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Date Issued: 5/15/00

Date Signed: 5/22/00

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ACRS-3199

April 5-7, 2000

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REPORTS, LETTERS, AND MEMORANDA

REPORTS

- Draft Final Technical Study of Spent Fuel Pool Accident Risk at Decommissioning Nuclear Power Plants (Report to Richard A. Meserve, Chairman, NRC, from Dana A. Powers, Chairman, ACRS, dated April 13, 2000)
- NRC Program for Risk-Based Analysis for Reactor Operating Experience (Report to Richard A. Meserve, Chairman, NRC, from Dana A. Powers, Chairman, ACRS, dated April 13, 2000)
- Reactor Safety Goal Policy Statement (Report to Richard A. Meserve, Chairman, NRC, from Dana A. Powers, Chairman, ACRS, dated April 17, 2000)

LETTER

- Proposed NRC Research Plan for Digital Instrumentation and Control (Letter to William D. Travers, Executive Director for Operations, NRC, from Dana A. Powers, Chairman, ACRS, dated April 18, 2000)

MEMORANDA

- Final Rule: “Elimination of the Requirement for Noncombustible Fire Barrier Penetration Seal Materials and Other Minor Changes” (10 CFR Part 50) (Memorandum to William D. Travers, Executive Director for Operations, NRC, from John T. Larkins, Executive Director, ACRS, dated April 6, 2000)
- Draft Regulatory Guide DG-1094, “Fire Protection for Operating Nuclear Power Plants” (Memorandum to William D. Travers, Executive Director for Operations, NRC, from John T. Larkins, Executive Director, ACRS, dated April 7, 2000)
- SECY-00-0061, Proposed Revision to the Enforcement Policy to Address the Revised Reactor Oversight Process (Memorandum to William D. Travers, Executive Director for Operations, NRC, from John T. Larkins, Executive Director, ACRS, dated April 10, 2000)
- SECY-00-0071, Draft Regulatory Guide (DG-1095), “Guidance for Implementation of 10 CFR 50.59 (Changes, Tests, and Experiments)” (Memorandum to William D. Travers, Executive Director for Operations, NRC, from John T. Larkins, Executive Director, ACRS, dated April 10, 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

471st ACRS Meeting
April 5-7, 2000

MINUTES OF THE 471st MEETING OF THE
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS
APRIL 5-7, 2000
ROCKVILLE, MARYLAND

The 471st meeting of the Advisory Committee on Reactor Safeguards (ACRS) was held in Conference Room 2B3, Two White Flint North Building, Rockville, Maryland, on April 5-7, 2000. Notice of this meeting was published in the *Federal Register* on March 17, 2000 (65 FR 14634) (Appendix I). The purpose of this meeting was to discuss and take appropriate action on the items listed in the meeting schedule and outline (Appendix II). The 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. Spent Fuel Pool Accident Risk for Decommissioning Plants (Open)

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

Dr. Thomas S. Kress, ACRS, stated that the purpose of this session was to discuss with the NRC staff the draft final technical study of spent fuel pool (SFP) accident risk at decommissioning nuclear power plants. The ACRS is responding to the Commission's request in the staff requirements memorandum of December 21, 1999, that the ACRS perform a technical review of the validity of the draft study and its risk objectives.

Mr. Glenn Kelly, Office of Nuclear Reactor Regulation (NRR), stated that decommissioning nuclear power plants pose a different risk to public health and safety relative to operating nuclear power plants. However, under current regulations the decommissioning plants are subject to many of the same requirements as operating plants. Exemptions from the regulations are frequently requested by the licensees after a nuclear power plant is permanently shut down.

To reduce the need to routinely process exemptions, the staff has undertaken a technical study to provide the technical basis for rulemaking concerning several exemption issues.

During the 467th meeting of the ACRS (November 4-6, 1999), the Committee reviewed a draft report of a technical study prepared by the NRC staff on the SFP accident risk at decommissioning plants. The staff in its study proposed to take a risk-informed view of power reactor decommissioning requirements and to use the risk insights derived from this review to guide the promulgation of new regulations. The staff's study concluded that the risk at decommissioning plants with recently irradiated fuel in the SFP could not be dismissed as low when compared to operating reactors due to the frequency and consequences of postulated events leading to drainage of the SFP and a zirconium fire. The results of the staff's study are intended to support a rulemaking in regulatory areas such as emergency planning, safeguards, and insurance for decommissioning plants.

The ACRS issued its letter to the EDO on November 12, 1999, regarding the draft study. On December 16, 1999, the EDO responded to the ACRS letter. The

staff has now completed its review and requantification of the preliminary risk assessment study.

The staff in its revised draft of the report estimated, after a period of 1 year following permanent shutdown, that the generic frequency of events leading to zirconium fires at decommissioning plants would be less than 3×10^{-6} per year for a plant that implements the design and operational characteristics assumed in the risk assessment performed by the staff. This frequency was estimated on the basis of the assumption that the industry decommissioning commitments plus additional staff assumptions would be implemented. The staff recognizes that this estimate could be much higher for a plant that does not implement these operational characteristics. The staff noted in its study that the most significant contributor to the SFP risk issue is a seismic event that exceeds the design basis earthquake. However, the staff added that the overall frequency of this event is within the developed SFP performance guideline for large radionuclide releases (related to a zirconium fire) of 1×10^{-5} per year.

The staff's study addressed three main areas, namely how risk-informed decisionmaking can be applied to decommissioning plants, the risk assessment of SFPs at decommissioning plants, and the implications of SFP risks on regulatory requirements. The staff stated that for many of the sequences leading to zirconium fires, there are very large delay times due to the long time required to boil off the large SFP water inventory. Thus, the staff concluded that although the consequences of zirconium fires are comparable to large, early release frequency from postulated operating reactor accidents, the time of release occurs much later following initiation of the accident, and consequently there is a large amount of time to initiate and implement protective actions, including public evacuation.

The report indicates that the risk assessment shows low numerical risk results in combination with satisfaction of the safety principles as described in Regulatory Guide 1.174, such as defense in depth, maintaining safety margins, and performance monitoring. For the report's implications on security, it is not clear what risk insights can be used to assess what target sets are important to protect against sabotage.

Concurrent with providing the Commission a copy of this draft report, the staff will be issuing it for public comment. Following resolution of any Commission and public comments and review by the ACRS, the staff plans to publish the final report in May 2000. The staff will utilize the industry commitments and the

conclusions in this report to support an integrated decommissioning rulemaking to be submitted in June 2000 and will develop interim guidelines for any future plants that elect to decommission before establishing revised regulations. On February 22, 2000, a notice was published in the *Federal Register* on the availability of the final draft study. The public comment period expired on April 7, 2000.

Mr. Jason Schaperow, NRC/RES, presented a brief consequence evaluation for spent fuel pool accidents. The object of the analysis was to assess the effect of 1 year of decay on offsite consequences and to assess the effect of early versus late evaluation. The approach undertaken by the staff was to use the MACCS code with fission product inventories for 30 days and 1 year after final shutdown.

The staff concluded that short-term consequences (early fatalities) are reduced by a factor of two, from 30 days to 1 year. In addition, early evacuation reduces early fatalities by up to a factor of 100. However, the long-term consequences (cancer fatalities and societal dose) are less affected by additional decay and early evacuation.

Mr. Schaperow discussed briefly the effect of ruthenium. He stated that small-scale Canadian tests with an air environment show significant ruthenium release following cladding oxidation. The MACCS code calculations show that release of all ruthenium increases early fatalities by a factor of 100. Some of the mitigating factors for ruthenium releases in the SFP could be rubbing of the fuel to limit air ingress, and early evacuation. The PHEBUS test planned to examine the effect of air ingress on a larger scale in an integral facility.

Conclusion

The Committee sent a report on this matter to Chairman Meserve, dated April 13, 2000.

III. Proposed Research Plan for Digital Instrumentation and Control (Open)

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

Dr. Robert E. Uhrig, Chairman of the Subcommittee on Plant Systems, introduced the topic to the Committee. He stated that the purpose of this session was to

discuss with the representatives of the NRC staff the proposed research plan for digital instrumentation and control (I&C).

NRC Staff Presentation

Dr. Sher Bahadur led the discussions for the staff. He stated that in the early 1990s the NRC began developing guidance to support the review of digital systems in nuclear power plants. RES commissioned the National Academy of Sciences - National Research Council to review the issue associated with the use of digital I&C systems. The National Research Council issued its report and made several recommendations, including a proposal to develop a research plan that would balance short-term regulatory needs and long-term anticipatory research needs.

Mr. Matthew Chiramal presented the regulatory framework and digital I&C review process. He stated that in 1997 the NRC completed an update to Chapter 7, "Instrumentation and Control," of NUREG-0800, "Standard Review Plan (SRP) for the Review of Safety Analysis Reports for Nuclear Power Plants." The update to the SRP addressed many of the regulatory review issues associated with digital technology. In support of the SRP update, the NRC also developed six regulatory guides addressing software quality assurance. These regulatory guides endorsed eight Institute of Electrical and Electronic Engineers standards, with exceptions. Since the update of the SRP, RES has been supporting the digital I&C regulatory framework by providing review guidelines and technical information on specific I&C issues.

Mr. Steven Arndt presented the proposed research plan for digital I&C. He stated that to meet the short-term and long-term goals of the research plan, research programs have been developed on the basis of the four agency performance goals of maintaining safety, increasing public confidence, reducing regulatory burden, and making NRC activities and decisions more effective, efficient, and realistic.

The digital I&C research program activities are grouped into four areas. The first two areas, Systems Aspects of Digital Technology and Software Quality Assurance, have been developed to meet the short term goal of improving the review of digital systems by providing tools and methods that can improve the current review process. The third area, Risk Assessment of Digital I&C Systems, has been developed to meet the long-term goal of including digital systems in

risk-based regulatory programs. The fourth area, Emerging I&C Technology and Applications, has been developed to meet the long-term goal of reducing the time it takes for the NRC to become ready to review the application of new technology to nuclear power plants.

The process for the scheduling of the research activities uses four criteria to prioritize them. In order of importance they are (1) regulatory need (as evaluated for stakeholder input, primarily NRR user needs), (2) dependence of activities on one another, (3) time needed to complete the research, and (4) completion of needed work that has already been initiated. The proposed research plan is to be completed in the next 5 years.

Conclusion

The Committee issued a letter on this matter to Dr. William D. Travers, Executive Director for Operations, on April 18, 2000.

IV. Proposed White Paper on Risk-Based Performance Indicators (Open)

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

Dr. George Apostolakis, Chairman of the ACRS Subcommittee on Reliability and Probabilistic Risk Assessment, introduced the topic to the Committee. He stated that the Subcommittee met on December 15, 1999, to discuss NRC programs for risk-based analysis of reactor operating experience, including the staff's plans to develop a White Paper on risk-based performance indicators (RBPIs). Dr. Apostolakis noted that the Committee had met with the staff about 2 years ago to discuss development of RBPIs and stated that he was somewhat surprised that the development effort was still at such a high level.

NRC Staff Presentation

Messers Patrick Baranowsky and Steven Mays, RES, led the discussion of this topic for the NRC staff. Mr. Hossein Hamzehee, RES, provided supporting discussion. Significant points raised by the staff during the presentation include the following:

- The proposed White Paper is a conceptual document. It updates previous work in this area to be consistent with the revised reactor oversight process (RROP). Some of the detailed work noted in the White Paper has already been accomplished. The staff plans to refine the models sufficient to support risk-informed decisionmaking. However, the staff does not propose the development of new technology in this area.
- The staff's approach is to identify the most significant contributors to risk and to link the RBPIs to the RROP cornerstones of safety. The staff proposes to establish RBPIs for all modes of operation and plant conditions (e.g., full-power, low-power, and shutdown operations, external events, etc.).
- The Committee also discussed the sources' performance data such as the Equipment Performance and Information Exchange System Program (EPIX) and the Sequence Coding and Search System. The EPIX was established as a voluntary industry database in lieu of the proposed Reliability Data Rule.
- The Phase 1 portion of the RBPI development effort would be to identify the most risk-significant contributors to risk as candidate performance indicators (PIs). Phase 2 would entail developing possible indicators that would integrate RBPIs and the results of inspection and assessment.

Dr. Bonaca questioned whether the staff would expect to have "leading indicators" as an outcome of the RBPI effort. The staff noted that data are always "lagging" and asserted that the intent is to make the RBPIs a performance monitoring system that is driven by observed contributors to risk.

Dr. Apostolakis questioned whether there was a need to develop RBPIs for health effects, quality assurance, or safety culture. The staff reiterated that the RBPIs selected must be able to complement the RROP. The staff stated that the RBPIs must be organized logically rather than intuitively and that indicators must be measurable.

Drs. Bonaca and Apostolakis questioned the completeness and consistency of information provided by licensees in the EPIX database. They also questioned the uniformity of terms and definitions used by licensees in providing information for this "voluntary" database. Dr. Powers suggested that the RBPIs might be more

effective if they measure plant-specific trends rather than comparing data on an industry-wide basis. The staff acknowledged that there is some variability in the information provided by licensees but expressed reservation concerning how precise the data must be to useful assessments. The staff reiterated that the terms, definitions, and reporting guidelines were agreed upon by the industry in lieu of the Reliability Data Rule.

Dr. Apostolakis suggested that page 8 of the presentation handout be modified to specify that the items listed were "guiding principles" rather than definitions for what constitutes RBPIs. The staff agreed to modify the handout as suggested.

Conclusion

The Committee's comments on this matter are included in a report to Chairman Meserve, dated April 13, 2000, on the NRC program for risk-based analysis of reactor operating experience.

V. Human Performance Program (Open)

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

Dr. Dana Powers, ACRS Chairman, introduced this topic to the Committee. Mr. Jack Rosenthal, RES, began his presentation by giving background information relating to the development of SECY-00-0053, "NRC Program on Human Performance in Nuclear Power Plant Safety." He described the contents of SECY-00-0053 and the basis for the program on human performance. Mr. Rosenthal summarized the results of the following studies sponsored by the NRC:

- evaluation of human reliability sensitivity studies by the Brookhaven National Laboratory,
- qualitative review of Accident Sequence Precursor (ASP) data by RES, and
- quantitative review of ASP data by the Idaho National Engineering and Environmental Laboratory (INEEL).

Mr. Rosenthal noted that the INEEL review identified latent human errors as a major contributor to significant events. Mr. Rosenthal explained the program's

four elements, which consisted of supporting the reactor oversight process, plant licensing and monitoring, the risk-informed regulation implementation plan, and emerging technology and issues.

The Committee members and the staff discussed whether there is a human contribution to all errors, how to identify or prevent latent errors, whether there is a need for additional control station design guidance, and the use of the human reliability assessment models.

Messrs. David Trimble and Richard Eckenrode, NRR, presented NRR activities related to human performance. Several activities involved testing the hypothesis that the effects of human performance on plant safety would largely be reflected in the plant PIs and inspection findings. They described the supplemental inspection procedure for human performance and the human performance significance determination process

The Committee members and the staff discussed how the hypothesis would be tested, use of the supplemental inspection procedure, the premises associated with the significance determination process, and use of a risk-informed approach for evaluating manual versus automatic actions.

Conclusion

The Committee plans to prepare a report to Chairman Meserve on this matter for the ACRS meeting on May 11-13, 2000.

VI. Special Studies for Risk-Based Analysis of Reactor Operating Experience (Open)

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

Dr. Mario Bonaca, cognizant ACRS member for this meeting, introduced the topic to the Committee. He stated that the Subcommittee on Reliability and Probabilistic Risk Assessment met on December 15, 1999, to discuss NRC programs for risk-based analysis of reactor operating experience, including RBPIs, ASP analyses, common-cause failure analyses, system and component reliability and availability studies, and special studies (e.g., study of initiating event frequencies, D. C. Cook draft risk assessment, etc.).

NRC Staff Presentation

Messers Patrick Baranowsky and Steven Mays, NRR, led the discussion on this matter for the NRC staff. Significant points raised during the staff's presentation include the following:

- The staff plans to continue updating and consolidating its initiating event, system, and component reliability studies. The staff plans to prepare an annual report on overall reactor safety performance.
- The staff plans to continue its development of Standardized Plant Analysis Risk (SPAR) models. These programs were developed by the former Office for Analysis and Evaluation of Operational Data and are now administered by RES.
- The staff plans to continue to work closely with the industry to refine the Reliability and Availability Data System.

Drs. Powers and Apostolakis questioned how the staff compared industry operating experience for low-power and shutdown operations when very few models exist against which comparisons can be made. The staff stated that some computer software programs exist but acknowledged that ad hoc models are necessary to analyze emergent plant events and incidents.

Dr. Powers questioned the absence of fire frequency analysis in the EPIX database. The staff stated that there were very few fires at nuclear power plants and noted that much of the available data related to fires is proprietary.

Dr. Apostolakis questioned the fidelity of the SPAR models in validating the information in licensee probabilistic risk assessments (PRAs) and individual plant examinations. He suggested that a peer review of the SPAR models be considered. The staff agreed to take Dr. Apostolakis' comments and suggestions under consideration.

Conclusion

The Committee issued a report to Chairman Meserve, dated April 13, 2000, on the NRC programs for risk-based analysis of reactor operating experience and on the staff's proposed White Paper on RBPIs.

VII. Reports of the Materials and Metallurgy and Thermal-Hydraulic Phenomena Subcommittees (Open)

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

Materials and Metallurgy Subcommittee - Dr. William J. Shack, Chairman of the Materials and Metallurgy Subcommittee, summarized the presentation the staff made at the Joint Meeting of the Materials and Metallurgy and the Reliability and Probabilistic Risk Assessment Subcommittees on March 16, 2000, concerning the status of the NRC Pressurized Thermal Shock (PTS) Technical Basis Re-evaluation Project. He first provided background information on the development of the current PTS screening criterion. Dr. Shack then described the activities of and interactions among the three groups working in the areas of probabilistic fracture mechanics, PRAs, and thermal-hydraulics. Each group is composed of NRC staff and industry experts. He highlighted the expert elicitation process that the staff is using to develop a flaw distribution, the staff's plans for incorporating uncertainties, and the potential approaches for revising the PTS acceptance criterion.

The Committee discussed the amount of conservatism in the current PTS screening criterion, statistical treatment of the data, location and positioning of assumed flaws, and the possible consequences of the project results on other regulatory guidance. Dr. Powers questioned whether the staff would consider the effects of PTS on boiling-water reactor vessels when evaluating the request to use automatic depressurization and low-pressure injection systems to reach safe shutdown conditions. Dr. Kress speculated on possible unreviewed severe accident consequences resulting from the failure of a reactor pressure vessel.

Conclusion

The Committee decided to review and comment on the proposed draft Commission paper concerning the potential revisions to the PTS acceptance criterion at the ACRS meeting on May 11-13, 2000.

Thermal-Hydraulic Phenomena Subcommittee - Dr. Wallis, Chairman, Thermal-Hydraulic Phenomena Subcommittee, provided a report to the Committee on the results of its meeting on March 15, 2000. The meeting was held to discuss the

status of the NRC staff's reviews of the Electric Power Research Institute (EPRI) RETRAN-3D, the Siemens Power Corporation SRELAP-5, and the General Electric (GE) Nuclear Energy TRACG codes and to begin review of thermal-hydraulic issues associated with the NRC staff's reevaluation of the PTS screening criterion.

Regarding the staff's code reviews, Dr. Wallis first discussed the status of the RETRAN code review, reminding the Committee of the significant problems that the Subcommittee had found with this code during its review last year. He said that NRR discussed the status of its review of RETRAN-3D, indicating that, at this point, any approval of this code by the staff will be on an applicant-specific submittal basis, if at all. Dr. Wallis also noted that an EPRI representative provided additional information on the status of its recent interactions with the staff. The result was disappointing in that EPRI apparently has done little to address the Subcommittee's concerns. Mr. L. Agee of EPRI provided Dr. Wallis with additional information through an e-mail message, but this material also contained errors similar to those seen by the Subcommittee earlier. The Subcommittee does not plan any further action on this matter, subject to further input from the staff.

The Subcommittee was provided introductory information from both the staff and the respective vendors relative to the SRELAP-5 and TRACG codes. Review of these codes by the NRC staff is just beginning. Dr. Wallis said that the Subcommittee is working on a review plan for these codes.

Representatives of RES provided an overview of its program to obtain the necessary thermal-hydraulic inputs (system pressure, downcomer temperature, and fluid-to-wall convective heat transfer) to support revision of the PTS rule. This program consists of ensuring that these inputs, developed to support the original PTS rule, are either still operative or require updating or correction. Experiments will be performed at the Oregon State University's "APEX" test facility to obtain data on loop flow stagnation and downcomer mixing phenomena. Dr. Wallis indicated that one of the RES presentations did not provide adequate information relative to the "big picture" for this work. Consequently, the Committee will need to obtain additional information on the objectives, scope, and goals of this program pursuant to the Committee's ongoing review of this matter. Dr. Kress observed that the problem appears to have been one of poor communication, and that the RES program, particularly the experimental work at the Oregon State University, should be adequate to the task at hand.

Conclusion

The Committee will continue its review of the RES PTS thermal-hydraulic program in conjunction with its ongoing review of the PTS Screening Re-evaluation Project. ACRS review of the above-noted thermal-hydraulic codes will proceed in coordination with the staff's review schedule.

VIII. Proposed Revision of the Commission's Safety Goal Policy for Reactors (Open)

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

The Committee continued its discussions of the proposed revision of the Commission's Safety Goal Policy Statement (SGPS) for reactors. During this meeting, the Committee developed formal comments relative to the SGPS.

Conclusion

The Committee issued a report on this matter to Chairman Meserve dated April 17, 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 EDO, dated March 6, 2000, to ACRS comments and recommendations included in its letter dated February 11, 2000, concerning revision of Appendix K, "ECCS Evaluation Models," to 10 CFR Part 50.

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

- The Committee discussed the response from the EDO, dated March 20, 2000, to the ACRS comments and recommendations included in the ACRS report dated February 8, 2000, concerning SECY-00-001, "Evaluation of the Requirement for Licensees to Update Their Inservice Inspection and Inservice Testing Programs Every 120 Months."

The Committee decided that this issue is moot since the Commission will decide on the issue.

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 April 4, 2000. The following items were discussed:

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

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

- Anticipated Workload for ACRS Members

The anticipated workload of the ACRS members through June 2000 was discussed. The objectives were: (1) to review the reasons for the scheduling of each activity and the expected work product and to make changes, as appropriate, (2) to manage the members' workload for these meetings, and (3) to plan and schedule items for ACRS discussion of topical and emerging issues.

During this session, the Subcommittee discussed and developed recommendations on the items that require Committee decision, which are included in Section II of the Future Activities list.

- Status of Selecting Candidates for Potential ACRS Membership

ACRS members and the Screening Panel interviewed four candidates during the March meeting for ACRS membership. Based on the information gathered through the interviews, reference checks, and feedback provided by the members, the Screening Panel developed a list of three candidates for submittal to the Commission for consideration and selection.

- Joint ACRS/ACNW Subcommittee Report on Defense-in-Depth

During the 118th meeting of the ACNW, March 27-29, 2000, the Committee approved a report titled "Defense-in-Depth in a Risk-Informed Regulatory Process." The ACRS should review and either approve this report; disapprove; or approve with Additional Comments.

- Meeting with Members of the German Reactor Safety Committee

On March 13, 2000 Lothae Hahn (Chairman of the RSK), Edmund Kersting (Vice Chairman, RSK) and Renzo Candeli (Executive Director of RSK office) met with D. Powers, G. Apostolakis, M. Bonaca, T. Kress, G. Wallis, and J. Larkins. They discussed several topics of mutual interest, including Risk-Informed Performance Based Regulation; Generic Safety Issues; Decommissioning and Emergency Responses; and Reactor Regulatory Research.

As a result of this technical exchange, the RSK members suggested that the ACRS members travel to Germany in June 2000, to discuss, with members of the RSK and their contractors, the area of digital instrumentation and control. Additionally, it was recommended that the RSK and ACRS meet annually to discuss issues of mutual interest.

- Change in NRC Travel Regulations

A copy of the February 8, 2000 NRC Yellow Announcement, "Mandatory Usage of the Government Sponsored Charge Card for

Travel,” was distributed to the members for information during the March meeting. Subsequently, as authorized by the General Services Administration, the NRC has delayed the implementation of the use of government sponsored charge cards until May 1, 2000. NRC plans to provide new guidance prior to May 1, 2000.

- Proposed Rulemaking to Revise FACA Regulations

The General Services Administration (GSA) is revising the implementation regulations for FACA to make it consistent with legislative changes, shifts in Federal policy, and decisions issued by the Supreme Court and other Federal Courts. Copies of the ACRS/ACNW and Office of Human Resources comments were provided to the members during the March meeting. Since then the Commission has approved issuing the regulations to GSA. OGC submitted their comments to GSA on March 24, 2000.

- ACRS/ACNW Division of Responsibilities in Decommissioning

As a result of the increased number of regulatory activities in the area of decommissioning, Dr. Savio has been tasked to summarize the NRC staff's current activities in this area and to develop a plan for ACRS or ACNW reviews. Dr. Savio provided a proposal for the division of review activities related to power reactor and non-power reactor decommissioning.

- Meeting with Industry Representatives

During the March meeting, the Subcommittee discussed ways in which the ACRS could interact with industry representatives, including NEI, INPO, and utilities. This idea stemmed from the January 2000 ACRS retreat. The Subcommittee has recommended that Dr. Savio develop a proposal for this type of interaction and discuss this proposal with the cognizant ACRS members and submit to the Subcommittee for discussion during its April meeting.

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- Meeting with the EDO

The Planning and Procedures Subcommittee met with the EDO and the Deputy EDO to discuss items of mutual interest. A proposed list of topics for this meeting was discussed. Dr. Powers will provide a report to the Committee regarding the meeting with the EDO with emphasis on mutual agreements, and Committee follow-up items.

C. Future Meeting Agenda

Appendix IV summarizes the proposed items endorsed by the Committee for the 472nd ACRS Meeting, May 11-13, 2000.

The 471st ACRS meeting was adjourned at 2:00 p.m. on April 7, 2000.

NUCLEAR REGULATORY COMMISSION**Advisory Committee on Nuclear Waste Revised**

The agenda for the 118th meeting of the Advisory Committee on Nuclear Waste (ACNW) scheduled to be held on March 27-29, 2000, in Room T-2B3, 11545 Rockville Pike, Rockville, Maryland, has been revised to include a discussion on: Uranium Plume Attenuation—Representatives from the NRC Office of Research will present results from a historical case analysis of the transport of uranium. Mechanisms controlling retardation of radionuclides by common soil minerals will be presented. The discussion of the DOE-NRC technical exchange on the resolution of key technical issues (on March 28) has been canceled.

All other items pertaining to this meeting remain the same as published in the *Federal Register* on Thursday, March 9, 2000 (65 FR 12595).

For further information contact: Mr. Richard K. Major, Special Assistant, ACNW (Telephone 301/415-7366), between 8 a.m. and 5 p.m. EST.

Dated: March 13, 2000.

Andrew L. Bates,

Advisory Committee Management Officer.

[FR Doc. 00-6635 Filed 3-16-00; 8:45 am]

BILLING CODE 7590-01-U

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 April 5-7, 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).

Wednesday, April 5, 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.: Spent Fuel Pool Accident Risk for Decommissioning Plants (Open)—The Committee will hear presentations by and hold discussions with representatives of the NRC staff regarding the proposed final report of a

technical study associated with the spent fuel pool accident risk for decommissioning plants, public comments received on the proposed report, and the staff's resolution of public comments.

10:45 A.M.-12:15 P.M.: Proposed Research Plan for Digital Instrumentation and Control (Open)—The Committee will hear presentations by and hold discussions with representatives of the NRC staff regarding the proposed research plan for digital instrumentation and control.

1:15 P.M.-2:45 P.M.: Proposed White Paper on Development of Risk-Based Performance Indicators (Open)—The Committee will hear presentations by and hold discussions with representatives of the NRC staff regarding the proposed white paper on development of risk-based performance indicators.

3 P.M.-4 P.M.: Human Performance Program (Open)—The Committee will hear presentations by and hold discussions with representatives of the NRC staff regarding the revised version of the human performance program.

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

5 P.M.-7 P.M.: Discussion of Proposed ACRS Reports (Open)—The Committee will discuss a proposed ACRS report on matters considered during this meeting. In addition, the Committee will discuss a proposed ACRS report on the revision of the Commission's Safety Goal Policy Statement for Reactors as well as an ACRS/ACNW joint report on Defense-in-Depth in a Risk-Informed Regulatory Process.

Thursday, April 6, 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.-9:45 A.M.: Special Studies for Risk-Based Analysis of Reactor Operating Experience (Open)—The Committee will hear presentations by and hold discussions with representatives of the NRC staff regarding special studies of the staff associated with the risk-based analysis of reactor operating experience.

10 A.M.-11:15 A.M.: Operating Event at Indian Point Unit 2 (Open)—The Committee will hear presentations by and hold discussions with representatives of the NRC staff regarding the findings and recommendations of the Augmented

Inspection Team, which investigated the reactor trip and partial loss of AC power event that occurred at Indian Point Unit 2 on August 31, 1999.

11:15 A.M.-11:45 A.M.: Reports of the Materials and Metallurgy and Thermal-Hydraulic Phenomena Subcommittees (Open)—The Committee will hear reports by the Chairmen of the ACRS Subcommittees on Materials and Metallurgy and on Thermal-Hydraulic Phenomena regarding the status of activities associated with the development of a revised Pressurized Thermal Shock Screening Criterion.

1 P.M.-1:15 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.

1:15 P.M.-1:45 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.

1:45 P.M.-2 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.

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

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

Friday, April 7, 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 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: March 13, 2000.

Andrew L. Bates,

Advisory Committee Management Officer.

(FR Doc. 00-6634 Filed 3-16-00; 8:45 am)

BILLING CODE 7590-01-P

OFFICE OF PERSONNEL MANAGEMENT

Privacy Act of 1974; Amendment to a System of Records

AGENCY: Office of Personnel Management (OPM).

ACTION: Notice to amend a system of records.

SUMMARY: OPM proposes to amend a system of records in its inventory of record systems subject to the Privacy Act of 1974 (5 U.S.C. 552a), as amended. This notice is required under the Privacy Act whenever an agency establishes or revises one of its systems of records (5 U.S.C. 552a(e)(4)).

DATES: This amendment will be effective without further notice April 26, 2000, unless comments are received that result in any changes.

ADDRESSES: Send written comments to Mary Beth Smith-Toomey, Office of the Chief Information Officer, Office of Personnel Management, 1900 E Street NW., Room 5415, Washington, DC 20415-7900.

FOR FURTHER INFORMATION CONTACT: Mary Beth Smith-Toomey, (202) 606-8358.

SUPPLEMENTARY INFORMATION: This notice updates OPM/Internal-3, Security Officer Control Files, by adding a database tracking system for investigative reports. This tracking system will provide data on pending and completed schedules, types of investigations, position sensitivity levels, clearances granted and issues developed.

U.S. Office of Personnel Management.

Janice R. Lachance
Director.

OPM/INTERNAL-3

SYSTEM NAME:

Security Officer Control Files

SYSTEM LOCATION:

U.S. Office of Personnel Management, Office of Contracting and Administrative Services, 1900 E Street NW., Washington, DC 20415-7100

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

This system contains records on active, inactive and pending OPM employees and contractors.

CATEGORIES OF RECORDS IN THE SYSTEM:

The records in the system contain date of birth; social security number; classification as to position sensitivity; types and dates of investigations; investigative reports, including those

from Federal law enforcement agencies, Department of Defense and internal inquiries; dates and levels of clearances; names of agencies and the reasons why they were provided clearance information on OPM employees and contractors.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM INCLUDES THE FOLLOWING WITH ANY REVISIONS OR AMENDMENTS:

Executive Orders 10450 and 12958.

PURPOSE:

These records are used exclusively by OPM Security Officers and the employees of other security offices to assist them in controlling position sensitivity and personnel clearances.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Routine uses 1, 3, 5 and 6, of the Prefatory Statement at the beginning of OPM's system notices (60 FR 63075, effective January 17, 1996) apply to the records maintained within the system. The routine uses listed below are specific to this system of records only.

a. To disclose information to an agency in the executive, legislative, or judicial branch, or the District of Columbia Government, in response to its request related to issuing a security clearance or conducting a security or suitability investigation of an individual. Only information that is relevant and necessary to the requesting agency's decision on the matter will be released.

b. To verify a security clearance in response to an inquiry from a security office of an agency in the executive, legislative, or judicial branch, or the District of Columbia Government. Also, to provide OPM employees and contractors access to classified data or areas, when their official duties require such access.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

These records are maintained in file folders and in an automated data base.

RETRIEVABILITY:

These records are retrieved by name, social security number, and date of birth of the individual on whom they are maintained.

SAFEGUARDS:

The disks and file folders are stored in fire-resistant safes contained within a secured area, in lockable metal file cabinets, or in secured rooms. The file folders do not leave the Security Office.



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

March 14, 2000

**SCHEDULE AND OUTLINE FOR DISCUSSION
 471st ACRS MEETING
 APRIL 5-7, 2000**

**WEDNESDAY, APRIL 5, 2000, CONFERENCE ROOM 2B3, TWO WHITE FLINT NORTH,
 ROCKVILLE, MARYLAND**

- 1) 8:30 - 8:35 A.M. Opening Remarks by the ACRS Chairman (Open)
 1.1) Opening statement (DAP/JTL/SD)
 1.2) Items of current interest (DAP/NFD/SD)
 1.3) Priorities for preparation of ACRS reports (DAP/JTL/SD)
- 2) 8:35 - 10:30 A.M. Spent Fuel Pool Accident Risk for Decommissioning Plants (Open)
 (TSK/MME)
 2.1) Remarks by the Subcommittee Chairman
 2.2) Briefing by and discussions with representatives of the NRC staff regarding the proposed final report of a technical study associated with the spent fuel pool accident risk for decommissioning plants, public comments received on the proposed report, and the staff's resolution of public comments.
- Representatives of the nuclear industry will provide their views, as appropriate.
- 40 - 11:00*
 10:30 - 10:45 A.M. *****BREAK*****
- 3) *11:00 - 12:40*
 10:45 - 12:15 P.M. Proposed Research Plan for Digital Instrumentation and Control (Open) (REU/AS)
 3.1) Remarks by the Subcommittee Chairman
 3.2) Briefing by and discussions with representatives of the NRC staff regarding the proposed research plan for digital instrumentation and control.
- 12:40 - 1:30*
 12:15 - 1:15 P.M. *****LUNCH*****
- 4) *1:30 - 3:05*
 1:15 - 2:45 P.M. Proposed White Paper on Risk-Based Performance Indicators (Open) (GA/MTM)
 4.1) Remarks by the Subcommittee Chairman
 4.2) Briefing by and discussions with representatives of the NRC staff regarding the proposed white paper on risk-based performance indicators.

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

- 3:05-3:20
2:45 - 3:00 P.M. ***BREAK***
- 5) 3:20-4:55
3:00 - 4:00 P.M. Human Performance Program (Open) (GA/NFD)
5.1) Remarks by the Subcommittee Chairman
5.2) Briefing by and discussions with representatives of the NRC staff regarding the revised version of the human performance program.
- 6) 4:55-5:10
4:00 - 5:00 P.M. Break and Preparation of Draft ACRS Reports
Cognizant ACRS members will prepare draft reports for consideration by the full Committee.
- 7) 5:10-
5:00 - 7:00 P.M. Discussion of Proposed ACRS Reports (Open)
Discussion of proposed ACRS reports on:
7.1) Spent Fuel Pool Accident Risk for Decommissioning Plants (TSK/MME)
6:35-6:48 7.2) Proposed Research Plan for Digital Instrumentation and Control (REU/AS)
7.3) Proposed White Paper on Risk-Based Performance Indicators (GA/MTM)
6:25-6:35 7.4) Human Performance Program (GA/NFD)
7.5) Proposed Revision of the Commission's Safety Goal Policy Statement for Reactors (TSK/GA/PAB)
5:15-6:25 7.6) ACRS/ACNW Joint Report on Defense in Depth in a Risk-Informed Regulatory System (TSK/JS/MTM)

THURSDAY, APRIL 6, 2000, CONFERENCE ROOM 2B3, TWO WHITE FLINT NORTH, ROCKVILLE, MARYLAND

- 8) 8:30 - 8:35 A.M. Opening Remarks by the ACRS Chairman (Open) (DAP/SD)
- 9) 8:35 - 9:45 A.M. Special Studies for Risk-Based Analysis of Reactor Operating Experience (Open) (MVB/MTM)
9.1) Remarks by the Subcommittee Chairman
9.2) Briefing by and discussions with representatives of the NRC staff regarding special studies of the staff associated with the risk-based analysis of reactor operating experience.
- 9:55-10:10
9:45 - 10:00 A.M. ***BREAK***
- ~~10) 10:00 - 11:15 A.M. Operating Event at Indian Point Unit 2 (Open) (JJB/PAB)
10.1) Remarks by the Subcommittee Chairman
10.2) Briefing by and discussions with representatives of the NRC staff regarding the findings and recommendations of the Augmented Inspection Team, which investigated the reactor trip and partial loss of AC power event that occurred at Indian Point Unit 2 on August 31, 1999.~~

Joint Subcommittee Discussion

Representatives of the Indian Point Licensee will provide their views, as appropriate.

- 11) 10:30-11:10 → Discuss Self-Assessment Review
 11:15-11:45 A.M. Reports of the Materials and Metallurgy and Thermal-Hydraulic Phenomena Subcommittees (Open) (WJS/GBW/NFD/PAB)
 11:10-11:50 am Discussion of the reports by the Chairmen of the ACRS Subcommittees on Materials and Metallurgy and on Thermal-Hydraulic Phenomena regarding the status of activities associated with the development of a revised Pressurized Thermal Shock Screening Criterion.

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

- 11:50-1:15
 11:45-1:00 P.M. ***LUNCH***
 1:15-1:18 → Thank You Letter re Naval Reactor Tour on 4-5-00
- 12) 1:00-1:45 P.M. Future ACRS Activities (Open) (DAP/JTL/SD)
 1:18-1:40 Discussion of the recommendations of the Planning and Procedures Subcommittee regarding items proposed for consideration by the full Committee.
- 13) 1:40-2:20
 1:45-1:45 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.
- 14) 2:25-2:30
 1:45-2:00 P.M. Reconciliation of ACRS Comments and Recommendations (Open) (DAP, et al./SD, et al.)
 Discussion of the responses from the NRC Executive Director for Operations to comments and recommendations included in recent ACRS reports and letters.
- 15) 2:35-
 2:00-3:00 P.M. Break and Preparation of Draft ACRS Reports
 Cognizant ACRS members will prepare draft reports for consideration by the full Committee.
- 16) 3:00-8:00
 7:00 P.M. Discussion of Proposed ACRS Reports
 Discussion of proposed ACRS reports on:
- 5:40-7:55 16.1) Spent Fuel Pool Accident Risk for Decommissioning Plants (TSK/MME)
 - 3:00-3:45 16.2) Proposed Research Plan for Digital Instrumentation and Control (REU/AS)
 - 16.3) Proposed White Paper on Risk-Based Performance Indicators (GA/MTM)
 - 16.4) Human Performance Program (GA/NFD)
 - 4:35-5:20 16.5) Special Studies for Risk-Based Analysis of Reactor Operating Experience (MVB/MTM)

3.45-4.35 16.6) Proposed Revision of the Commission's Safety Goal Policy Statement for Reactors (TSK/GA/PAB)

~~16.7) ACRS/AGNW Joint Report on Defense in Depth in a Risk Informed Regulatory System (TSK/JS/MTM)~~

FRIDAY, APRIL 7, 2000, CONFERENCE ROOM 2B3, TWO WHITE FLINT NORTH, ROCKVILLE, MARYLAND

17) 8:30 - 2:00 P.M. Discussion of Proposed ACRS Reports (Open)
(12:00-1:00 P.M. LUNCH) Continue discussion of proposed ACRS reports listed under Item 16.

~~18) 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.

9.25-9.50 Spent Fuel Pool (Draft + Final)

8:30-9:10 Risk-Based Analysis Rx Op Exp (Draft + Final)

APPENDIX III: MEETING ATTENDEES

471st ACRS MEETING
April 5-7, 2000

NRC STAFF (April 5, 2000)

G. Millman, OEDO
G. Bagchi, NRR
E. Throm, NRR
G. Kelly, NRR
L. Kopp, NRR
C. Grattan, NRR
B. Huffman, NRR
G. Perry, NRR
S. Richards, NRR
T. Uises, NRR
J. Schaperow, NRR
M. Cheok, NRR
G. Mencinsky, NRR
T. Eaton, NRR
J. Lee, NRR
T. Collins, NRR
J. Hannon, NRR
F. Kantor, NRR
R. Skelton, NRR
D. Barss, NRR
D. Jackson, NRR
M. Chiramal, NRR
F. Gallardo, NRR
G. Hubbard, NRR
M. Rubin, NRR
M. Johnson, NRR
R. Eckenrode, NRR
D. Trimble, NRR
J. Costello, RES,
S. Arndt, RES
J. Calvert, RES
J. Kramer, RES
C. Antonesa, RES
S. Bahadur, RES
J. Mitchell, RES
J. Persensky, RES
M. Mayfield, RES
J. Rosenthal, RES

M. Federline, RES
T. Wolf, RES
P. Baranowsky, RES
D. Marksberry, RES
D. Yielding, RES
N. Kadambi, RES
E. Trager, RES
P. Lewis, RES
I. Schoenfeld, RES
N. Siu, RES

ATTENDEES FROM OTHER AGENCIES AND GENERAL PUBLIC

R. Kennedy, RPK Structural Mechanics Consulting
A. Nelson, NEI
A. Wyche, SERCH/Bechtel
P. Atherton, Nuclear Safety Consultant
D. Raleigh, SERCH/Bechtel
T. Houghton, NEI
S. Floyd, NEI
J. Forester, Sandia Labs

NRC STAFF (April 6, 2000)

G. Millman, OEDO
T. Wolf, RES
J. Mitchell, RES
D. Marksberry, RES



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

April 17, 2000

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

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

- 1) 8:30 - 8:35 A.M. Opening Remarks by the ACRS Chairman (Open)
 1.1) Opening statement (DAP/JTL/SD)
 1.2) Items of current interest (DAP/NFD/SD)
 1.3) Priorities for preparation of ACRS reports (DAP/JTL/SD)
- 2) 8:35 - 10:00 A.M. Initiatives Related to Risk-Informed Technical Specifications (Open)
 (JDS/GA/MTM)
 2.1) Remarks by the Subcommittee Chairman
 2.2) Briefing by and discussions with representatives of the NRC staff and industry groups regarding initiatives related to risk-informed technical specifications, initial industry submittals on risk-informed technical specifications, and related matters.
- 10:00 - 10:15 A.M. *****BREAK*****
- 3) 10:15 - 11:45 A.M. Potential Revisions to the Pressurized Thermal Shock (PTS) Acceptance Criterion (Open) (WJS/NFD)
 3.1) Remarks by the Subcommittee Chairman
 3.2) Briefing by and discussions with representatives of the NRC staff regarding a draft Commission Paper that describes potential revisions to the PTS acceptance criterion.
- Representatives of the nuclear industry will provide their views, as appropriate.
- 11:45 - 12:45 P.M. *****LUNCH*****
- 4) 12:45 - 2:15 P.M. Proposed Revision to Regulatory Guide 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis" (Open) (GA/MTM)
 4.1) Remarks by the Subcommittee Chairman
 4.2) Briefing by and discussions with representatives of the NRC staff regarding proposed revision to Regulatory Guide 1.174 and an associated guidance on the use of risk information in license amendment reviews.

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

- 2:15 - 2:30 P.M. ***BREAK*****
- 5) 2:30 - 4:00 P.M. Proposed Regulatory Guide and Standard Review Plan (SRP) Section Associated with NRC Code Reviews (Open) (GBW/PAB)
 5.1) Remarks by the Subcommittee Chairman
 5.2) Briefing by and discussions with representatives of the NRC staff regarding proposed Regulatory Guide and SRP Section associated with the NRC staff's review of the analytical codes.
- 6) 4:00 - 5:00 P.M. Break and Preparation of Draft ACRS Reports
 Cognizant ACRS members will prepare draft reports for consideration by the full Committee.
- 7) 5:00 - 7:00 P.M. Discussion of Proposed ACRS Reports (Open)
 Discussion of proposed ACRS reports on:
 7.1) Risk-Informed Technical Specifications (JDS/GA/MTM)
 7.2) Potential Revisions to the Pressurized Thermal Shock Acceptance Criterion (WJS/NFD)
 7.3) Proposed Revision to Regulatory Guide 1.174 (GA/MTM)
 7.4) Proposed Regulatory Guide and Standard Review Plan Section Associated with NRC Staff Code Reviews (GBW/PAB)
 7.5) Human Performance Program (GA/NFD)

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

- 8) 8:30 - 8:35 A.M. Opening Remarks by the ACRS Chairman (Open) (DAP/SD)
- 9) 8:35 - 10:00 A.M. SECY-00-0062, Risk-Informed Regulation Implementation Plan (Open) (GA/MME)
 9.1) Remarks by the Subcommittee Chairman
 9.2) Briefing by and discussions with representatives of the NRC staff regarding risk-informed regulation implementation plan that is described in SECY-00-0062.

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

- 10:00 - 10:15 A.M. ***BREAK*****
- 10) 10:15 - 11:30 A.M. Operating Event at E.I. Hatch Nuclear Power Plant, Unit 1 (Open) (JJB/AS)
 10.1) Remarks by the Subcommittee Chairman

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

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

- 11) 11:30 - 11:45 A.M. Reconciliation of ACRS Comments and Recommendations (Open) (DAP, et al./SD, et al.)
Discussion of the responses from the NRC Executive Director for Operations to comments and recommendations included in recent ACRS reports and letters.
- 11:45 - 12:45 P.M. ***LUNCH*****
- 12) 12:45 - 2:15 P.M. Physical Security Requirements for Power Reactors (Open/Closed) (TSK/NFD)
12.1) Remarks by the Subcommittee Chairman
12.2) Briefing by and discussions with representatives of the NRC staff regarding the status of revising the physical security requirements for power reactors by incorporating insights gained from threat assessment activities being conducted by the staff in coordination with other Federal agencies.
- [NOTE: A portion of this session will be closed to discuss safeguards information.]
- 2:15 - 2:30 P.M. ***BREAK*****
- 13) 2:30 - 2:45 P.M. Future ACRS Activities (Open) (DAP/JTL/SD)
Discussion of the recommendations of the Planning and Procedures Subcommittee regarding items proposed for consideration by the full Committee.
- 14) 2:45 - 3:30 P.M. Report of the Planning and Procedures Subcommittee (Open) (DAP/JTL)
Report of the Planning and Procedures Subcommittee on matters related to the conduct of ACRS business.
- 15) 3:30 - 4:30 P.M. Break and Preparation of Draft ACRS Reports
Cognizant ACRS members will prepare draft reports for consideration by the full Committee.
- 16) 4:30 - 7:00 P.M. Discussion of Proposed ACRS Reports
Discussion of proposed ACRS reports on:
16.1) Risk-Informed Regulation Implementation Plan (GA/MME)
16.2) Risk-Informed Technical Specifications (JDS/GA/MTM)

- 16.3) Potential Revisions to the Pressurized Thermal Shock Acceptance Criterion (WJS/NFD)
- 16.4) Proposed Revision to Regulatory Guide 1.174 (GA/MTM)
- 16.5) Proposed Regulatory Guide and Standard Review Plan Section Associated with NRC Staff Code Reviews (GBW/PAB)
- 16.6) Human Performance Program (GA/NFD)

SATURDAY, MAY 13, 2000, CONFERENCE ROOM 2B3, TWO WHITE FLINT NORTH, ROCKVILLE, MARYLAND

- 17) 8:30 - 12:30 P.M. Discussion of Proposed ACRS Reports (Open)
Continue discussion of proposed ACRS reports listed under Item 16.

- 12:30 - 1:30 P.M. *****LUNCH*****

- 18) 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
471st ACRS MEETING
April 5-7, 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 April 5-7, 2000

- 2 Spent Fuel Pool Accident Risk for Decommissioning Plants
 2. Draft Final Technical Study of Spent Fuel Pool Accident Risk at Decommissioning Nuclear Power Plants, presentation by G. Kelly, NRR [Viewgraphs]
 3. Consequence Evaluation for Spent Fuel Pool Accidents, presentation by J. Schaperow, RES [Viewgraphs]
 - 3a Comments from NEI on Spent Fuel Pool Accident Risk for Decommissioning briefing held on 4/5/00 (e-mail from A. Nelson to M. El-Zeftawy)

- 3 Proposed Research Plan for Digital Instrumentation and Control
 4. Research Plan for Digital Instrumentation and Control (I&C), presentation by RES and NRR [Viewgraphs]

- 4 Proposed White Paper on Risk-Based Performance Indicators
 5. Risk-Based Performance Indicators and Industry-Wide Performance Measures Development Program, presentation by RES

- 5 Human Performance Program
 6. Draft NRC Inspection Manual, Inspection Procedure 71841: Supplemental Inspection for Human Performance, received April 3, 2000 [Handout #5.1]
 7. NRC Program on Human Performance in Nuclear Power Plant Safety, presentation by RES, NRR
 8. NRR Human Performance Activities in Reactor Oversight Process, presentation by NRR

- 9 Special Studies for Risk-Based Analysis of Reactor Operating Experience
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- 12 Future ACRS Activities
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- 13 Report of the Planning and Procedures Subcommittee
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 5. ACRS letter dated November 12, 1999
 6. EDO Response, dated December 16, 1999 and ACRS Analysis dated January 28, 2000
 7. Letter from David Lochbaum to NRC dated March 15, 2000
 8. Staff Requirements, SECY 99-168 dated December 21, 1999
 9. Request for extension (e-mail) dated January 4, 2000

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 17. Memorandum dated February 25, 2000, from A. Thadani, RES, to S. Collins, NRR, Subject: White Paper: Development of Risk-Based Performance Indicators (RBPIs) Program Overview
 18. Report dated March 15, 2000 from D. Powers, Chairman, ACRS, to R. Meserve, Chairman, NRC, Subject: Revised Reactor Oversight Process
 19. Letter dated June 10, 1999, from Dana A. Powers, Chairman, ACRS, to W. Travers, EDO, NRC, Subject: Pilot Application of the Revised Inspection and Assessment Programs, Risk-Based Performance Indicators, and Performance-Based Regulatory Initiatives and Related Matters
 20. Report dated February 23, 1999, from D. Powers, Chairman, ACRS, to S. Jackson, Chairman, NRC, Subject: Proposed Improvements to the NRC

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 24. Letter dated February 19, 1999, from D. Powers, Chairman, ACRS, to W. Travers, EDO, NRC, Subject: SECY-98-244, "NRC Human Performance Plan"
 25. U.S. Nuclear Regulatory Commission, SECY 0053, "NRC Program on Human Performance in Nuclear Power Plant Safety," dated February 29, 2000

- 9 Special Studies for Risk-Based Analysis of Reactor Operating Experience
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 34. Memorandum dated March 24, 2000, from N. Dudley, ACRS, to Drs. W. Shack and G. Apostolakis, ACRS Members, Subject: Working Copy of Minutes for Joint Subcommittee Concerning the NRC Pressurized Thermal Shock Screening Criterion Re-evaluation Project, March 16, 2000