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APRIL 11-13, 1996

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A. Reports, Letters, and Memoranda

Continued Need for United States Membership in the Nuclear Energy Agency (Report to Shirley Ann Jackson, Chairman, NRC, from T.S. Kress, Chairman, ACRS, dated April 17, 1996.)

Recommendations for Appointment of ACRS Members (Report to Shirley Ann Jackson, Chairman, NRC, from T.S. Kress, Chairman, ACRS, dated April 19, 1996.)

Westinghouse Best-Estimate Loss-of-Coolant Accident Analysis Methodology (Report to Shirley Ann Jackson, Chairman, NRC, from T.S. Kress, Chairman, ACRS, dated April 19, 1996.)

Proposed Revisions to 10 CFR Parts 50 and 100 and Proposed Regulatory Guides Relating to Reactor Site Criteria (Report to Shirley Ann Jackson, Chairman, NRC, from T.S. Kress, Chairman, ACRS, dated April 22, 1996.)

Probabilistic Risk Assessment Framework, Pilot Applications, and Next Steps to Expand the Use of PRA in the Regulatory Decision-Making Process (Report to Shirley Ann

DESIGNATED ORIGINAL

Jackson, Chairman, NRC, from T.S. Kress, Chairman, ACRS, dated April 23, 1996.)

Proposed Standard Review Plan for Dry Cask Storage Systems (Memorandum to James M. Taylor, Executive Director for Operations, from John T. Larkins, Executive Director, ACRS, dated April 22, 1996) - Consistent with the ACRS/ACNW decision, Dr. Larkins informed Mr. Taylor that the ACRS/ACNW decided not to review the proposed Standard Review Plan at this time.

Draft Response to Questions on the Proposed Revisions to 10 CFR Part 100 and Part 50 (SECY-94-194) (Memorandum to Shirley Ann Jackson, Chairman, NRC, from John T. Larkins, Executive Director, ACRS, dated April 24, 1996)

- B. Reconciliation of ACRS Comments and Recommendations
- C. Report on the Meeting of the Planning and Procedures Subcommittee Held on March 10, 1996 (Open)
- D. Future Meeting Agenda

## 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
- VI. Minutes for Closed Session

[ APPENDIX VI REMOVED - FOIA EX(b)(4) ]

MINUTES OF THE 430TH MEETING OF THE  
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
APRIL 11-13, 1996  
ROCKVILLE, MARYLAND

The 430th meeting of the Advisory Committee on Reactor Safeguards was held at Conference Room 2B3, Two White Flint North Building, Rockville, Maryland, on April 11-13, 1996. 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, but portions of the meeting were closed to discuss proprietary material and personnel issues. There was one written statement and two 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 Neal R. Gross and Co., Inc., 1323 Rhode Island Avenue, N.W., Washington, D.C. 20005.]

ATTENDEES

ACRS Members: Dr. Thomas S. Kress (Chairman), Dr. Robert L. Seale (Vice-Chairman), Dr. George Apostolakis, Mr. James C. Carroll, Dr. Ivan Catton, Dr. Mario H. Fontana, Mr. William J. Lindblad, Dr. Don W. Miller [absent April 11th], Dr. Dana A. Powers, Dr. William J. Shack, and Mr. Charles J. Wylie. [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. Thomas S. Kress, Committee Chairman, convened the meeting at 8:30 a.m. and reviewed the schedule for the meeting. He announced that a list of items of interest had been provided to the members. Particular attention was drawn to items on the Millstone and Palo Verde nuclear plants, and to the schedule for interviewing applicants for ACRS membership.

II. PROPOSED FINAL REVISIONS TO 10 CFR PART 50, AND 10 CFR PART 100, "REACTOR SITE CRITERIA" (Open)

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

Introduction

Mr. William Lindblad, Chairman of the Extreme External Phenomena Subcommittee, stated that the material for this meeting is divided



into two parts: (1) geology and earthquake engineering and (2) the evaluation of radiological releases. He also stated that two representatives of the industry had asked to make statements at the conclusions of these discussions.

#### NRC Staff Presentation (Seismic)

Mr. Leonard Soffer, Office of Nuclear Regulatory Research (RES), presented a very brief chronology and overview of the current rule. He stated that 10 CFR Part 100 was issued in 1962. This is one of the oldest of the Commission's Regulations. Appendix A to Part 100 was issued in November 1973. ACRS was briefed on the first proposed revision to Appendix A in February 1992. The proposed rule was published in October 1992 for public comment. It was subsequently withdrawn in March 1994 in its entirety and the revised proposed rule was reissued in October 1994. The proposed revised final rule is in two subparts. Subpart A consists of the existing regulations which remain in effect for the current operating plants. Subpart B applies for the future plants.

Dr. Joseph Murphy, RES, presented the background and the technical aspects of the proposed revisions to Seismic and Geologic Siting Criteria for Nuclear Power Plants. He indicated that the current regulations are too detailed and inflexible, lack clarity, and lead to conflicting interpretations of the operating basis earthquake (OBE). The principal purpose of this effort was to provide stability in license reviews for future plants. One of the staff's proposed actions is to decouple siting criteria from plant design. He indicated where substantive change had been made in the regulatory requirements or guidance, especially in the definition of the safe shutdown earthquake ground motion and OBE.

Dr. Murphy discussed the significant revisions made to Appendix A (10 CFR 100.23), Geological Siting Criteria; specifically, the definition of OBE was removed from Part 100, and guidance is provided for the uncertainty analysis. Dr. Murphy indicated that the role of probabilistic analysis is to ensure that all of the uncertainties have been included in the assessment of the seismic hazard, and the role of the deterministic analysis is to ensure that the resultant design provides protection against the most likely worst case that should be considered in the design of the plant. He concluded by providing the tabulation of the regulatory guidance assembled for the earth science portion of earthquake engineering in the Regulatory Guide.

#### Nonseismic

Mr. Soffer discussed briefly the proposed rule and stated that it would retain the use of source term and dose calculations to

determine the distance to the exclusion area boundary (EAB) and the size of the outer radius of the low population zone (LPZ). The proposed dose criteria would require that an individual located at any point on the boundary of the exclusion area for any two-hour period following the onset of the postulated fission product release not receive a dose in excess of 25 rem total effective dose equivalent (TEDE). Similarly, an individual located at the outer boundary of the LPZ for the entire period of the cloud passage (taken to be 30 days) must not receive a dose in excess of 25 rem TEDE. The source term dose criteria is relocated to Part 50.34. The proposed Section 100.21 contains basic site criteria without any numerical values.

With regard to population density, the proposed rule stated that reactor sites should be located away from very densely populated centers. Areas of low population density are generally preferred. However, in determining the acceptability of a particular site located away from a very densely populated center but not in an area of low density, consideration will be given to safety, environmental, economic, or other factors, which may result in sites being found acceptable. The guidance for preferred population density is provided in Revision 2 of Regulatory Guide 4.7. Mr. Soffer also stated the reasons for revising Part 100 were to facilitate the considerations that went into Part 52 where the staff was to facilitate the licensing of standardized designs without a site, or certified sites without a set design. Mr. Soffer concluded that the elements of the final revised rule, the source and dose criteria, are being relocated to Part 50.34. The dose criteria is revised from 25 rem whole body and 300 rem thyroid to 25 rem TEDE. The dose to an individual at the EAB is not to exceed 25 TEDE for any two-hour period following the fission product release.

Mr. Soffer stated that RES had a differing opinion with regard to the time period over which the dose to an individual at the EAB is to be evaluated and is providing it to the Commission for consideration. RES recommends that the final rule be modified from any two-hour period after release of fission products (referred to as the "worst" two hours) to a period of two hours commencing with fuel failure plus the time period from accident initiation until fuel failure begins (referred to as the "first" two hours).

Mr. Barry Zalcmán, NRR, provided its differing view of the first two hours and worst two hours. NRR believes that (1) the proposed licensing framework would provide a relaxation of engineered safety feature (ESF) performance requirements commensurate with updated source term and radiological insights, (2) the regulatory requirements for determination of in-containment radioactive material during the two-hour dose evaluation period should be consistent and capable of handling designs substantially different from those

analyzed in NUREG-1465, (3) the analysis should be easy to perform and reproducible with confidence, and (4) the technical bases and analytical methods should be defensible. For these reasons, NRR recommends the worst two-hours for the dose evaluation period.

Mr. William Russell, Director, NRR, provided his brief views of the different opinions of NRR and RES. He stated that he agrees with the NRR decision to recommend the "worst two-hour" approach.

#### Nuclear Energy Institute Presentation

Mr. Anderson and Mr. Gmyrek, Nuclear Energy Institute (NEI), provided brief comments on the proposed final rule and stated that the industry is very interested in the proposed rule, particularly the adoption of the TEDE value. Mr. Gmyrek stated that, at this point, NEI has not taken a position for or against either the first two-hour or worst two-hour period.

#### Westinghouse Presentation

Mr. Grover, Westinghouse, had a prepared statement in which he disagreed with the staff on the proposed final rule. He briefly provided the alternative approaches to the proposed rule: (1) replace the 25-rem TEDE limit with a total dose limit of 35 rem TEDE and specify that no more than 20 rem could come from acute dose, which has the advantage of maintaining consistency with 10 CFR 20 regarding the definition of TEDE doses and with the goal of having risk of latent cancer fatality at less than  $2.71 \times 10^{-2}$ , (2) keep the 25-rem limit but redefine the dose basis as other than TEDE and call it TEDE-Latent Cancer Fatality Risk Basis, or (3) eliminate dose limits from the rule and instead specify a limit on the calculated risk of latent cancer fatality (the appropriate value currently identified by staff is  $2.71 \times 10^{-2}$ ).

#### Committee Action

The Committee issued a report to Chairman Jackson, dated April 22, 1996, on this matter.

### III. SEVERE ACCIDENT RESEARCH (Open)

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

#### Introduction

Dr. Mario Fontana, Chairman of the Severe Accidents Subcommittee, introduced the presentation by noting that significant fission

products can only reach the environment as a result of a severe accident. He stated that in order to support risk-informed regulations, the NRC staff needs to know more about the inherent risks associated with severe accidents.

#### NRC Staff Presentation

Mr. Charles Ader, RES, provided an overview of the origins and evolution of the NRC severe accident research program. He described the objectives and status of research efforts in the areas of direct containment heating (DCH), lower head integrity, fuel-coolant interaction, debris coolability, hydrogen combustion, fission product behavior, and core melt progression. Mr. Ader explained the interrelationship between, and uses of, the NRC severe accident codes. He concluded his presentation by explaining the considerations that are used to determine whether to continue or to terminate research projects.

During his presentation, Mr. Ader made several observations. The staff considers the two major early containment failure issues, Mark I liner failure and DCH, to be resolved or nearing resolution. Research efforts have resolved the issues associated with significant risk threats. Uncertainties exist concerning severe accident management issues and the understanding of the progress of severe accidents. Severe accident research should continue in order to maintain staff capabilities, to reduce uncertainties, and to leverage resources by participating in international research groups.

The Committee and the RES staff discussed the following items:

- DCH resolution criteria
- neglecting DCH in Level II probabilistic risk assessments
- containment fragility curves associated with DCH
- triggering mechanisms for steam explosions
- the decision-making process for terminating research projects
- NRC participation in and knowledge of international research efforts
- use of codes to support risk-informed regulatory decisions
- knowledge of fission product behavior for supporting regulatory decisions

Members of the Committee expressed the opinion that additional research is needed to determine the probability of steam generator tube failures during severe accidents. Members of the Committee noted that additional research would be required in the areas of fission product release and transport, and in the physics of severe accident progression to reduce the uncertainties in probabilistic risk assessments.



### Conclusion

The Committee decided to prepare a report for Chairman Jackson during the May 1996 ACRS meeting on this matter.

### IV. GRADED QUALITY ASSURANCE PROGRAM (Open)

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

Mr. Charles Wylie stated that the NRC staff and other representatives will inform the Committee regarding the current status of the Graded Quality Assurance (GQA) program. He noted that the GQA initiative is jointly undertaken by the industry and the NRC and is intended to provide a safety benefit by allowing the licensees and NRC to preferentially allocate resources to items of higher safety significance.

Ms. Suzanne Black, NRR, summarized the GQA program.

In 1993, the Executive Director for Operations (EDO) established the Regulatory Review Group (RRG). The RRG reviewed the power reactor regulations and related processes and emphasized the potential application of performance-based regulations and the use of risk insights.

In the area of quality assurance (QA), the RRG determined that the existing regulations were performance-based and that 10 CFR Part 50, Appendix B, contains provisions for the graded application of QA controls over activities affecting the quality of structures, systems, and components (SSCs) to an extent commensurate with their importance to safety.

Although both Appendix B and the associated industry standards allow a large degree of flexibility, the licensees and the NRC staff have been reluctant to make major changes in established QA practices.

The primary objectives of NRC efforts related to the GQA initiative are to:

- Provide a safety benefit by allowing licensees and NRC to preferentially allocate resources to items of higher safety significance and provide cost savings by reducing the resources expended on items of lesser safety significance.
- Gain lessons learned from volunteer utilities and prepare internal staff and regulatory guidance for wider industry implementation.

To facilitate meeting these objectives, the NRC staff envisions the following process:

- The NRC staff issues the NRR Draft Evaluation Guide for the Development of Graded Quality Assurance Programs.
- Licensees submit program changes, if required by 10 CFR 50.54(a), and NRC staff issues plant-specific responses.
- NRC staff and volunteer licensees conduct pilot interactions.
- NRC staff documents lessons learned.
- NRC develops draft regulatory guidance (e.g., Regulatory Guide, inspection procedures).
- NRC issues regulatory guidance (close-out of NRR Action Plan).
- NRC staff and industry gain additional insights through use of the regulatory guidance and through follow-on site visits and reviews. Regulatory guidance revised, as necessary, based on additional experience and planned evaluation of regulatory guidance effectiveness.

In June 1995, NEI issued a draft "Guideline for Implementing a Graded Approach to Quality" document. The NRC staff prepared a draft evaluation guide, "Development of Graded Quality Assurance Programs," dated January 1996. Licensees developing GQA programs will consider various methods to adjust their QA programs to accommodate their individual needs. Irrespective of a licensee's specific approach, the NRC envisions a GQA program to have four essential elements as follows:

- a process that determines the safety significance of SSCs in a reasonable and consistent manner
- the implementation of appropriate QA controls for SSCs, or groups of SSCs, according to safety function and safety significance
- an effective root-cause analysis and corrective action program
- a means for reassessing SSC safety significance and QA controls when new information becomes available

In recognition of the programs being implemented at Grand Gulf, as well as the grading of quality assurance controls being initiated,



proposed, or implemented at other utilities, the staff has developed draft guidance to clarify its expectations regarding GQA programs. For the first essential element, determination of risk significance, the staff will confirm that the process is scrutable, repeatable, and provides reasonable results related to the categorization of SSCs based on safety significance. For the second essential element, establishing QA controls, the staff expects that QA requirements for low-safety-significant safety-related SSCs will continue to satisfy the applicable criteria of Appendix B. It is recognized, however, that the inherent flexibility of the regulations will be utilized and that deviations from past commitments, industry standards, and regulatory guides will be part of GQA programs.

To ensure that a program adequately addresses the third element, corrective actions, the ability to identify and address degraded equipment performance resulting from application of GQA controls should be apparent. To address the fourth element, operational feedback, existing or modified licensee programs should evaluate additional information as it becomes available (e.g., plant modifications or changes in operating procedures and practices such as rolling on-line maintenance schedules, system/component reliability data, identification of new risk vulnerabilities) and assess its potential implications in regard to the GQA program. This initial guidance, combined with lessons learned from the pilot plants and early follow-on plants, is expected to form the basis for the staff's final review guidance (e.g., Regulatory Guide and inspection procedures).

The staff is planning to continue interactions with the industry regarding the GQA program. For example, in order to gain insights into the placement of SSCs into safety significance categories, the staff needs information to assess the impact of the following issues on the process:

- scope of the PRA analysis
- level of detail
- use of risk metrics
- PRA quality
- process for assuring PRA quality
- role of expert panel and its decision criteria
- deterministic considerations
- integration of PRA insights with deterministic considerations

Licensees would provide such information as detailed descriptions of the PRA model; sensitivity studies regarding the impact of operating practices such as rolling on-line maintenance schedules and plant configurations, failures of combinations of SSCs, and choice of importance measures used in safety significance classifi-

cations; expert panel charter and procedures; interviews with expert panel members; and final documentation regarding the classification of SSCs into categories of safety significance.

Mr. Carter Rogers, Palo Verde, briefly summarized the informed-risk/GQA initiatives at Palo Verde, which is a volunteer plant. The process consists of the following four elements:

- Identification of safety significance of SSCs. There is a broad-based expert panel in place.
- Implementation of appropriate QA controls. The grading provisions are already in QA.
- Effective root cause and corrective action program. The maintenance rule and condition reporting are implemented.
- Means of reassessing the significance of SSCs. There is a commitment for continuing expert panel and PRA updates.

Currently the items that have been implemented under the graded business processes are the Maintenance Rule, GQA procurement, maintenance plan, emergent work risk-indicator matrix, inspections/audits/reviews, and warehouse inventory stocking levels. Future items are in-service-inspection and frequency, Appendix J valve testing, motor-operated valve (MOV) testing, safety operating valve testing, QA audit and evaluation frequency, and fire protection testing. Other future items are outage times allowed by technical specifications, and in-service testing scope and frequency. The Palo Verde representatives are cooperating and interacting with the NRC staff regarding the GQA program.

Mr. Mike Meisner, Grand Gulf, briefly summarized the GQA initiatives at Grand Gulf, another volunteer plant. He noted that the GQA program is part of an integrated risk management program. The focus is to develop the tools to understand what is important to safety (beyond the traditional definition of safety-related) to better allocate resources. Grand Gulf representatives identified a number of nonsafety-related systems and components that were safety significant, especially in the fire protection arena. Grand Gulf examined approximately 80,000 components and found 22,000 that are related to safety. The individual determination of safety significance will result in either high-safety significance or low-safety significance. Members of the expert panel for QA have experience beyond the Maintenance Rule.

Mr. Roy Rehugler, South Texas, briefly summarized the GQA initiatives at South Texas, the third volunteer plant. He noted that the PRA risk ranking categories at South Texas are high, medium, or low. The results of the PRA risk ranking will be

provided to the GQA working group (W.G.) to analyze performance data, consider risk ranking, inject deterministic knowledge and insights, and develop recommendations regarding levels of programmatic control and activity oversight. The recommendation of the GQA W.G. will be submitted to the expert panel for review and analysis. The expert panel will decide whether to establish or modify the program controls. South Texas applied the GQA program to MOVs, pressure locking and thermal binding, seismic evaluations, and others such as molded case circuit breakers.

Mr. Adrian Heymer, NEI, summarized NEI activities regarding the GQA initiatives. He stated that NEI has prepared a document, "NEI 96-02/Guideline For Implementing a Graded Approach to Quality", dated March 1996. This document provides the general framework for implementing a graded approach to quality. The industry will base its decision to enhance its current methods for implementing quality on cost-benefit considerations and the additional safety benefits of such activities. NEI recommends the use of probabilistic and deterministic insights and analyses to categorize SSCs following a review by an expert panel.

The methodology for the SSC categorization involves assessments and evaluations of safety functional failures, and deviations in the pertinent work functions that could impact a safety function. It is broader than that used in the maintenance rule. It includes the potential impacts of such aspects as different plant operating modes, human factors, seismic, fire, and design considerations. Mr. Heymer emphasized that the NEI guideline document should not result in the development of an alternative quality assurance program. The intent is to refine and optimize current quality implementation practices and to build on industry experiences. It is anticipated that each licensee will develop additional detailed implementation procedures, building on the guidance contained in the NEI document.

#### Conclusion

This briefing was for information only.

#### V. WESTINGHOUSE COBRA/TRAC BEST-ESTIMATE ECCS THERMAL HYDRAULIC CODE (Open/Closed)

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

#### Introduction (Open)

Dr. Catton, Chairman, Thermal Hydraulic Phenomena Subcommittee, introduced this topic to the Committee. He noted that, in its

February 23, 1996 letter documenting the results of its initial review of this matter, the Committee identified several technical details of the Westinghouse best-estimate, large-break, loss-of-coolant accident (LBLOCA) methodology that needed further attention and also commented on the adequacy of the associated documentation. Westinghouse has provided both the Committee and NRR with additional information, and Dr. Catton participated in a telephone conference with Westinghouse representatives to discuss the details of this information. He reviewed the technical concerns that remained from the initial ACRS review for the Committee and indicated that, in general, he was satisfied with the modifications made by Westinghouse to address these concerns.

Westinghouse Presentation (Closed - Proprietary Information)

Minutes for the Closed Session are in Appendix VI.

[APPENDIX VI REMOVED - FOIA EX(b)(4)]

NRR Presentation (Open)

Mr. Robert Jones made a brief presentation that summarized the NRR staff's review of the Westinghouse actions noted above as well as the staff's proposed actions relative to the Committee's concerns with the adequacy of the documentation of the Westinghouse LBLOCA methodology. NRR finds the Westinghouse actions acceptable for resolution of the ACRS concerns. Regarding the issue of documentation, NRR committed to performing a review of the final Westinghouse submittal, which is due within six months following the staff's approval of the LBLOCA methodology.

Regarding the Committee's recommendation that NRR issue guidance for ensuring that future best-estimate LBLOCA submittals are adequate, the staff plans, instead, to require that all future submittals be in the form of a "living document" that will maintain its currency.

CONCLUSION

The Committee issued a report to Chairman Jackson dated April 19, 1996, on this matter.

VI. MEETING WITH THE DIRECTOR OF THE NRC OFFICE FOR ANALYSIS AND EVALUATION OF OPERATIONAL DATA (AEOD) (Open)

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

Dr. Kress welcomed Mr. Edward Jordan, Director, AEOD, and his staff and stated that the purpose of this session is to discuss items of mutual interest.



Mr. Jordan appreciated the opportunity to speak before the Committee. He noted that the main charter of AEOD is to:

- Provide an independent capability to analyze operational data
- Review, analyze, and evaluate reactor plant and nuclear materials safety experience
- Manage the agency's incident response and incident investigation programs
- Manage the agency's technical training program
- Manage the agency's Committee for the Review of Generic Requirements (CRGR)

The general mission of the technical training division is to coordinate, with NRC offices and regions, policy development and implementation of formal NRC staff qualifications and training programs; and to provide technical assistance in areas of expertise and advice and limited technical training to foreign regulatory counterparts. Practical applications of risk management are being added to reactor simulator courses. Some of the examples of risk-informed regulation are risk-informed Technical Specifications and the effects of the Maintenance Rule on plant operations. AEOD is continuing to integrate the PRA implementation plan deliverables into the curriculum. Other updates to the reactor technology curriculum are digital instrumentation and control, steam generator issues, and the use of simulators.

The mission of the incident response division is to provide direction and develop policies and guidelines to the NRC programs for the investigation of operational incidents, and to provide immediate response to radiological incidents. The mission of other programs such as the safety programs is to communicate the important safety lessons drawn from the independent analysis and evaluation of experience. There were eight generic NRC communications related to AEOD studies in 1993 through 1995. These are related to items such as MOVs, common-cause failures, and the Wolf Creek blowdown event.

AEOD analyzes reactor operating experience by utilizing risk-based information. This involves assessing and trending risk indicators, comparing reactor operator experience with PRA and individual plant examinations (IPEs), identifying technical insights related to risk contributors, and providing insights related to risk to industry and regulators.

Other current AEOD studies include the human performance program plan (a system for describing and monitoring the status of all

agency programs related to human performance); the accident sequence precursor program (to determine the conditional probability of subsequent severe core damage/conditional core damage probability, given the failures during an operational event); and system reliability studies (to evaluate reliability and provide insights on risk-important systems based on operating experience).

Currently, a proposed rule to 10 CFR 50.76 was issued for public comment on February 12, 1996 on reporting reliability and availability data for risk-significant equipment. The proposed rule will provide a consolidated source of PRA quality equipment performance data for industry-wide sharing of reliability and availability experience and to support PRA applications. AEOD is interacting with the Institute of Nuclear Power Operations (INPO) and NEI to better understand the data to be provided.

Mr. Jordan described the Wolf Creek emergency service water (ESW) event that occurred on January 30, 1996. He noted that the decreasing water level in the intake structure was caused by formation of ice on travelling screens. The reactor was manually tripped due to cavitation of circulating water pumps. Five control rods did not fully insert. The atmospheric relief valves were used to remove decay heat. The availability of the turbine-driven auxiliary feedwater pump was jeopardized by failure of the inboard packing due to inadequate previous maintenance practices. Ice formation on the trash racks of the ESW system resulted in a loss of one train of the ultimate heat sink and jeopardized the other. One of the generic implications of this event is the failure of control rods to fully insert into the core because of high burnup fuel. Other recent control rod insertion problems have occurred at South Texas Unit 1 and North Anna Unit 1.

Another event was the loss of offsite power (LOOP) and reactor trip while two emergency diesel generators were unavailable at Catawba Unit 2. The safety significance of this event is that the LOOP with one emergency diesel generator out of service is a significant precursor to a station blackout.

Mr. Jordan briefly summarized the charter and the functional duties of the CRGR. The CRGR provides independent oversight of potential backfitting and adds valuable technical quality assurance and regulatory coherence. CRGR reviews special matters for the NRC. Currently, the demand is for risk-informed and performance-based rules.

AEOD has data bases that include accident sequence precursors, common-cause failures, sequence coding and search systems, performance indicators, monthly operating reports, nuclear plant reliability, preliminary notifications, emergency notifications,



and morning reports. In addition, AEOD is presently available on the Internet.

### Conclusion

This briefing was for information only.

## VII. SPENT FUEL PROJECT OFFICE ACTIVITIES (Open)

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

Dr. Kress summarized the matters discussed during the March 26, 1996 Joint ACRS/ACNW Subcommittee meeting. The NRC staff presented information regarding Spent Fuel Project Office (SFPO) activities and decommissioning. A panel of invited experts presented opinions on and discussed the health effects of low levels of ionizing radiation. Dr. John Garrick, ACNW, was the Chairman for the first meeting of the Joint Subcommittee. The chairmanship will alternate between the ACRS and ACNW annually.

Dr. Kress stated that the SFPO is doing a good job of identifying and resolving issues. In his opinion, the review plans, review criteria, and analyses prepared by the SFPO are strictly deterministic. The staff had explained that, even though the risk associated with dry cask storage is small, there may be higher risk implications with storage of recently irradiated fuel. Brookhaven National Laboratories is performing a study to determine how long it takes after a full core off-load for the risk of fuel damage due to loss of spent fuel pool cooling to become negligible. The Joint Subcommittee plans to review the completed study. The ACRS members discussed the Department of Energy's move toward evaluating risk in relationship to waste handling.

Dr. Kress noted that during the discussion of the health effects of low levels of ionizing radiation, the panel participants exhibited a wide polarization of opinion. Dr. Garrick plans to draft a letter on the subject for approval by both committees.

The Joint Subcommittee plans to discuss decommissioning, the agency safety philosophy, and expert opinion at the next Joint Subcommittee meeting.

### Conclusion

The Committee agreed with the Joint ACRS/ACNW Subcommittee recommendation that the proposed Standard Review Plan for Dry Cask Storage Systems not be reviewed at this time.

#### VIII. USE OF RULENET IN THE RULEMAKING PROCESS (Open)

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

Dr. Robert Seale, Chairman of the Regulatory Policies and Practices Subcommittee, introduced the session by noting that Commissioner Rogers had asked the Committee to comment on the use of RuleNet, which is an NRC-sponsored pilot project that developed an interactive internet site for reading and commenting on a rulemaking concerning fire protection requirements.

#### Nuclear Power Institute (NEI) Presentation

Mr. George Wu, NEI, explained how to use RuleNet. He concluded that RuleNet has merit and can improve communications between the NRC and the public if it is properly managed, is cost effective, and adds value to the regulatory process. The Committee and Mr. Wu discussed whether participants in RuleNet represented themselves or their organizations, how a participant's affiliation was identified, how the voting and weighing of comments was accomplished, and the effect of RuleNet on public health and safety.

Mr. Alexander Marion, NEI, stated that the RuleNet project was broadly advertised and that NEI had represented the industry. He added that RuleNet enhanced communications, but could be more effective in discussing specific focused areas such as draft generic letters and NRC bulletins, or as an alternative to public meetings. Mr. Marion concluded that, to the extent more effective communications relate to properly informed decisions, which link to safety, RuleNet is a safety improvement.

#### NRC Presentation

Mr. William Olmstead, Office of the General Counsel, explained that the RuleNet initiative originated as a result of NRC participation in the National Performance Review's RegNet process. He noted that the use of electronic communication in licensing poses problems because the information that used to consist of hard copies, which became part of the public record, is now transmitted between computers. Mr. Olmstead stated that the NRC used RuleNet to reach agreement with the public on the statement of the issues associated with the fire protection rulemaking. Phase I of RuleNet identified issues. Phase II reached agreement on the statement of the issues. Phase III asked for public comments on proposed resolutions of the issues. Mr. Olmstead explained that the NRC did not use scoring or weighing of participant responses, but attempted to develop a consensus on the issues.

### Conclusion

The Committee took no action based on this information briefing.

### X. EXECUTIVE SESSION (Open)

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

#### A. Reports, Letters and Memoranda

Continued Need for United States Membership in the Nuclear Energy Agency (Report to Shirley Ann Jackson, Chairman, NRC, from T.S. Kress, Chairman, ACRS, dated April 17, 1996.)

Recommendations for Appointment of ACRS Members (Report to Shirley Ann Jackson, Chairman, NRC, from T.S. Kress, Chairman, ACRS, dated April 19, 1996.)

Westinghouse Best-Estimate Loss-of-Coolant Accident Analysis Methodology (Report to Shirley Ann Jackson, Chairman, NRC, from T.S. Kress, Chairman, ACRS, dated April 19, 1996.)

Proposed Revisions to 10 CFR Parts 50 and 100 and Proposed Regulatory Guides Relating to Reactor Site Criteria (Report to Shirley Ann Jackson, Chairman, NRC, from T.S. Kress, Chairman, ACRS, dated April 22, 1996.)

Probabilistic Risk Assessment Framework, Pilot Applications, and Next Steps to Expand the Use of PRA in the Regulatory Decision-Making Process (Report to Shirley Ann Jackson, Chairman, NRC, from T.S. Kress, Chairman, ACRS, dated April 23, 1996.)

Proposed Standard Review Plan for Dry Cask Storage Systems (Memorandum to James M. Taylor, Executive Director for Operations, from John T. Larkins, Executive Director, ACRS, dated April 22, 1996) - Consistent with the ACRS/ACNW decision, Dr. Larkins informed Mr. Taylor that the ACRS/ACNW decided not to review the proposed Standard Review Plan at this time.

Draft Response to Questions on the Proposed Revisions to 10 CFR Part 100 and Part 50 (SECY-94-194) (Memorandum to Shirley Ann Jackson, Chairman, NRC, from John T. Larkins, Executive Director, ACRS, dated April 24, 1996)

B. 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 to ACRS comments and recommendations included in recent ACRS reports:

EDO letter dated March 15, 1996, responding to the ACRS report dated February 23, 1996, concerning the Westinghouse best-estimate loss-of-coolant accident analysis methodology.

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

EDO letter dated March 21, 1996, responding to the ACRS letter dated February 22, 1996, concerning Revision 2 to Regulatory Guide 1.149, "Nuclear Power Plant Simulation Facilities for Use in Operator License Examinations."

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

EDO letter dated March 22, 1996, responding to the ACRS letter dated February 26, 1996, concerning the proposed final NRC Bulletin 96-XX, "Potential Plugging of Emergency Core Cooling Suction Strainers by Debris in BWR," and an associated draft revision 2 of Regulatory Guide 1.82, "Water Sources for Long-term Recirculation Cooling Following a Loss-of-Coolant Accident."

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

EDO letter dated April 4, 1996, responding to the ACRS letter dated March 14, 1996, concerning the resolution of Generic Safety Issue 78.

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

EDO letter dated April 10, 1996, responding to the ACRS letter dated March 8, 1996, concerning the use of Individual Plant Examinations in the regulatory process.

The Committee decided to continue its discussion of this matter during its review of the IPE Insights Report.

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

The Committee heard a report from Dr. Kress on the Planning and Procedures Subcommittee meeting held on April 10, 1996. The following items were discussed:

1. CANDIDATES FOR ACRS MEMBERSHIP

An interview schedule was established to screen five applicants for ACRS membership. During the Full Committee meeting, a decision was to be made regarding which applicants should be recommended to the Commission.

RECOMMENDATION

The Subcommittee referred this matter to the full Committee.

2. INTERNATIONAL MEETINGS

Dr. Hicken, RSK Reactor Safety Committee, was given possible meeting dates from June until November 1996. He said he would consult with his Committee (GRS) and suggest a meeting date, probably in the fall.

A message from Canada suggested a meeting in late September or early October. A draft reply would suggest October 9, 1996, the day preceding the October meeting.

RECOMMENDATION

The Subcommittee recommends that a meeting with the Canadian ACNS be proposed for October 9, 1996.

3. JOINT ACRS/ACNW SUBCOMMITTEE

Minutes of the first meeting have been prepared and approved by Dr. Garrick. Proposed topics for the next meeting, to be held on August 1-2, 1996, are the agency's safety philosophy, use of expert judgment, the Brookhaven National Laboratory risk analysis, and decommissioning.

RECOMMENDATION

The Subcommittee notes the following Joint Subcommittee recommendations:

- that the Standard Review Plan for Dry Cask Storage Systems not be reviewed at this time;



- that decommissioning be reviewed after the Brookhaven National Laboratory risk analysis has been completed and the proposed final rule on decommissioning has been prepared by the staff after reconciliation of public comments; and
- that a letter on the health effects of low levels of ionizing radiation be drafted by Drs. Garrick and Steindler for approval by both Full Committees.

The Subcommittee recommended that risk harmonization be added to the agenda for the next Joint Subcommittee meeting.

4. RESEARCH

The Commission met with Dr. Boulette, Chairman of the NSRRC, Dr. Morrison, and Mr. Milhoan on March 27, 1996, to discuss recent NSRRC activities. During Dr. Morrison's opening remarks, he stated that the ACRS review of the RES programs had been limited and infrequent since the formation of the NSRRC. He further stated that the ACRS had "more or less turned all of the responsibilities over to the NSRRC." These comments were discussed by the Subcommittee.

RECOMMENDATION

The Subcommittee recommended that a procedure be established for a routine exchange of reports between the ACRS and the NSRRC and that the Full Committee discuss this matter further.

5. INTERNET CONNECTION

A contract has been approved to give all ACRS/ACNW members access to the Internet. The first nine hours are free and some additional time can be provided. Members should indicate to R. Summers whether they want this connection or not.

RECOMMENDATION

The Subcommittee recommended that all members contact R. Summers during the Full Committee meeting concerning their need for an Internet connection.

6. Fee Billing



To support fees billed to industry for plant-specific activities, an "Other" category will be added to the Compensation Worksheet. The new category will provide space for members to specify each plant activity for which preparation time was spent.

#### RECOMMENDATION

The Subcommittee recommended that for each Subcommittee meeting, members be told the category to which time should be charged for preparation, travel and meeting time for that meeting.

#### 7. CONFLICT OF INTEREST

Dr. Miller was invited to attend the National Academy of Sciences/National Research Council May 21-23, 1996 Digital I&C Committee meeting. Because the ACRS may later review the information discussed at the NAS/NRC Committee meeting, Dr. Miller's participation raises the question of a potential conflict of interest.

#### RECOMMENDATION

The Subcommittee recommended that Dr. Miller establish at the beginning of the meeting that he was there as an observer only and not to participate substantially in the deliberations of the NAS/NRC on behalf of the ACRS, because the ACRS would be providing comments to the Commission on the NAS/NRC study.

#### 8. TRAVEL

The following travel requests have been received:

- Dr. Miller to attend the 1996 ANS International Topical Meeting on Nuclear Plant Instrumentation, Control, and Human Machine Interface Technologies (May 6-9, 1996), State College, PA.
- Dr. Catton to attend the OECD Nuclear Energy Agency Committee on the Safety of Nuclear Installations Workshop on Transient Thermal-Hydraulic and Neutronic Codes Requirements (Nov. 5-8, 1996), Annapolis, Maryland.
- Dr. Fontana to attend the 1996 ANS Annual Meeting and the Technical Program Committee Meeting for the 1997 ANS Advanced Reactor Systems Topical Meeting.

- Dr. Kress to attend the ANS Annual Meeting in Reno, NV.

#### RECOMMENDATION

The Subcommittee approves the above travel requests. The Subcommittee recommended that, as a matter of principle, ACRS members attend only one meeting a year that can be categorized as being strictly for professional development or for maintaining professional credentials.

#### 10. MEMBERS' ISSUES

- A memorandum from Dr. Powers asked whether the ACRS or a subcommittee should examine the issue of a design basis terrorist attack on nuclear installations.
- Mr. Carroll provided a draft memorandum for signature by Ms. Pat Norry, Director, Office of Administration, concerning the change of policy regarding use of an office in the home. This draft was provided to Ms. Norry. No reply has been received as yet.
- A memorandum from Dr. Powers to Dr. Seale informed the Committee of the decision by the Department of State to withdraw from OECD/NEA.

#### RECOMMENDATIONS

- The Subcommittee recommended that the issue of terrorist attacks be referred to the Safeguards and Security Subcommittee, and that the Subcommittee Chairman propose a course of action.
- The Subcommittee recommended that Dr. Seale draft a letter to the Commission on the possible withdrawal of the U.S. from the OECD Nuclear Energy Agency.

#### D. Future Meeting Agenda

Appendix IV summarizes the proposed items endorsed by the Committee for the 431st ACRS Meeting, May 23-25, 1996.

The 430th ACRS meeting was adjourned at 3:05 p.m. on Saturday, April 13, 1996.

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

For further details with respect to this action, see the application for license amendment dated September 6, 1995. Copies are available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC 20555, and at the local public document room located at the Callaway County Public Library, 710 Court Street, Fulton, Missouri 65251.

Dated at Rockville, Maryland, this 18th day of March 1996.

For the Nuclear Regulatory Commission,  
**Kristine M. Thomas,**

*Project Manager, Project Directorate IV-2,  
Division of Reactor Projects III/IV, Office of  
Nuclear Reactor Regulation.*

(FR Doc. 96-7144 Filed 3-22-96; 8:45 am)

BLLS02 CODE 7900-01-P

### **Advisory Committee on Reactor Safeguards, Meeting**

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 11-13, 1996, in Conference Room T-2B3, 11545 Rockville Pike, Rockville, Maryland. The date of this meeting was previously published in the *Federal Register* on Monday, November 27, 1995 (60 FR 58393).

#### **Thursday, April 11, 1996**

**8:30 a.m.-8:45 a.m.: Opening Remarks by the ACRS Chairman (Open)**—The ACRS Chairman will make opening remarks regarding conduct of the meeting and comment briefly regarding items of current interest. During this session, the Committee will discuss priorities for preparation of ACRS reports.

**8:45 a.m.-10:45 A.M.: Proposed Final Revisions to 10 CFR part 50 and 10 CFR part 100, "Reactor Site Criteria" (Open)**—The Committee will hear presentations by and hold discussions with representatives of the NRC staff regarding the proposed final revisions to 10 CFR part 50 and 10 CFR part 100, new appendix S to part 50, and associated Regulatory Guides and Standard Review Plan sections. These proposed revisions include relocation of plant design criteria, and source term and dose calculations from 10 CFR part 100 to 10 CFR part 50.

Representatives of the nuclear industry will participate, as appropriate.

**11 a.m.-12:30 p.m.: Severe Accident Research (Open)**—The Committee will hear presentations by and hold discussions with representatives of the NRC staff regarding the domestic and foreign research activities in the severe accident area, NRC severe accident codes (e.g., MELCOR, SCDAP/RELAP5, CONTAIN, and VICTORIA), and related matters.

Representatives of the nuclear industry will participate, as appropriate.

**11:30 p.m.-3 p.m.: Graded Quality Assurance Program (Open)**—The Committee will hear presentations by and hold discussions with representatives of the NRC staff regarding the Graded Quality Assurance Program and related matters.

Representatives of the nuclear industry will participate, as appropriate.

**3:15 p.m.-4 p.m.: Report of the Planning and Procedures Subcommittee (Open/Closed)**—The Committee will hear a report of the Planning and Procedures Subcommittee on matters related to the conduct of ACRS business, and organizational and personnel matters relating to the ACRS staff.

A portion of this session may be closed to discuss qualifications of candidates nominated for appointment to the ACRS, organizational and personnel matters that relate solely to the internal personnel rules and practices of this Advisory Committee, and matters the release of which would constitute a clearly unwarranted invasion of personal privacy.

**4 p.m.-7 p.m.: Preparation of ACRS Reports (Open)**—The Committee will discuss proposed ACRS reports on matters considered during this meeting as well as proposed ACRS reports on PRA Framework Document and Use of PRA in the Regulatory Process, and Resolution of the Multiple System Responses Program (MSRP) issues.

#### **Friday, April 12, 1996**

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

**8:35 a.m.-10 a.m.: Meeting with the Director of the NRC Office for Analysis and Evaluation of Operational Data (AEOD) (Open)**—The Committee will hear presentations by and hold discussions with Mr. Edward Jordan, AEOD Director, on items of mutual interest, including:

- AEOD activities associated with the development of risk-informed and performance-based regulations

- Risk-Based Performance Indicators
- AEOD study on spent fuel pools
- Recent interaction with INPO (training, event analysis, etc.)

- Update on Technical Training Center programs, e.g., Digital I&C, and specialized training of inspection personnel in support of current risk-based methods applications:
  - Implementation of Maintenance Rule
  - Inservice Inspection
  - Inservice Testing

**10:15 a.m.-11:15 a.m.: Spent Fuel Project Office Activities (Open)**—The Committee will hear a report by the Subcommittee Chairman concerning the matters discussed during the March 26, 1996 joint ACRS/ACNW Subcommittee meeting, including the Spent Fuel Project Office activities, decommissioning, and health effects of low-level radiation. The Committee will also hear presentations by and hold discussions with representatives of the NRC staff regarding activities of the Spent Fuel Project Office, including the proposed Standard Review Plan for dry cask storage systems.

**11:15 a.m.-11:45 a.m.: Future ACRS Activities (Open)**—The Committee will discuss recommendations of the Planning and Procedures Subcommittee regarding items proposed for consideration by the full Committee during future meetings.

**11:45 a.m.-12 Noon: 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. The EDO responses are expected to be provided to the ACRS prior to the meeting.

**1 p.m.-2:15 p.m.: Westinghouse COBRA/TRAC Best-Estimate ECCS Thermal Hydraulic Code (Open/Closed)**—The Committee will hear presentations by and hold discussions with representatives of the Westinghouse Electric Corporation and the NRC staff regarding response to ACRS concerns related to the Westinghouse COBRA/TRAC Best-Estimate ECCS Thermal Hydraulic Code.

A portion of this session may be closed to discuss Westinghouse proprietary information applicable to this matter.

**2:15 p.m.-2:45 p.m.: Use of RuleNet in the Rulemaking Process (Open)**—The Committee will hear presentations by and hold discussions with representatives of the Nuclear Energy Institute regarding the experience gained through the use of RuleNet in the rulemaking process.



Representatives of the NRC staff will participate, as appropriate.

**3 p.m.-4 p.m.: Preparation of ACRS Reports (Open)**—The Committee will discuss proposed ACRS reports on matters considered during this meeting as well as proposed ACRS reports on PRA Framework Document and Use of PRA in the Regulatory Process, and Resolution of the Multiple System Responses Program (MSRP) issues.

**Saturday, April 13, 1996**

**8:30 a.m.-11:30 a.m.: Preparation of ACRS Reports (Open)**—The Committee will continue discussion of proposed ACRS reports on matters considered during this meeting as well as the proposed reports on other matters noted above.

**11:45 a.m.-1 p.m.: Strategic Planning (Open)**—The Committee will discuss items that are of significant importance to NRC, including rebaselining of the Committee activities for FY 96-97.

Procedures for the conduct of and participation in ACRS meetings were published in the Federal Register on September 27, 1995 (60 FR 49925). In accordance with these procedures, oral or written statements may be presented by members of the public, 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, Chief, Nuclear Reactors Branch, at least five days before the meeting, if possible, so that appropriate arrangements can be made to allow the 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 the Chief of the Nuclear Reactors Branch 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 the Chief of the Nuclear Reactors Branch if such rescheduling would result in major inconveniences.

In accordance with subsection 10(d) Pub. L. 92-463, I have determined that it is necessary to close portions of this meeting noted above to discuss matters that relate solely to the internal personnel rules and practices of this Advisory Committee per 5 U.S.C. 552b(c)(2), to discuss Westinghouse proprietary information per 5 U.S.C.

552b(c)(4), and to discuss matters the release of which would constitute a clearly unwarranted invasion of personal privacy per 5 U.S.C. 552b(c)(6).

Further information regarding topics to be discussed, whether the meeting has been cancelled 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, Chief, Nuclear Reactors Branch (telephone 301/415-7364), between 7:30 A.M. and 4:15 P.M. EST.

ACRS meeting notices, meeting transcripts, and letter reports are now available on FedWorld from the "NRC MAIN MENU." Direct Dial Access number to FedWorld is (800) 303-9672; the local direct dial number is 703-321-3339.

The 432nd ACRS meeting date has been changed to June 12-15, 1996.

Date: March 19, 1996.

Andrew L. Bates,

Advisory Committee Management Officer.

[FR Doc. 96-7143 Filed 3-22-96; 8:45 am]

BILLING CODE 7550-01-P

## OFFICE OF SCIENCE AND TECHNOLOGY POLICY

### Meeting of the President's Committee of Advisors on Science and Technology

#### ACTION: Notice of meeting.

**SUMMARY:** This notice sets forth the schedule and summary agenda for a meeting of the President's Committee of Advisors on Science and Technology (PCAST), and describes the functions of the Committee. Notice of this meeting is required under the Federal Advisory Committee Act.

**DATES AND PLACE:** April 18-19, 1996. The White House Conference Center, Truman Room, Third Floor, 726 Jackson Place NW, Washington, DC 20500.

**TYPE OF MEETING:** Open.

**PROPOSED SCHEDULE AND AGENDA:** The PCAST will meet in open session on Thursday, April 18, 1996, at approximately 9:00 AM on current activities of the Office of Science and Technology Policy (OSTP) and the National Science and Technology Council (NSTC). This session will end at approximately 12:00 Noon. The Committee will reconvene in open session at approximately 1:30 PM to discuss science and technology policies of national importance. This session will end at approximately 5:00 PM.

The Committee will meet again in open session on Friday, April 19, 1996,

at approximately 9:00 AM, for a general discussion among Committee members and other Executive Office staff about future PCAST activities. This session will end at approximately 12:00 Noon.

Any of the morning or afternoon sessions may be interrupted for the PCAST to gather at the White House to be introduced to the President and/or Vice President of the United States.

**FOR FURTHER INFORMATION:** For information regarding time, place, and agenda, please call Evelyn Diaz, at (202) 456-6100, prior to 3:00 PM on Friday, April 12, 1996. Other questions may be directed to Angela Phillips Diaz, Executive Secretary of PCAST, or Elizabeth M. Gunn, Senior Policy Analyst for PCAST, at (202) 456-6100. Please note that public seating for this meeting is limited, and is available on a first-come, first-served basis.

**SUPPLEMENTARY INFORMATION:** The President's Committee of Advisors on Science and Technology was established on November 23, 1993, by Executive Order 12882, as amended, and continued through September 30, 1997, by Executive Order 12974. The purpose of PCAST is to advise the President on matters of national importance that have significant science and technology content, and to assist the President's National Science and Technology Council in securing private sector participation in its activities. The Committee members are distinguished individuals appointed by the President from non-Federal sectors. The PCAST is co-chaired by John H. Gibbons, Assistant to the President for Science and Technology, and by John Young, former President and CEO of Hewlett-Packard Company.

Dated: March 4, 1996.

Barbara Ann Ferguson,

Assistant Director for Budget and Administration, Office of Science and Technology Policy.

[FR Doc. 96-5569 Filed 3-22-96; 8:45 am]

BILLING CODE 5175-01-P

## PEACE CORPS

### Information Collection Requests Under OMB Review

**AGENCY:** Peace Corps.

**ACTION:** Notice of public use form review request to the Office of Management and Budget.

**SUMMARY:** Pursuant to the Paperwork Reduction Act (44 U.S.C. chapter 35) this notice announces that the information collection requests abstracted below have been forwarded



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

Revised  
March 25, 1996

SCHEDULE AND OUTLINE FOR DISCUSSION  
430th ACRS MEETING  
APRIL 11-13, 1996

Thursday, April 11, 1996, Conference Room 2B3, Two White Flint North,  
Rockville, Maryland

- |   |  |
|---|--|
| <p>1) 8:30 - 8:<sup>35</sup><del>45</del> A.M.</p>                          | <p><u>Opening Remarks by the ACRS Chairman (Open)</u><br/> 1.1) Opening Statement (TSK/SD)<br/> 1.2) Items of Current Interest (TSK/JTL/SD)<br/> 1.3) Priorities for Preparation of ACRS Reports (TSK/SD)</p>  |
| <p>2) 8:<sup>35</sup><del>45</del> - 11:<sup>11</sup><del>45</del> A.M.</p> | <p><u>Proposed Final Revisions to 10 CFR Part 50, and 10 CFR Part 100, "Reactor Site Criteria" (Open) (WJL/AS)</u><br/> 2.1) Remarks by the Subcommittee Chairman<br/> 2.2) Briefing by and discussions with representatives of the NRC staff regarding the proposed final revisions to 10 CFR Part 50 and 10 CFR Part 100, new Appendix S to Part 50 and associated Regulatory Guides and Standard Review Plan sections. These proposed revisions include relocation of plant design criteria, and source term and dose calculations from 10 CFR Part 100 to 10 CFR Part 50.</p> <p>Representatives of the nuclear industry will participate, as appropriate.</p> |
| <p>11:<sup>11</sup><del>45</del> - 12:00<br/>10:45 - 11:00 A.M.</p>         | <p>BREAK</p>   |
| <p>3) 12:00 - 1:<sup>05</sup><del>30</del> P.M.</p>                         | <p><u>Severe Accident Research (Open) (MHF/NFD)</u><br/> 3.1) Remarks by the Subcommittee Chairman<br/> 3.2) Briefing by and discussions with representatives of the NRC staff regarding the domestic and foreign research activities in the severe accident area, NRC severe accident codes (e.g., MELCOR, SCDAP/RELAP5, CONTAIN, and VICTORIA), and related matters.</p>   |

{ TRANSCRIBED PORTIONS OF THE MEETING

Representatives of the nuclear industry will participate, as appropriate.

<sup>15</sup>  
~~12:30~~ - <sup>45</sup> 1:30 P.M.

LUNCH

4) <sup>45</sup>  
~~1:30~~ - <sup>15</sup> 3:00 P.M.

Graded Quality Assurance Program (Open)  
(CJW/MME)

- 4.1) Remarks by the Subcommittee Chairman
- 4.2) Briefing by and discussions with representatives of the NRC staff regarding the Graded Quality Assurance Program and related matters.

Representatives of the nuclear industry will participate, as appropriate.

<sup>15</sup>  
3:00 - <sup>30</sup> 3:15 P.M.

BREAK

5) <sup>30</sup>  
3:15 - <sup>5:04</sup> ~~4:30~~ P.M.

CLOSED:

3:37 - 4:40 P.M.

Westinghouse COBRA/TRAC Best-Estimate ECCS Thermal Hydraulic Code (Open/Closed)  
(IC/PAB)

- 5.1) Remarks by the Subcommittee Chairman
- 5.2) Briefing by and discussions with representatives of the Westinghouse Electric Corporation and the NRC staff regarding response to ACRS concerns related to the Westinghouse COBRA/TRAC Best-Estimate ECCS Thermal Hydraulic Code.

[Note: A portion of this session may be closed to discuss Westinghouse proprietary information applicable to this matter]

6) <sup>5:04</sup>  
~~4:00~~ - 7:00 P.M.

Preparation of ACRS Reports (Open)

Discussion of proposed ACRS reports on:

- 6.1) Proposed Final Revisions to 10 CFR Part 50, and 10 CFR Part 100, Reactor Site Criteria (WJL/AS)
- 6.2) Severe Accident Research (MHF/NFD)
- 6.3) PRA Framework Document and next step to expand the Use of PRA in the Regulatory Process (GA/MTM)
- 6.4) Resolution of the Multiple System Responses Program (MSRP) Issues (CJW/MME/AWC)



6.5) Westinghouse COBRA/TRAC Best-Estimate  
ECCS Thermal Hydraulic Code (IC/PAB)

Friday, April 12, 1996, Conference Room 2B3, Two White Flint North,  
Rockville, Maryland

- 7) 8:30 - 8:35 A.M. Opening Remarks by the ACRS Chairman (Open)  
(TSK/SD)
- 8) 8:35 - 10:<sup>25</sup>~~00~~ A.M. Meeting with the Director of the NRC Office  
for Analysis and Evaluation of Operational  
Data (AEOD) (Open) (TSK/MME)
- 8.1) Remarks by the ACRS Chairman
- 8.2) Briefing by and discussions with  
Mr. Edward Jordan, AEOD Director, on  
items of mutual interest, including:
- AEOD activities associated with  
the development of risk-informed  
and performance-based regulations
  - Risk-Based Performance Indicators
  - AEOD study on spent fuel pools
  - Recent interaction with INPO  
(training, event analysis, etc.)
  - Update on Technical Training  
Center programs, e.g., Digital  
I&C, and specialized training of  
inspection personnel in support  
of current risk-based methods  
applications:
- Implementation of Maintenance  
Rule
  - In-service Inspection
  - In-service Testing
- 10:<sup>25</sup>~~00~~ - 10:<sup>40</sup>~~15~~ A.M. BREAK
- 9) 10:<sup>40</sup>~~15~~ - 11:15 A.M. Spent Fuel Project Office Activities  
(Open) (TSK/NFD/RS)
- 9.1) Report by the Subcommittee Chairman  
concerning the matters discussed  
during the March 26, 1996 Joint  
ACRS/ACNW Subcommittee meeting,  
including the Spent Fuel Project  
Office activities, decommissioning,  
and health effects of low-level  
radiation.

- 9.2) Briefing by and discussions with representatives of the NRC staff regarding activities of the Spent Fuel Project Office, including the proposed Standard Review Plan for dry cask storage systems.

10) 11:15 - 12:<sup>30</sup>~~15~~ P.M.

CLOSED:

11:30 - 12:10 P.M.

Report of the Planning and Procedures Subcommittee (Open/Closed) (TSK/JTL)  
Report of the Planning and Procedures Subcommittee on matters related to the conduct of ACRS business, and organizational and personnel matters relating to the ACRS staff.

[Note: A portion of this session may be closed to discuss qualifications of candidates nominated for appointment to the ACRS, organizational and personnel matters that relate solely to the internal personnel rules and practices of this Advisory Committee, and matters the release of which would constitute a clearly unwarranted invasion of personal privacy.]

12:<sup>30</sup>~~15~~ - 1:<sup>30</sup>~~15~~ P.M.

LUNCH

11) 1:<sup>30</sup>~~15~~ - 2:<sup>25</sup>~~45~~ P.M.

Use of RuleNet in the Rulemaking Process (Open) (RLS/NFD)

- 11.1) Remarks by the Subcommittee Chairman  
11.2) Briefing by and discussions with representatives of the Nuclear Energy Institute regarding the experience gained through the use of RuleNet in the rulemaking process.

Representatives of the NRC staff will participate, as appropriate.

12) 2:<sup>25</sup>~~45~~ - 3:00 P.M.

Future ACRS Activities (Open) (TSK/SD)  
Discussion of the recommendations of the Planning and Procedures Subcommittee regarding items proposed for consideration by the full Committee during future meetings.

13) ~~2:15~~<sup>3:00</sup> - ~~2:30~~<sup>3:10</sup> P.M.

Reconciliation of ACRS Comments and Recommendations (Open) (TSK, 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.

~~2:30~~<sup>3:10</sup> - ~~2:45~~<sup>3:25</sup> P.M.

BREAK

14) ~~2:45~~<sup>3:25</sup> - ~~7:00~~<sup>6:35</sup> P.M.

Preparation of ACRS Reports (Open)

Discussion of proposed ACRS reports on:

- 14.1) Proposed Final Revisions to 10 CFR Part 50, and 10 CFR Part 100, Reactor Site Criteria (WJL/AS)
- 14.2) Severe Accident Research (MHF/NFD)
- 14.3) PRA Framework Document and next step to expand the Use of PRA in the Regulatory Process (GA/MTM)
- 14.4) Resolution of the Multiple System Responses Program (MSRP) Issues (CJW/MME/AWC)
- 14.5) Westinghouse COBRA/TRAC Best-Estimate Thermal Hydraulic Code (IC/PAB)
- 14.6) Standard Review Plan for Dry Cask Storage Systems (tentative) (TSK/NFD/RS)

Saturday, April 13, 1996, Conference Room 2B3, Two White Flint North, Rockville, Maryland

15) 8:30<sup>5</sup> - 11:30 A.M.

Preparation of ACRS Reports (Open)  
Continue discussion of proposed ACRS reports identified under Item 14.

11:30 - 11:45 A.M.

BREAK

16) 11:45 - ~~1:00~~<sup>3:10</sup> P.M.

Strategic Planning (Open) (TSK/JTL)  
Discussion of items of significant importance to NRC, including rebaselining of the Committee activities for FY 96-97.

- 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 IV: FUTURE AGENDA

The Committee agreed to consider the following during the 431st ACRS Meeting, May 23-25, 1996:

IPE Insights Report - The Committee will hear presentations by and hold discussions with representatives of the NRC staff and its consultants regarding the IPE Insights Report, with emphasis on issues pertaining to safety goals. Representatives of the nuclear industry will participate, as appropriate.

Proposed Rule on Shutdown Operations - The Committee will hear presentations by and hold discussions with representatives of the NRC staff regarding the proposed rule on shutdown operations, the associated Regulatory Guide, and results of the NRC staff study of shutdown risk at Surry and Grand Gulf nuclear plants. Representatives of the nuclear industry will participate, as appropriate.

Digital Instrumentation and Control Systems - The Committee will hear presentations by and hold discussions with representatives of the NRC staff and its consultants regarding proposed Standard Review Plan Sections, Regulatory Guides, and Branch Technical Positions associated with digital instrumentation and control systems. Representatives of the nuclear industry will participate, as appropriate.

Regulatory Review Group Recommendations - The Committee will hear presentations by and hold discussions with representatives of the NRC staff regarding the status of resolution and implementation of the Regulatory Review Group Recommendations. Representatives of the nuclear industry will participate, as appropriate.

Meeting with the NRC Commissioners - The Committee will meet with the NRC Commissioners to discuss items of mutual interest, including the following:

- Use of IPEs in the regulatory process, PRA framework document, pilot applications and next step to expand the use of PRA in the regulatory process
- Fire protection issues, including fire PRA models and PRA-based scoping analysis of degraded fire barriers
- Proposed final revisions to 10 CFR Parts 50 and 100
- Status of ACRS review of Regulatory Guidance documents related to digital instrumentation and control systems
- Status of ACRS review of standard plant designs:
  - ABWR and system 60+ design certification rules
  - AP600 design
  - Test and analysis programs associated with the AP600 and SBWR designs



APPENDIX V  
LIST OF DOCUMENTS PROVIDED TO THE COMMITTEE

[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 11-13, 1996.
- 2     Proposed Final Revisions to 10 CFR Part 50, and 10 CFR Part 100, "Reactor Site Criteria"
  2.   Draft Final Rule, Revision of 10 CFR Parts 50, 100, dated April 11, 1996, Presented by Leonard Soffer and Andrew Murphy [Viewgraphs]
  3.   Staff Presentation on the Part 50 and Part 100 Rulemaking, DBA Dose Calculations Sensitivity Scaling Analyses, dated April 11, 1996, Presented By Barry Zalcmman [Viewgraphs]
  4.   Revision of 10 CFR Parts 50, 52 and 100, dated April 11, 1996, Presented by M.W. Gmyrek and R.L. Andersen, NEI [Viewgraphs]
  5.   Westinghouse Electric Comments on Proposed Change to 10 CFR 50, dated April 11, 1996, by James L. Grover [Handout]
- 3     Severe Accident Research
  6.   Status of the Severe Accident Research Program, dated April 11, 1996, Presented by Charles Ader [Viewgraphs]
- 4     Graded Quality Assurance Program
  7.   Graded Quality Assurance Initiative, dated April 11, 1996, Presented by Suzanne Black [Viewgraphs]
- 5     Westinghouse COBRA/TRAC Best-Estimate ECCS Thermal Hydraulic Code
  8.   Westinghouse Best-Estimate LOCA Methodology: Blowdown Heat Transfer Distributions and Minimum Film Boiling Temperature, dated April 11, 1996, Presented by M.Y.

Young [Viewgraphs]

9. NRR Review of Westinghouse Best-Estimate ECCS Code, dated April 11, 1996, Presented by Robert C. Jones [Viewgraphs]
- 8 Meeting with the Director of the NRC Office for Analysis and Evaluation of Operational Data (AEOD)
10. ACRS Briefing, dated April 12, 1996, Presented by Edward L. Jordan, Director, AEOD [Viewgraphs]
- 10 Report of the Planning and Procedures Subcommittee
11. Final Draft Minutes of Planning and Procedures Subcommittee Meeting - April 10, 1996 [Handout #10.1]
12. Memorandum from Howard J. Larson, ACNW staff, to ACNW Members, dated March 27, 1996: Nuclear Safety Research Review Committee Presentation to Commission March 27, 1996
- 11 Use of RuleNet in the Rulemaking Process
13. NEI Views on NRC RuleNet Pilot Project, dated April 12, 1996, Presented by George Wu [Viewgraphs]
14. Sample pages of the NRC Home Page [Handout].
- 12 Future ACRS Activities
15. Future ACRS Activities - 431st ACRS Meeting, May 23-25, 1996 [Handout #12.1]
- 13 Reconciliation of ACRS Comments and Recommendations
16. Reconciliation of ACRS Comments and Recommendations [Handout #13.1]

MEETING NOTEBOOK CONTENTS

TAB

DOCUMENTS

- 2 Proposed Final Revisions to 10 CFR Part 50, and 10 CFR Part 100, "Reactor Site Criteria"
  1. Table of Contents
  2. Proposed Schedule
  3. Status Report, dated April 11, 1995
  4. Memorandum from T. Speis, Office of Nuclear Regulatory Research, to J. Larkins, ACRS, dated March 6, 1996: Revisions of 10 CFR Part 100< Reactor Site Criteria, Revisions to 10 CFR Part 50, New Appendix S to Part 50 (Final Rules) and Associated Regulatory Guides and Standard Review Plan Sections, and Attachments
- 3 Severe Accident Research
  5. Table of Contents
  6. Agenda
  7. Status Report, dated April 11, 1995
  8. Letter from D. Ward, Chairman, ACRS, to Ivan Selin, Chairman, NRC, dated August 18, 1992: Severe Accident Research Program Plan
  9. Minutes from the ACRS Severe Accidents Subcommittee Meeting, March 1, 1996
- 4 Graded Quality Assurance Program
  10. Table of Contents
  12. Tentative Agenda
  13. Status Report, dated April 11, 1995
  14. SECY-95-059, dated March 10, 1995: Development of Graded Quality Assurance Methodology
  15. Draft Guideline for Implementing a Graded Approach to Quality, Nuclear Energy Institute, dated June 1995.
  16. NRR Draft Evaluation Guide, Development of Graded Quality Assurance Program, Revision 5, dated January 1996
- 5 Westinghouse COBRA/TRAC Best-Estimate ECCS Thermal Hydraulic Code
  17. Table of Contents
  18. Presentation Schedule
  19. Project Status Report, dated April 11, 1995
  20. Report from T. Kress, Chairman, ACRS to S. Jackson, Chairman, NRC, dated February 23, 1996: Westinghouse Best-Estimate Loss-of-Coolant Accident Analysis Methodology

21. Letter from J. Taylor, EDO, to T. Kress, Chairman, ACRS, dated March 15, 1996
  22. Letter to R. Jones, NRR, from N. Liparulo, Nuclear Energy Institute (NEI), dated March 25, 1996: Resolution of Issues Related to Review of WCAP-12945-P [Contains Proprietary Material - Do Not Release Without Prior Authorization]
- 8 Meeting with the Director of the NRC Office for Analysis and Evaluation of Operational Data (AEOD)
23. Table of Contents
  24. Tentative Agenda
  25. Status Report, dated April 12, 1995
  26. Memorandum from J. Larkins, ACRS, to E. Jordan, AEOD, dated March 21, 1996: ACRS Meeting with the Director of the NRC Office for Analysis and Evaluation of Operational Data - April 12, 1996, Rockville, Maryland
- 11 Use of RuleNet in the Rulemaking Process
27. Table of Contents
  28. Agenda
  29. Status Report, dated April 12, 1995
  30. SRM from J. Hoyle, SECY, to J. Larkins, ACRS, dated December 22, 1995: Meeting with the ACRS, Friday, December 8, 1995
  31. Memorandum from J. Larkins, ACRS, to ACRS Members, dated January 23, 1996: SRM on the NRC RuleNet Program
  32. RuleNet Pages printed from the Internet, March 29, 1996
  33. Letter from W. Rasin, NEI, to NEI Nuclear Strategic Issues Advisory Committee, dated December 1, 1995: NRC RuleNet Program