairman
 - 2.2) Briefing by and discussions with representatives of the NRC staff regarding the status of developing risk-informed revisions to 10 CFR Part 50 and related matters.

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

3:15 - 3:30 P.M. *BREAK*****

- 3) 3:30 - 6:00 P.M. Discussion of Proposed ACRS Reports (Open)
Discussion of proposed ACRS reports on:
 - 3.1) Low-power and Shutdown Operations Risk Insights Report (GA/MTM)
 - 3.2) Proposed Revision of the Commission's Safety Goal Policy Statement for Reactors (TSK/GA/PAB)

6:00 - 6:15 P.M. *BREAK*****

- 4) 6:15 - 7:15 P.M. Discussion of Topics for Meeting with the NRC Commissioners (Open)
Discussion of issues associated with risk-informed regulation, including:
 - 4.1) Impediments to the increased use of risk-informed regulation (TSK/MTM)
 - 4.2) Use of importance measures in regulatory applications, impact of the scope and quality of the PRA on importance measures, and threshold values for importance measures (GA/AS)
 - 4.3) Technical Adequacy of Performance Indicators (JJB/NFD)

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

- 5) 8:30 - 8:35 A.M. Opening Remarks by the ACRS Chairman (Open) (DAP/SD)
- 6) 8:35 - 9:15 A.M. Discussion of Topics for Meeting with the NRC Commissioners (Open)
Discussion of topics listed under Item 4.
- 9:15 - 9:30 A.M. *****BREAK*****
- 7) 9:30 - 11:30 A.M. Meeting with the NRC Commissioners (Open) (DAP, et al./JTL, et al.)
Meeting with the NRC Commissioners, Commissioners' Conference Room, One White Flint North, to discuss topics listed under Item 4 and other items of mutual interest.
- 11:30 - 1:00 P.M. *****LUNCH*****
- 8) 1:00 - 2:30 P.M. Technical Components Associated with the Revised Reactor Oversight Process (Open) (JJB/MTM)
8.1) Remarks by the Subcommittee Chairman
8.2) Briefing by and discussions with representatives of the NRC staff regarding the technical components associated with the revised reactor oversight process, including the updated significant determination process, technical adequacy of the current and proposed plant performance indicators, and related matters.
- 2:30 - 2:45 P.M. *****BREAK*****
- 9) 2:45 - 4:00 P.M. Oconee Nuclear Power Plant License Renewal Application (Open) (MVB/RLS/NFD)
9.1) Remarks by the Subcommittee Chairman
9.2) Briefing by and discussions with representatives of the NRC staff and Duke Energy Corporation regarding the license renewal application for the Oconee Nuclear Power Station and the associated NRC staff's Safety Evaluation Report.
- 4:00 - 4:15 P.M. *****BREAK*****
- 10) 4:15 - 4:45 P.M. Proposed Final Amendment to 10 CFR 50.72 and 50.73 (Open) (MVB/NFD)
10.1) Remarks by the Subcommittee Chairman
10.2) Discussions with representatives of the NRC staff regarding issues raised by the ACRS members during the February ACRS meeting, including the intent of the 10 CFR 50.73 requirement for reporting degraded components.

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

- 11) 4:45 - 5:15 P.M. Proposed Final Revision 3 to Regulatory Guide 1.160, "Assessing and Managing Risk Before Maintenance Activities at Nuclear Power Plants" (Open) (JJB/JDS/AS)
 11.1) Remarks by the Subcommittee Chairman
 11.2) Discussions with representatives of the NRC staff, as needed, regarding the proposed final revision 3 to Regulatory Guide 1.160.

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

- 12) 5:15 - 6:15 P.M. Break and Preparation of Draft ACRS Reports
 Cognizant ACRS members will prepare draft reports for consideration by the full Committee.
- 13) 6:15 - 7:15 P.M. Discussion of Proposed ACRS Reports (Open)
 Discussion of proposed ACRS reports on:
 13.1) Technical Components Associated with the Revised Reactor Oversight Process/Technical Adequacy of the Current and Proposed Performance Indicators (JJB/MVB/MTM)
 13.2) Proposed Final Amendment to 10 CFR 50.72 and 50.73 (MVB/NFD)
 13.3) Proposed Final Revision 3 to Regulatory Guide 1.160 (JJB/JDS/AS)
 13.4) Oconee License Renewal Application (MVB/RLS/NFD)

FRIDAY, MARCH 3, 2000, CONFERENCE ROOM 2B3, TWO WHITE FLINT NORTH, ROCKVILLE, MARYLAND

- 14) 8:30 - 8:35 A.M. Opening Remarks by the ACRS Chairman (Open) (DAP/SD)
- 15) 8:35 - 10:15 A.M. Phenomena Identification and Ranking Table (PIRT) for High Burnup Fuel (Open) (DAP/MME)
 15.1) Remarks by the Subcommittee Chairman
 15.2) Briefing by and discussions with representatives of the NRC staff regarding the use of PIRT process for high burnup fuel.

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

10:15 - 10:30 A.M. *BREAK*****

- 16) 10:30 - 11:30 A.M. Proposed Resolution of Generic Safety Issue B-17. "Criteria for Safety Related Operator Actions" (Open) (RLS/PAB)
 16.1) Remarks by the Subcommittee Chairman
 16.2) Briefing by and discussions with representatives of the NRC staff regarding the proposed resolution of Generic Safety Issue B-17.
- Representatives of the nuclear industry will provide their views, as appropriate.
- 17) 11:30 - 12:00 Noon 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.
- 12:00 - 1:00 P.M. ***LUNCH***
- 18) 1:00 - 1:15 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.
- 19) 1:15 - 1:30 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.
- 20) 1:30 - 2:30 P.M. Break and Preparation of Draft ACRS Reports
 Cognizant ACRS members will prepare draft reports for consideration by the full Committee.
- 21) 2:30 - 7:00 P.M. Discussion of Proposed ACRS Reports (Open)
 Discussion of proposed ACRS reports on:
 21.1) Oconee License Renewal Application (MVB/RLS/NFD)
 21.2) Proposed Resolution of Generic Safety Issue B-17 (RLS/PAB)
 21.3) Low-power and Shutdown Operations Risk Insights Report (GA/MTM)
 21.4) Proposed Revision of the Commission's Safety Goal Policy Statement for Reactors (TSK/GA/PAB)
 21.5) Technical Components Associated with the Revised Reactor Oversight Process/Technical Adequacy of the Current and Proposed Performance Indicators (JJB/MVB/MTM)
 21.6) Proposed Final Amendment to 10 CFR 50.72 and 50.73 (MVB/NFD)
 21.7) Proposed Final Revision 3 to Regulatory Guide 1.160 (JJB/JDS/AS)

**SATURDAY, MARCH 4, 2000, CONFERENCE ROOM 2B3, TWO WHITE FLINT NORTH,
ROCKVILLE, MARYLAND**

- 22) 8:30 - 1:30 P.M. Discussion of Proposed ACRS Reports (Open)
(12:00-1:00 P.M. - LUNCH) Continue discussion of proposed ACRS reports listed under Item 21.
- 23) 1:30 - 2:00 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
469th ACRS MEETING
FEBRUARY 3-5, 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 February 3-5, 2000

- 2 Technical Aspects Associated with the Revised Reactor Oversight Process and Related Matters
 2. Revised Reactor Oversight Process Pilot Program Results and Lessons Learned, presentation by W. Dean, A. Madison, M. Johnson, G. Parry, NRR [Viewgraphs]
 3. Letter to Tennessee Valley Authority, Subject: Inspection Plan for Sequoyah, dated December 21, 1999
 4. Letter to Commonwealth Edison Company, Subject: Inspection Plan-Quad Cities Nuclear Power Station, dated December 22, 1999
 5. Letter to Nebraska Public Power District, Subject: Inspection Plan-Cooper Nuclear Station, dated December 27, 1999
 6. Letter to New York Power Authority, Subject: Mid-Cycle Performance Review and Inspection Plan-James A. Fitzpatrick Nuclear Power Plant, dated January 3, 2000

- 3 Proposed Final Amendment to 10 CFR 50.72 and 50.73
 7. Draft Final Rule-Modification of Event Reporting Requirements 10 CFR 50.72 and 50.73, presentation by NRR [Viewgraphs]
 8. Proposed Final Amendment to 10 CFR 50.72 and 50.73, e-mail from the NRC staff dated January 28, 2000, Subject: "Corrected Copy of Noteworthy Issues" [Handout 3.1]
 9. Licensee Event Reporting System, presentation by J. Davis, NEI

- 4 Proposed Regulatory Guide and Associated NEI Document 96-07, "Guidelines for 10 CFR 50.59 Safety Evaluations"
 10. Status of 10 CFR 50.59 Guidance, presentation by E. McKenna, NRR [Viewgraphs]
 11. NEI 96-07, Revision 1, Guidelines for 10 CFR 50.59 Evaluations,

- presentation by R. Bell, NEI [Viewgraphs]
12. Memorandum dated January 31, 2000, Subject: NEI Document 96-07, "Guidelines for 10 CFR 50.59 Safety Evaluations [Handout 4)
- 5 Proposed Revision of the Commission's Safety Goal Policy Statement for Reactors
13. Modifications to the Reactor Safety Goal Policy Statement, presentation by J. Murphy, RES [Viewgraphs]
 14. ACRS Proposed Review of the Commission's Safety Goal Policy Statement for Reactors, P. Boehnert [Handout 5-1]
- 5a Review of Power Uprate Applications and Potential Synergistic Safety Issues
15. Presentation by G. Cronenberg, Senior Fellow [Viewgraphs]
- 9 Impediments to the Increased Use of Risk-Informed Regulation and Use of Importance Measures in Risk-Informing 10 CFR Part 50
16. Risk-Informed Regulation - Challenges and Importance Measures, presentation by T. King, RES, G. Holahan, NRR, M. Virgilio, NMSS [Viewgraphs]
 17. Risk Informing 10 CFR 50, Top Event Prevention (TEP) A Deterministic Application of PSA, presentation by CMS Energy [Viewgraphs]
 18. Importance Measures (Issues/Alternatives), presentation by CMS Energy [Viewgraphs]
 19. Impediments to Risk-Informed Regulation and Risk Importance Measures, presentation by T. Hook, Manager, Nuclear Safety Oversight, San Onofre Nuclear Generating Station [Viewgraphs]
 20. Impediments to Risk Informed Regulation, presentation by STP Nuclear Operating Company [Viewgraphs]
 21. Risk Ranking of All PSA Basic Event, presentation by South Texas Project [Viewgraphs]
- 10 Proposed Final Revision of Appendix K to 10 CFR Part 50
22. Appendix K Rulemaking, Final Rule Change Revising the 102% Power Level Requirement, presentation by J. Donoghue, NRR [Viewgraphs]
- 14 Reconciliation of ACRS Comments and Recommendations
23. Reconciliation of ACRS Comments and Recommendations [Handout #14.1]
- 15 Future ACRS Activities
24. Future ACRS Activities - 470th ACRS Meeting, March 2-4, 2000 [Handout #15-1]

- 16 Report of the Planning and Procedures Subcommittee
 25. Final Draft Minutes of Planning and Procedures Subcommittee Meeting - February 2, 2000 [Handout #16.1]

MEETING NOTEBOOK CONTENTS

TAB

DOCUMENTS

2 Technical Aspects Associated with the Revised Reactor Oversight Process and Related Matters

1. Table of Contents
2. Proposed Schedule
3. Status Report, dated February 3, 2000
4. Note dated January 27, 2000, from John J. Barton, ACRS, to Michael Johnson, NRR, Subject: Issues and questions for February 3 ACRS meeting
5. E-mail message dated January 23, 2000, from Jack D. Sieber, ACRS, Subject: Use of Pis (predecisional)
6. E-mail dated January 22, 2000 from T. S. Kress (predecisional)
7. Facsimile dated January 22, 2000, from D. A. Powers (predecisional)
8. SRM dated December 17, 1999, Subject: Meeting with the ACRS
9. Letter dated November 23, 1999, from Samuel J. Collins, Director, NRR, Subject: Request for review of revised reactor oversight program
10. SRM dated June 18, 1999, Subject: SECY 99-007 and SECY 99-007A
11. Letter dated June 10, 1999, from Dana A. Powers, Chairman, ACRS, Subject: Inspection/assessment programs, PIs & performance-based initiatives
12. Letter dated August 9, 1999, from William D. Travers, EDO, NRC, to Dana A. Powers, Chairman, ACRS, Subject: EDO response to ACRS letter

3 Proposed Final Amendment to 10 CFR 50.72 and 50.73

13. Table of Contents
14. Proposed Schedule
15. Status Report dated February 3, 2000
16. Letter dated March 23, 1999, from Dana A. Powers, Chairman, ACRS, to William D. Travers, Executive Director, NRC, Subject: Proposed Amendment to 10 CFR 50.72, Immediate Notification and 50.73, Licensee Event Reporting System
17. Letter dated April 19, 1999, from William D. Travers, Executive Director, NRC, to Dana A. Powers, Chairman, ACRS, Subject: Proposed Rulemaking to Modify the Reactor Event Reporting Requirements in 10 CFR 50.72 and 50.73
18. Memorandum dated June 15, 1999, from Annette Vietti-Cook, Secretary, NRC, to William D. Travers, Executive Director for Operations, NRC, Subject: Staff Requirements - SECY 99-119, Rulemaking to Modify the Event Reporting Requirements for Power Reactors in 10 CFR 50.72 and 50.73

19. E-mail dated January 24, 2000, Noteworthy Issues Associated with the Proposed Final Revision to 10 CFR 50.72 and 50.73
- 4 Proposed Regulatory Guide and Associated NEI Document 96-07, "Guidelines for 10 CFR 50.59 Safety Evaluations"
 20. Table of Contents
 21. Proposed Schedule
 22. Status Report dated February 3, 2000
 23. ACRS Report dated May 17, 1999
 24. Staff Requirements Memorandum, dated June 22, 1999
 25. NEI 96-07 (Draft Rev. 1C), dated December 30, 1999 (predecisional)
 26. Table-Resolution Status of NRC Nov. 3 comments
- 5 Proposed Revision of the Commission's Safety Goal Policy Statement
 27. Table of Contents
 28. Proposed Schedule
 29. Status Report dated February 3, 2000
 30. Memorandum dated January 27, 2000, from Joseph A. Murphy, RES, to John T. Larkins, Executive Director, ACRS, Subject: ACRS Review of Draft Commission Paper on Proposed Modifications to the Reactor Safety Goal Policy Statement, and attachments (predecisional-for internal ACRS use only)
 31. SRM dated October 28, 1999, on SECY 99-191 re: Safety Goals
 32. SRM dated October 16, 1997, on SECY 97-208 re: Elevation of CDF
 33. Report dated April 19, 1999, from Dana A. Powers, Chairman, ACRS to Shirley Ann Jackson, Chairman, NRC, Subject: Status of Efforts on Revising the Commission's Safety Goal Policy Statement
 34. Letter dated May 24, 1999, from William D. Travers, EDO, NRC, to Dana A. Powers, Chairman, ACRS, Subject: Status of Efforts on Revising the Commission's Safety Goal Policy Statement
 35. Report dated May 11, 1998, from R. L. Seale, Chairman, ACRS, to Shirley Ann Jackson, Chairman, NRC, Subject: Elevation of CDF to a Fundamental Safety Goal and Possible Revision of the Commission's Safety Goal Policy Statement
- 9 Impediments to the Increased Use of Risk-Informed Regulation and Use of Importance Measures in Risk Informing 10 CFR Part 50
 36. Memorandum dated December 17, 1999, to John T. Larkins, Executive Director, ACRS, from Annette L. Vietti-Cook, Secretary, NRC, Subject: Staff Requirements - Meeting with ACRS on Thursday, November 4, 1999
 37. Report to Greta Joy Dicus, Chairman, NRC, from Dana A. Powers,

- Chairman, ACRS, Subject: Proposed Plans for Developing Risk-Informed Revisions to 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities" dated October 12, 1999
38. Letter dated November 8, 1999, from William d. Travers, Executive Director for Operations, NRC, to Dana A. Powers, Chairman, ACRS, Subject: Proposed Plans for Developing Risk-Informed Revisions to 10 CFR Part 50, "Domestic Licensing Production and Utilization Facilities"
 39. Statement of James P. Ricco, Staff Attorney, Public Citizen's Critical Mass Energy Project, to ACRS dated September 30, 1999
 40. Report to Shirley Ann Jackson, Chairman, NRC, from Dana A. Powers, Chairman, ACRS, Subject: The Role of Defense in Depth in a Risk-Informed Regulatory System dated May 19, 1999
- 10 Proposed Final Revision of Appendix K to 10 CFR Part 50
41. Table of Contents
 42. Presentation Schedule
 43. Project Status Report dated February 4, 2000
 44. Note to P. Boehnert from J. Donoghue, "Final Rule Package for Appendix K Revision," dated January 19, 2000
 45. Public Comments Received on Proposed Revision to the Appendix K Revision
 46. Letter to W. D. Travers, EDO, from D. A. Powers, ACRS, Subject: Revision of Appendix K, "ECCS Evaluation Models: to 10 CFR Part 50, dated July 22, 1999
 47. Letter to D. A. Powers, ACRS, from W. D. Travers, EDO, Subject: Staff Response to ACRS Letter of July 22, 1999, on Revision of Appendix K, "ECCS Evaluation Models," to 10 CFR Part 50, dated August 18, 1999
 48. Excerpt from Minutes of 464th ACRS Meeting: Proposed Revision to Appendix K of 10 CFR Part 50