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MINUTES OF THE 459TH MEETING OF THE
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS
FEBRUARY 3-6, 1999
ROCKVILLE, MARYLAND

The 459th meeting of the Advisory Committee on Reactor Safeguards was held in Conference Room 2B3, Two White Flint North Building, Rockville, Maryland, on February 3-6, 1999. The purpose of this meeting was to discuss and take appropriate action on the items listed in the attached agenda. The meeting was open to public attendance. There were no written statements nor 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 I (Eye) Street, N.W., Washington, D.C. [Copies of the transcript are available for purchase from Ann Riley & Associates, Ltd., 1250 I Street, N.W., Suite 300, N.W., Washington, D.C. 20005.]

ATTENDEES

ACRS Members: Dr. Dana A. Powers (Chairman), Dr. George Apostolakis (Vice-Chairman), Mr. John Barton, Dr. Mario V. Bonaca, Dr. Mario H. Fontana, Dr. Thomas S. Kress, Dr. Don W. Miller, Dr. William J. Shack, Dr. Robert L. Seale, Dr. Robert E. Uhrig, and Dr. Graham 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. An item of interest was Chairman Jackson's acceptance speech for her future position as President of the Rennsselaer Polytechnic Institute and continuation of the NRC mission. Changes that have occurred in the CRGR membership, and the agenda to the 1999 Regulatory Information Conference which will be held during the first week of March.

II Status of the Proposed Final Revision to 10 CFR 50.59 (Changes, Tests and Experiments) (Open)

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

Introduction

Mr. John J. Barton, Chairman of the Subcommittee on Plant Operations introduced the topic to the Committee. He stated that the purpose of this meeting was to discuss the public comments on the staff's proposed rulemaking on 10 CFR 50.59 (Changes, Tests and Experiments). He noted that the staff is in the process of reconciling the public comments and revising the proposed rulemaking. Mr. Barton also noted that several ACRS Members provided comments and questions for the staff to consider in preparing for this briefing.

NRC Staff Presentation

Ms. Eileen McKenna, NRR, led the discussions for the NRC staff. She presented the objectives for the near-term revision to 10 CFR 50.59, plans for the reconciliation of public comments, options for revising the proposed rulemaking, and the schedule for completion. Significant points raised during the presentation include:

- The rule objectives are to maintain the integrity of the licensing basis, clarify requirements for when safety evaluations are required, when NRC review is required, and allow for "minimal" changes without prior NRC approval.

- Most public comments were provided by nuclear power reactor licensees, industry organizations, and law firms.

- Key issues discussed in the public comments and in ACRS deliberations were those associated with options for "margin of safety," definition of "minimal" increase in probability and consequences, screening of changes, clarification on definitions, the NRC Enforcement Policy, and the status of industry guidance development.

- The Nuclear Energy Institute (NEI) offered an alternative approach (i.e., barrier approach) for margin of safety which was endorsed by a majority of public comments. Some comments suggested not using margins as a safety criterion.

- The staff expects to provide a paper to the Commission summarizing the proposed reconciliation of public comments and recommendations on specific issues (margins, definition of minimal, scope, etc.) by February 19, 1999. The staff hopes to get feedback from the Commission in March 1999. The proposed final rule is due to the Commission by April 30, 1999.

Dr. Powers noted that there is a difficulty in considering the use of risk information in the current context of 10 CFR 50.59. The staff agreed and noted that quantitative analysis of risk is not performed for most changes. Dr. Apostolakis noted that the current basis for the definition of "minimal" is qualitative. The staff stated that using risk information creates a challenge in trying to quantify the increase in probability or consequences. Dr. Apostolakis suggested that the word "probability" not be used, noted that engineering judgments are routinely made. He reiterated the staff view that the key is to maintain the integrity of the licensing basis. Dr. Kress agreed and suggested that there may be a need for additional definition of what constitutes the licensing basis.

Dr. Bonaca stated that a number of attributes were considered in designing plant systems (e.g., redundancy, separation, diversity, etc.) and noted that these were relatively easy to measure. Dr. Kress stated that there is no good way to use probabilistic risk assessment (PRA) to calculate risk for changes under 10 CFR 50.59 and suggested that it is more important to define the "attributes" important to safety.

Dr. Seale questioned the status of staff reconciliation of guidance in NSAC-125 and NEI 96-07, both entitled, "Guidelines for 10 CFR 50.59 Safety Evaluations." The staff stated that there appears to be Commission support for endorsement of this industry guidance. The staff added that NEI has agreed to modify the guidance once the proposed rule is in place. Mr. Barton questioned the schedule for NRC guidance development (i.e., regulatory guide) and modification of NEI 96-07. In particular, he questioned whether the rule could be approved with delayed implementation for development/revision to the guidance. The staff agreed that an implementation period may be necessary to allow for revision/evaluation of the subject guidance and associated licensee programs.

At the conclusion of the briefing, Mr. Barton noted that the Committee expects to review the staff's proposed Commission paper on the summary of public comments and staff recommendations for revising 10 CFR 50.59 during its March 10-13, 1999 meeting. He added that the Committee plans to review the proposed final rule during the May 5-8, 1999 ACRS meeting.

Conclusion

The Committee issued a report to Chairman Jackson dated February 18, 1999, on this matter.

III Proposed Improvements to the NRC Inspection and Assessment Programs (Open)

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

Introduction

Mr. John Barton, Chairman of the Subcommittee on Plant Operations introduced this topic to the Committee. He noted that this matter was discussed at a January 26, 1999 joint meeting of the Plant Operations and Reliability and Probabilistic Risk Assessment Subcommittees. Mr. Barton introduced the NRC staff and informed the Committee that the staff would provide an overview of the revised inspection and assessment programs to monitor nuclear power plant performance and respond to a set of questions that arose during the January 26 Subcommittee meeting.

NRC Staff Presentation

Mr. Frank Gillespie, NRR, began by updating the Committee on the status of activities related to revisions of the NRC Inspection and Assessment Program. He noted that the staff has tentatively selected eight plants to participate in the pilot program (two in each region). These plants will be named following additional consultation with the nuclear industry and the Commission. He also noted that two documents are under preparation: one to ensure that no high-risk events are eliminated by the screening methodology, and another to address the use of the inspection results. Both documents are expected to be available in about two weeks.

The Committee and staff next discussed issues pertaining to a set of questions that arose during discussion of the revisions to the inspection and assessment process during the January 26, 1999 Joint Subcommittee meeting. These issues included selection, assessment, and the schedule for the pilot plants; the high-level objectives of the assessment process; the implications associated with the use of thresholds for the performance indicators; revisions to the enforcement program that are to dove-tail with the revised assessment program; oversight of the transition process; and the need to address additional policy issues associated with this effort.

Significant key points raised by the Committee included the following:

- Dr. Powers expressed concern with the lack of replicates for the pilot programs to ensure that the effects of uncontrolled variables are properly considered. He also noted that the use of a six-month pilot program may not be representative of plant performance, since the program is designed to utilize a one year assessment program.

- Dr. Apostolakis expressed concern with the staff's use of a 95% threshold for the performance indicators. He expressed concern that the staff may use this threshold approach to "ratchet" plants to a more stringent level of performance, i.e, move from inspection program items to regulatory requirements. He said that the staff needs to clearly formulate and state its objectives for this Inspection and Assessment Program. He also suggested that the staff work to develop plant-specific performance thresholds.

- In response to Dr. Seale, the staff stated that they will examine the results of plant assessments among the Regions to ensure consistency.

- Mr. Barton suggested that the staff include a master acronym list in a revised version of SECY-99-014. The staff agreed to consider this suggestion.

  In response to Mr. Barton, Mr. Gillespie stated that policy issues associated with this matter will require resolution. He added that these policy issues will require more time and discussion with the EDO's Office.

Conclusion

The Committee issued a letter to the NRC Chairman, dated February 23, 1999, on this matter.

IV Meeting with the NRC Commissioners, Commissioners' Conference Room, One White Flint North (Open)

The Committee met with the Commissioners on February 3, 1999, to discuss important items of mutual interest including: proposed (near-term) revision to 10 CFR 50.59 (Changes, Tests and Experiments); and proposal for the development of a risk-informed framework for 10 CFR 50.59; options to make 10 CFR Part 50 risk informed; proposed rulemaking on the use of revised source term; status of ACRS activities associated with license renewal; impact of PRA results and insights on the

regulatory system; elevation of CDF to a fundamental safety goal and possible revision of the Commission's Safety Goal Policy Statement; and the NRC Safety Research Program.

V Proposed Final Revision to 10 CFR 50.65 (a)(3) of the Maintenance Rule (Open)

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

Introduction

Dr. William J. Shack, Acting Chairman of the Plant Operations Subcommittee, introduced this topic to the Committee. He stated that the purpose of this session was to hear presentations by and hold discussions with representatives of the NRC staff regarding the proposed final revision to the Maintenance Rule, which would require licensees to perform the safety assessments maintenance activities.

NRC Staff Presentation

Mr. Richard Correia, NRR, led the presentation for the NRC staff and presented the proposed revised final Maintenance Rule. The Maintenance Rule, 10 CFR 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," was issued in July 1991, and became effective on July 10, 1996.

The Commission issued a staff requirements memorandum (SRM) on April 11, 1997, directing the staff to consider whether the language regarding the performance of 10 CFR 50.65(a)(3) safety assessments needed to be clarified. In SECY-97-173, "Potential Revision to 10 CFR 50.65(a)(3) of the Maintenance Rule to Require Licensees to Perform Safety Assessments," dated August 1, 1997, the staff recommended revising 10 CFR 50.65(a)(3) to include the requirement of the safety assessments of maintenance activities.

The Commission issued an SRM on December 17, 1997, approving the staff's recommendation. More specifically, the Commission directed the staff to (1) add an introductory sentence to 10 CFR 50.65 to clarify that the rule applies under all conditions of operation, including normal shutdown; (2) make editorial corrections to the third sentence of paragraph (a)(3); and (3) delete the last sentence of paragraph (a)(3), and create a new paragraph (a)(4).

The new paragraph (a)(4) would change "should" to "shall" regarding the performance of safety assessments; expand the scope of the requirement for

performing those assessments to include all planned maintenance activities; specify that the safety assessments are to examine the extant plant condition and the condition expected during the maintenance activity; and specify that the safety assessments are to be used to ensure that the plant is not placed in risk-significant configurations or configurations that would degrade the performance of safety functions to an unacceptable level. Additionally, the Commission directed that extended or protracted regulatory analysis of Alternative 1 is unnecessary and that the regulatory analysis discussion of Alternative 3 be limited.

The proposed rule was issued for comment which ended on December 14, 1998. A total of 34 comments from utilities, NEI, and members of the public were received. In response to the public comments, the following recommendations were made:

- Revise the (a)(4) language to clarify the use of assessments.
- Assessments must be performed for all maintenance activities that could impact plant safety (e.g., transient initiators).
- Requests for deletion of Technical Specification Configuration Risk Management Program (CRMP) will be processed after 10 CFR 50.65 (a)(4) becomes effective.
- Combinations of out-of-service low safety significant structure, system, and components (SSCs) must be evaluated for the impact on plant safety.
- Regulatory Guide 1.160 will be revised to incorporate implementation guidance for (a)(4) assessments, including shutdown.

The staff plans to forward the revised final rule to the Commission with the recommendation that the effective date of the rule be after the regulatory guide is issued in final form.

Conclusions

The Committee plans to write a report to the Commission during April 7-10, 1999, ACRS meeting.

VI SECY-98-244, NRC Human Performance Plan (Open)

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

Introduction

Dr. Dana Powers, Chairman of the ACRS, noted that the Human Performance Plan (HPP) has been a recurring theme for the Committee. He stated that the Committee was interested in the current version of the HPP. Dr. Powers stated that he was more interested in how the staff planned to develop future versions of the HPP than in the current version of the HPP.

Dr. Steven Arndt, RES, introduced the presentation by summarizing the background of previous revisions to the HPP and the previous ACRS comments. He explained that the current version of the HPP is a work-in-progress and described the associated staff activities. The staff has formulated a disciplined strategy to develop a more technically defensible HPP. The future development of the HPP will begin with the identification of agency needs in the field of human performance. These identifications will be made quantitatively where possible. The Accident Sequence Precursor data for events over the last five years with conditional core damage probabilities greater than 10^{-5} will be reviewed to isolate the human performance contribution to events. Licensee event reports, insights from the Individual Plant Examinations, NRC inspection reports, and Office for Analysis and Evaluation of Operational Data (AEOD) system studies will also be examined. The findings from these efforts will be augmented by human reliability analysis sensitivity studies. The staff stated that this strategy will lead to the formulation of a list of agency needs that can be justified by NRC line organizations and reviewed by stakeholders.

Dr. Arndt explained that the list of NRC human performance needs will be prioritized by a process now being developed within RES. Requirements and closure conditions for the priority activities will be defined, quantitatively where possible, using regulatory analysis guidelines and risk criteria such as those described in Regulatory Guide 1.174.

The ACRS Members and the staff discussed the following:

- lack of linkage between the HPP's mission statements and goals,
- use of a phenomena identification and ranking table in the prioritization process,
- use of a high level human performance model,
- use of risk-metrics to compare HPP activities with other research activities,
- cooperation with the Institute of Nuclear Power Operations,
- communicating research needs,
- unsuccessful applications of quantitative closure criteria, and
- scrutability of decisions based on expert judgment.

Conclusion

The Committee issued a letter to the Executive Director for Operations dated February 19, 1999, on this matter.

VII Proposed Resolution of Generic Safety Issue (GSI) B-61, Allowable ECCS Equipment Outage Periods (Open)

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

Introduction

Dr. Robert Seale, the cognizant ACRS Member, introduced this topic to the Committee. He stated that the purpose of this meeting was to discuss the impact of a limit on cumulative outage time (COT) on systems during unscheduled or corrective maintenance.

NRC Staff Presentation

Mr. Arthur Buslik, RES, led the presentation for the NRC staff. Mr. Buslik stated that TMI Action Item II.K.3.17 asked that utilities report the dates and lengths of their emergency core cooling systems (ECCS) outages and for the staff to determine if a need exists for a limit on COT. This issue was subsumed under GSI B-61. The staff's reason for considering a need for a control on cumulative outage times was that the risk depends on COT. The staff discussed its approach to resolution of this issue, which includes considerations of 10 CFR 50.109 backfit requirements and the role of the Maintenance Rule.

Mr. Buslik stated that an in-house study consistent with NRC regulatory analysis guidelines was used to determine whether there is substantial added overall protection of the public health and safety by the reduction in core damage frequency and the reduction in the frequency of core damage accidents involving early containment failure. A total of four representative plants from NUREG-1150 were evaluated on the impacts of a control on COT, planned, and unplanned outage rates through implementation of the Maintenance Rule.

The ACRS Members and the staff discussed the following issues:

- regulatory analysis approach,

- role of the Maintenance Rule,
- benefit from imposing controls on cumulative outage times, and
- finding of no significant safety benefit.

The staff concluded that the contribution to core damage frequency, including the effect of a control on equipment COTs and the conditional probability of containment failure for these plants did not meet the substantial added protection criterion specified in the regulatory analysis guidelines.

Conclusion

The Committee wrote a letter to the Executive Director for Operations dated February 19, 1999, on this matter.

VIII Fire Protection Issues (Open)

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

Introduction

Dr. Dana A. Powers, Chairman of the Fire Protection Subcommittee, introduced this topic to the Committee. He stated that the purpose of this session was to hear presentations by and hold discussions with representatives of the NRC staff regarding the draft NFPA-805 Standard and the development of the proposed outline for a comprehensive regulatory guide for fire protection.

NRC Staff Presentation

Mr. Patrick M. Madden, NRR, presented a brief background and the current status regarding the NFPA-805 Standard and the development of the proposed outline for a comprehensive regulatory guide.

NFPA-805 Standard

The NRC staff stated that the purpose of NFPA 805 is to provide a comprehensive fire protection Standard to protect the public health and safety. The scope of the Standard is limited to establishing the minimum requirements for existing light-water reactors during all phases of plant operation (e.g., power operation, shutdown, decommissioning, and degraded conditions). The staff stated that within the framework of NFPA 805, the plant owner/operator is provided the option of selecting

a deterministic approach (e.g., Appendix R to 10 CFR Part 50 and NFPA *Life of Safety Code*) or a performance-based approach (e.g., engineering analysis, fire modeling, and probabilistic safety assessment) for satisfying the criteria. To meet the requirements of the standard, both the performance criteria specified in the standard and the risk criteria established by the plant owner/operator must be satisfied. Acceptable methods for conducting the site-wide risk assessment and the performance-based approaches will be included with the standard. Alternative analytical methods not included in the standard may be used, provided they are acceptable to the authority having jurisdiction. The staff plans to hold a public meeting to discuss the comments received from the industry in the near future. The staff concluded that significant progress has been made in the development of the NFPA-805 Standard and anticipates that the technical Committee for the NFPA will be successful in developing a risk-informed, performance-based standard for consideration as an alternative to the existing NRC fire protection requirements.

Status and Development of the Comprehensive Regulatory Guide

The staff stated that the development of a comprehensive regulatory guide for fire protection at nuclear power plants was approved by the Commission in a SRM dated June 30, 1998. The NRC staff, with technical assistance from the Pacific Northwest National Laboratory (PNNL), has prepared the draft outline to be used for the development of the comprehensive regulatory guide. The staff provided the draft copy of the outline to NEI on December 24, 1998 for their comments. It was requested that NEI coordinate the industry review of the draft outline and provide comments concerning the topics addressed in the outline and any additional topical areas that industry believes warrants specific regulatory guidance. In order to achieve the September 1999 schedule directed by the Commission for the issuance of the guide, NEI was requested to provide comments to the NRC staff by February 24, 1999.

Conclusions

The Committee issued a report to Chairman Jackson dated February 18, 1999 regarding the NFPA-805 Standard.

IX. Subcommittee Report - Report on December 16-17, 1998 Thermal-Hydraulic Phenomena Subcommittee Meeting

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

Dr. G. Wallis provided a report to the Committee on the results of the December 16-17, 1998 meeting of the Thermal-Hydraulic Phenomena Subcommittee. The Subcommittee discussed the following topics: application of the Westinghouse best-estimate large-break LOCA methodology to Upper Plenum Injection (UPI) plants, a status report on the NRC Office of Nuclear Regulatory Research (RES) program on thermal-hydraulic phenomena, initial review of both the Electric Power Research Institute RETRAN-3D code, and the NRC staff program to develop guidance for development and review of thermal-hydraulic code submittals. Dr. Wallis noted that the Subcommittee had concerns with the Westinghouse UPI code submittal and will hold another meeting on February 23, 1999 to continue review of this matter. With regard to the RES work, concern was expressed by the Subcommittee over the loss of significant resources) both money and FTEs). Review of the RETRAN-3D code and the NRC code guidance documentation will continue at future meetings.

Dr. Powers suggested that the Subcommittee work on developing a comprehensive list of attributes that the ACRS could provide to the NRC staff with regard to the promotion of appropriate code review guidance.

X. Follow-up Items Resulting from the ACRS Retreat (Open)

A meeting of the ACRS Subcommittee on Regulatory Policies and Practices was held on January 27-29, 1999, in Bethesda, Maryland. A number of key issues were discussed and recommendations were made. The Committee will act on these recommendations and make assessments of the effectiveness of the actions taken.

XI. NRC Safety Research Program (Open)

The Committee discussed the format and content of its 1999 report to the Commission regarding the NRC safety research program. Several research areas were discussed including PRA research for risk-informed/performance-based regulation; high burnup fuel performance; thermal-hydraulic code integration and in-house capabilities; advanced instrumentation and control; and research required for plant license renewal. The Committee plans to issue its report to the Commission in May 1999.

XII. 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) to ACRS comments and recommendations included in recent ACRS reports:

- The Committee discussed the response from the NRC Executive Director for Operations (EDO) dated December 11, 1998 to the ACRS comments and recommendations included in the ACRS report dated November 19, 1998, concerning the proposed rule on use of an alternative source term at operating reactors.

  The Committee decided that it was satisfied with the EDO's response.

- The Committee discussed the response from the EDO dated December 11, 1998, to the ACRS comments and recommendations included in the ACRS report dated November 17, 1998, concerning the proposed revision to the enforcement policy.

  The Committee plans to continue its review of this matter during future meetings.

- The Committee discussed the response from the NRC EDO dated December 28, 1998, to the ACRS comments and recommendations included in the ACRS letter dated November 23, 1998, concerning the reprioritization and proposed resolution of Generic Safety Issue GSI-171.

  The Committee decided that it was satisfied with the EDO's response. However, the Committee decided to continue its discussion on the issue of developing appropriate tools for conducting risk-informed analysis for effective prioritization of GSIs during the review of the reevaluation of the GSI process.

- The Committee discussed the response from the NRC EDO dated January 7, 1999, to ACRS comments and recommendations included in the ACRS letter dated November 20, 1998, concerning the staff's Safety Evaluation Report on the topical report (WCAP-14572, Revision 1) and the Westinghouse Owners Group application of risk-informed methods to inservice inspection of piping and associated Structural Reliability and Risk Assessment.

The Committee plans to continue its discussion of this matter during future meetings. Specifically, the Committee noted that the staff's revised SER still does not sufficiently characterize the distinction between parameter and model uncertainties discussed during the Committee's deliberations. The Committee plans to review NUREG-1661 relative to these concerns and issues noted in the EDO's response.

- The Committee discussed the response from the NRC EDO dated January 8, 1999, to the ACRS comments and recommendations included in the ACRS letter dated December 14, 1998, regarding the proposed commission paper concerning options for making risk-informed revisions to 10 CFR Part 50.

  The Committee decided that it was satisfied with the EDO's response.

- The Committee discussed the response from the EDO dated January 19, 1999, to the ACRS comments and recommendations included in the ACRS interim report dated December 11, 1998 concerning the proposed improvements to the NRC inspection and assessment programs.

  The Committee decided it was satisfied with the EDO's response.

- The Committee discussed the response from the NRC EDO dated January 29, 1999, to ACRS comments and recommendations included in the ACRS letter dated December 11, 1998, concerning options for incorporating risk insights into the 10 CFR 50.59 process.

  The Committee decided that it was satisfied with the EDO's response.

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

The Committee heard a report from Dr. Powers, ACRS Chairman, and Dr. Larkins, the Executive Director, ACRS, on the Planning and Procedures Subcommittee meeting held on February 2, 1999. The following items were discussed:

- The NRC is installing a new electronic document storage and retrieval system that is scheduled to replace existing systems by October 1999. This date would enable NRC to avoid some Y2K problems with existing systems.

The ACRS Office has been selected for early implementation, starting in March 1999.

- Of the four Working Groups proposed during the 1998 Quadripartite Meeting, only the Working Group on high burnup fuel is currently active. During the retreat, it was agreed that the NRC staff would be asked whether to invite members of this Working Group to review the draft phenomena identification and ranking table (PIRT) related to this effort. Due to the uncertain situation regarding the RSK and other concerns, a decision was made not to pursue the other three Working Groups in the absence of expressed support from the other Quadripartite member countries.

- Dr. Apostolakis proposed that the ACRS Bylaws be amended to provide more time for Members to submit additional comments to ACRS reports/letters. The process for amending the Bylaws is described in Section 14. Dr. Seale has proposed that the provision of the Bylaws be waived when extended time is needed for additional comments. Dr. Larkins noted that the current Bylaws are out of date. A draft revised version of the Bylaws was distributed to the Members during the February ACRS meeting and will be discussed during the next Planning and Procedures Subcommittee meeting.

- The ACRS should decide which License Renewal Generic Topical Reports it should review and establish a schedule. The ACRS should also review the list of Generic Issues distributed at the Retreat and decide which issues it should review. A schedule should then be established for evaluating the issues to formulate an ACRS position on each. Dr. Seale proposed an ACRS visit to the Calvert Cliffs and Oconee plants as part of its review, with a definite schedule to be established before the ACRS meets with the Commission on February 3, 1999.

  The Subcommittee recommended that Dr. Fontana take the lead in identifying the License Renewal Generic Technical Issues as well as the industry topical reports that should be reviewed, make assignments to Members, and establish a schedule for Members' input. Also, if the Committee decides to visit either Calvert Cliffs or Oconee, Dr. Fontana, with assistance from the ACRS staff, should establish a schedule for visiting these plants.

- ACRS Members met with the RES Office Director and staff on January 26, 1999 to discuss plans to address RES core capabilities and skills. RES provided a draft SECY paper that concludes that there is no benefit in

pursuing this issue further and that the budget process drives decisions on core competencies. The ACRS Members present at the meeting informed RES that they had no objection to issuance of the draft SECY paper, subject to approval by the full Committee. RES is also doing a self-assessment that should address ACRS concerns and that assessment will be provided to ACRS for review and comment.

The Subcommittee recommended that the ACRS endorse the draft SECY paper. Also, the full Committee decided to discuss whether to endorse the RES proposal to include the following statement in draft SECY paper: "We have discussed this conclusion with key members of the Advisory Committee on Reactor Safeguards. They agree that under the circumstances described above, that this approach is both practical and reasonable." In addition, the Subcommittee suggests a meeting with Commissioner McGaffigan be scheduled to discuss his views on core capabilities.

- The appointment of Dr. Mario Bonaca to the ACRS was formally approved by the NRC Chairman on January 28, 1999.

- A draft of the summary of the ACRS Retreat has been prepared (separate handout) and a number of actions and follow-up items are included in this meeting summary. ACRS Members were requested to provide comments by COB Saturday, February 6, 1999.

  Dr. Powers suggested several topics for discussion during the full Committee review the follow-up items resulting from the Retreat. These include:

  - Distribution of workload to Subcommittees
  - Prioritization of ACRS recommendations
  - Review of proposed letters to identify those that should be allowed to "ripen" and those that should use a revised format for the introductory paragraph
  - Structured and unstructured discussion time
  - Adopt-a-Region Program instead of the existing Adopt-a Plant Program.

- <u>MEMBER ISSUES</u>

  - Dr. Powers noted that NEI is asking NRC to discontinue its audits of the Severe Accident Management Programs established by licensees. He stated that NEI believes the four demonstrations

provided by licensees provide an adequate basis for NRC to reach closure on the Severe Accident Management plans. Dr. Powers asked if ACRS should provide advice to the Commission on this issue and, if so, whether a subcommittee meeting should be held. The Subcommittee recommended that Dr. Kress, Severe Accident Subcommittee Chairman, propose a course of action and that this item be included in the Future Activities.

- Dr. Powers noted that NRC is in the process of making its evaluations of licensee emergency preparedness planning performance-based. He noted that a number of performance indicators have been defined. Dr. Powers asked that the ACRS consider if it should review this activity and its interface with Federal Emergency Management Agency (FEMA) and the evaluation of the offsite program. This will be discussed at a later date.

- Dr. Powers noted that an issue has arisen concerning poor documentation and the lack of validation of best-estimate Codes against data. This is a problem not only in thermal-hydraulics but also human performance and fire protection and perhaps other areas. Dr. Powers asked if there should be criteria for deciding when and how best estimate or better estimate models must be validated against data. Dr. Wallis will look into this issue and provide recommendations and a plan.

- Dr. Seale requested that the July full Committee Meeting be moved from July 7-9, 1999, to July 14-16, 1999. The Committee approved this recommendation.

• <u>FOREIGN TRAVEL</u>

- Dr. Powers requested an endorsement to attend an IAEA meeting in Vienna, Austria, on Feb. 8-11, 1999 on defense-in-depth. No compensation or support was requested. The Committee endorsed Dr. Powers' attendance.

- Dr. Powers has requested approval to attend an Enlarged Halden Programme Group Meeting at Loen, Norway, on May 22-30, 1999. Dr. Powers has been invited to participate in this meeting. The Committee will discuss this at the March 1999 ACRS full Committee meeting. The Committee approved this request.

- Dr. Uhrig has requested approval to attend the Enlarged Halden Reactor Program Information Meeting at Halden, Norway on May 22-29, 1999. The Committee will discuss this at the March 1999 full Committee meeting.

D. Future Meeting Agenda

Appendix IV summarizes the proposed items endorsed by the Committee for the 460th ACRS Meeting, March 10-13, 1999.

The 459th ACRS meeting was adjourned at 1:00 p.m. on February 6, 1999.