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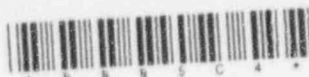
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Draft Standard Review Plans on Antitrust and Power Reactor Licensee Financial Qualifications & Decommissioning Funding Assurance (Memorandum to James M. Taylor, Executive Director for Operations, from John T. Larkins, Executive Director, ACRS, dated August 14, 1996) - Consistent with the Committee's decision, Dr. Larkins informed Mr. Taylor that the Committee decided not to review the subject Standard Review Plans.

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Rulemaking Plan for Amendments to 10 CFR 73.55, Changes to Nuclear Power Plant Security Requirements (Memorandum to James M. Taylor, Executive Director for Operations, from John T. Larkins, Executive Director, ACRS, dated August 14, 1996) - Consistent with the Committee's decision, Dr. Larkins informed Mr. Taylor that the Committee decided not to review the subject Rulemaking Plan.

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- B. Reconciliation of ACRS Comments and Recommendations
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- IV. Future Agenda and Subcommittee Activities
- V. List of Documents Provided to the Committee

MINUTES OF THE FOUR HUNDRED THIRTY-THIRD MEETING OF THE
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS
AUGUST 8-10, 1996
ROCKVILLE, MARYLAND

The 433rd meeting of the Advisory Committee on Reactor Safeguards was held at Conference Room 2B3, Two White Flint North Building, Rockville, Maryland, on August 8-10, 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. There were no written statements nor requests for time to make oral statements from members of the public regarding the meeting.

A transcript of selected portions of the meeting was kept and is available in the NRC Public Document Room at the Gelman Building, 2120 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. John Barton, Dr. Ivan Catton, Dr. Mario H. Fontana, Mr. William J. Lindblad, Dr. Don W. Miller, 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 Mr. John Barton had been approved as a Member of the ACRS and was attending this meeting as a voting Member and that this would be the last meeting for ACRS Member Charles Wylie; that two new NRC Commissioners had been approved by the Senate and would be joining the Commission in the near future; and that several speeches and articles of interest were included in the Items of Interest document provided to the Members.

II. Supplemental Safety Evaluation Reports for Evolutionary Plant Designs (Open/Closed)

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

Introduction

Mr. Lindblad stated that the purpose of this session was to hear presentations by the NRC staff and representatives of General Electric Nuclear Energy (GENE) and ASEA Brown-Boveri Combustion Engineering regarding proposed design changes to the Advanced Boiling Water Reactor (ABWR) and System 80+ designs, respectively.

NRC Staff Presentation

Mr. Jerry Wilson, NRR, stated that GENE had submitted eleven design changes to the ABWR design to be reviewed by the NRC. These changes resulted from the information developed in the course of the ABWR First-Of-A-Kind-Engineering (FOAKE) program. The basic approach of the GENE/FOAKE activity is to develop the design details of the ABWR consistent with the requirements of the design undergoing NRC certification.

Originally, the staff had provided its evaluation of the ABWR design in the Final Safety Evaluation Report (FSER), NUREG-1503. On the basis of the FSER and the ACRS report of approval, the NRC issued a final design approval (FDA) for the ABWR on July 13, 1994. Subsequently, GENE prepared a separate document called the Design Control Document (DCD) to be incorporated by reference in the ABWR design certification rule.

The staff prepared a supplement to NUREG-1503 that documented its review of the proposed design changes and concluded that none of these changes would affect the original findings in NUREG-1503.

ABB-CE submitted a total of 26 design changes to the System 80+ design. Originally, the staff provided its evaluation of the System 80+ design in NUREG-1462. On the basis of the NUREG and the ACRS report of approval, the NRC issued its FDA for the System 80+ design on July 26, 1994. The staff prepared a supplement to NUREG-1462 that documents its review of the proposed design changes.

Mr. Wilson indicated that most of the proposed design changes for both the ABWR and System 80+ designs are not controversial in nature and do not appear to represent changes to the original safety findings. Consequently, the staff concluded that the proposed design changes for both the ABWR and System 80+ designs were acceptable and that both applications for design certification met the requirements of Subpart B to CFR Part 52.

GENE Presentation

Mr. Alan Beard, GENE, noted that the proposed design changes are provided to correct an error or deficiency necessary to assure adequate protection of the public health and safety, or to bring

the DCD into compliance with the regulations in effect at the time the ABWR Final Design Approval (FDA) was issued. The changes affect the Technical Specifications and are necessary to make the DCD design functionally operable. The changes are design improvements that GENE has determined should be incorporated at this time. Eleven design change packages were submitted to the NRC for review. These design changes are:

- Reactor and radwaste building heating, ventilation, and air conditioning (HVAC) will use electric heating in place of hot water heating and reconfigure reactor building HVAC supply fans for the use of high efficiency filters
- Adding an additional chiller/pump set to the HVAC Emergency Cooling Water System to enhance the design
- Change of the smoke removal method for three HVAC systems to increase mechanical assistance and to comply with the accepted method prescribed by the industrial standards
- Reassign the main control room HVAC exhaust fans according to their respective divisional space to simplify the physical separations of divisions
- Miscellaneous Tier 1 and Tier 2 changes to correct typographical errors, textual clarifications, and radiation zone map corrections
- Control room habitability area HVAC isolation to provide power for each pair of motor-operated isolation dampers in series from two independent class 1E divisions, instead of powering both dampers from a single division
- Deletion of the rupture disks originally intended to protect the low pressure exhaust side of the reactor core isolation cooling turbine case and exhaust line from overpressurization
- Upgrading of the fine motion control rod drive and scram piping design pressures based on tests and evaluations of water hammer effects
- Use of a high-strength material for the clad shells of the lower drywell access tunnels and reactor pressure vessel pedestal
- Correction of inconsistencies in Technical Specifications

- Increasing outside air flow rate, and the minimum depth of charcoal adsorption in emergency filters for the control room habitability area HVAC to satisfy Tier 2 requirements

ABB - CE Presentation

Mr. Stan Ritterbusch, ABB-CE, stated that, subsequent to the System 80+ FDA in July 1994, ABB-CE continued the development of design details based on the preparation of commercial bids and participation in Korean development programs. This detailed engineering effort has led to 7 design modifications, 11 "other" modifications, and 8 consistency corrections. The revisions are not required to meet Commission regulations or to maintain the validity of FSER conclusions.

The 7 design modifications are as follows:

- High-Energy Line Piping - The primary system safety relief valves are now mounted directly on the pressurizer. The pressurizer safety valve pipes were removed from the list of high-energy lines inside containment.
- Containment Spray System - The containment spray pump suction line and the crossover line to the shutdown cooling system were increased from 18 inches to 20 inches. This meets the manufacturer's recommendations.
- Safety Depressurization System Sizing - A more detailed analysis has shown that 4-inch piping (instead of 6-inch) and valves, along with an appropriately sized orifice, are adequate to meet performance requirements.
- Startup of Standby Charging Pump - The interlock that prevented the simultaneous operation of two charging pumps was removed and a flow controller was added to limit the flow to 160 gallons per minute. The modification allows continuous flow during pump changeover.
- Chemical Volume and Control System Instrumentation - The normal operating pressure for the volume control tank was changed from 20 psig to 20-50 psig.
- Shutdown Risk Evaluation - A small tank was added to the reactor coolant system hot leg so the shutdown heated junction thermocouple instruments could be located outside the reactor vessel. This will enable the water level to be monitored with the reactor vessel head removed and with increased accuracy.

- Engineered Safety Feature System Monitoring Instrumentation Range - The range for containment spray pump suction pressure was increased from 0-20 psig to 0-25 psig, and the range for the containment spray pump motor current was increased from 0-150 amps to 0-175 amps.

The 11 "other" modifications are:

- Leak-before-break analysis
- Loading combinations for component supports
- Damping valves for piping seismic analysis
- Identification of spare control element assembly locations
- Fuel inspection program
- Applicable ASME code cases
- Shutdown cooling system failure modes analysis
- Seismic margins analysis insights
- Reactor coolant system materials
- Steam generator manufacturing
- Engineered safety features system monitoring instrumentation text

The 8 consistency corrections are:

- Classification of structure, systems, and components
- Chemical volume and control system return flow
- Chemical volume and control system redundancy
- Main steam system isolation
- ECCS Technical Specifications
- Severe Intersystem LOCA description
- Engineered safety feature system monitoring instrumentation figure
- Severe accident analysis

Conclusion

As a result of its review, the Committee concluded that the proposed design changes for the ABWR and System 80+ designs do not change the conclusion reached earlier by the Committee and that the Committee continues to believe acceptable bases and requirements have been established in the applications for design certification for these two designs. The Committee issued reports to Chairman Jackson, dated August 14 and 15, 1996, on this matter.

III. SECY-96-128, "Policy and Key Technical Issues Pertaining to the Westinghouse AP600 Standardized Passive Reactor Design"
(Open)

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

Mr. Lindblad, Westinghouse Standard Plant Designs Subcommittee Chairman, noted that the Subcommittee met on July 19, 1996 with representatives of the NRC staff and Westinghouse Electric Corporation (Westinghouse) to discuss the policy and key technical issues presented in SECY-96-128.

Mr. Thomas Kenyon, NRR, introduced the presentation by outlining a chronology of the ACRS involvement in the review of the AP600 design and by summarizing the issues contained in SECY-96-128. He explained the difference between a policy issue and a technical issue, and stated that the policy issues would result in regulatory requirements.

Mr. Brian McIntyre, Westinghouse, provided the following answers to questions asked during the July 19, 1996 Subcommittee meeting:

- Placement of hydrogen igniters in the containment is described in Chapter 48 of the AP600 Probabilistic Risk Assessment (PRA).
- There is no limit in the Utility Requirements Document concerning the length of time a site can be without offsite power.

Balance Between Prevention and Mitigation of Severe Accidents

Mr. John Monninger, NRR, presented the proposed staff policy position that the AP600 design review should consider the use of nonsafety-related systems to address the uncertainties associated with the passive removal mechanisms for design basis analysis and for balance between prevention and mitigation of severe accidents. He concluded that the design should incorporate multi-barrier defense-in-depth including additional nonsafety-related accident mitigation systems.

Mr. Jim Grover, Westinghouse, stated that the AP600 design meets the acceptance criteria for design-basis accidents without reliance on nonsafety-related systems. He compared Westinghouse aerosol removal rates to removal rates in a draft Sandia National Laboratories report. Mr. Jim Scobel, Westinghouse, presented the severe accident mitigation capabilities of the AP600 design. He concluded that the addition of a containment spray system was unnecessary.

Westinghouse representatives, ACRS Members, and NRC staff discussed the balance between prevention and mitigation, defense-in-depth, use of PRA results, development of aerosol removal rates, alternative nonsafety-related systems for removing aerosols, and the prevention or mitigation of steam generator tube ruptures.

External Reactor Vessel Cooling

Mr. Monninger presented the proposed staff policy position that the design review should include reliance on in-vessel retention of the core complemented with limited analytical evaluation of ex-vessel phenomena. He explained that limited evaluations are necessary to ensure that ex-vessel releases of core material will not cause a breach of the containment. Mr. Scobel, Westinghouse, indicated agreement with the staff and described the limited deterministic evaluations of ex-vessel steam explosion and core-concrete interactions being done by Westinghouse.

Westinghouse representatives, ACRS Members, and NRC staff discussed the Risk Oriented Accident Analysis Methodology review process; the effect of reactor vessel cooling on the probability of other accidents; and the chemical reaction of molten fuel, cladding, and vessel support materials.

Post-72 Hour Action

Mr. Alan Levin, NRR, presented the proposed staff policy position that any site should be capable of sustaining all design-basis events with onsite equipment and supplies for the long term. He explained that the policy is consistent with operating plant requirements.

Mr. Terry Schulz, Westinghouse, explained the AP600 design approach for long-term safe shutdown, offsite support needs, external events, plant coping capability, and support system reliability. He concluded that the AP600 design provides reliable long-term shutdown capability and that reliance on offsite support should be permitted after 72 hours.

Westinghouse representatives, ACRS Members, and NRC staff discussed the credit that should be given for passive designs, the frequency of major hurricanes hitting nuclear power plants, NRC response team reliance on offsite equipment, the usage of compressed air by main control room operators, iodine releases, and Westinghouse assumptions concerning offsite support needs.

Spent Fuel Pool Cooling

Mr. Harold Walter, NRR, compared the AP600 spent fuel pool design with the present regulatory requirements and concluded that the

AP600 design should include onsite capability to remove spent fuel pool decay heat. Mr. Schulz, Westinghouse, described the reliance on offsite support and possible design changes, which would allow for passive makeup to a boiling spent fuel pool. He stated that the AP600 spent fuel pool design met the offsite dose criteria. The PRAs associated with spent fuel pools were then discussed.

Technical Issues

Mr. Kenyon, NRR, identified the six addition technical issues contained in SECY-96-128. Mr. Schulz stated that an offsite dose limit of 0.35 Sv total effective dose equivalent (TEDE) was more appropriate than the staff criteria of 0.25 Sv TEDE. Mr. McIntyre cautioned against allowing the policy issues to impose additional regulatory requirements.

CONCLUSION

The Committee issued a report to Chairman Jackson dated August 15, 1996, on this matter.

IV. Risk-Informed and Performance-Based Regulations and Related Matters (Open)

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

Dr. Apostolakis, Chairman of the Subcommittee on Probabilistic Risk Assessment, introduced the topic to the Committee and reviewed the discussions of the PRA Subcommittee meetings held on July 18 and August 7, 1996. He noted that all but one ACRS Member attended these Subcommittee meetings and suggested that the full ACRS review might be accomplished in less time than was allocated for this matter. He stated that the ACRS had been asked to write a letter commenting on the general approach the NRC staff is recommending.

The purpose of this meeting was to discuss the issues identified in the Staff Requirements Memorandum dated May 15, 1996, including the use of the Commission's safety goals and subsidiary goal objectives for plant-specific applications, accounting for uncertainty in risk-informed and performance-based regulation, requirements for risk neutrality versus allowance for acceptable increases in risk, and the role of performance-based regulation.

NRC Presentation

Messrs. Gary M. Holahan, NRR, and Mark A. Cunningham, RES, led the discussion for the NRC staff. They summarized the key issues discussed at the meetings of the PRA Subcommittee, July 18 and

August 7, 1996. They noted points of agreement and open issues from those discussions. Significant points made during the presentation included:

Use of Safety Goals

- Existing safety goal objectives can be used to derive acceptance guidelines for plant-specific applications.
- Subsidiary core damage frequency (CDF) objectives ($1E^{-4}$ per reactor-year) will control CDF and sequences other than those with high conditional consequences which will be controlled by an individual prompt fatality quantitative health objective (QHO) or by a large, early release frequency (LERF).
- A multi-objective top-down approach appears to be the most appropriate for definition of lower-level goals and criteria.
- Open issues include how LERF is best defined (e.g., should LERF reflect plant-specific characteristics?) and whether safety goals should be restated to address land and water contamination, CDF as a fundamental goal, and population effects.

Accounting for Uncertainty

- Some plant characteristics are modeled in PRAs while others are not. Both are sources of uncertainty. For those that are modeled, quantitative uncertainty analysis and use of mean values are appropriate. For those that are not modeled, maintaining defense-in-depth is necessary to increase confidence.

Risk Neutrality Versus Allowance for Acceptable Increases in Risk

- Acceptance guidelines can have three regions. These regions may be different for each plant.
- Difficulties exist in the review of "packaged" requests for changes to the current licensing basis (CLB).
- Open issues include: whether plant risk should be allowed to increase to acceptance guidelines or be limited to some fraction and whether licensees for plants where the calculated total risk is higher than the acceptable guidelines should be permitted to make changes to CLB that increase plant risk.

Performance-Based Regulation

- Where practical, performance-based strategies should be included in the implementation and monitoring phase of the risk-informed, decision-making process.
- An open issue remains as to whether the Commission should explicitly address the scope and role of performance-based regulation in the regulatory process.

The ACRS and staff extensively discussed the use of safety goals and subsidiary objectives. Several Members expressed agreement with the points made by the staff regarding CDF and LERF. However, there was extensive discussion on how to best define LERF. Dr. Catton questioned whether it is defined as that amount which gets out of containment. The staff stated that is one way to do it. Dr. Kress suggested that it might be defined in terms of TEDE. The staff stated that it could be expressed in terms of a containment failure, time, and then extended to dose. Dr. Powers suggested that the staff may have already defined a comparable value in the proposed rulemaking amendments to 10 CFR Part 60 for waste repository storage. Dr. Apostolakis questioned the site characteristics, such as meteorology, that would affect a large, early release. The staff provided some examples but reiterated that it was an open issue to be resolved.

The ACRS and staff discussed a number of approaches and options to address uncertainty. There was general agreement that this was a difficult issue to address in making regulatory decisions. Drs. Apostolakis and Kress expressed agreement with the staff's view that uncertainties should be quantified and that the use of mean values was appropriate except for broad distributions. They also expressed agreement with pursuing options to resolve uncertainty for characteristics and phenomena that are not modeled.

The ACRS and staff discussed the concept of the "three region" approach described in the Electric Power Research Institute's Probabilistic Safety Assessment (PSA) Applications Guide. Dr. Seale questioned the linearity of the model and the "fuzziness" of the partitioned regions. Dr. Powers stated that the NRC and industry would likely establish different boundaries. The staff noted that using the three-region model may be fairly easy for individual submittals but emphasized that acceptance of "packaged" requests, where some portions increase risk, would be more complex. Drs. Kress, Apostolakis, and Seale expressed the view that decisions should be based on an assessment of total risk that would allow for some increases in risk for individual portions of a submittal.

The ACRS and staff discussed the staff's 6-step approach to integrating performance-based strategies into the implementation and monitoring phase of risk-informed decision-making. Dr. Seale expressed the view that it was the responsibility of both the applicant and the NRC. The staff noted that some performance-based approaches may require Commission approval and may also require rulemaking to address legal issues.

Overall, the ACRS Members expressed general agreement with the points raised by the staff. The Committee decided to address the issues related to the pilot applications at a future meeting.

Conclusion

The Committee issued a report to Chairman Jackson, dated August 15, 1996, on this matter.

V. Spent Fuel Pool Cooling Issues (Open)

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

Introduction

Dr. Kress, Chairman of the Onsite Fuel Storage and Decommissioning Subcommittee, summarized the issues and noted that the Committee had previously heard presentations on this subject. Dr. Kress believed that the issues of concern to the Committee were the risk implications of the scenario, the generic application to other facilities, and whether the scenario should be part of the design bases for the Susquehanna Steam Electric Station. He further stated that this briefing was for information only and no Committee report was required.

NRR Presentation

Mr. Gary Holahan, Director, Division of Systems Safety and Analysis (DSSA), introduced the staff presentation and provided a background discussion on spent fuel pool cooling events, 10 CFR Part 21 notification, and the relationship between the spent fuel pool and design basis accidents at operating reactors. He stated that there were three generic issues to be discussed in this presentation. The first concerned the results of the survey conducted by NRR with the assistance provided by the Regions to obtain information on the current licensing requirements and operating practices at the operating reactors. Additionally, clarification was needed as to whether the core off-load practices were in conformance with their licensing basis. This activity has been completed, even though a

number of discrepancies were identified that were not safety significant.

The second issue was to perform a more detailed technical review to collect information on the design features as well as operational practices to determine the potential weaknesses. The third issue was that the Executive Director for Operations has asked the Office of Analysis and Evaluation of Operational Data (AEOD) to perform a study on the spent fuel cooling issues that will be covered separately by AEOD.

Mr. Steven Jones, NRR, presented the results and conclusions of the survey conducted by NRR, assisted by the regions, regarding the spent fuel pool cooling issues. This survey covered two activities that measured the extent to which problems encountered at Millstone Unit 1, regarding compliance with the Final Safety Analysis Report (FSAR), had occurred at other facilities. The first activity, which was the focus of the survey, compared current refueling practices against the licensing basis (drawn from the FSAR, Technical Specifications, license amendments, and other docketed correspondence) for decay heat removal from spent fuel pools for operating plants. The second activity was to review the licensees' compliance with other revised NRC inspection guidance.

During the course of this survey, the staff determined that nine sites (fifteen units) needed to modify their licensing bases or plant practices, pursuant to 10 CFR 50.59 or 50.90, to ensure that their reload practices were in compliance with their licensing basis. This was an indication that, similar to Millstone Unit 1, a number of other plants had previously performed full core off-loads that were inconsistent with their licensing basis. The staff concluded that, based on the information reviewed, the specific licensee actions taken and commitments made, ensure that core off-load practices are consistent with the spent fuel pool decay heat removal licensing basis for all plants or will be, prior to their next refueling outage. Further, the staff concluded that the spent fuel pool cooling systems and backup cooling capability at the existing plants are adequate. Systems design features and licensees' operating practices were found to be adequate in ensuring protection of public health and safety.

AEOD Presentation

Mr. Jose Ibarra, AEOD, presented the overview and the plan of the study on the spent fuel cooling issues. This study is being performed at the request of the Executive Director for Operations and is scheduled to be completed by the end of September 1996. Mr. Ibarra stated that AEOD plans to use the existing analyses, evaluations, and any other information available related to spent fuel pool issues.

Conclusion

This briefing was for information only. No Committee action was required. The Committee plans to discuss the results of this AEOD study when they are available.

VI. EXECUTIVE SESSION (Open)

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

A. Reports and Memoranda

Design Changes Proposed by ASEA Brown Boveri - Combustion Engineering Relating to the Certification of the System 80+ Design (Report to Shirley Ann Jackson, Chairman, NRC, from T.S. Kress, Chairman, ACRS, dated August 14, 1996.)

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Risk-Informed, Performance-Based Regulation and Related Matters (Report to Shirley Ann Jackson, Chairman, NRC, from T.S. Kress, Chairman, ACRS, dated August 15, 1996.)

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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 (EDO) dated June 21, 1996, responding to ACRS comments and recommendations included in the ACRS report dated June 6, 1996, concerning Regulatory Guidance Documents Related to Digital Instrumentation and Control Systems.

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

- The Committee discussed the response from the NRC Executive Director for Operations dated June 28, 1996, responding to ACRS comments and recommendations included in the ACRS report dated June 4, 1996, concerning Proposed Rule on Shutdown Operations.

The Committee decided that it would continue its discussion of this issue.

- The Committee discussed the response from the NRC Executive Director for Operations dated July 18, 1996, responding to ACRS comments and recommendations included in the ACRS report dated June 6, 1996, concerning Potential Use of IPE/IPEEE Results to Compare the Risk of the Current Population of Plants with the Safety Goals.

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

- The Committee discussed the response from the NRC Executive Director for Operations dated July 26, 1996, responding to ACRS comments and recommendations included in the ACRS report dated June 28, 1996, concerning Severe Accident Research.

During its September 12-13, 1996 meeting, the Committee is scheduled to discuss with the NRC staff the capability of NRC codes to assess the likelihood of steam generator tube ruptures during a severe accident. Subsequent to this discussion, the Committee plans to provide comments concerning this matter.

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 August 6, 1996.

The following items were discussed:

1. MEETING WITH CHAIRMAN JACKSON

Dr. Larkins met on August 1, 1996 with Chairman Jackson. Principal topics of discussion were ACRS/ACNW FY '97 and '98 budget, status of Chairman's items of interest, international activities, and Committee composition.

RECOMMENDATION

The Subcommittee recommended that Dr. Larkins brief the Full Committee on his meeting with Chairman Jackson.

2. INTERNATIONAL

- The ACRS received a fax from Dr. Töpfer, of the German advisory committee, RSK, requesting a meeting in September. In a telephone discussion, Dr. Töpfer suggested September 16 and Dr. Larkins suggested that September 11 would be preferable.
- The ACRS Office received an e-mail message from the Canadian Advisory Committee on Nuclear Safety (ACNS) commenting on the schedule proposed by the ACRS for the ACRS/ACNS meeting on October 9, 1996. Subject to ACRS approval, a revised schedule will be prepared and sent to ACNS. A final agenda will be available at the September ACRS meeting.
- It has been suggested that the Quadripartite Meeting be held in the spring of 1997, rather than the fall. A fax has been sent to Dr. Togo requesting proposed dates for this meeting.

RECOMMENDATIONS

- The Subcommittee recommended that ACRS members be asked about their availability for a meeting with the German RSK Committee on both September 11 and 16, and that a reply be faxed to the RSK.
- Based on the e-mail message from the Canadian ACNS, a revised agenda for the meeting was prepared. Members approved a final agenda that will be sent to the ACNS.

3. ACRS SUBCOMMITTEE MEETING

A Subcommittee Meeting for ACRS Members and ACRS senior management has now been scheduled for October 17-18, 1996, at the Royal Sonesta Hotel in Boston, MA, with hotel rooms reserved for members and staff on October 16 and 17.

4. INTERACTIONS WITH RES

- Drs. Kress and Larkins met with Dr. Morrison, Director of RES, to discuss the roles of ACRS and NSRRC (Nuclear Safety Research Review Committee) in reviewing research activities.
- RES plans to meet with the French on September 30 and October 1, 1996 (in France) to discuss the proposed thermal hydraulic research program at the CATHARE test facility. The results of this research will be used in revising the NRC thermal hydraulic codes. RES has requested Dr. Catton's participation in this meeting.
- In its June 24, 1996, report to Chairman Jackson, the Committee commented that the present codes RELAP/SCDAP are not capable of addressing the steam generator tube temperature distributions under severe accident conditions. This comment was made without prior discussion with the appropriate NRC staff. Consequently, the staff is questioning the basis for this comment.

RECOMMENDATIONS

- The Subcommittee recommended that both Dr. Catton and Mr. Paul Boehnert attend the meeting in France if possible.
- The Subcommittee recommended that the cognizant Subcommittee Chairman and the ACRS staff review the Committee's conclusions and recommendations to bring to the Members' attention those subjects that have not yet been discussed with the appropriate NRC staff.

5. TRAVEL

The following travel requests have been received:

- Dr. Catton requested approval to attend the International Conference on Performance-Based Codes and Fire Safety Design on September 24-26, 1996, in Ottawa, Ontario (pp. 13-18).
- Drs. Apostolakis and Fontana requested approval to attend PSA '96 on September 29-October 3, 1996, in Park City, Utah (pp. 19-20).

RECOMMENDATIONS

The Subcommittee recommended that the above travel requests be approved.

6. MEMBERS' ISSUES

No members' issues were raised.

D. Future Meeting Agenda

Appendix IV summarizes the proposed items endorsed by the Committee for the 434th ACRS Meeting, September 12-14, 1996.

The 433rd ACRS meeting was adjourned at 1:00 p.m. on Saturday, August 10, 1996.

the applicant on a material issue of law or fact. Contentions shall be limited to matters within the scope of the amendment under consideration. The contention must be one which, if proven, would entitle the petitioner to relief. A petitioner who fails to file such a supplement which satisfies these requirements with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing, including the opportunity to present evidence and cross-examine witnesses.

If the amendment is issued before the expiration of the 30-day hearing period, the Commission will make a final determination on the issue of no significant hazards consideration. If a hearing is requested, the final determination will serve to decide when the hearing is held.

If the final determination is that the amendment request involves no significant hazards consideration, the Commission may issue the amendment and make it immediately effective, notwithstanding the request for a hearing. Any hearing held would take place after issuance of the amendment.

If the final determination is that the amendment request involves a significant hazards consideration, any hearing held would take place before the issuance of any amendment.

A request for a hearing or a petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attention: Docketing and Services Branch, or may be delivered to the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, by the above date. Where petitions are filed during the last 10 days of the notice period, it is requested that the petitioner promptly so inform the Commission by a toll-free telephone call to Western Union at 1 (800) 245-5100 (in Missouri 1 (800) 342-6700). The Western Union operator should be given Detagram Identification Number N1023 and the following message addressed to Herbert N. Berkow: petitioner's name and telephone number, date petition was mailed, plant name, and publication date and page number of this Federal Register notice. A copy of the petition should also be sent to the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to M. Stanford Blanton, Esq., Balch and Bingham, P.O.

Box 306, 1710 Sixth Avenue, Birmingham, Alabama, attorney for the licensee.

Nontimely filings of petitions for leave to intervene, amended petitions, supplemental petitions and/or requests for hearing will not be entertained absent a determination by the Commission, the presiding officer or the presiding Atomic Safety and Licensing Board that the petition and/or request should be granted based upon a balancing of the factors specified in 10 CFR 2.714(a)(1)(i)-(v) and 2.714(d).

For further details with respect to this action, see the application for amendment dated June 24, 1996, which is available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, and at the local public document room, located at the Houston-Love Memorial Library, 212 W. Burdeshaw Street, P.O. Box 1366, Dothan, Alabama.

Dated at Rockville, Maryland, this 27th day of June 1996.

For the Nuclear Regulatory Commission,

Byron L. Siegel,

Project Manager, Project Directorate II-2, Division of Reactor Projects—II, Office of Nuclear Reactor Regulation.

(FR Doc. 96-16964 Filed 7-2-96; 8:45 am)

BILLING CODE 7550-01-P

Boraflex Degradation in Spent Fuel Pool Storage Racks; Issued

AGENCY: Nuclear Regulatory Commission.

ACTION: Notice of Issuance.

SUMMARY: The Nuclear Regulatory Commission (NRC) has issued Generic Letter 96-04 to notify all licensees of nuclear power reactors about problems that have been encountered with using Boraflex in spent fuel storage racks for the nonproductive absorption of neutrons, and for licensees that use Boraflex, to request implementation of certain actions and require the submittal of a written response. This generic letter is available in the NRC Public Document Room under accession number 9606240132.

DATES: The generic letter was issued on June 26, 1996.

ADDRESSEES: Not applicable.

FOR FURTHER INFORMATION CONTACT:

Laurence I. Kopp at (301) 415-2879.

SUPPLEMENTARY INFORMATION: The information that is being requested will enable the NRC staff to determine whether licensees are complying with the current licensing basis for the facility with respect to GDC 62 for the

prevention of criticality in fuel storage and handling, and 5-percent subcriticality margins that are either contained in the technical specifications, or committed to in the updated FSARs, of plants containing Boraflex in the spent fuel storage racks. The staff is not establishing a new position for such compliance in this generic letter.

Dated at Rockville, Maryland, this 26th day of June, 1996.

For the Nuclear Regulatory Commission,

Elinor G. Adamsen,

Deputy Director, Division of Reactor Program Management, Office of Nuclear Reactor Regulation.

(FR Doc. 96-16963 Filed 7-2-96; 8:45 am)

BILLING CODE 7550-01-P

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 August 8-10, 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, August 8, 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 on 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.: Supplemental Safety Evaluation Report for Evolutionary Plant Designs

(Open/Closed)—The Committee will hear presentations by and hold discussions with representatives of the NRC staff, General Electric Nuclear Energy (GENE), and ABB-Combustion Engineering (ABB-CE) regarding the proposed changes to the GENE Advanced Boiling Water Reactor (ABWR) and ABB-CE System 80+ evolutionary plant designs and the associated NRC staff Safety Evaluation Report. Other interested parties will participate, as appropriate.

A portion of this session may be closed to discuss GENE and ABB-CE proprietary information applicable to this matter.



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

July 18, 1996

SCHEDULE AND OUTLINE FOR DISCUSSION
433rd ACRS MEETING
AUGUST 8-10, 1996

Thursday, August 8, 1996, Conference Room 2B3, Two White Flint North,
Rockville, Maryland

1) 8:30 - 8:45 A.M.

Opening Remarks by the ACRS Chairman (Open)
1.1) Opening Statement (TSK/SD)
1.2) Items of Current Interest
(TSK/JTL/SD)
1.3) Priorities for Preparation of ACRS
Reports (TSK/SD)

2) 8:45 - 10:45 A.M.

Supplemental Safety Evaluation Reports for
Evolutionary Plant Designs (Open/Closed)
(WJL/MME)
2.1) Remarks by the Subcommittee Chairman
2.2) Briefing by and discussions with
representatives of the NRC staff,
General Electric Nuclear Energy
(GENE), and ABB-Combustion
Engineering (ABB-CE) regarding the
proposed changes to the GENE ABWR
and CE System 80+ evolutionary plant
designs and the associated NRC staff
Safety Evaluation Reports.

Other interested parties will participate
as appropriate.

[Note: A portion of this session may be
closed to discuss GENE and ABB-CE propri-
etary information applicable to this matter]

10:45 - 11:00 A.M.

BREAK

3) 11:00 - 1:00⁴⁰ P.M.

SECY-96-128, "Policy and Key Technical
Issues Pertaining to the Westinghouse
AP600 Standardized Passive Reactor Design"
(Open/Closed) (WJL/NFD)
3.1) Remarks by the Subcommittee Chairman

{ TRANSCRIBED PORTIONS OF THE MEETING }

- 3.2) Briefing by and discussions with representatives of the NRC staff and Westinghouse Electric Corporation regarding SECY-96-128, which includes proposed staff positions on three policy issues: Prevention and Mitigation of Severe Accidents, Post-72-Hour Actions, and External Reactor Vessel Cooling, as well as the status of seven key technical issues, pertaining to the AP600 passive plant design.

Other interested parties will participate, as appropriate.

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

⁴⁰ 1:00 - ³⁵ 2:00 P.M.

LUNCH

³⁵ 2:00 - ^{3:52} ~~4:00~~ P.M.

Risk-Informed and Performance-Based Regulations and Related Matters (Open) (GA/MTM/BH)

- 4.1) Remarks by the Subcommittee Chairman
4.2) Briefing by and discussions with representatives of the NRC staff regarding several issues raised in the Staff Requirements Memoranda dated May 15 and June 11, 1996, including:

- Role of performance-based regulation in the PRA Implementation Plan
- Plant-specific application of safety goals
- Requirement for risk neutrality versus the allowance for an acceptable increase in risk
- Risk-informed inservice testing and inservice inspection requirements
- Pilot applications for risk-informed and performance-based regulations

Representatives of the nuclear industry will participate, as appropriate.

^{3:52}
4:30 - 4:45 P.M.

BREAK

5) ¹⁰ 4:45 - ^{6:30} 7:00 P.M.

Preparation of ACRS Reports (Open)

Discussion of proposed ACRS reports on:

- 5.1) Supplemental Safety Evaluation Reports for Evolutionary Plant Designs (WJL/MME)
- 5.2) Steam Generator Tube Issues (RLS/NFD)
- 5.3) Risk-Informed and Performance-Based Regulations and Related Matters (GA/MTM/BH)

Friday, August 9, 1996, Conference Room 2B3, Two White Flint North, Rockville, Maryland

6) 8:30 - 8:35 A.M.

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

7) 8:35 - ¹⁷ 9:00 A.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.

8) ¹⁷ 9:00 - 9:30 A.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 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.]

9) 9:30 - 11:00⁷ A.M.

Spent Fuel Pool Cooling Issues (Open)
(TSK/AS)

- 9.1) Remarks by the Subcommittee Chairman
- 9.2) Briefing by and discussions with representatives of the NRC staff regarding the results of the staff review of the safety issues associated with spent fuel pool cooling.

Representatives of the nuclear industry will participate, as appropriate.

11:00⁷ - 11:15²⁰ A.M.

BREAK

10) 11:15²⁰ - 11:45 A.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.

11:45 - 1:00¹⁰ P.M.

LUNCH

11) 1:00¹¹ - 7:00 P.M.
(3:00 - 3:15 BREAK)

Planning and Procedures Subcommittee (cont.)

Preparation of ACRS Reports (Open)

Discussion of proposed ACRS reports on:

- 11.1) Supplemental Safety Evaluation Reports for Evolutionary Plant Designs (WJL/MME)
- 11.2) Risk-Informed and Performance-Based Regulations and Related Matters (GA/MIM)
- 11.3) SECY-96-128, "Policy and Key Technical Issues Pertaining to the Westinghouse AP600 Standardized Passive Reactor Design" (WJL/NFD)
- 11.4) Spent Fuel Pool Cooling Issues (TSK/AS)
- 11.5) Steam Generator Tube Issues (RLS/NFD/BH)

Saturday, August 10, 1996, Conference Room 2B3, Two White Flint North,
Rockville, Maryland

12) 8:30⁰ - 12:30 P.M.

Preparation of ACRS Reports (Open)
Continue discussion of proposed ACRS reports
listed under Item 11.

13) 12:30 - 1:00 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 III: MEETING ATTENDEES

433rd FULL COMMITTEE MEETING
August 8, 1996
NRC Staff

NAME	NRC ORGANIZATION
Jerry Wilson	NRR/DRPM
Son Ninil	NRR/DRPM
David Dize	NRR/DSSA/SRXB
Keith Mortensen	NRR/DRCH/HICB
Stu Magruder	NRR/DRPM/PGEB
Larry Kopp	NRR/DSSA/SRYB
D.C. Scalette	NRR/DRPM/PDST
Ted Quay	NRR/DRPM/PDST
Tom Boyce	NRR/DISP/PIPB
Alan Levin	NRR/DSSA/SRXB
Len Soffer	EDO
Jay Lee	NRR/DRPM/PERB
Roger Pederser	NRR/DRPM/PERB
Jin-sien Guo	NRR/DSSA/SPLB
Robert M. Weisman	OGC/Hearings and Enforcemnet
Angela T. Chu	NRR/DPPA/TSB
Terence L. Chan	OCM/GD
Andre Drozd	NRR/DSSA/SCSB
George Georgia	NRR/DE/ESGB
Joe Sebrosky	NRR/DRPM/PDST
Thomas Renyon	NRR/DRPM/PDST
Chey Yang Li	NRR/DSSA/SPSB
Y.S. Chiang	NRR/DE
J.H. Raval	NRR/SPLB
Jeff Holmes	NRR/SPLB
Ronald Young	NRR/SPLB
Diane Jackson	NRR/PDST
Barry Zalcman	NRR/DSSA/SPSB
Marie Pohida	NRR/DSSA/SPSB
Tom Bergman	NRR/DRCH/HQMB
Juan Pevalta	NRR/DRCH/HQMB
John Manning	NRR/SCSB
Tony Hsia	NRR/SPSB
Gareth Parry	NRR/DSSA
Adel El-Bassioni	RES/DST/PRAB
Dave Fischer	NRR/DE/EMEB
Ann Ramey-Smith	RES/DST/PRAB
Lee Higgings	OIG
Bob Gramm	NRR/DRCH
S. Dinsmore	NRR/SPSB
R. Isesia	NRR/SPSB
R. Wessman	NRR/EMEB

433rd FULL COMMITTEE MEETING
August 9, 1996
NRC Staff

NAME	NRC ORGANIZATION
Joel Kramer	RES/DST/CIHFB
Steven R. Jones	NRR/DSSA/SPLB
Gail H. Marcus	NRR/PD33
George Hubbard	NRR/SPLB
Laura A. Dudes	NRR/SPLB
Jose Ibarra	AEOD
Hal Ornstein	AEOD
L.B. Marsh	NRR/SPLB
R. Barrett	AEOD/SPD
Warren Lyon	NRR/SRXB
Sada Pullani	AEOD/SPD
Kulin Desai	NRR/SRXB
Chris Grattan	NRR/DSSA
Jim Costello	RES/DET
Len Soffer	EDO

433rd FULL COMMITTEE MEETING
August 8, 1996
Other Agencies

NAME	AFFILIATION
John Trotter	Polestar Appl. Technology
Alan Beard	GE Nuclear Energy
Warren Fujimoto	none
Charles Thompson	DOE
Roger Huston	TVA
Stan Ritterbusch	ABB-CE
Terrel Samuels	ABB-CE
C.B. Brinkman	ABB-CE
Terry Schulz	Westinghouse
Jim Grover	Westinghouse
Jim Scobel	Westinghouse
L.B. Marsh	NRC/DSSA
R. Emch	NRC/DRPM
M. Fleishman	NRC/OCMKR
Barton Z. Cowan	ESCM (w)
Amy Cubbage	NRC/SRXB
C.W. Rowley	The Wesley Corp/ASME
Toshipuki Zama	TEPCO
Page Hegus	GE Nuclear Energy
H.G. Hamzehee	TV Electric
John Trotten	Polestar Applied Technology
Steve Mixon	NUS Corp
Roger Huston	TVA
Paige Negus	GE

APPENDIX IV: FUTURE AGENDA

The Committee agreed to consider the following during the 434th ACRS Meeting, September 12-14, 1996:

THURSDAY, SEPTEMBER 12, 1996, CONFERENCE ROOM 2B3, TWO WHITE
FLINT NORTH, ROCKVILLE, MARYLAND

- 1) 8:30 - 8:45 A.M. Opening Remarks by the ACRS Chairman
(Open)

- 1.1) Opening Statement (TSK/SD)
- 1.2) Items of Current Interest (TSK/JTL/SD)
- 1.3) Priorities for Preparation of ACRS Reports (TSK/SD)

- 2) 8:45 - 10:45 A.M. Adequacy of the Codes to Analyze Steam
Generator Tube Temperature Distributions
During Severe Accidents (Open) (MHF/NFD)

- 2.1) Remarks by the Subcommittee Chairman
- 2.2) Briefing by and discussions with representatives of the NRC staff regarding the adequacy of the NRC codes to analyze steam generator tube temperature distributions during severe-accident conditions.

Representatives of the industry will participate, as appropriate.

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

- 3) 11:00 - 11:15 A.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.

- 4) 11:15 - 11:45 A.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.

[Note: A portion of this session may be closed to discuss 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.]

- 5) 11:45 - 12:15 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.

12:15 - 1:15 P.M. LUNCH

- 6) 1:15 - 2:45 P.M. Indian Point Unit 3 (Open) (JJB/MTM)
6.1) Remarks by the Subcommittee Chairman
6.2) Briefing by and discussions with representatives of the Indian Point Unit 3 licensee (New York Power Authority) regarding the resolution of issues that led to the shutdown of Indian Point Unit 3, and the status of resolution of new issues since the restart of the plant in June 1995.

Representatives of the NRC staff will participate.

2:45 - 3:00 P.M. BREAK

- 7) 3:00 - 5:00 P.M. Preparation of ACRS Report (Open)
Discussion of proposed ACRS report on:
7.1) Adequacy of NRC Codes to Analyze Steam Generator Tube Temperature Distributions During Severe Accidents (MHF/NFD)

5:00 - 5:15 P.M. BREAK

- 8) 5:15 - 7:00 P.M. Strategic Planning (Open) (TSK/JTL)
Discussion of items of significant
importance to NRC, including rebaselining
of the Committee activities for FY 97.

FRIDAY, SEPTEMBER 13, 1996, CONFERENCE ROOM 2B3, TWO WHITE FLINT
NORTH, ROCKVILLE, MARYLAND

- 9) 8:30 - 8:35 A.M. Opening Remarks by the ACRS Chairman
(Open)

(TSK/SD)

- 10) 8:35 - 10:30 A.M. Meeting with the Director of the NRC
Office of Nuclear Regulatory Research
(RES) (Open)

(TSK/MME)

- 10.1) Remarks by the ACRS Chairman
10.2) Briefing by and discussions with Mr.
David Morrison, RES Director, on items
of mutual interest including:

- Overview of the NRC research
program and budget
- Research priorities
- NRC Thermal Hydraulic Code
Activities
- International cooperative research
program
- RES plans and priorities for providing
information necessary for the development of
risk-informed and performance-based regula-
tions by expanding the scope of NUREG-1150
work to include Level 3 PRA for shutdown
modes of operation, fire, and other external
events; rationale for these plans and priori-
ties; ongoing and/or proposed research to do
such PRAs for other modes of operation

10:30 - 10:45 A.M. BREAK

- 11) 10:45 - 12:00 NOON Loss of Feedwater Event at Arkansas
Nuclear One Unit 1 (Open) (JJB/AS)

11.1) Remarks by the Subcommittee
Chairman

11.2) Briefing by and discussions with representatives of the NRC staff regarding the findings and conclusions of the Augmented Inspection Team which investigated the May 19, 1996 loss of feedwater event at Arkansas Nuclear One Unit 1.

Representatives of the licensee will participate, as appropriate.

12:00 - 1:15 P.M. LUNCH

- 12) 1:15 - 3:00 P.M. Preparation of ACRS Report (Open)
Discussion of proposed ACRS report
on:
13.1) Adequacy of NRC Codes to Analyze
Steam Generator Tube Temperature
Distributions During Severe
Accidents (MHF/NFD)

- 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

[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

DOCUMENTS

ITEM NO.

- 1 Opening Remarks by the ACRS Chairman
 1. Items of Interest, dated August 8-10, 1996
- 2 Supplemental Safety Evaluation Reports for Evolutionary Plant Designs
 2. Design Certification Reviews, NRR Staff Presentation, dated August 8, 1996, presented by Jerry Wilson [Viewgraphs]
 3. Proposed Changes to the GE ABWR Design Control Document, dated August 8, 1996, presented by J. Alan Beard, GE Nuclear Energy, ABWR Certification [Viewgraphs]
 4. System 80+ Design Control Document Revisions, dated August 8, 1996, presented by Stanley E. Ritterbusch, Manager, Standard Plant Licensing, ABB Combustion Engineering Nuclear Systems [Viewgraphs]
- 3 SECY-96-128, "Policy and Key Technical Issues Pertaining to the Westinghouse AP600 Standardized Passive Reactor Design"
 5. Policy and Key Technical Issues Pertaining to the Westinghouse AP600 Design, dated August 8, 1996, presented by Thomas J. Kenyon, NRR [Viewgraphs]
 6. AP600 Technical and Policy Issues, SECY-96-128, dated August 8, 1996, presented by Jim Grover, Brian McIntyre, Terry Schulz, and Jim Scobel, Westinghouse Electric Corporation.
- 4 Risk-Informed and Performance-Based Regulations and Related Matters
 7. Issues Related to the Risk-Informed Regulatory Process, dated August 8, 1996, presented by Gary M. Holahan, NRR, and Mark A. Cunningham, RES [Viewgraphs].
- 7 Reconciliation of ACRS Comments and Recommendations

8. Reconciliation of ACRS Comments and Recommendations
[Handout #7.1]

8 Report of the Planning and Procedures Subcommittee

9. Final Draft Minutes of Planning and Procedures
Subcommittee Meeting - August 6, 1996 [Handout #8.1]

9 Spent Fuel Pool Cooling Issues

10. NRC Staff Presentation to the Full ACRS: Resolution of
the Spent Fuel Pool Action Plan, dated August 9, 1996,
presented by Steven R. Jones [Viewgraphs].
11. AEOD Spent Fuel Study, dated August 9, 1996, presented by
Jose G. Ibarra [Viewgraphs].

10 Future ACRS Activities

12. Future ACRS Activities - 434th ACRS Meeting, September
12-14, 1996 [Handout #10.1]

MEETING NOTEBOOK CONTENTS

TAB

DOCUMENTS

2. Supplemental Safety Evaluation Reports for Evolutionary Plant Designs

1. Table of Contents
2. Tentative Agenda
3. Status Report
4. Letter from Joseph L. Quirk, ABWR Licensing Manager, General Electric Company, to Dennis M. Crutchfield, NRC, dated April 16, 1996.
5. Letter from J. Ernest Wilkins, Jr., Chairman, ACRS, to Ivan Selin, Chairman, NRC, dated April 14, 1994: Report on Safety Aspects of the General Electric Nuclear Energy Application for Certification of the Advanced Boiling Water Reactor Design.
6. Memorandum from Brian K. Grimes, NRR, to John T. Larkins, ACRS, dated July 1, 1996: Advanced Boiling Water Reactor Design Changes.
7. Memorandum from John C. Hoyle, Secretary, NRC, to John T. Larkins, ACRS, dated June 11, 1996: Staff Requirements - Meeting with ACRS, Friday, May 24, 1996.
8. Memorandum from C.B. Brinkman, ABB Combustion Engineering Nuclear Systems, to Document Control Desk, NRC, dated June 27, 1996: System 80+ Standard Plant Design Changes.
9. Letter from T. S. Kress, Chairman, ACRS, to Ivan Selin, Chairman, NRC, dated May 11, 1994: Report on the Safety Aspects of the ASEA Brown Boveri - Combustion Engineering Application for Certification of the System 80+ Standard Plant Design.
10. Memorandum from Brian K. Grimes, NRR, to John T. Larkins, ACRS, dated July 1, 1996: System 80+ Design Changes.
11. Memorandum from C.B. Brinkman, ABB Combustion Engineering Nuclear Systems, to Document Control Desk, NRC, dated July 17, 1996: System 80+ Standard Plant Design Changes.
12. Memorandum from Rick Sherry, ACRS Senior Fellow, to Medhat El-Zeftawy, ACRS Senior Staff Engineer, dated July 25, 1996: Advanced Boiling Water Reactor Design Changes.
13. Memorandum from August W. Cronenberg, ACRS Senior ACRS Fellow, to ACRS Members, dated July 24, 1996: Changes to System 80+ Design Documentation.

3. SECY-96-128, "Policy and Key Technical Issues Pertaining to the Westinghouse AP600 Standardized Passive Reactor Design"

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15. Agenda

16. Status Report, dated August 8, 1996
17. SECY-96-128, dated June 12, 1996: Policy and Key Technical Issues Pertaining to the Westinghouse AP600 Standardized Passive Reactor Design.
18. Letter from T. S. Kress, Chairman, ACRS, to James M. Taylor, Executive Director for Operations, NRC, dated June 15, 1995: Proposed Commission Paper on Technical Issues Pertaining to the Westinghouse AP600 Standardized Passive Reactor Design.
19. Letter from James M. Taylor, Executive Director for Operations, NRC, to T. S. Kress, Chairman, ACRS, dated August 8, 1995: Response to ACRS Comments on Commission Paper on Technical Issues Pertaining to the Westinghouse AP600 Design.
20. Memorandum from August W. Cronenberg, ACRS Senior ACRS Fellow, to ACRS Members and Staff, dated July 2, 1996: NRC Staff and Westinghouse Positions on AP600 Design Review Issues.

4 Risk-Informed and Performance-Based Regulations and Related Matters

21. Table of Contents
22. Proposed Schedule
23. Status Report
24. Memorandum from John C. Hoyle, Secretary, NRC, to John T. Larkins, ACRS, dated June 11, 1996: Staff Requirements - Meeting with ACRS, Friday, May 24, 1996.
25. Memorandum from John C. Hoyle, Secretary, NRC, to James M. Taylor, Executive Director for Operations, NRC, dated May 15, 1996: Staff Requirements - Briefing on PRA Implementation Plan, 10:00 A.M., Thursday, April 4, 1996.
26. Letter from Shirley A. Jackson, Chairman, NRC, to T.S. Kress, Chairman, ACRS, dated July 18, 1996: Potential Use of IPE/IPEEE Results to Compare the Risk of the Current Population of Plants with the Safety Goals.
27. Letter from T. S. Kress, Chairman, ACRS, to Shirley A. Jackson, Chairman, NRC, dated June 6, 1996: Potential Use of IPE/IPEEE Results to Compare the Risk of the Current Population of Plants with the Safety Goals.
28. Letter from Shirley A. Jackson, Chairman, NRC, to T.S. Kress, Chairman, ACRS, dated June 3, 1996: Probabilistic Risk Assessment Framework, Pilot Applications, and Next Steps to Expand the Use of PRA in the Regulatory Decision-Making Process.
29. Letter from T. S. Kress, Chairman, ACRS, to Shirley A. Jackson, Chairman, NRC, dated April 23, 1996: Probabilistic Risk Assessment Framework, Pilot Applications, and Next Steps to Expand the Use of PRA in the Regulatory Decision-Making Process.

30. Memorandum from James M. Taylor, Executive Director for Operations, NRC, to Shirley A. Jackson, Chairman, NRC, and Commissioners Rogers and Dicus, NRC, dated June 20, 1996: Status Update of the Agency-Wide Implementation Plan for Probabilistic Risk Assessment (PRA) (From March 1, 1996 to May 31, 1996) and briefing viewgraphs.

9 Spent Fuel Pool Cooling Issues

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32. Proposed Schedule
33. Status Report, dated August 9, 1996
34. Memorandum from James M. Taylor, Executive Director for Operations, NRC, to Shirley A. Jackson, Chairman, NRC, and Commissioners Rogers and Dicus, NRC, dated July 29, 1996: Resolution of Spent Fuel Storage Pool Action Plan Issues.
35. Memorandum from Edward L. Jordan, AEOD, to James M. Taylor, Executive Director for Operations, NRC, dated February 29, 1996: Plan and Schedule for Spent Fuel Pool Study.