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WASHINGTON, D.C.

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subsections (c)(4), (5) and (9)(B) of section 552b of Title 5, United States Code.

1. Date: January 12, 1987
   Time: 8:00 a.m. to 5:00 p.m.
   Room: 415
   Program: This meeting will review applications submitted for Museums and Historical Organizations, submitted to General Programs, for projects beginning after July 1, 1987.
2. Date: January 15–16, 1987
   Time: 8:00 a.m. to 5:00 p.m.
   Room: 415
   Program: This meeting will review applications submitted for Museums and Historical Organizations, submitted to General Programs, for projects beginning after July 1, 1987.
3. Date: January 22–23, 1987
   Time: 8:00 a.m. to 5:00 p.m.
   Room: 415
   Program: This meeting will review applications submitted for Museums and Historical Organizations, submitted to General Programs, for projects beginning after July 1, 1987.
4. Date: January 29–30, 1987
   Time: 8:00 a.m. to 5:00 p.m.
   Room: 415
   Program: This meeting will review applications submitted for Museums and Historical Organizations submitted to General Programs, for projects beginning after July 1, 1987.

Stephen J. McCleary,
Advisory Committee Management Officer.

[FR Doc. 86-29011 Filed 12-24-86; 8:45 am]
BILLING CODE 7536-01-M

NUCLEAR REGULATORY COMMISSION

Advisory Committee on Reactor Safeguards, Subcommittee on General Electric Reactors (ABWR)/Safety Philosophy, Technology, and Criteria; Revised

The Federal Register published on Friday, December 19, 1986 (51 FR 45571) contained notice of a joint meeting of the ACRS Subcommittees on General Electric Reactors (ABWR)/Safety philosophy, Technology, and Criteria to be held on Wednesday, January 7 1987, 9:00 a.m., Room 1048, 1717 H Street, NW., Washington, DC. To the extent practical the meeting will be open to public attendance. However, portions of the meeting may be closed to discuss information provided the agency from a foreign source (FOIA Exemption (b)1 and safeguards information (FOIA Exemption (b)(3). All other items regarding this meeting remain the same as previously announced.

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 a prepaid telephone call to the cognizant ACRS staff member, Mr. Richard Major (telephone: 202/634-1414) between 8:15 a.m. and 5:00 p.m. Persons planning to attend this meeting are urged to contact the above named individual one or two days before the scheduled meeting to be advised of any changes in schedule, etc., which may have occurred.

Dated: December 19, 1986.

Thomas G. McCreless,
Assistant Exective Director for Technical Activities.

[FR Doc. 86-29074 Filed 12-24-86; 8:45 am]
BILLING CODE 7590-01-M

Advisory Committee on Reactor Safeguards, Nuclear Regulatory Commission; Meeting Agenda

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 Reaction Safeguards will hold a meeting on January 8–10, 1987, in Room 1046, 1717 H Street, NW., Washington, DC. Notice of this meeting was published in the Federal Register on November 20, 1986.

Thursday, January 8, 1987

8:30 a.m.–8:40 a.m.: Report of ACRS Chairman (Open)—The ACRS Chairman will report briefly regarding items of current interest to the Committee.

8:40 a.m.–10:45 a.m.: General Electric Advanced BWR (Open/Closed)—Discuss scope of review, applicable criteria, etc., regarding the prelicensing agreement for consideration of this project.

Portions of this session will be closed as necessary to discuss Proprietary Information applicable to this project.

11:00 a.m.–12:00 Noon: Meeting with NRC Director, Office of Nuclear Reactor Regulation (Open)—Discuss items of mutual interest regarding the NRC regulatory process and safety-related matters.

1:00 p.m.–2:30 p.m.: Implementation of NRC Safety Goal Policy (Open)—Subcommittee report and briefing regarding the status of NRC activities regarding implementation of the NRC Safety Goal Policy.

2:30 p.m.–2:50 p.m.: Future Activities (Open)—Discuss anticipated ACRS subcommittee activities and topics proposed for consideration by the full Committee. Discuss topics for future meeting with NRC Commissioners.

2:50 p.m.–3:25 p.m.: ACRS Subcommittee Activity (Open)—Hear and discuss ACRS subcommittee report regarding seismic reevaluation of the Diablo Canyon Nuclear Plant.

3:30 p.m.–6:30 p.m.: Improved Light Water Reactors (Open)—Discuss proposed ACRS report to the NRC regarding the characteristics of improved light water reactors.

Friday, January 9, 1987

8:30 a.m.–8:30 a.m.: Meeting with NRC Executive Director for Operations (Open/Closed)—Discuss proposed NRC Staff Reorganization and assignment of personnel and its impact on ACRS activities.

Portions of this session will be closed as necessary to discuss internal NRC personnel rules and practices as well as information the release of which would represent a clearly unwarranted invasion of personal privacy.

9:30 a.m.–10:30 a.m.: Systems Interactions (Open)—Briefing and discussion of NRC Staff resolution of ACRS comments in its report of May 13, 1986 on Proposed Resolution of USI A-17, Systems Interactions in Nuclear Power Plants.

10:45 a.m.–11:15 a.m.: Suppression Pool Bypass (Open)—Discuss proposed priority for resolution of Generic Issue 61, SRV Discharge Line Break in the Airspace of Mk I/Mk II Containments.

11:15 a.m.–12:00 Noon: Appointment of New ACRS Member (Closed)—Discuss the qualifications of candidates proposed for appointment to the ACRS.

This session will be closed as necessary to discuss internal agency personel policies and practices as well as information the release of which would represent a clearly unwarranted invasion of personal privacy.

1:00 p.m.–6:30 p.m.: Improved Light Water Reactors (Open)—Discuss proposed ACRS report to the NRC regarding the characteristics of improved light water reactors.

Saturday, January 10, 1987

8:30 a.m.–12:30 p.m.: ACRS Reports to NRC (Open/Closed)—Discuss proposed ACRS reports to the NRC regarding items considered during this meeting.

Portions of this session will be closed as necessary to discuss Proprietary Information applicable to the matters being discussed.

1:30 p.m.–2:30 p.m.: ACRS Subcommittee Activities (Open/Closed)—Hear and discuss reports of designated ACRS subcommittees regarding safety-related activities.

including activities of NRC regional offices, performance of solid state devices under adverse environmental conditions, TVA management problems and the proposed NRC Safety Research Program. Allocation of ACRS resources will also be discussed.

Portions of this session will be closed as necessary to discuss Proprietary Information applicable to the matter being discussed and to discuss information the release of which would be likely to significantly frustrate the NRC in the performance of its statutory function.

Procedures for the conduct of and participation in ACRS meetings were published in the Federal Register on October 20, 1986 (51 FR 37241). In accordance with these procedures, oral or written statements may be presented by members of the public, recordings will be permitted only during those portions of the meeting when a transcript is being kept, and questions may be asked only by members of the Committee, its consultants, and Staff. Persons desiring to make oral statements should notify the ACRS Executive Director as far in advance as practicable 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 meetings 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 a prepaid telephone call to the ACRS Executive Director, R. F. Fraley, prior to the meeting. In view of the possibility that the schedule for ACRS meeting may be adjusted by the Chairman as necessary to facilitate the conduct of the meeting, persons planning to attend should check with the ACRS Executive Director if such rescheduling would result in major inconvenience.

I have determined in accordance with subsection 10(d) Pub. L. 92-463 that it is necessary to close portions of this meeting as noted above to discuss information that involves the internal personnel rules and practices of the NRC [5 U.S.C. 552b(c)(2)], information that involves Proprietary Information [5 U.S.C. 552b(c)(4)] applicable to the facility being discussed, information the release of which would represent a clearly unwarranted invasion of personal privacy [5 U.S.C. 552b(c)(6)], and information the premature release of which would be likely to significantly frustrate the NRC in the performance of its statutory function per 5 U.S.C. 552b(c)(9).

For 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 prevent oral statements and the time allotted can be obtained by a prepaid telephone call to the ACRS Executive Director, Mr. Raymond F. Fraley (telephone 202/634-3265), between 8:15 a.m. and 5:00 p.m.

Dated: December 19, 1986.

John C. Hoyle,

Advisory Committee Management Officer.

[FR Doc. 86-29075 Filed 12-24-86; 8:45 am]

BILLING CODE 7590-01-M

[Docket Nos. 50-266 and 50-301]

Wisconsin Electric Power Co.; Point Beach Nuclear Plant; Environmental Assessment and Finding of No Significant Impact

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an exemption from the technical requirements of Appendix R to 10 CFR Part 50 to Wisconsin Electric Power Company (the licensee), for the Point Beach Nuclear Plant, Units 1 and 2, located in Manitowoc County, Wisconsin.

Environmental Assessment

Identification of Proposed Action

The Exemption would allow alternatives to the following requirements of 10 CFR Part 50 Appendix R, Section III.G:

1. Service Water Pump Room, Elevation 7 feet 0 inch, to the extent that 20 feet separation free of intervening combustibles is not provided in this zone pursuant to III.G.2.b.
2. Residual Heat Removal Pump Fire Zone, Elevation 19 feet 3 inches, to the extent that an automatic fire suppression system is not installed within this zone pursuant to III.G.2.b.
3. Auxiliary Building Fire Area, Elelvations -19 feet 3 inches; -5 feet 3 inches; 8 feet; 26 feet; and 46 feet, to the extent that an automatic fire suppression system is not installed throughout the area pursuant to III.G.2.b.
4. Auxiliary Building, Elevation 46 feet, to the extent that a 3-hour fire rated floor barrier is not provided in the central part of the zone pursuant to III.G.2.a.

The Need for the Proposed Action

The proposed Exemption is needed because the features described in the licensee's request regarding the existing level of fire protection and proposed modifications at the plant are the most practical method of meeting the intent of Appendix R and literal compliance would not significantly enhance the fire protection capability.

Environmental Impacts of the Proposed Action

The proposed Exemption would provided a degree of fire protection equivalent to that required by Appendix R such that there would be no increase in the risk of fires at this facility. Consequently, the probability of fires would not be increased and the post-fire radiological releases would not be greater than previously determined. Neither would the proposed Exemption otherwise affect radiological plant effluents. Therefore, the Commission concludes that there are no significant radiological environmental impacts associated with the proposed Exemption.

With regard to potential non-radiological impacts, the proposed Exemption involves features located entirely within the restricted area as defined in 10 CFR Part 20. It does not affect non-radiological plant effluents and has no other environmental impact. Therefore, the Commission concludes that there are no significant non-radiological environmental impacts associated with the proposed Exemption.

Alternatives to the Proposed Action

Since we have concluded that the environmental effects of the proposed action are negligible, any alternatives with equal or greater environmental impacts need not be evaluated.

The principal alternative would be to deny the requested Exemption. This would not reduce the environmental impacts or significantly enhance the fire protection capability in meeting the intent of Appendix R.

Alternative Use of Resources

This action does not involve the use of resources not previously considered in the Final Environmental Statement related to the operation of the Point Beach Nuclear Plant Units 1 and 2.

Agencies and Persons Consulted

The NRC staff reviewed the licensee's request and did not consult other agencies. The staff did retain Franklin Research Center as a consultant during the review of the proposed Exemption.

Finding of No Significant Impact

Based upon the foregoing environmental assessment, we conclude that the proposed action will not have a significant effect on the quality of the

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

Revised: January 7, 1987

SCHEDULE AND OUTLINE FOR DISCUSSION
321ST ACRS MEETING
JANUARY 8-10, 1987
WASHINGTON, D. C.

Thursday, January 8, 1987, Room 1046, 1717 H Street, NW, Washington, D.C.

1) 8:30 - 8:45 A.M. Report of ACRS Chairman (Open)
1.1) Opening Statement (FJR)
1.2) Items of current interest (FJR/RFF)

2) 8:45 - 10:45 A.M. General Electric Advanced BWR (Open/Closed)
2.1) Discuss ACRS participation in the review of this project (DO/RKM)
(Note: Portions of this session will be closed as necessary to discuss Proprietary Information.)

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

5) 11:00 - 11:30 A.M. Future Activities (Open)
TAB---------- 5.1) Anticipated ACRS subcommittee activities (MWL)
TAB---------- 5.2) Proposed items for consideration by the full Committee (FJR/RFF)
5.3) Items for February meeting with NRC Commissioners

3) 11:30 - 12:30 P.M. Meeting with Director, Office of Nuclear Reactor Regulation (Open)
TAB 3---------- 3.1) Discuss items of mutual interest.

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

4) 1:30 - 3:00 P.M. Implementation of NRC Safety Goal Policy (Open)
TAB 4---------- 4.1) Subcommittee report of Jan. 7, 1987 meeting and briefing by NRC Staff (DO/RPS)

6) 3:00 - 3:30 P.M. ACRS Subcommittee Activities (Open)
TAB 6---------- 6.1) ACRS subcommittee report regarding:
. Seismic reevaluation of Diablo Canyon (CPS/RPS)

3:30 - 3:45 P.M. BREAK

7) 3:45 - 6:30 P.M. Improved Light Water Reactors (Open)
TAB 7---------- 7.1) Discuss proposed ACRS report to NRC (DO/RKM)

Friday, January 9, 1987, Room 1046, 1717 H Street, NW, Washington, D.C.

8) 8:30 - 9:30 A.M. Meeting with Executive Director for Operations (Open/Closed)

TAB 8---------- Discuss NRC Staff reorganization and its impact on ACRS

(Note: Portions of this session will be closed as necessary to discuss internal agency personnel practices.)

9) 9:30 - 10:30 A.M. Systems Interactions (Open)

TAB 9 ---------- 9.1) Briefing by NRC Staff regarding resolution of ACRS comments in its report of May 13, 1986 (DO/RPS)

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

10) 10:45 - 12:00 NOON Implications of Chernobyl Accident (Open)

TAB 10 --------- 10.1) Briefing by NRC Staff regarding update of proposed NRC report

10.2) Discuss proposed ACRS comments/ recommendations (DO/RPS)

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

11) 1:00 - 1:30 P.M. Appointment of New Member (Closed)

11.1) Discuss qualifications of candidates for appointment to the Committee (HWL/ALN)

(Note: Portions of this session will be closed as necessary to discuss internal agency personnel policies and practices as well as information the release of which would represent a clearly unwarranted invasion of personal privacy.)

14) 1:30 - 2:00 P.M. NRC Safety Research Program (Open)

Status of ACRS report to the U.S. Congress (CPS/SD)

12) 2:00 - 6:30 P.M. Improved Light Water Reactors (Open)

(3:00-3:15-BREAK)

12.1) Complete ACRS discussion of proposed report to NRC regarding the characteristics of improved LWRs (DO/RKM)

Saturday, January 10, 1987, Room 1046, 1717 H Street, NW, Washington, D.C.

13) 8:30 - 12:30 P.M. ACRS Reports to NRC (Open)
Discuss proposed ACRS reports to NRC regarding:
- Improved LWRs (DO/RKM)
- Resolution of ACRS comments regarding Systems Interactions (tentative) (DO/RPS)
- Implications of the Chernobyl accident (DO/RPS)
- ACRS comments on the seismic reevaluations of the Diablo Canyon plant (tentative) (CPS/RPS)

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

15) 1:30 - 3:00 P.M. ACRS Subcommittee Activities (Open)
Reports of ACRS Subcommittees regarding:

TAB ----------
15.1) 1:30 - 1:45: Regional Activities - Report on Dec. 2, 1986 subcommittee meeting
15.2) 1:45 - 2:00: TVA Management - Briefing by NRC Staff on Nov. 21, 1986 (CJW/RPS)
15.3) 2:00 - 2:30: Instrumentation and Controls - Report on Dec. 18, 1986 subcommittee meeting regarding performance of solid state devices under adverse environmental conditions (JCE/MME)
15.4) 2:30 - 2:45: Severe Accidents - Report regarding Dec. 19, 1986 subcommittee meeting on implementation plans for the NRC Severe Accident Policy Statement (WK/MDH)
15.5) 2:45 - 3:00: Meeting of Planning Subcommittee on January 9, 1987 (WK/RFF)

CERTIFIED

FOIA EXEMPTION b(6)

PROPOSED MINUTES OF THE
321ST ACRS MEETING
JANUARY 8-10, 1987

The 321st meeting of the Advisory Committee on Reactor Safeguards, held at 1717 H Street, N.W., Washington, D.C., was convened by Acting Chairman F.J. Remick at 8:30 a.m., Thursday, January 8, 1987.

[NOTE: For a list of attendees, see Appendix I. Mr. G.A. Reed did not attend the meeting; Dr. H.W. Lewis did not attend on January 8.]

The Acting Chairman noted the existence of the published agenda for the meeting, and identified the items to be discussed. He noted that the meeting was being held in conformance with the Federal Advisory Committee Act and the Government in the Sunshine Act, Public Laws 92-463 and 94-409, respectively. He also noted that a transcript of some of the public portions of the meeting was being taken, and would be available in the NRC Public Document Room at 1717 H Street, N.W., Washington, D.C.

[Note: Copies of the transcript taken at this meeting are also available for purchase from ACE-Federal Reports, Inc., 444 North Capitol Street, Washington, D.C. 20001.]

I. Chairman's Report (Open)

[Note: R.F. Fraley was the Designated Federal Official for this portion of the meeting.]

The Acting Chairman noted that Mr. Stephen White has returned to duty at TVA. He then read an announcement of personnel reassignments as part of the planned NRC Staff reorganization (See Appendix II).

He told the Committee that Dr. C.P. Siess had received the NRC Distinguished Service Award (the NRC's highest honor award) and that Mr. A.L. Newsom had received the NRC Meritorious Service Award (the NRC's second highest honor award). All ACRS Members were invited to attend the awards ceremony on January 14, 1987.

Mr. G.A. Reed is continuing to recover from illness but he is not expected to return until the April ACRS meeting.

He reported that the short version of the Wingspread meeting summary had been modified to include the comments received and that copies had been sent to the foreign delegation for their views and comments. He reminded the Members that they should review the longer version and submit their comments to Dr. T.G. McCreless.

II. General Electric Advanced BWR (Open)

[Note: R.K. Major was the Designated Federal Official for this portion of the meeting.]

Dr. Okrent, Chairman of the ACRS General Electric Reactor Plants Subcommittee, introduced the start of the Committee's review of the General Electric Advanced Boiling Water Reactor (GE ABWR). He noted that this was an information session, but as the Committee becomes acquainted with this design a letter will be requested in several months. The first request being asked of the Committee will be to offer an opinion relating to a licensing basis agreement (LBA). The LBA will be a document that attempts to scope out areas of review. Dr. Okrent noted most of the day's discussion was introductory material with one specific topic (filtered vents) used to illustrate both technical and procedural problems which may be faced.

Mr. David McGoff, Acting Deputy Assistant Secretary for Reactor Development in the Department of Energy, gave the Committee some DOE perspectives on the ABWR program. He explained that DOE is participating in and sponsoring the G.E. ABWR safety analysis and certification program. This is part of a DOE sponsored advanced light water reactor program aimed at rejuvenation of the U.S. nuclear option in the early nineties. DOE funding will be $8 million over a three-year period.

Mr. Dan Wilkins, General Manager of the ABWR Program, G.E., gave an overview presentation of the ABWR program. He stated the program began in the late seventies. The objective of the program was to produce an ABWR with improved operability, capacity factors, safety performance, reduced occupational exposure and radioactive wastes, and a reduction in all elements of plant cost. The ABWR concept was created by an international engineering team that combined the best features of worldwide BWR experience. The program is now focused in Japan under the sponsorship of Tokyo Electric Power Company and a consortium of Japanese utilities. The technical development effort being carried out in partnership between GE, Hitachi and Toshiba is essentially complete. Over $250 million have been invested and the concept is ready for lead plant application. Mr. Wilkins expects the lead plant to proceed in Japan, with an operating unit expected in the mid-nineties.

Features new to U.S. BWRs in the ABWR design include: internal recirculation pumps, fine-motion control rod drives, digital/solid state control, multiplexing, advanced fuel, improved reactor and containment building, and three ECCS divisions. The plant is designed to produce 1,350 megawatts electric. The plant is engineered for a 48 month construction time.

Mr. Wilkins also explained the safety optimization of the ABWR. Eliminating recirculation piping has removed a large source of past radiation exposure, and has eliminated the existence of large pipes below the level of the core in the vessel. This results in a LOCA becoming a less severe event. The control rod drives now have diversity. The rods are scrammed hydraulically and inserted electrically. The scram discharge volume has been eliminated. There are now three full divisions

of decay heat removal and core cooling. They are powered both mechanically and electrically and are physically separated. The control system is fault tolerant, self-diagnostic, digital control. All the latest materials and water chemistry technology are used.

The philosophy behind the ABWR is that every feature of this design had to be either proven by operating experience or proven by a test program. These are on the order of twenty major test programs.

Mr. Wilkins explained that the ABWR design will be a part of the EPRI, ALWR Utility Requirements program. As various EPRI requirements modules are completed they will be applied to the ALWR. GE would like to have a LBA by the middle of this year, that will provide the framework for the follow-on preparation of the safety analyses report and review. The design review is targeted for completion in 1990. It is expected that design certification would be completed in 1991.

It was noted that the real purpose of the LBA is to identify, up front, those issues that must be addressed during the course of the review. If misunderstandings exist they should be resolved in the beginning. Following the design review and certification, the design would stand for 10-years with an option to renew, without further review. The ABWR design is a nuclear island concept similar to GESSAR II. The Turbine Island is not a part of this design.

Mr. Wilkins stated that the ABWR represents a major investment. GE is not eager to make design changes at this point. However, if it is believed points have been overlooked, GE wants to consider them. In answer to a question from Mr. Ebersole, the degree of detail in the licensing documents for the ABWR would be comparable to GESSAR. GE also felt there was extensive backup documentation that gave additional detail. The FSAR could be used as an index to that additional design detail material. Just how much of the design and to what detail it is frozen in the certification process remained unclear.

In response to other Committee questions, GE representatives thought that emergency operating procedure guidelines would be produced for the ABWR. These guidelines go beyond the design bases into the degraded core situation.

In response to Dr. Okrent, Mr. Wilkins thought the two most difficult issues to be overcome in the licensing basis agreement were, on the technical front, severe accident issues and procedurally, laying out the process for arriving at a certified design. Dr. Okrent mentioned a problem with the LBA approach. He felt it would be hard to identify problem areas at this early stage since the ABWR design itself was not described in detail. Dr. Okrent thought it will be a challenge to create a document that provides as much licensing stability as practical while still maintaining necessary flexibility and avoiding impediments created by backfitting procedures.

Mr. Wilkins said that GE would like to outline big fundamental issues in the licensing basis agreement. The document itself would have the force of a memorandum of understanding.

Mr. Ralph Caruso, Senior Project Manager of the ABWR Project, discussed the Staff's review plan and the licensing basis agreement. He noted that the ABWR project involved new concepts in licensing, including: a new standardized BWR design, the use of the licensing basis agreement, the design certification process, and the use of the EPRI light water reactors requirements document. Since a lead plant may first be built in Japan, coordination on the review effort between U.S. and Japanese regulatory agencies is anticipated.

Mr. Caruso explained that the licensing basis agreement is an agreement concerning the groundrules and procedural arrangements for the ABWR review. The LBA should describe the expected scenario for the review. Where possible, and when they are available, the LBA will provide technical design bases for issues that have been troublesome in the past. Where technical bases are not available, the LBA will give procedures to evaluate new issues and criteria. The LBA itself has no basis in the regulations and is not legally binding; it is a reasoned expression of intent by the Staff and the Applicant. The Staff does not consider the backfit regulation applicable to the ABWR review until after the final design approval has been issued. New issues that arise during the review will be treated according to procedures outlined in the EPRI program and contained in section 8.2 of the draft LBA.

Mr. Caruso said there were two significant open issues in the current version of the LBA. These were treatment of a probabilistic risk assessment and the severe accident policy statement. Until a final version of a severe accident policy statement regulation and containment performance criteria are finished, the Staff will use draft versions for guidance. Currently, the Staff expects final versions of these initiatives to be ready by spring, and expects to be able to incorporate them into a final LBA.

Dr. Okrent suggested the Staff use the EPRI screening criteria for new improvements and evaluate a large number of improvements already implemented by other nations using LWRs (France, Germany, England, Japan, etc.). This would give the Staff and Commissioners some feel for the criteria. Dr. Okrent was also concerned over how uncertainties would be factored into the screening process.

Mr. Caruso indicated the LBA was not scheduled for completion until June of 1987. He wanted ACRS comments or the LBA proposal so they could be incorporated into the final document.

Both General Electric and the Staff discussed the issue of a containment filtered vent system. GE felt such a system was not necessary. They believe a filtered vent is not necessary since features to prevent a core melt accident have reduced core damage probability to less than 10^{-6}/RY. Mitigation features prevent containment overpressure, exclude hydrogen burning, and resist core debris attack on the containment building. They believe the containment design ensures suppression pool scrubbing of fission products and makes pool bypass unlikely. Even so, a provision for a vent (containment penetration) is included in the design.

Mr. Caruso stated the NRC Staff does not have a firm position on filtered vents. At this stage of the ABWR review it is hard to establish a position one way or the other.

Mr. Sawyer of General Electric told Dr. Okrent that the ABWR had 100% relief capacity to the suppression pool. Peak vessel pressures, given a delayed scram, are about the same as for the BWR-6, on the order of 1,375 psi. Power levels are acceptable for 15-20 minutes until liquid poison can shutdown the chain reaction.

III. Meeting with the Director, Office of Nuclear Reactor Regulation (Open)

[Note: Thomas G. McCreless was the Designated Federal Official for this portion of the meeting]

Mr. Harold Denton, NRR, discussed recent NRC Staff action concerning the accident at Chernobyl, Strategic Planning and the reliability of auxiliary feedwater systems.

Concerning the accident at Chernobyl, Mr. Denton said that the NRC Staff is nearing publication of two reports. The first is an interagency compilation of facts that pertains to causes and effects of the accident. It is expected that this report will be issued within the next month. The second report is an assessment of the implications of that accident for NRC licensed reactor. It is planned that ACRS comments will be sought on report on the implications.

Dr. Moeller requested that the NRC Staff forward any information it may receive concerning the health effects from the use of KI by the Soviets following the Chernobyl accident.

Concerning Strategic Planning, Mr. H. Denton is the Chairman of the Strategic Planning Steering Committee. Membership includes Dr. Eric Beckjord, Dr. Tom Murley, some people from Resource Management, and senior managers. The plan is to cover five years and currently is not tied to the NRC budget.

Mr. Denton said that he hopes the 1st phase will be completed by the end of February. He said that the NRC is at the end of an era regarding Licensing but that many new problems will mean more interaction with other Federal and state agencies such as high level waste, new reactor designs and increased involvement by states.

Dr. Okrent suggested that another Federal agency had gathered information from the public for consideration in developing a strategic plan. He said that in his opinion the NRC is in a dilemma concerning the use of the cost/benefit approach to improving safety. He said if someone at NRC were to be responsible to the concerns of the public he might be reassigned. Mr. Denton said that some people have expressed the belief that he and Robert Bernero were reassigned because they had advocated a change in the Mark I reactors but that there was no connection.

Mr. Denton noted the exchange of letters between the ACRS and NRR regarding resolution of Generic Issue 124, "Auxiliary Feedwater System Reliability" for seven older operating PWRs. He also noted NRRs issuance of a Safety Evaluation Report resolving this issue for the Prairie Island plant. (Note: ACRS has received copies of this report). This SER addresses the point that NRR has chosen to pursue a plant specific resolution approach instead of a more generic resolution based on an objective reliability criterion as suggested by the Committee. Mr. Denton noted that NRR had been criticized for delay in resolving this concern vis-a-vis the plant specific approach now underway for this issue. The approach now being taken will assure expeditious and satisfactory resolution of this concern.

Mr. Ward expressed disappointment with the NRR resolution approach. Noting that NRC is supposed to be making use of objective and quantitative reliability criteria to address safety concerns, he said the NRR approach is a step backward in this regard. Further discussion brought out the point that the backfit rule requirement that potential fixes be evaluated against the $1000/man rem cost limit means that very few fixes are cost effective at a core melt probability of 10^{-4} and that almost no fixes are cost effective at a 10^{-5} core melt probability. Citing the extensive delay associated with resolving the ATWS issue on a generic basis, Mr. Denton also noted that he did not believe the issue should be subjected to the lengthy delay associated with such an approach.

Denton said that two or three more plant specific resolution reports will be available over the next few months. He urged the Committee to reserve judgment on NRR's effort here until it has reviewed these reports.

Mr. Ward indicated agreement with NRR's suggestion and he indicated the DHRS Subcommittee would track NRR's effort and may wish to meet with them pending review of the above reports.

Mr. C. Michelson questioned the process of resolution of generic issues. He said that a case in point was USI A-17, Systems Interaction. At the point of resolution of A-17, the Staff acknowledged that the problem was not previously understood and that it established another generic issue that had to go through the process of prioritization. Mr. Denton said that he was unaware of this and would look into it.

IV. Implementation of NRC Safety Goal Policy (Open)

[Note: Richard Savio was the Designated Federal Official for this portion of the meeting]

Dr. Okrent reported on the Safety Philosophy, Technology, and Criteria Subcommittee's review of the NRC Staff's proposal for implementation of the Commission's August, 1986 Safety Goal Policy. The Subcommittee discussed this matter with the NRC Staff during the Subcommittee meetings held on December 10, 1986 and January 7, 1987. Dr. Okrent recommended that the ACRS schedule time to discuss this topic at the February

and March, 1987 ACRS meetings and to work on issuing a report to the Commission at the March meeting.

Mr. M. Taylor discussed the NRC Staff's progress in developing an implementation plan for the August 1986 Commission Safety Goal Policy. The August 1986 policy statement: (1) established two qualitative goals, (2) established two quantitative objectives, (3) stated a Commission intent to pursue a course of action "that has as its objective providing reasonable assurance, while giving appropriate consideration to the uncertainties involved, that a severe core damage accident will not occur at a U.S. nuclear power plant," and (4) proposed the use of a general performance guideline specifying that the frequency of a large release be less than 10^{-6}/reactor year. The policy statement also expresses a Commission intent to make a best effort to ensure that the quantitative techniques used in decision-making take uncertainty into account.

The NRC Staff has developed a proposed implementation plan which they believe incorporates the Commission Policy Statement guidance. The main feature of the Staff's implementation plan are displayed in the "Integrated Safety Goal Matrix" (See Appendix III). The matrix is similar to what was proposed by the NRC Staff in 1986 prior to the adoption of the current Safety Goal Policy. The NRC Staff is proposing that the Safety Goal Policy be used for about a year as one of the decision elements in the resolution of Generic Issues and plant specific requirements, the implementation of the NRC's Policy Statement on Severe Accidents, in Environmental Statements, and in allocating NRC resources. The experience gained in the trial application would be used to access the adequacy of the implementation plan. (The NRC Staff made this proposal to the Commission on January 8 before the presentation to the ACRS. The Commission appeared to be reluctant to let them start the trial implementation without additional Commission guidance. The Commission is currently developing additional guidance for the Staff and expects to complete this process in 1-2 months.)

The proposed Safety Goal Policy implementation plan was discussed at some length. The highlights of this part of the discussion were:

(a) A general performance guideline specifying limits on the frequency of a large release is used in the Safety Goal Policy Statement and in the proposed implementation plan. The definition of a large release is controversial. The NRC Staff proposal defines a large release as one that will cause one or more prompt fatalities at the site boundary. Commissioner Asselstine, in the additional views, which were appended to the Safety Goal Policy Statement, defined a large release as one which would result in a whole body dose of 5 rem to an individual at the boundary. The guidelines of 10 CFR 100 have been proposed by others.

(b) The NRC Staff believes that the core melt frequency/cost-benefit guideline relationship expressed in the "Integrated Safety Goal Matrix" (See Appendix III) implements the "reasonable assurance... that a severe core damage accident will not occur" statement in the Safety Goal Policy Statement. This was also controversial.

Opinions were expressed that, if what PRA has told us about core melt frequency is true, another core melt in the U.S. would not be unlikely in the lifetime of the currently operating plants. It was noted that core melt as used in the Staff's matrix is defined as one that is not arrested prior to penetrating the reactor vessel were as the "reasonable assurance" statement is directed at the more likely core damage accident.

(c) The NRC Staff proposal for implementing the Safety Goal Policy Statement will utilize the results of NUREG-1150 in making estimates of risk. Questions were raised as to the adequacy of this approach. The six plants analyzed in NUREG-1150 may well not be very representative of U.S. operating plants.

(d) It was suggested that the NRC Staff review their cost benefit guidelines and methodology in light of the Chernobyl experience. Loss of unique societal resources are not specifically considered in the NRC cost-benefit methodology. It was suggested that this issue be reconsidered.

(e) The NRC Staff's "Integrated Safety Goal Matrix" includes averted on-site costs (AOSC) in the cost-benefit rule. The subject of including AOSC continues to be controversial.

(f) The NRC Staff, in the proposed implementation guidance, suggests that a factor of 3 for a reduction in core melt frequency and a factor of 10 for a reduction in risk be considered as "substantial" and large enough to not be "lost" in the calculational uncertainties. These factors, by the NRC Staff's arguments, correspond to the difference between the "best estimates" and "95% confidence" estimates in the calculations done for NUREG-1150. (It is not clear that statistic laws be used correctly in NUREG-1150) These factors (3 and 10) would be used as general, but not absolute, guidelines in judging whether a proposed reactor modification merited consideration under the cost-benefit guidelines. There was some feeling that these factors were too high and would in practice end up being used as thresholds rather than guidelines.

Dr. Okrent asked that the ACRS give consideration to the following issues:

(1) The plan proposed by the NRC Staff places a great deal of importance on the results of the NUREG-1150 work. The reference plants considered in NUREG-1150 may not be representative of the currently operating plants.

(2) External events are not currently considered in NUREG-1150. The question would arise as to how far the NRC can go with the use of NUREG-1150 without considering the effects of external events.

(3) The present Safety Goal Policy uses the concept of "reasonable assurance" in expressing an intent to prevent core melt. This concept needs to be defined if it is to be implemented.

(4) The scheme which the NRC Staff proposed gives some incentive for reducing core melt frequency below 10^{-4}/reactor year. The ACRS need to decide if the incentive is appropriate or if it should be larger or smaller. Conversely, the NRC Staff's proposal gives a decreasing emphasis to defense-in-depth as core melt frequency decreases. The ACRS needs to review the adequacy of this concept.

(5) A number of safety-related changes will be implemented in foreign reactors. The implementation decisions made by the NRC Staff need to be examined in light of the rationale for these changes.

(6) Loss of societal resources is not addressed in the NRC Staff implementation plan except to the extent that they are included in the $1000/person-rem rule. The ACRS needs to consider if this is appropriate.

(7) The NRC Staff proposes improvements of a factor of 3 for core melt frequency and a factor of 10 for risk as guidelines as to when the benefit of a proposed modification is significant as compared to the uncertainty associated with the risk estimates. The ACRS need to consider if this approach and the associated guidelines are appropriate.

(8) The NRC Staff proposal defines the 10^{-6}/reactor year guideline for a large release as applying to releases which will result in one or more prompt fatalities at a site boundary. This definition needs to be examined and, if judged not to be satisfactory, alternatives need to be proposed.

V. Improved Light Water Reactors (Open)

[Richard K. Major was the Designated Federal Official for this portion of the meeting]

The Committee concluded its review of this topic this month and issued a report to Chairman Zech entitled, "ACRS Recommendations On Improved Safety For Future Light Water Power Reactor Designs." This report document the results of their review, which began at the August 1986 meeting and was considered at each succeeding meeting. Additional comments were made by Dr. Lewis who was joined in these remarks by Dr. Remick, Dr. Shewmon and Mr. Ward. Mr. Ward had a separate set of additional remarks. The letter is dated January 15, 1987.

VI. Meeting with the Executive Director for Operations (Open)

[Thomas G. McCreless was the Designated Federal Official for this portion of the meeting]

Victor Stello, EDO, discussed the NRC Staff reorganization. He described the basic reasoning and philosophy behind the reorganization,

the current status, the next steps to be taken and how long before the reorganization will be fully implemented.

The EDO said that recent events have demonstrated the need for increased NRC involvement at the policy level concerning state issues, for intense involvement on international affairs, and for the coordination of Congressional and Public Affairs offices. Rather than separate offices, a single office is to be formed and will be headed by Harold Denton.

Mr. Stello said that the NRC workload is clearly changing to that required to regulate an operating industry. A single office, NRR, will now be responsible for every aspect of nuclear power plant licensing. This Office will combine the licensing and inspection functions. NMSS similarly will be responsible for materials and the fuel cycle. A single office, RES, will be responsible for dealing with unresolved safety questions. A variety of administrative tasks will now be combined into a single office.

Responding to a question from Dr. Mark concerning how coordination and consistency is to be achieved among Regions, Mr. Stello said that presently three offices (NRR, IE, the Region) are involved in the flow of information. With the reorganization, this will be reduced to two. NRR will be the responsible office for making sure the problem is solved.

In response to a question from Mr. Michelson asking who is responsible for the preparation of inspection standards, the EDO said that a separate unit within NRR will be established.

Mr. Ebersole requested that the NRC Staff provide the Committee with a list of NRC project managers and the plants for which they are responsible as soon as this is established after the reorganization.

Mr. Stello said that two separate project offices will be established, one for TVA and another for Commanche Peak, because of the very intense involvement. The Commissioners have agreed.

Mr. Michelson asked where the CRGR will be located and who will be responsible for the Training Center. Mr. Stello said that the CRGR will be in AEOD because that office is at least neutral in terms of being an advocate of any rule, regulation or order. AEOD will also be responsible for the Training Center. This is to assure that lessons learned are also included in training.

Responding to a question from Mr. Ward concerning the disappearance of the Division of Human Factors Technology from the proposed reorganization, Mr. Stello said that human factors would not be a separate division but that people problems will be the responsibility of NRR; the details are still being worked out. He proposes alignment of NRR activities by regions instead of by nuclear power plant types.

Dr. Okrent asked if in the new organization there was a conscious effort to build a group whose job would be to look for flaws in NRC Staff policies and if NRC Staff that took unpopular positions were moved into

jobs where they would no longer cause worry. Mr. Stello chose to answer the second question first. He said that the article in Inside NRC that had suggested that Mr. H. Denton and Mr. R. Bernero were reassigned because of positions that they had taken, was "sheer nonsense". Both are gifted and talented individuals who are uniquely qualified for their new jobs and they will make significant contributions to the NRC in their new jobs.

In response to Dr. Okrent's first question the EDO said AEOD has a completely independent diagnostic responsibility.

Dr. Okrent mentioned the EDO's appearance on the McNeil-Lehrer TV program concerning the Chernobyl accident. He said that the EDO displayed more confidence in containments and core melt frequencies than is justified. Mr. Stello said that he is more certain now than before that such an accident cannot occur in a US LWR. At Chernobyl there was a positive reactivity feedback that literally disintegrated the core, destroyed confinement containment systems and spread radioactive materials. Ten tons of fuel were ejected from the reactor; half of that beyond 20 kilometers. Mr. Stello said that NUREG 1150 had determined for two reactors with Mark I containments that 90% of the risk for core melt for one and 99% for the other came from station blackout. He said that he believes that consideration should be given to accident prevention instead of the Mark I containment. Dr. Okrent said that he was sorry that the EDO was putting so much reliance on NUREG 1150.

Dr. Remick asked if Human Factors would be in the Division of Licensing Performance and Quality Evaluation and Mr. Stello said no. Dr. Remick also asked if anything was being done in the reorganization to assure more consistency in the wording of rulemakings. The EDO said that RES will now be responsible for such rulemakings.

Mr. Ebersole asked if consideration was being given to the importance of venting to cope with the loss of power and suppression pool overheating. Mr. Stello said yes.

VII. Systems Interactions (Open)

[Note: Richard Savio was the Designated Federal Official for this portion of the meeting]

The ACRS Subcommittee on Safety Philosophy, Technology and Criteria (Dr. Okrent, Chairman) met on January 7, 1987 to review the NRC Staff work on the development of a resolution to USI-A17, "Systems Interaction in Nuclear Power Plants." Dr. Okrent gave a brief Subcommittee report and Mr. D. Thacker (NRR Staff) summarized the NRC Staff's recent work. The ACRS last commented on the NRC Staff's proposed resolution to USI-A17 in a May 13, 1986 report, recommending extensive changes. The NRC Staff in general did not accommodate the ACRS recommendations in their revised proposal, but intends to address the ACRS concerns under a new Generic Issue. ORNL is currently developing a scope and work plan for this new work and is expected to complete this work in September 1987. The resulting Generic Issue is expected to be prioritized about 6 months

after this. The NRC Staff's revised proposal on the resolution of USI A17 is expected to go to the CRGR in 1-2 months, to the Commission, and then to be released for public comment. This would be the "second round" of the CRGR review and CRGR is expected to agree with the NRC Staff's proposal. The NRC Staff current schedule calls for issuance of the completed resolution in the Fall, 1987.

The ACRS decided to evaluate the scope of the proposed new Generic Issues and to reevaluate the resolution of USI-A17 after the end of the public comment period. The Committee will report on this work as appropriate at that time.

The NRC Staff's proposed resolution to USI-A17 involves (1) issuing a Generic Letter for information describing what the NRC Staff believes they have learned from the USI-A17 work; (2) issuing a second Generic Letter which will request that licensees submit information on the internal flooding evaluations which they have performed; and (3) utilizing the plant walkdowns to be performed as part of the resolution of USI-A46 to search for seismically induced systems interactions.

There were a number of comments by Members on specific aspects of the NRC Staff proposal. Mr. Ebersole believes that the Staff has, in general, defined systems interactions in too narrow a context. Mr. Ebersole noted that fire protection equipment is not seismically qualified and for that reason has the potential for causing seismically induced systems interactions. Mr. Michelson stated that he was disappointed with the progress made on the NRC systems interactions work. He also stated that this lack of progress was not the fault of the people working on USI-A17. Mr. Michelson noted that the NRC Staff was sending a Generic Letter to the licensees describing NRC's insights on systems interactions and expressed concern that this would be effective. He stated that reviews of water-induced systems interaction should include consideration of all types of moisture intrusion and not just simple spillage of water on the floor. Mr. Michelson recommended that the ACRS accept what the NRC Staff was proposing for the resolution of USI-A17, recognizing that this was only a partial solution, and depend on the promised future work to address the outstanding systems interaction issues. Mr. Wylie stated that the requirements for the USI-A46 walkdown should be made as complete as possible to avoid having to do additional walkdowns in the future. Dr. Okrent stated that NRC should try to, possibly via INPO, to develop the post-USI A-17 approach to system interactions. Dr. Shewmon stated that experience alone may reveal important systems interactions through precursors.

VIII. Implications of the Chernobyl Accident (Open)

[Richard Savio was the Designated Federal Official for this portion of the meeting]

Dr. Okrent gave a brief report on Subcommittee activities. A draft ACRS report on the lessons-learned from the Chernobyl accident was distributed and discussed at the December 11-12, 1986 ACRS meeting. Dr. Kerr and Dr. Shewmon developed alternative versions of this report during the

period between the December, 1986 and January, 1987 ACRS meetings. These were distributed along with a slightly modified version (incorporating comments by Drs. Okrent and Moeller) of the original December draft.

Mr. Sheron (NRC Staff) gave a brief status report on the work being carried out on the NRC Staff's Chernobyl implications and factual reports. The report summarizing the factual aspects of the accident will be issued for comment on February 6, 1987. This report and the Chernobyl implications report are scheduled to be sent to the Commission during the week of January 20, 1987. (These reports were subsequently delivered to the Commission on February 4, 1987) Mr. Sheron stated that no important changes had to be made in the NRC Staff's implications report since it was discussed with the ACRS at the December, 1986 meeting.

The proposed drafts of the ACRS Chernobyl implications reports were read and discussed. The ACRS subsequently sent a letter to Mr. V. Stello expressing satisfaction with the NRC Staff progress on the Chernobyl implications report and a report to the Commission containing ACRS observations on the implications of the Chernobyl accident.

IX. Executive Sessions

A. Reports, Letters, and Memoranda

1. Improved Safety for Future Light Water Reactor Plants Design

The Committee prepared recommendations to the Commissioners regarding improved safety requirements and objectives for future light water reactor plants. A set of additional comments by Dr. Lewis, Dr. Remick, Dr. Shewmon and Mr. Ward, and another set by Mr. Ward were appended to the recommendations.

2. Implications of the Accident at Chernobyl Nuclear Station, Unit 4

The Committee prepared comments for the Commissioners on the implications of the accident at Chernobyl Nuclear Station Unit 4 relative to nuclear power plants in the United States.

The Committee prepared a memorandum to the EDO commenting on the draft NRC Staff Report on the Implications of the Accident at Chernobyl Nuclear Station Unit 4.

3. Report to Congress on the NRC Reactor Safety Research Program

The Committee prepared letters to the Congressional Subcommittees on Energy and the Environment, the Subcommittee on Nuclear Regulations, and the Subcommittee on Energy Conservation and Power. These letters clarify the proposed change of format of the ACRS report to Congress.

B. ACRS Membership Vacancy

See Supplement.

C. Subcommittee Activities

1. Seismic Reevaluation of Diablo Canyon

Dr. Siess briefly described the Pacific Gas and Electric Program for the seismic reevaluation of the Diablo Canyon Plant (Long Term Seismic Program). This work was reviewed at a meeting of the Extreme External Phenomena Subcommittee meeting held on November 20, 1986. The program was started in 1985 and is scheduled to be completed in 1988. Pacific Gas and Electric has employed a large number of technical experts to participate in the program and is working closely with the NRC Staff and its consultants.

Dr. Siess noted that the ACRS has four consultants, (Drs. Page, Maxwell, Thompson, and Trifunac) reviewing this work. Dr. Page, Maxwell and Thompson have each submitted reports, all of which express general satisfaction with the PG&E program and contain a number of general and specific comments. The Subcommittee is satisfied with the progress that is taking place. The next Subcommittee discussion will be scheduled in about a year from now, when the work is near completion, to review the program work product. The Subcommittee will continue to follow the work and the progress of the NRC Staff's review. The ACRS accepted the Subcommittee's conclusions.

The NRC Staff also briefed the Subcommittee on the status of the NRC's Seismic Margins Program and the application of this program's methodology to the Maine Yankee plant. The NRC Staff has suggested that the results of this work be discussed with the ACRS once the trial application on the Maine Yankee plant is completed. Dr. Siess recommended that this should be brought to the attention of the Committee for discussion. The ACRS accepted this recommendation. Late Spring/early Summer would be the most likely time for the scheduling of this discussion.

2. Regional Activities

Dr. Remick provided a Subcommittee Chairman's oral report of the meeting of the ACRS Subcommittee on Regional and I&E Programs which took place on December 2, 1986 in Glen Ellyn,

Illinois. Dr. Remick described the meeting as helpful and indicated that the Region III participants were very candid.

Dr. Remick noted that one item of interest discussed at the meeting was use of radios by operators in the control room. Twenty five operators at the Prairie Island plant have asked for a hearing to discuss this matter after the NRC issued an order to take the radios out of control rooms. Dr. Lewis noted that this brings up a question of whether large numbers of insiders, instead of a single insider, should be considered for some circumstances. Dr. Lewis felt that it was not clear which side of this issue should be taken.

Dr. Remick noted that the Systematic Assessment of Licensee Performance (SALP) Program was discussed at the meeting and that Mr. Keppler believes that it is one of the most effective programs in the NRC. Mr. Keppler believes that in general the SALP ratings were too high and conceded that differences do exist between regions, but this matter was being addressed.

The members discussed the fact that Region III lived with the Zimmer, Marble Hill, and Davis-Besse problems for a long period of time before they were resolved. Mr. Ebersole questioned whether Mr. Keppler has "the hammer" needed to take care of problems in a timely manner.

Dr. Remick found the December 2nd Subcommittee Meeting to be extremely candid, refreshing, and useful and noted that the Subcommittee plans to meet with Region IV personnel within the next few months. Dr. Remick felt these meetings are useful as information gathering meetings and that the Subcommittee might have some recommendations to the Committee at a later date. Mr. Michelson suggested that for future meetings the Subcommittee should select specific items for discussion for which the specific Region has a special area of expertise, e.g., Region III is most expert in motor-operated valve work.

3. TVA Organizational Issues

Mr. Wylie reported on the activities of the Subcommittee on TVA Organizational Issues. The ACRS last reported on this subject on August 12, 1986. TVA and the NRC Staff have responded to the ACRS comments (Ref. Letter from V. Stello to R. Fraley, dated November 5, 1986). Mr. Wylie summarized the TVA and NRC Staff responses. Mr. Michelson indicated that he would be reviewing the TVA responses to the ACRS concerns as to the organization structuring of safety responsibility within TVA and suggested that he be provided with documents describing in detail the current structuring and staffing of the Nuclear Safety Review Board. The ACRS Staff will provide Mr. Michelson with this material. The NRC Staff has also issued a SECY paper (SECY 86-334, TVA Preliminary Lessons Learned, November 12, 1986) which identified the lessons which

the NRC Staff believes are to be learned from the TVA experience. This paper has been distributed to the ACRS.

Mr. White, TVA's Manager of Nuclear Power, has taken a leave-of-absence pending resolution of conflict of interest question and his Deputy, Mr. C. Mason, is responsible for TVA's nuclear organization during this time. A number of TVA contract managers have been reassigned to advisory positions and the number of managers reporting directly to the Manager of Nuclear Power has been reduced. (Mr. White resumed the duties of Manager of Nuclear Power on January 7, 1987).

The NRC Staff expects to complete their SER on TVA's management reorganization by early February, 1987. Mr. Wylie recommended that the ACRS schedule a 1-2 hour briefing for the March, 1987 ACRS. The ACRS concurred. (The date for the completion of the NRC Staff SER was subsequently delayed to March, 1987 and the ACRS discussions rescheduled for the April ACRS meeting).

TVA schedules for startup on Sequoyah, Browns Ferry, and Watts Bar have continued to be delayed. Sequoyah's scheduled restart dates is now Spring 1987. The earliest that Browns Ferry is expected to restart is Summer 1987. TVA has stated that the Watts Bar Unit will be ready for startup by the end of 1987. Mr. Wylie will review the draft NRC SER's on the startup of each of these plants and recommend action to the ACRS.

Dr. Kerr asked if the welding problems at Watts Bar were primarily QA documentation. While there are some documentation problems, a significant number of welds do not conform to the welding codes. About 60 percent of the QA controlled welds have been reexamined and, of these, approximately 10 percent are not acceptable under the welding codes now in use.

4. Instrumentation and Control Systems

Mr. Ebersole briefed the Committee regarding the Instrumentation and Control Systems Subcommittee activities. He indicated that the Subcommittee met on December 18, 1986 in Washington, D.C. to discuss the effect of adverse conditions such as high temperature on solid-state components in nuclear power plants. In addition, the NRC Staff briefed the Subcommittee on the reliability of reactor vessel level indication system (RVLIS) in the presence of the upper head injection (UHI) internals after the UHI accumulators have been disconnected.

Regarding the RVLIS, the NRR Staff indicated that this system is completely independent of the UHI internals and could be accurately used with either a UHI plant or a non-UHI plant.

On the performance of solid state devices under adverse environmental conditions, the Subcommittee heard a presentation from AEOD office regarding their report titled "The Effects of Ambient Temperature on Electronic Equipment in Safety-Related Instrumentation and Control Systems." Mr. Ebersole indicated that this is a serious issue and that elevated temperatures in safety-related instrument cabinets could cause decreases in the reliability of solid state devices. Inadequate cooling can also result in common cause failure of redundant instrumentation channels. Mr. Michelson expressed some concern that the generic aspects of this problem have not been fully recognized by personnel at operating nuclear plants. Dr. Okrent and Mr. Wylie recommended that the Committee prepare a letter on this matter to the EDO for consideration. However, Mr. Ron Hernan, NRR, stated that the NRR Staff is in the process of prioritizing the issues and will start reviewing the AEOD report shortly. The Staff review is expected to be completed by the end of March or early in April 1987. Consequently, Mr. Ebersole has decided to defer action regarding this letter until the NRC Staff has completed its review.

5. NRC Safety Research Program

° Status of the ACRS Report to Congress

Dr. Siess said that although the Office of Management and Budget (OMB) has proposed a significant reduction to the total NRC budget in its preliminary mark, it restored all of that money in its final mark subsequent to receiving the NRC reclama. As a result, the total NRC budget is the same as that included in the Commission's budget request submitted to the OMB on September 2, 1986.

Dr. Siess said that at the time of the ACRS review in June 1986, the total budget for the FY 1988 NRC Safety Research Program was $99.6 million. Subsequently, it has been increased by $4 million; this increase is specifically earmarked for research in the thermal-hydraulics area. Since there are no other major changes in the proposed NRC Safety Research Program and Budget for FY 1988, he suggested that cognizant Subcommittee Chairmen look at the comments and recommendations in the June 11, 1986 ACRS report to the Commission and revise them, as necessary, to provide input to the forthcoming ACRS report to the Congress. He said that input to Draft 1 should be sent to Sam Duraiswamy by January 23, 1987.

Dr. Okrent suggested that in its report to the Congress the ACRS reference the recommendations of the National Research Council (included in the report entitled "Revitalizing Nuclear Safety Research") in certain specific areas such as human factors. Mr. Ward endorsed the suggestion by Dr. Okrent.

Dr. Siess said that although he was somewhat disappointed with the technical content of the National Research Council's report, he would prepare a transmittal letter, calling attention to some of its major recommendations.

° Reaction to the December 19, 1986 ACRS Letters to the Congress

Dr. Lewis said that subsequent to the December 18, 1986 ACRS letters to the Speaker of the House and the President of the Senate which proposed an alternate approach to comply with the statutory requirement that the ACRS should submit an annual report to the Congress on the NRC Safety Research program, he had conversations with Mr. Myers of Congressman Udall's staff. Mr. Myers did not raise any strong objection to the ACRS proposal. However, he was somewhat concerned that the ACRS did not bring this matter to the direct attention of Congressman Udall. Mr. Myers suggested that an ACRS letter to Congressman Udall clarifying the intent of the ACRS on this matter would be helpful. The Committee decided to write such a letter. The Committee also decided that the new procedure will be adopted starting from next year. For this year, the Committee decided to send a report to the Congress on the FY 1988 NRC Safety Research Program and Budget.

The Committee discussed briefly the memorandum from Mr. Parler, General Counsel, which commented on the legal ramifications of the December 16, 1986 ACRS letters to the Congress. Dr. Lewis said that in writing those letters the Committee neither intended to violate its statutory obligation nor sought any legislative change. It merely proposed an alternate, and obviously more efficient, procedure to provide comments to the Congress on the NRC Safety Research Program. He expressed dissatisfaction of the approach followed by Mr. Parler in handling this matter. He felt that Mr. Parler should have discussed his concerns with the Committee first prior to writing such a memorandum and making it public. The proposal by Dr. Lewis to send a response to Mr. Parler was not endorsed by the Committee.

° Consideration of the Request by Mr. Beckjord

Dr. Siess informed the Committee that Mr. Eric Beckjord, Director of the Office of Nuclear Regulatory Research (RES), met with him on Thursday, January 8, 1987 to discuss and seek advice on a specific recommendation made by the National Research Council which states that the NRC should impanel an independent advisory group, reporting to the Director of RES, to review the NRC research program and provide advice to the RES Director. Mr. Beckjord was not enthusiastic about the creation of another advisory group. Since the ACRS has been reviewing the NRC Safety Research Program for the past several years and providing valuable advice, he asked whether the ACRS

would be willing to undertake such an effort as recommended by the National Research Council. Dr. Siess said that he told Mr. Beckjord that the Committee may be willing to undertake such an effort if requested by the Commission. Even then, it may not provide comments directly to the Staff. ACRS comments would be sent either to the Commission or to the Executive Director for Operations.

Dr. Siess said that if such an effort is undertaken, it would require 3-4 meetings of the Safety Research Program Subcommittee to do the job. He sought the opinion of the full Committee on this issue.

Dr. Lewis commented that the Committee's function is to provide advice to the Commission. He is not in support of providing advice directly to the Staff.

Dr. Kerr said that since a major portion of the Agency budget is spent on the NRC Safety Research Program, coupled with the fact that the Committee has already been spending some effort in reviewing the NRC research, it would be worthwhile to undertake such an effort and provide advice to the Staff through the Commission or the EDO.

After further discussion, the Committee decided to undertake the review of the overall structure and thrust of the NRC Safety Research Program, if requested by the Commission.

6. Planning

The Committee did not object to the Planning Subcommittee's recommendation that additional subcommittee meetings be authorized as follows:

- 1 meeting of the Subcommittee on Auxiliary Systems to discuss applicable research activities

- 1 meeting of the Subcommittee on Thermal Hydraulic Phenomena to discuss proposed activities regarding thermal hydraulic research, the MIST program, the B&W Improved Scaled Integral Facility, etc., in addition to the two-day meeting already scheduled to consider proposed changes in the ECCS rule and related matters.

- 1 meeting of the Subcommittee on Regulatory Policies and Practices to discuss the staff handling of AIT activities and the resolution of other serious transients and "near misses" in nuclear power plant operations.

D. Other Committee Conclusions

1. Electrical Surge Protection

The Committee agreed to continue its discussion of electrical surge protection at the February meeting. A draft report by Mr. Wylie (Draft #1, Electrical Surge Protection for Nuclear Power Plants dated 1/10/87) was carried over for discussion.

2. Dedicated Decay Heat Removal Systems

The Committee was provided with the January 10, 1987 memorandum from Mr. J.C. Ebersole to the ACRS, titled "Argument For Dedicated Systems" as a background document.

3. Meeting with the NRC Commissioners

The Committee identified its report Recommendations on Improved Safety for Future Light-Water Reactors as a suitable topic for future discussion with the Commissioners. The Committee agreed that it would take at least two more meetings before it will have developed a Committee position on implementation of NRC Safety Goal Policy and that a discussion with the Commissioners of this matter would best be scheduled after that.

Dr. Okrent suggested that the treatment of people who take "unpopular" positions in the NRC Staff is an item which may warrant further discussion by the Committee and with the Commissioners. Mr. Stello, EDO, commented regarding this matter and agreed to ask Mr. Denton and/or Mr. Bernero to meet with ACRS to discuss their reassignments.

The Committee's long-range activities and particularly its role in radwaste regulation was another item suggested for further discussion among the ACRS Members as a potential item for discussion with the Commissioners. A session with NMSS to discuss its proposal for ACRS activities in radwaste regulation is to be scheduled during the February ACRS meeting.

E. Future Activities

1. Future Agenda

The Committee agreed on tentative agenda items for the 322nd ACRS Meeting, February 5-7, 1987 (see Appendix IV).

2. Future Subcommittee Activities

A schedule of future subcommittee activities was distributed to members (see Appendix V).

The 321st ACRS Meeting was adjourned at 2:30 p.m., Saturday, January 10, 1987.

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Supplement

ACRS Membership Vacancy

The Committee decided to recommend to the Commissioners the names of Dr. Robert Avery, Dr. Martin J. Steindler and Mr. John M. West as candidates for the current vacancy on the ACRS. Dr. Bernard Kahn's name, previously proposed to the Commissioners on July 15, 1986, was withdrawn.

APPENDICES
321ST ACRS MEETING MINUTES
JANUARY 8-10, 1987
ACRS-2485

Appendix I

APPENDICES
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321ST ACRS MEETING
JANUARY 8-10, 1987

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ACRS MEETING

DATE: January 8-10, 1987

ATTENDEES

Dr. William Kerr, Chairman ___

Dr. Forrest J. Remick, Vice Chairman ___

Dr. Max W. Carbon ___

Mr. Jesse C. Ebersole ___

Dr. Harold W. Lewis ~~not~~ present Jan. 8, 1987

Dr. Carson Mark ___

Mr. Carlyle Michelson ___

Dr. Dade W. Moeller ___

Dr. David Okrent ___

Mr. Glenn A. Reed ~~not~~ present

Dr. Paul G. Shewmon ___

Dr. Chester P. Siess ___

Mr. David A. Ward ___

Mr. Charles J. Wylie ___

NRC ATTENDEES

321ST ACRS MEETING

January 8, 1987

D. J. McGupp, DOE
R. Caruso, DBL
D. Giessing, DOE
R. Hernan, NRR/PPAS
M.B. Spangler, NRR

PUBLIC ATTENDEES

321ST ACRS MEETING

January 8, 1987

J. O. Berga, EPRI
D. Juiozo, McGraw Hill
S. Omoto, TEPCO
Kateskbaugh, UCS/Hammon Weiss
Altheia Wyche, SERCH Licensing/Bechtel
R. Huston, AIF
H. M. Fontecilla, VA Power
G. A.Brown, Stone & Webster
M. Lewis, E.C.N.P.
P. Collins, KMC, Inc.
D. Knuth, KMC
N. Osborn

NRC ATTENDEES

321ST ACRS MEETING

January 9, 1987

Ron Hernan, NRR/PPAS
R. Bosnak, NRR, DSRO
D. Thatcher, NRR/DSRO
N. Anderson, NRR/DSRO
H. Reponem, NRR/DSRO
S. Bryan, NRR/DHET

PUBLIC ATTENDEES

321ST ACRS MEETING

January 9, 1987

J. Trotter, NUS
E. Fotopoulos, Serch Licensing, Bechtel
L. S. Clifford, CFE
H. M. Fontecilla, VA Power
K. Unnerstall, Newman & Holtzinger
D.Airolo, McGraw-Hill
M. Beaumont, Westinghouse
R. E.Schaffstall, KMC, Inc.
C. Guild,Doub and Muntzing
C. Tully,AIF
S. Murphy, NIRS
B. Boher, Framatome
P. A. Ward, IEAL

ZECH ANNOUNCES KEY PERSONNEL CHANGES FOR REORGANIZED NRC

Following up his announcement in November of a major agency reorganization (INRC, 24 Nov. '86, 4), NRC Commission Chairman Lando Zech has named key personnel to fill the top spots within NRC's new structure. He has also fleshed out other details of the reorganization, including the creation within the Office of Nuclear Reactor Regulation (NRR) of two new project offices—one for the Tennessee Valley Authority's nuclear plants and the other for Texas Utilities Electric Co.'s Comanche Peak facility.

Zech also named two new regional administrators. Tapped to head Region I is Richard Vollmer, currently the deputy director of NRR; to head Region III will be Bert Davis, who has been deputy administrator in Region III. Vollmer replaces Thomas Murley, who is to become the new director of NRR; Davis replaces James Keppler, who will be the deputy executive director for operations.

In his latest announcement, Zech also said that James Sniezek will become the deputy director of NRR rather than the director of the Office of Analysis & Evaluation of Operational Data (AEOD) as was previously announced. Edward Jordan will now become the director of AEOD.

The effective date for the reorganization has yet to be determined, although it is expected to be in late spring or early summer.

Zech believes the key features of the reorganization include transferring the functions of the Office of Inspection & Enforcement (I&E) to the executive director for operations, NRR, and the Office of Nuclear Material Safety & Safeguards; the creation of a new Office of Governmental & Public Affairs; and the assignment of responsibility for resolving generic safety issues to the Office of Nuclear Regulatory Research (RES). The review of full-scope probabilistic risk assessments will also be given to RES.

Noting that NRC's mission is different today than when the agency was created in 1975, Zech said, "We have shifted from evaluation of construction permit and operating license applications to the regulation of a maturing operational industry. The new organization will focus NRC's major program offices on the day-to-day safety of operational facilities and make them more accountable for our safety programs. In addition, the new organization is designed to strengthen the role of our research program to further enhance safe operations at our 106 commercial nuclear power plants. It also will enable us to focus more attention on resolving safety issues in the materials licensing and waste areas."

Following is a listing of some of the key personnel changes in the reorganization, along with a person's current position. In some cases, a person's title did not change substantially in the reorganization.

OFFICE OF GOVERNMENTAL & PUBLIC AFFAIRS

Director — Harold Denton *(currently director of the Office of Nuclear Reactor Regulation)*

Director of congressional affairs — To be assigned

Director of public affairs — Joseph Fouchard

Director of international programs — James Shea

Director of state, local, and Indian tribes programs — Carlton Kammerer *(currently director, Office of Congressional Affairs)*

OFFICE OF THE EXECUTIVE DIRECTOR FOR OPERATIONS

Executive director for operations — Victor Stello

Deputy executive director for operations — James Keppler *(currently Region III administrator)*

Assistant for operations — Thomas Rehm

Deputy executive director for regional operations — James Taylor *(currently director of the Office of Inspection & Enforcement)*

Director, Office of Enforcement — James Lieberman *(currently assistant general counsel for enforcement)*

OFFICE OF ANALYSIS & EVALUATION OF OPERATIONAL DATA

Director — Edward Jordan *(currently director of the division of emergency preparedness and engineering response in I&E)*

Director, division of operational assessment — Richard Spessard *(currently deputy director of the division of inspection programs in I&E)*

Director of the division of safety programs — Clemens Heltemes *(currently director of AEOD)*

OFFICE OF NUCLEAR REGULATORY RESEARCH

Director — Eric Beckjord

Deputy director for research — Denwood Ross

Deputy director for generic issues — Themis Speis *(currently director of the division of safety review and oversight in the Office of Nuclear Reactor Regulation)*

Director of the division of engineering — Guy Arlotto

Director of the division of reactor systems and plant systems — Brian Sheron *(currently deputy director of the division of safety review and oversight in NRR)*

Director of reactor accident analysis — Robert Bernero *(currently director of the division of BWR licensing in NRR)*

Director of the division of regulatory applications — Billy Morris *(currently deputy director of the division of reactor systems safety in the Office of Research)*

OFFICE OF NUCLEAR REACTOR REGULATION

Director — Thomas Murley *(currently Region I administrator)*

Deputy director — James Sniezek *(currently deputy executive director for regional operations and generic requirements)*

Director, program management, policy development and analysis staff — to be assigned

Associate director for projects — Frank Miraglia *(currently director of the division of PWR licensing-B)*

Associate director for inspection and technical assessment — Richard Starostecki *(currently acting deputy director of I&E)*

Director of the division of reactor projects, I/II — Steven Varga *(currently a project director in NRR's division of PWR licensing-A)*

Director division of reactor projects, III/IV/V — Dennis Crutchfield *(currently assistant director for technical support in the division of PWR licensing-B)*

Director of the division of operational events assessment — C.E. Rossi *(currently assistant director in the division of PWR licensing-A)*

Director of the division of engineering and system technology — Lawrence Shao *(currently deputy director of the division of engineering technology in RES)*

Director of the division of reactor inspection and safeguards — James Partlow *(currently director of the division of inspection programs in I&E)*

Director of emergency preparedness and technology application — To be assigned

Director of licensee performance and quality evaluation — William Russell *(currently director of the human factors technology division in NRR)*

Director of the TVA project office — To be assigned

Director of the Commanche Peak project office — To be assigned

OFFICE OF NUCLEAR MATERIAL SAFETY & SAFEGUARDS

Director — John Davis

Deputy director — Hugh Thompson *(currently acting director TVA projects staff in NRR)*

Director, program management, policy development, and analysis staff — Jack Roe *(currently deputy executive director for operations)*

Director division of high-level waste management — Robert Browning

Director of the division of safeguards and transportation — Robert Burnett

Director of the division of low-level waste management and decommissioning — Malcolm Knapp

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INTEGRATED SAFETY MATRIX
(GUIDELINE FOR CORE-MELT, LARGE RADIOACTIVE RELEASE, HEALTH EFFECTS AND BENEFIT-COST)*

Large-Scale Core-Melt Frequency (Per RY)	Large Radioactive Release Frequency (Per RY)**	Health Effects @0.1%/RY Prompt/Latent***	Benefit Cost ($1,000/p-r + Averted onsite costs)****
$< 10^{-5}$	$\leq 10^{-6}$, or	Meet both objectives	No further safety improvement
	$> 10^{-6}$, health effects analyses may be required	Don't meet one	Improve ($1,000/p-r)
$< 10^{-4} - 10^{-5}$	$\leq 10^{-6}$, or	Meet both objectives	Improve ($1,000/p-r +1 → 0% AOSC)
	$> 10^{-6}$, health effects analyses likely required	Don't meet one	Improve ($1,000/p-r +100% AOSC)
$10^{-3} - 10^{-4}$	Presumed not to meet health effects until detailed analyses reveal otherwise	Meet both objectives	Improve ($1,000/p-r + 10 → 1% AOSC)
		Don't meet one	Improve ($1,000/p-r +100% AOSC)
$> 10^{-3}$	Presumed not to meet health effects until detailed analyses reveal otherwise	Meet both objectives	Improve ($1,000/p-r +100% AOSC)
		Don't meet one	Improve (cost no limit)

* All values are taken as mean values

** The overall guideline for the frequency of a large and life threatening release less than 10^{-6} per RY may serve as an acceptable surrogate (for health effects analyses) that provides a high degree of assurance that the Commission's Safety Goals are achieved. Otherwise, improvement in accident mitigation or prevention may be desirable for added defense-in-depth.

*** Prompt effects integrated to 1 mile from site boundary; latent effects to 10 miles.

**** (1) AOSC = Averted onsite costs (See NUREG/CR-3568, A Handbook for Value-Impact Assessment)
(2) p-r = person-rem, integrated to 50 miles

FIGURE 2

FUTURE AGENDA

FEBRUARY ACRS MEETING

Safety Goal Policy Implementation -- Briefing on the status of Staff action regarding preparation of an implementation plan.	4 hours
Review of Advanced BWR -- Brainstroming on the Licensing Basis Agreement.	1½ hours
Standard Plant Improvements -- Discuss proposed recommendations regarding improved standardized nuclear plants.	1½ hours
Naval Reactors Training Facility -- ACRS comments requested regarding the moored training ship demonstration project.	2 hours
NRC Safety Research Program -- Annual report to Congress on NRC Safety Research Program.	5 hours
Advanced Reactor Design -- Briefing and discussion regarding the use of proven technology and standardization of advanced non-LWR design.	1 hour
Future ACRS Activities -- Discuss anticipated subcommittee activities and items proposed for consideration by the full Committee.	1/2 hour
Bypassing of the Suppression Pool in Mark I Containments -- Discuss NRC Staff's proposed resolution of Generic Issue 61, "SRV Line Break Inside the BWR Wetwell Airspace of Mark I and Mark II Containments."	1/2 hour
Meeting with the NRC Commissioners -- Topics to include: ACRS report on Improved LWRs	2 hours
New Members --	
Further action at the 322nd ACRS Meeting by the New Members Subcommittee, or the full Committee, is dependent on the response from the Commissioners conerning the Committee's proposal of Dr. Avery, Dr. Steindler and Mr. West as candidates for the current vacancy.	1/2 hour, tentative
Recent Events at Operating Plants -- Subcommittee report and Staff briefing regarding recent events at nuclear power plants.	2½ hours
Augmented Inspection Teams -- NRC Staff briefing on AIT reports on Surry and on Hatch.	2 hours

Proposed ACRS Reports to NRC -- Discuss proposed ACRS reports to the NRC regarding:

1. Matters considered during this meeting
2. Electrical Surge Protection

Subcommittee Reports -- Hear reports from Subcommittees on recent ACRS subcommittee meetings; including:

1. Severe Accidents
2. Regulatory Policies and Practices

NRC Nuclear Radwaste Program -- Meeting with NMSS to discuss proposed ACRS participation in the NRC program for regulation of radioactive wastes.

Later ACRS Meetings

MARCH	
Radiation Damage -- Comments on Reg. Guide 1.99, Rev. 2, "Radiation Damage to Reactor Pressure Vessels."	Deferred until revised guide is received
MARCH	
BWR Pipe Crack Guidance -- Comments on incorporation of public comments into NUREG-0313, Rev. 2, regarding monitoring, repair of pipe cracking in BWR systems	Deferred until revised NUREG is received
MARCH	
General Design Criterion 4, Environmental and Missile Design -- Comments on proposed changes in GDC 4 regarding design of pipe whip restraints.	Deferred until revised rule is received
MARCH	
TVA Management Problems -- Comments regarding proposed TVA corporate "get-well" plan.	Deferred until NRC Staff evaluation is received
MARCH	
Implementation of Severe Accident Polocy -- ACRS comments requested regarding NRC Staff's proposed implementation Plan for NRC Severe Accident Policy.	Deferred until NRC Staff's generic letter and attachments are received.
MARCH	
Safety Awareness of Management at Nuclear Facilities -- ACRS Subcommittee on Human Factors report regarding proposed ACRS report discussed during 319th ACRS Meeting (Nov. 1986).	Deferred until March following Subcommittee Meeting on February 18, 1987
MARCH/APRIL	
EPRI Requirements for Standardized LWR -- Comments regarding SER for Chapter I of EPRI Requirements documents.	Deferred until NRC Staff SER is received

APRIL/MAY

Decay Heat Removal/Auxiliary Feedwater System Reliability -- Discuss resolution of ACRS comments regarding proposed NRC plan for review of seven nuclear power plants.	Deferred until NRC Staff review of several more plants is completed

APRIL/MAY

Seabrook EPZ -- If the NRC Staff reviews the Public Service Company of New Hampshire request for exemption from a 10 mile EPZ, the ACRS will comment on the Staff review.	Deferred until NRC Staff review is received

Revised: 1/10/87

ACRS SUBCOMMITTEE MEETINGS

Regulatory Policies and Practices, January 14, 1987, 1717 H Street, NW, Washington, DC (Quittschreiber), 9:00 A.M., Room 1046. The Subcommittee will begin its current review of the nuclear plant regulatory process. Attendance by the following is anticipated, and reservations have been made at the hotels indicated for the night of January 13:

Dr. Lewis	HYATT	Dr. Siess	ANTHONY
Dr. Kerr	LOMBARDY	Mr. Ward	NONE
Dr. Remick	NONE	Mr. Wylie	DAYS INN

Structural Engineering, January 21 and 22, 1987, at the AMFAC Hotel, 2910 Yale Blvd., SE, Albuquerque, NM (Igne), 8:00 A.M. The Subcommittee will review containment integrity and Category I structures, and other related programs. Attendance by the following is anticipated, and reservations have been made at the AMFAC Hotel (telephone # 505/843-7000) for the nights of January 20 and 21:

Dr. Siess	Mr. Bender
Dr. Mark	

Naval Reactors (Closed), January 30, 1987, National Center #2 Building, Crystal City, VA (Boehnert). The Subcommittee will review the Naval Reactor Moored Training Ship Project. Attendance by the following is anticipated, and reservations have been made at the hotels indicated for the night of January 29:

Dr. Kerr	LOMBARDY	Dr. Remick	NONE
Dr. Lewis	HYATT	Mr. Ward	NONE

Advanced Reactor Designs, February 4, 1987, 1717 H Street, NW, Washington, DC (El-Zeftawy), 8:30 A.M., Room 1046. The Subcommittee will review DOE advanced non-LWR designs regarding the use of proven technology and standardization. Attendance by the following is anticipated, and reservations have been made at the hotels indicated for the night of February 3:

Dr. Carbon	STATE PLAZA	Dr. Shewmon	NONE
Dr. Mark	LOMBARDY	Dr. Siess	ANTHONY
Mr. Michelson	DAYS INN	Dr. Wylie	DAYS INN
Dr. Remick	NONE		

322nd ACRS Meeting, February 5-7, 1987, Washington, DC, Room 1046.

Standardization of Nuclear Facilities, February 11, 1987, 1717 H Street, NW, Washington, DC (Alderman). The Subcommittee will discuss requirements of the EPRI Advanced Light Water Reactors program. Lodging will be announced later. Attendance by the following is anticipated:

Mr. Wylie	Mr. Michelson
Dr. Kerr	Dr. Siess

Waste Management, February 12-13, 1987, 1717 H Street, NW, Washington, DC (Merrill), 8:30 A.M., Room 1046. The Subcommittee will review several pertinent nuclear waste management topics, which are to be determined during an agenda planning session with the NMSS and RES Staffs on January 21, 1987. Lodging will be announced later. Attendance by the following is anticipated:

Dr. Moeller
Dr. Carbon
Dr. Kerr
Dr. Mark
Dr. Remick
Dr. Shewmon

Human Factors, February 18, 1987, 1717 H Street, NW, Washington, DC (Alderman). The Subcommittee will review "Safety Conscience" concept at utilities. Lodging will be announced later. Attendance by the following is anticipated:

Dr. Remick
Mr. Ebersole
Dr. Kerr
Mr. Michelson
Mr. Ward
Mr. Wylie
Mr. Kruesi

Regional and I&E Programs, March 12, 1987, 1717 H Street, NW, Washington, D, (Boehnert), 8:30 A.M., Room 1046. The Subcommittee will continue its review of the activities of the Office of Inspection and Enforcement. Attendance by the following is anticipated:

Dr. Remick
Mr. Michelson
Dr. Moeller
Mr. Reed
Mr. Ward
Mr. Wylie

Severe Accidents, Date to be determined (February/March), Washington, DC (Houston). The Subcommittee will continue the review of the NRC Implementation Plan for Severe Accidents, specifically the generic letters for Individual Plant Examinations (IPE) for existing plants. Attendance by the following is anticipated:

Dr. Kerr
Dr. Carbon
Dr. Mark
Dr. Okrent
Dr. Shewmon
Dr. Siess

AC/DC Power Systems Reliability, Date to be determined (March), Washington, DC (El-Zeftawy). The Subcommittee will review the proposed Station Blackout rule. Attendance by the following is anticipated:

Dr. Kerr
Mr. Ebersole
Dr. Lewis
Mr. Wylie

Joint Occupational & Environmental Protection Systems/Severe Accidents/Seabrook, Date to be determined (March), Washington, DC (Igne/ Houston/Major). The Subcommittee will review Brookhaven National Laboratory's draft report of the Seabrook Emergency Planning Sensitivity Study. Attendance by the following is anticipated:

Dr. Moeller
Dr. Kerr
Dr. Mark
Dr. Remick
Dr. Siess
Dr. Catton (tent.)

Thermal Hydraulic Phenomena, Date to be determined (2-day meeting, April/May), INEL, Idaho Falls, ID (Boehnert). The Subcommittee will review: (1) the Final ECCS Rule and associated documentation, (2) uncertainty methodology to be applied to review of new BE ECCS code models, and (3) the TIC activities at INEL. Attendance by the following is anticipated:

Mr. Michelson
Mr. Ebersole
Dr. Kerr
Mr. Ward
Mr. Ward
Dr. Catton
Dr. Schrock
Dr. Sullivan
Dr. Tien

Decay Heat Removal Systems (tentative), Date to be determined (April/May), Washington, DC (Boehnert). The Subcommittee will continue its review of the NRR Resolution Position for USI A-45. Attendance by the following is anticipated:

Mr. Ward
Mr. Ebersole
Mr. Michelson
Mr. Reed
Mr. Wylie
Dr. Catton
Mr. Davis

Seabrook Unit 1, Date to be determined, Washington, DC (Major). The Subcommittee will review the application for a full power operating license for Seabrook Unit 1. Attendance by the following is anticipated:

Dr. Kerr
Dr. Lewis
Dr. Moeller
Mr. Michelson

Regional and I&E Programs, Date to be determined (May), Region IV, Arlington, TX (Boehnert). The Subcommittee will review the activities under the control of the Region IV Office. Attendance by the following is anticipated:

Dr. Remick
Mr. Michelson
Dr. Moeller
Mr. Reed
Mr. Ward
Mr. Wylie

Metal Components, Date to be determined, Washington, DC (Igne). The Subcommittee will: (1) review public comments on GDC 4 broad scope rule (LBB) and criteria for component support design margins, (2) hear a status report of the Whipjet program (application of broad scope GDC-4 criteria) as applied to lead plant Beaver Valley Unit 2; (3) review public comments on NUREG-0313, Revision 2 (long range fix for BWR-IGSCC problems), (4) discuss Reg. Guide 1.99, Rev. 2, and (5) review other related matters i.e., Surry feedwater suction piping failure. Attendance by the following is anticipated:

Dr. Shewmon
Mr. Michelson
Mr. Ward
Mr. Bender
Dr. Bush
Dr. Kassner
Mr. Rodabaugh

SCHEDULE OF ACRS SUBCOMMITTEE MEETING

DATE	SUBCOMMITTEE MEETING	STAFF ENGR. & MEMBERS
JANUARY 14, 1987	REGULATORY POLICIES AND PRACTICES	(QUITTSCHREIBER) Lewis, Kerr, Remick Siess, Ward, Wylie

PURPOSE: The Subcommittee will begin its current review of the nuclear plant regulatory process.

LOCATION: WASHINGTON, DC

BACKGROUND:

What action is requested; by what date is it needed?

During the August 1986 ACRS meeting the Committee assigned the Reg. Policies and Practices Subcommittee to review the regulatory process.

What will be done at this meeting?

The Subcommittee will meet with representatives of INPO, NUMARC, and NPOC.

What would be the consequence of postponing this meeting?

None

PERTINENT PUBLICATIONS AND THEIR AVAILABILITY:

1. UNPOC Report on Leadership in Achieving Operational Excellence, issued August 1986.

SCHEDULE OF ACRS SUBCOMMITTEE MEETING

DATE	SUBCOMMITTEE MEETING	STAFF ENGR. & MEMBERS
JANUARY 21 & 22, 1987	STRUCTURAL ENGINEERING	(IGNE) Siess, Mark Cons.: Bender

PURPOSE: To visit and review containment integrity and Category I structures facilities and programs.

LOCATION: ALBUQUERQUE, NM

BACKGROUND:

What action is requested; by what date is it needed?

RES requested that we visit and review the above programs during late 1986/early 1987.

What will be done at this meeting?

See Purpose.

What would be the consequence of postponing this meeting?

None

PERTINENT PUBLICATIONS AND THEIR AVAILABILITY:

1. NUREG-0900, Rev. 1, Nuclear Power Plant Severe Accident Research Plan; Section 3.3, Containment Behavior Research. (distributed)
2. Draft LANL report entitled, "Seismic Category I Structures Program - Current Status and Program Plan for FY 1986 through FY 1989. (distributed)

SCHEDULE OF ACRS SUBCOMMITTEE MEETING

DATE	SUBCOMMITTEE MEETING	STAFF ENGR. & MEMBERS
JANUARY 30, 1987	NAVAL REACTORS (CLOSED)	(BOEHNERT) Kerr, Lewis, Remick, Ward

PURPOSE: To review the Naval Reactors Moored Training Ship Project.

LOCATION: CRYSTAL CITY, VA

BACKGROUND:

What action is requested; by what date is it needed?

Review of MTS Project to support NRC/NR review schedule.

What will be done at this meeting?

See Purpose.

What would be the consequence of postponing this meeting?

Impact NRC/NR review schedule.

PERTINENT PUBLICATIONS AND THEIR AVAILABILITY:

SER and supporting documents (classified) will be provided on a timely basis.

SCHEDULE OF ACRS SUBCOMMITTEE MEETING

DATE	SUBCOMMITTEE MEETING	STAFF ENGR. & MEMBERS
FEBRUARY 4, 1987	ADVANCED REACTOR DESIGNS	(EL-ZEFTAWY) Carbon, Mark, Michelson, Remick, Shewmon, Siess, Wylie

PURPOSE: To review DOE advanced non-LWR designs regarding the use of proven technology and standardization.

LOCATION: WASHINGTON, DC

BACKGROUND:

What action is requested; by what date is it needed?

Review draft Commission paper (that will be supplied by the NRC Staff) on Advanced Reactors standardization; February 1987.

What will be done at this meeting?

1) Review DOE's advanced reactor program goals regarding standardization.
2) Review the level of operating experience, supporting R&D, and prototype testing.
3) Make sure that the draft Commission paper is consistent with Commission goals/policy.

What would be the consequence of postponing this meeting?

Deletion of CRGR review and final submittal to the Commission.

PERTINENT PUBLICATIONS AND THEIR AVAILABILITY:

To be provided with Status Report.

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SCHEDULE OF ACRS SUBCOMMITTEE MEETING

DATE	SUBCOMMITTEE MEETING	STAFF ENGR. & MEMBERS
FEBRUARY 11, 1987	STANDARDIZATION OF NUCLEAR FACILITIES	(ALDERMAN) Wylie, Kerr, Michelson, Siess

PURPOSE: The Subcommittee will discuss requirements of the EPRI Advanced Light Water Reactors Program.

LOCATION: WASHINGTON, DC

BACKGROUND:

What action is requested; by what date is it needed?

Information gathering on EPRI requirements needed by March 1987.

What will be done at this meeting?

Discuss EPRI requirements with Staff, EPRI, AIR, and possibly vendors.

What would be the consequence of postponing this meeting?

Information needed by Standardization and Advanced BWR Subcommittees. ABWR Subcommittee to write letter in March.

PERTINENT PUBLICATIONS AND THEIR AVAILABILITY:

1. EPRI ALWR Chapter 1. (Available in ACRS office)

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SCHEDULE OF ACRS SUBCOMMITTEE MEETING

DATE	SUBCOMMITTEE MEETING	STAFF ENGR. & MEMBERS
FEBRUARY 12-13, 1987	WASTE MANAGEMENT	(MERRILL) Moeller, Carbon, Kerr, Mark Remick, Shewmon Cons.: Not yet selected

PURPOSE: The Subcommittee will review several NMSS and RES nuclear waste topics, which are to be determined during an agenda planning session with the NMSS and RES Staffs on January 21, 1987.

LOCATION: WASHINGTON, DC

BACKGROUND:

What action is requested; by what date is it needed?

See Purpose.

What will be done at this meeting?

See Purpose.

What would be the consequence of postponing this meeting?

Untimely ACRS response to pertinent issues.

PERTINENT PUBLICATIONS AND THEIR AVAILABILITY:

Will be identified by January 21, 1987 and provided with Status Report.

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SCHEDULE OF ACRS SUBCOMMITTEE MEETING

DATE	SUBCOMMITTEE MEETING	STAFF ENGR. & MEMBERS
FEBRUARY 18, 1986	HUMAN FACTORS	(ALDERMAN) Remick, Ebersole, Kerr, Michelson, Ward, Wylie Cons.: Kruesi

PURPOSE: To review "Safety Conscience" concept at utilities.

LOCATION: WASHINGTON, DC

BACKGROUND:

What action is requested; by what date is it needed?

Develop information to establish Committee position on "Safety Conscience." Committee letter needed for March 1987 meeting.

What will be done at this meeting?

Discuss with utilities, INPO, and NRC Staff concept of safety conscience.

What would be the consequence of postponing this meeting?

Would be unable to meet the March ACRS meeting deadline.

PERTINENT PUBLICATIONS AND THEIR AVAILABILITY:

1. Standard Review Plan 13.4, Operational Review (on-hand in ACRS office)
2. NUREG-0737, Clarification of TMI Action Plan Requirements, 1.B.1.2, Independent Safety Engineering Group (on-hand in ACRS office)

SCHEDULE OF ACRS SUBCOMMITTEE MEETING

DATE	SUBCOMMITTEE MEETING	STAFF ENGR. & MEMBERS
MARCH 12, 1987	REGIONAL AND I&E PROGRAMS	(BOEHNERT) Remick, Michelson, Moeller, Reed, Ward, Wylie

PURPOSE: To continue the review of the activities of the Office of Inspection and Enforcement.

LOCATION: WASHINGTON, DC

BACKGROUND:

What action is requested; by what date is it needed?

No specific action requested.

What will be done at this meeting?

See Purpose.

What would be the consequence of postponing this meeting?

None

PERTINENT PUBLICATIONS AND THEIR AVAILABILITY:

To be provided on a timely basis to support meeting.

SCHEDULE OF ACRS SUBCOMMITTEE MEETING

DATE	SUBCOMMITTEE MEETING	STAFF ENGR. & MEMBERS
TO BE DETERMINED (FEB./MARCH)	SEVERE ACCIDENTS	(HOUSTON) Kerr, Carbon, Mark, Okrent, Shewmon, Siess

PURPOSE: The Subcommittee will continue its review of the NRC Implementation Plan for Severe Accidents, specifically the generic letters for Individual Plant Examinations (IPE) for existing plants.

LOCATION: WASHINGTON, DC

BACKGROUND:

What action is requested; by what date is it needed?

Continue review of the proposed generic letter for Individual Plant Examinations (IPE), including a review of IDCOR-IPEM.

What will be done at this meeting?

Review as stated above.

What would be the consequence of postponing this meeting?

May delay issuance of generic letter on a schedule drawn up by NRR.

PERTINENT PUBLICATIONS AND THEIR AVAILABILITY:

Intended documents by January 30, 1987.

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SCHEDULE OF ACRS SUBCOMMITTEE MEETING

DATE	SUBCOMMITTEE MEETING	STAFF ENGR. & MEMBERS
TO BE DETERMINED (MARCH)	AC/DC POWER SYSTEMS RELIABILITY	(EL-ZEFTAWY) Kerr, Ebersole, Lewis, Wylie

PURPOSE: To review the proposed Station Blackout rule (SECY-85-163).

LOCATION: WASHINGTON, DC

BACKGROUND:

What action is requested; by what date is it needed?

ACRS letter on the proposed rule; March 1987.

What will be done at this meeting?

Review the proposed rule and the resolution of public comments.

What would be the consequence of postponing this meeting?

Would delay the issuance of the final rule.

PERTINENT PUBLICATIONS AND THEIR AVAILABILITY:

1. A Status Report and Schedule will be prepared prior to meeting.

A-026

SCHEDULE OF ACRS SUBCOMMITTEE MEETING

DATE	SUBCOMMITTEE MEETING	STAFF ENGR. & MEMBERS
TO BE DETERMINED (MARCH)	OCCUPATIONAL & ENVIRONMENTAL PROTECTION SYSTEMS/SEVERE ACCIDENTS/SEABROOK	(IGNE/HOUSTON/MAJOR) Moeller, Kerr, Mark, Remick, Siess Cons.: Catton (tent.)

PURPOSE: The Subcommittees will review Brookhaven National Laboratory's draft report of the Seabrook Emergency Planning Sensitivity Study.

LOCATION: WASHINGTON, DC

BACKGROUND:

What action is requested; by what date is it needed?

ACRS comments requested by NRC before the final draft BNL report; February/March.

What will be done at this meeting?

Review BNL report on Seabrook's attempt to modify the EPZ.

What would be the consequence of postponing this meeting?

Opportunity for ACRS comments on this important matter will be lost.

PERTINENT PUBLICATIONS AND THEIR AVAILABILITY:

1. Technical Evaluation of the EPZ Sensitivity Study for Seabrook (draft), Technical Report A-3852 (BNL), transmitted by letter fm V. Nerses, NNR, to R. Harrison, PSC of New Hampshire. (received & distributed)

SCHEDULE OF ACRS SUBCOMMITTEE MEETING

DATE	SUBCOMMITTEE MEETING	STAFF ENGR. & MEMBERS
TO BE DETERMINED (MARCH/APRIL)	STANDARDIZATION OF NUCLEAR FACILITIES	(ALDERMAN) Wylie, Ebersole, Michelson, Reed

PURPOSE: The Subcommittee will review the NRC evaluation of Chapter I, "Overall Requirements," of the EPRI Advanced Light Water Reactor Program.

LOCATION: WASHINGTON, DC

BACKGROUND:

What action is requested; by what date is it needed?

Committee comments on Staff review; January 1987.

What will be done at this meeting?

Discuss Staff review.

What would be the consequence of postponing this meeting?

Delay proposed schedule for overall review.

PERTINENT PUBLICATIONS AND THEIR AVAILABILITY:

1. Staff evaluation, December 15, 1986.

SCHEDULE OF ACRS SUBCOMMITTEE MEETING

DATE	SUBCOMMITTEE MEETING	STAFF ENGR. & MEMBERS
TO BE DETERMINED (APRIL/MAY) (2-day meeting)	THERMAL HYDRAULIC PHENOMENA	(BOEHNERT) Michelson, Ebersole, Kerr, Reed, Ward Cons.: Catton, Schrock, Sullivan, Tien

PURPOSE: To review: (1) Final ECCS Rule and associated documentation, (2) uncertainty methodology to be applied to review of new BE ECCS code models, and (3) TIC activities at INEL.

LOCATION: IDAHO FALLS, ID (INEL)

BACKGROUND:

What action is requested; by what date is it needed?

Timely review of final ECCS Rule version in conjunction with review of ECCS Rule by the Commission in April-May timeframe.

What will be done at this meeting?

See Purpose.

What would be the consequence of postponing this meeting?

See "Action Required" above.

PERTINENT PUBLICATIONS AND THEIR AVAILABILITY:

To be provided in the near future.

SCHEDULE OF ACRS SUBCOMMITTEE MEETING

DATE	SUBCOMMITTEE MEETING	STAFF ENGR. & MEMBERS
TO BE DETERMINED (APRIL/MAY)	DECAY HEAT REMOVAL SYSTEM	(BOEHNERT) Ward, Ebersole, Michelson, Reed, Wylie Cons.: Catton, Davis

PURPOSE: To continue review of NRR Resolution Position for USI A-45.

LOCATION: WASHINGTON, DC

BACKGROUND:

What action is requested; by what date is it needed?

See Purpose. Need meeting in December to support January ACRS review per NRR Project schedule.

What will be done at this meeting?

See Purpose.

What would be the consequence of postponing this meeting?

Impact NRR milestone schedule.

PERTINENT PUBLICATIONS AND THEIR AVAILABILITY:

Regulatory Analysis Report for A-45 Resolution (will be provided in November 1986).

SCHEDULE OF ACRS SUBCOMMITTEE MEETING

DATE	SUBCOMMITTEE MEETING	STAFF ENGR. & MEMBERS
TO BE DETERMINED	SEABROOK UNIT 1	(MAJOR) Kerr, Lewis, Moeller, Michelson

PURPOSE: Full power approval for the Seabrook plant. Currently ACRS has written a 5% power letter (4/19/83). Outstanding issues include emergency planning and Staff review of a probabilistic safety assessment performed for the Seabrook plant.

LOCATION: WASHINGTON, DC

BACKGROUND:

What action is requested; by what date is it needed?

Conclusion of ACRS OL review. Prior to operation above 5% power.

What will be done at this meeting?

Review outstanding issues and consider this plant for a full power ACRS letter. Conclude OL review.

What would be the consequence of postponing this meeting?

Postponing this meeting could impact plant operations.

PERTINENT PUBLICATIONS AND THEIR AVAILABILITY:

1. SER on Emergency Planning and review of the PRA expected by fall/winter.

NOTE: The proposal to conduct this meeting does not agree with the Planning Subcommittee's determination that no review of the Seabrook emergency planning provisions is necessary. If this is indeed the case, there is no impediment to issuing a 100% power letter.

SCHEDULE OF ACRS SUBCOMMITTEE MEETING

DATE	SUBCOMMITTEE MEETING	STAFF ENGR. & MEMBERS
O BE DETERMINED (MAY)	REGIONAL AND I&E PROGRAMS	(BOEHNERT) Remick, Michelson, Moeller, Reed, Ward, Wylie

PURPOSE: To begin review of the activities under the control of the Region IV Office.

LOCATION: ARLINGTON, TC (REGION IV)

BACKGROUND:

What action is requested; by what date is it needed?

No specific action needed.

What will be done at this meeting?

See Purpose above.

What would be the consequence of postponing this meeting?

None

PERTINENT PUBLICATIONS AND THEIR AVAILABILITY:

To be provided in near future.

SCHEDULE OF ACRS SUBCOMMITTEE MEETING

DATE	SUBCOMMITTEE MEETING	STAFF ENGR. & MEMBERS
TO BE DETERMINED	METAL COMPONENTS	(IGNE) Shewmon, Michelson, Ward Cons.: Bender, Bush Kassner, Rodabaugh

PURPOSE: To review: (1) public comments on GDC 4 broad scope rule (LBB) and criteria for component support design margins,(2) BVPS 2 Whipjet Program, first application of GDC 4 broad scope rule, (3) NUREG-0313, Rev. 2 with public comments, (4) Reg. Guide 1.99, Rev. 2, and (5) other related matters.

LOCATION: WASHINGTON, DC

BACKGROUND:

What action is requested; by what date is it needed?

Committee requested that public comments and its resolution be reviewed for GDC-4, NUREG-0313, Rev. 2, and Reg. Guide 1.99, Rev. 2. Committee has also requested that it be briefed on the Whipjet Program. Information needed by March/April.

What will be done at this meeting?

See Purpose.

What would be the consequence of postponing this meeting?

ACRS comments not timely.

PERTINENT PUBLICATIONS AND THEIR AVAILABILITY:

To be provided with Status Report.

OTHER DOCUMENTS RECEIVED

Meeting with H. Denton, NRR, to discuss topics of mutual interest, dated January 5, 1987 (Tab 3).

Memorandum from R. Fraley to ACRS Members, subject: NRC Long Range/Strategic Planning, dated November 14, 1986.

Memorandum from Chairman Zech to V. Stello, subject: Strategic Planning Steering Group, dated November 10, 1986.

Memorandum from R. Major to M. Carbon, subject: Commission Comments and Initiative Regarding Strategic Planning, dated October 3, 1986.

Memorandum from Chairman Zech to V. Stello, subject: Strategic Planning, dated September 19, 1986,

Letter from Dr. Evans, SDG, to D. Rathbun, OPE, listing the initial composite of strategic topics based on interviews with Commissioners and EDO, dated July 18, 1986.

Memorandum from P. Boehnert to D. Ward, subject: GENERIC ISSUE 124, dated December 17, 1986.

Memorandum from P. Boehnert to D. Ward, subject: NRC Staff Response to ACRS Comments on the Proposed Resolution of GI 124, dated November 10, 1986.

Letter from H. Denton to D. Ward, subject: ACRS Comments on Proposed Resolution of Generic Issue 124, dated October 21, 1986.

Letter from D. Ward to V. Stello, subject: ACRS Comments on Proposed Resolution of Generic Issue 124, dated September 17, 1986.

Proposed Agenda for the January 8, 1987 ACRS Discussion on the Implementation of the Commission's Safety Goal.

Memorandum from R. Savio to ACRS Members, subject: ACRS Discussion on the Implementation of the Commission's Safety Goal Policy, dated January 2, 1987.

NRC, 10 CFR Part 50 - Safety Goals for the Operating Safety Goals Policy.

Separate Views of Commissioner Bernthal on Safety Goals Policy.

Letter from D. Ward to Stello, subject: Application of NRC Safety Goals in Licensing Issues, dated November 10, 1986.

Letter from D. Ward to N. Palladino, subject: ACRS Comments on Quantification of Public Health Risks, dated April 16, 1986.

Letter from D. Ward to N. Palladino, subject: Additional Comments on Proposed Safety Goal Policy Statement, dated April 15, 1986.

Letter from D. Ward to N. Palladino, subject: ACRS Comments on Proposed Safety Goal Policy, dated March 19, 1986.

Letter from D. Ward to N. Palladino, subject: ACRS Comments on Proposed NRC Safety Goal Evaluation Report, dated July 17, 1985.

Letter from J. Ebersole to W. Dircks, subject: ACRS Report on Draft Task Action Plan - Containment Performance Guidelines, dated March 20, 1984.

Letter from J. Ebersole to W. Dircks, subject: ACRS Review of Draft NUREG-1050, "Probabilistic Risk Assessment (PRA): Status Report and Guidance for Regulatory Application", dated March 20, 1984.

Letter from J. Ray to N. Palladino, subject: ACRS Comments on Proposed NRC Safety Goal Evaluation Plan, dated August 9, 1983.

Letter from J. Ray to N. Palladino, subject: ACRS Comments on Proposed Safety Goal Policy Statement, dated January 10, 1983.

Letter from P. Shewmon to N. Palladino, subject: ACRS Comments on the NRC Staff Questions to the Commission Concerning the Policy Statement on Safety Goals for Nuclear Power Plants, dated September 15, 1982.

Letter from P. Shewmon to N. Palladino, subject: ACRS Report on the Draft Action Plan for Implementing the Commission's Proposed Safety Goals for Nuclear Power Plants, dated September 15, 1982.

Letter from P. Shewmon to N. Palladino, subject: Comments on Proposed Policy Statement on Safety Goals for NPP (NUREG-0880, A Discussion Paper), dated June 9, 1982.

Framework for Safety Goal Implementation, dated December 1986.

ACRS Subcommittee Meetings, dated January 6, 1987.

Memo from R. Savio to ACRS Members, subject: Subcommittee Report on the November 20, 1986 Extreme External Phenomena Subcommittee Discussions on Diablo Canyon, dated January 2, 1987.

Meeting Minutes for the November 20, 1986 Subcommittee Meeting, dated issued December 9, 1986.

Consultants' reports from J. Maxwell, B. Page, and G. Thompson. These reports were distributed at the December 11-13, 1986 ACRS Meeting.

Letter from D. Ward to N. Palladino, subject: ACRS Comments on the Long Term Seismic Program Plan for the Diablo Canyon Power Plant, dated July 17, 1985.

Letter from J. Ebersole to N. Palladino, subject: ACRS Report on Diablo Canyon Power Plant, dated June 20, 1984.

Letter from M. Plesset to J. Ahearne, subject: Diablo Canyon Nuclear Station, dated November 12, 1980.

Memo from R. Fraley to ACRS Members, subject: Reorganization of NRC Staff, dated November 14, 1986.

Memo from L. Zech to V. Stello, subject: Reorganization, dated November 10, 1986.

Memo from V. Stello to Office Directors, subject: Reorganization, dated October 21, 1986.

Proposed Agenda for the Friday, January 9, 1987 - Discussions on USI A-17, "Systems Interactions in Nuclear Power Plants.

Memo from R. Savio to ACRS Members, subject: January 9, 1987 ACRS Discussion on the NRC Staff's Proposed Resolution of USI A-17, dated January 2, 1987.

Letter from D. Ward to V. Stello, subject: ACRS Comments on Proposed Resolution of USI A-17, dated May 13, 1986.

Memo from V. Stello to Commissioner Asselstine, subject: Proposed Resolution of USI A-17, dated July 22, 1986.

Memo from V. Stello to D. Ward, subject: Response to ACRS Comments on Proposed Resolution of USI A-17, dated August 1, 1986.

Memo from R. Savio to ACRS Members, subject: ACRS Report on the Implications of the Chernobyl Accident, dated January 2, 1987.

Memo from R. Savio to F. Remick, subject: Meeting of the ACRS Subcommittee on Safety Philosophy, Technology and Criteria (12/10/86), dated December 18, 1986.

Meeting Minutes on the December 10th -- ACRS Subcommittee on Safety Philosophy, Technology and Criteria (Working Copy) issued; 12/18/86.

Certified Minutes of the November 5, 1986 Safety Philosophy, Technology and Criteria, issued November 25, 1986.

Project Status Report - ACRS 321st Meeting - Regional and I&E Programs Subcommittee Meeting - Subcommittee's Chairman's Report.

Letter from D. Ward to Chairman Zech, subject: ACRS Subcommittee on Regional Operations, dated July 21, 1986.

Memo from P. Boehnert to ACRS Members, subject: Certification of the ACRS Subcommittee Minutes of the Regional and I&E Programs Meeting, December 2, 1986, dated December 15, 1986.

Minutes of Subcommittee on Instrumentation and Control Systems Meeting of December 18, 1986.

Letter from W. Lipinski to J. Ebersole, subject: Instrumentation and Controls Subcommittee Meeting, December 18, 1986, dated December 19, 1986.

Topics Proposed for Future ACRS Meetings dated January 7, 1987.

Agenda for January 8, 1987 on Safety Goal Policy.

Memo from R. Savio to ACRS Members, subject: NRC Staff's Paper on Safety Goal Policy Implementation, dated January 8, 1987.

Memo from V. Stello to Chairman Zech, subject: Safety Goal Implementation Status, dated January 2, 1987.

10 CFR Part 50 - NRC - Policy Statement.

Summary/Minutes for Severe (Class 9) Accidents Subcommittee Meeting on December 19, 1985.

Summary of January 9, 1987 Meeting of the Planning Subcommittee.

Benefit-Cost Matrix for Integrated Safety Goal Guidelines, dated January 8, 1987.

NRR Staff Presentation to the ACRS, subject: NRC Licensing Program - Advanced Boiling Water Reactor (ABWR), January 7, 1987.

NRR Staff Presentation to the ACRS, subject: USI A-17 "Systems Interactions", dated January 9, 1987.

Schedule for Full Committee Presentation GE-ABWR, January 8, 1987.

Draft ABWR Licensing Basis Agreement.

Presentation to the ACRS on ABWR Certification Program, Presented by GE, dated January 1987.