

SUMMARY/MINUTES OF THE
PLANNING AND PROCEDURES SUBCOMMITTEE MEETING
WEDNESDAY, OCTOBER 3, 2001

The ACRS Subcommittee on Planning and Procedures held a meeting on October 3, 2001, in Room 2B1, Two White Flint North Building, Rockville, Maryland. The purpose of the meeting was to discuss matters related to the conduct of ACRS business. The meeting was convened at 10:00 a.m. and adjourned at 12:30 p.m.

ATTENDEES

G. Apostolakis, Chairman
M. Bonaca
T. Kress

ACRS STAFF

J. T. Larkins
S. Bahadur
H. Larson
R. P. Savio
S. Duraiswamy
S. Meador
T. Winfrey
J. Gallo

NRC STAFF

I. Schoenfeld

1) Review of the Member Assignments and Priorities for ACRS Reports and Letters for the October ACRS Meeting

Member assignments and priorities for ACRS reports and letters for the October ACRS meeting are attached (pp. 9-10). Reports and letters that would benefit from additional consideration at a future ACRS meeting were discussed.

RECOMMENDATION

The Subcommittee recommends that the assignments and priorities for the October 2001 ACRS meeting be as shown in the attachment.

S/11,

2) Anticipated Workload for ACRS Members

The anticipated workload of the ACRS members through December 2001 is attached (pp. 11-15). The objectives are to:

- Review the reasons for the scheduling of each activity and the expected work product and to make changes, as appropriate
- Manage the members' workload for these meetings
- Plan and schedule items for ACRS discussion of topical and emerging issue

During this session, the Subcommittee discussed and developed recommendations on the items that require Committee decision, which are included in Section II of the Future Activities list (pp. 16-18).

RECOMMENDATION

The Subcommittee recommends that the members provide comments on the anticipated workload. Changes will be made, as appropriate. The Committee needs to consider the Subcommittee's recommendations on items in Section II of the Future Activities List. In addition, the Subcommittee recommends that because of the unavailability of Mr. Leitch, Dr. Bonaca take the lead in reviewing final Safety Evaluation Report on the Hatch license renewal application. Dr. Shack should take the lead in reviewing the proposed update to 10 CFR Part 52.

3) Quadripartite Meeting Update

In a letter dated August 6, 2001 (pp. 19-21), Mr. Lothar Hahn of the RSK proposed the following:

- List of topics for the Quadripartite meeting, including those proposed by the ACRS.
- Meeting dates June 24-28, 2002, in Berlin, Germany.
- At least one member of the ACNW be invited to attend the meeting. [NOTE: During its August meeting, the ACNW had decided to send a member to this meeting.]
- One member of the Swiss, Spanish, and Swedish advisory bodies be invited to attend the meeting as observers.

Mr. Hahn requested feedback on the above proposals.

On Friday, September 7, 2001, Drs. Apostolakis and Larkins called RSK and discussed alternative dates (May 13-17, or May 27-31, 2002) for this meeting. They also

suggested a 3 day meeting instead of a 5 day meeting proposal by RSK. Recently, Dr. Larkins was informed by RSK that the week of May 27 is acceptable to them and they are in the process of checking with other countries. They plan to have a 3 day meeting and the trip to a reactor site will be optional or canceled.

RECOMMENDATION

The Subcommittee recommends that this meeting be held on May 29-31, 2002, and that Dr. Larkins continue to work with the RSK to plan this meeting and keep the Committee informed.

4) Meeting with the Commission

The ACRS is scheduled to meet with the NRC Commissioners between 1:30 and 3:30 p.m. on Wednesday, December 5, 2001. During the September ACRS meeting, the Committee decided to start the December meeting at 8:30 a.m. on Wednesday, December 5, 2001, a day earlier than previously scheduled.

Topics approved by the Commission are provided below:

- a) Regulatory Challenges for future plant designs (TSK/MME)
- b) Reactor Oversight Process (JDS/MWW)
- c) ACRS Activities Associated with Power Upgrades and Related Matters (GBW/DAP/PAB)
- d) ACRS Activities Associated with License Renewal and Related Matters (MVB/GML/NFD)

The Commission has deleted the topic on risk-informing 10 CFR 50.46 that was one of the topics proposed by the ACRS.

RECOMMENDATION

The Subcommittee recommends that the members, with the assistance of the cognizant staff engineers, prepare preliminary slides on the topics assigned to them for discussion by the Planning and Procedures Subcommittee on November 7, 2001 and by the full Committee during the November 2001 meeting. The members should provide the proposed slides to the ACRS Executive Director by October 31, 2001.

5) Assignments for Reviewing the License Renewal Application and the Staff's Safety Evaluation Report for the Hatch Nuclear Plant Units 1 and 2

Proposed assignments for the final review of the Hatch license renewal application and the associated staff's Safety Evaluation Report (SER) are attached (pp 22-26). A Subcommittee meeting is scheduled for October 25, 2001, to review the Hatch application. The staff's final SER will be sent to the members in early October 2001.

RECOMMENDATION

The Subcommittee recommends that the members review the Sections of the Hatch application and the associated staff's SER assigned to them and provide comments to the Subcommittee Chairman by October 22, 2001. The comments provided by the members should be discussed at the October 25, 2001 Subcommittee meeting.

6) DOD/DOE Naval Reactors (NR) VIRGINIA Submarine Plant Review

The Committee, in response to an NR proposal, plans to visit the shipyard in Groton, Connecticut (for initial inspection of the VIRGINIA-class nuclear propulsion plant design) on November 6, 2001, and tour a submarine on January 23, 2002. A schedule for the visit to the shipyard in Groton is attached (p. 27). Transportation from Washington would be provided by NR, allowing the Committee to depart and return the same day. The Committee also agreed to an overview briefing from NR regarding details of the VIRGINIA class submarine design on November 7, 2001. NR has requested that its briefing be held at its Headquarters Office. Given the extensive logistics involved, Mr. Sieber, cognizant Subcommittee Chairman, has agreed to NR's proposal. A schedule for this briefing is attached (p. 28).

During the September ACRS meeting, Mr. Sieber proposed assignments (p. 29) for the members for reviewing the VIRGINIA class submarine design, requesting comments. The members should provide comments, if any, to Mr. Siebert during the October ACRS meeting.

RECOMMENDATION

The Subcommittee recommends that the Committee visit NR Headquarters on November 7, 2001 (a.m.) to hear an overview briefing on the proposed VIRGINIA class submarine design. It also recommends that the members provide comments to Mr. Sieber on the proposed assignments.

7) Interview of Candidates for New ACRS Member

The due date for submitting applications for the ACRS member vacancy was August 31, 2001. Based on the review of the applications received, some members provided input to the ACRS Executive Director. The ACRS Member Candidate Screening Panel plans to interview qualified candidates on November 8-9, 2001. The Executive Director suggests that the members also interview these candidates on November 8-9, 2001.

RECOMMENDATION

The Subcommittee recommends that prior to the November 2001 meeting, the Executive Director provide the members with the schedule for interviewing the candidates along with the resumes of the candidates.

8) Safeguards at Nuclear Power Plants (JTL)

In view of the recent terrorist attacks on the World Trade Center and Pentagon, the Committee should consider holding a meeting with the staff and others, as needed, to discuss the adequacy of the safeguards at nuclear power plants with emphasis on the design-basis threat assessments.

A press release issued by the NRC reacting to the recent terrorist attacks is attached (pp. 30-32).

RECOMMENDATION

The Subcommittee recommends that the Plant Systems Subcommittee (possibly in conjunction with the Regulatory Policies and Practices Subcommittee) hear a briefing from the staff and others, as appropriate, on safeguards at nuclear power plants in early 2002.

9) Members' Review of Turkey Point License Renewal Application

During the September ACRS meeting, Dr. Bonaca, Chairman of the License Renewal Subcommittee, made assignments to the members for reviewing the Turkey Point license renewal application and the associated staff's SER. Members were requested to provide comments on the sections assigned to them by September 20, 2001. At the request of Dr. Bonaca, Mr. Dudley sent an e-mail on September 14 to remind the members about the due date for providing comments. Dr. Bonaca was disappointed that the members did not send him comments and suggested that the Planning and Procedures Subcommittee discuss this issue and propose a course of action for making the members' review of the future license renewal applications more effective and efficient.

RECOMMENDATION

The Subcommittee recommends that in order to alleviate the burden on the Subcommittee Chairman, the members review the sections of the future license renewal applications assigned to them and provide comments to the Subcommittee Chairman in a timely manner. Such a practice would reduce the burden on the Subcommittee Chairman and would also enhance the Committee's review of the license renewal applications.

10) ACRS Members' Retreat

During the September meeting, the Committee has agreed to hold its next retreat on January 24-26, 2002 in Florida following the Submarine tour on January 23. We need to decide on the topics for this retreat and also whether to invite certain experts and stakeholders to participate in the retreat. We are contracting with the Marriott Marina in Fort Lauderdale for accommodations for the retreat. Members should arrive on the 22nd of January 2002, in preparation for the Submarine tour.

RECOMMENDATION

Topics proposed by the Subcommittee are as follows:

- a) Future Plant Designs
 - Containment for advanced reactor designs
 - Use of defense-in-depth concept and PRA for advanced reactor designs [a representative of Exelon should be invited to provide a technical presentation on the PRA for modular gas-cooled reactor design.]
- b) Safety Research Program
- c) Power Uprates
 - Criteria to be used by the Committee for endorsing or declining power uprates, including PWR power uprates expected in the future.
 - Use of risk information in evaluating power uprates
 - Use of F-C curves.
- d) Risk meters [presentation by vendors and licensees]
- e) Reactor Oversight Process
- f) Risk-informed and Performance-Based Regulations
- g) License Renewal

The Subcommittee recommends that the members comment on the proposed topics as well as identify other topics for the retreat and that Dr. Larkins develop a proposed schedule based on the input provided by the Committee members. In addition, Dr. Larkins should explore the feasibility of inviting an expert to discuss the PRA for the PBMB if available.

11) ACRS/ACNW Office Retreat

Between September 19-21, 2001, the ACRS/ACNW office held a retreat during which the staff discussed ways to improve work processes and work environment in the office. As a part of this discussion, the office developed a new Vision Statement, a list of Office Values, and established a number of teams to develop recommendations on work process improvements. The staff needs to plan a follow-up retreat with the ACRS members in the next few months to discuss how the ACRS staff interacts with the Committee and to assess whether or not there are ways to improve how the staff and Committee interact.

RECOMMENDATION

The Subcommittee recommends that the ACRS plan on having this retreat at the December 2001 meeting (following the meeting with the Commissioners on December 5) to discuss issues related to staff/Committee interactions.

12) Future Licensing Activities

Industry representatives have indicated that the staff should expect different types of licensing applications from FY 2002 through FY 2006. The Nuclear Energy Institute provided to the Commission a projected new plant activities. The staff is currently considering two preapplication reviews (AP1000 and Pebble Bed Modular Reactor). The staff expects to receive one early site permit (ESP) application in the middle of FY 2002, and at least two additional ESP applications in mid-FY 2003. Assuming that Westinghouse and Exelon decide to move forward with their projected plans, the staff expects to receive an application to certify the AP1000 design in mid-FY 2002 and a combined license (COL) application for the PBMR in early FY 2003.

Because of the uncertainty associated with the projected submittals, the staff has limited its consideration of expected scenarios to the time period encompassed by FY 2002 and FY 2003. The staff has evaluated resource needs through FY 2003 for the following scenarios:

- 4 preapplication reviews (AP1000, PBMR, IRIS, and GT-MHR)
- 3 ESPs (expected from Exelon, Dominion, and Entergy)
- 1 design certification (AP1000)
- 1 COL application referencing an ESP and a custom design (e.g., PBMR)

The staff is currently preparing a Future Licensing and Inspection Readiness Assessment (FLIRA) paper to the Commission presenting the staff's assessment of the NRC readiness to review applications for licenses and to inspect new nuclear power plants. The staff in its budget proposal to the Commission does not include the ACRS support for FY 2002. However, the staff expects significant ACRS support in FY 2003.

RECOMMENDATION

The Subcommittee recommends that the Committee discuss this matter at the retreat and develop a review plan.

13) Member Issues

- Taxicab Scheduling

As a result of Reagan National Airport's closure, we routed Committee members through BWI or Dulles. It is sometimes difficult to get a taxi, which costs approximately \$60-\$75, therefore, if you will contact Tanya Winfrey with your

flight arrival (and departure) schedule, she will attempt to prearrange transportation to and from the airport.

RECOMMENDATION

The Subcommittee recommends that the members take note that it is now very hard to get a taxicab, and the sooner you make the reservation the more likely you can get one when you want it. The members should inform Tanya Winfrey of their flight schedule so as to enable her to make arrangements for taxicabs. None of the taxis can come around the building anymore. All County Cab will meet you in the back near the dumpster. All other taxis will meet you by the metro station on Marinelli Road.

- Dr. Bonaca would like to discuss the following:

Dr. Bonaca found it disconcerting that his issue with the NRC staff not reconciling the "new" order with the "old" order (still documented in the FSAR) is not even mentioned in the July 23, 2001 ACRS report on South Texas Project Exemption request.

This issue was first included as one of the recommendations in the draft ACRS report. As suggested by some members, it was moved to the "Discussion" Section of the report. Prior to his departure, he was promised that the paragraph discussing this issue would be kept in the report. However, it was deleted from the final ACRS report. He is concerned that no one informed him about deleting the paragraph. Had he known, he would have put additional comments. He would like to explore the possibility of sending additional comments now.

Also, he would like to review the process for debating issues during the preparation of ACRS reports.

RECOMMENDATION

The Subcommittee recommends that if a member leaves prior to the end of the meeting and if he has concerns about a specific report being discussed by the Committee, he should inform the Committee that he would like to see the report approved by the Committee and that he may have additional comments. The cognizant staff engineer should e-mail or fax a copy of the report immediately after the Committee's approval. After reviewing the report if the member wants to include additional comments, he should inform the ACRS Executive Director and send the comments by close of business the Monday following the ACRS meeting.

G:ACRS SECRETARY/REPORT-LTRS_SCHED.

**REPORTS/LETTERS SCHEDULED FOR CONSIDERATION DURING THE
OCTOBER 4-6, 2001 ACRS MEETING**

REPORTS/LETTERS	SUBC. CHAIR/ ACRS STAFF	PROPOSED PRIORITY	BASIS FOR PRIORITY	DRAFTS
1. Proposed Resolution of Generic Safety Issue-173A	TSK/MME	A+	The staff is waiting for the ACRS letter to complete the resolution of this issue.	
2. Reactor Oversight Process	JDS/GEA/MWW	A+	A Commission SRM requested ACRS comments on the reactor oversight process. ACRS comments were due by September 28, 2001. The Committee discussed a proposed report at the September meeting and decided to complete it at the October meeting. ACRS comments are now due to the Commission by October 15, 2001.	
3. Duane Arnold Core Power Uprate	DAP/PAB	A+	ACRS review timely to meet the schedule in the Chairman's Tasking Memorandum..	
4. Interim Report on the Turkey Point License Renewal Application/ Westinghouse Topical Reports Associated with License Renewal	MVB/NFD	B (Tentative)	Plant License Renewal Subcommittee heard briefings on the SER and Topical Reports on September 25, 2001. Subcommittee may recommend issuing letters on either the SER or Topical Reports or both.	
5. Readiness Assessment for Future Plant Designs and staff Proposal regarding Exelon's Regulatory Licensing Approach for the Pebble Bed Modular Reactor Design	TSK/MME	B (Tentative)	The Commission and the NRC staff would like to have the ACRS views on this matter early in the process	

**REPORTS/LETTERS SCHEDULED FOR CONSIDERATION DURING THE
OCTOBER 4-6, 2001 ACRS MEETING (Cont'd.)**

6. EPRI Report on Resolution of Generic Letter 96-06 Waterhammer Issues	TSK/PAB	A	The Committee discussed a proposed report at the September meeting. It should try to complete this report during the October meeting.	
7. Action Plan on the DPO Associated with Steam Generator Tube Integrity	DAP/SD	A	At the direction of the Commission, the staff developed an Action Plan to address ACRS comments contained in NUREG-1740. The Materials and Metallurgy Subcommittee heard briefing on the Action Plan on September 26, 2001. The Committee should comment on the staff's action plan.	
8. Response to the August 8, 2001, EDO response to the June 19, 2001, ACRS letter on Risk-Based Performance Indicators	GEA/MTM	B (Tentative) Larkingram?	During the September 2001 ACRS meeting, the Committee decided to continue its review of this matter during future meetings. The Committee plans to prepare a letter to the EDO during the October 2001 ACRS meeting.	

**ANTICIPATED WORKLOAD
OCTOBER 4-6, 2001**

LEAD MEMBER	BACKUP	ENGINEER	ISSUE	FULL COMM. REPORT	SUBC. MTG.	
					CHAIR.	MEMBER
Apostolakis	--	Markley	Risk-Based Performance Indicators-Response to the EDO	Larkins-gram (tent.)	P&P 10/3	--
Bonaca	Leitch	Dudley	Interim Review of the License Renewal Application for Turkey Point Units 3 and 4.	Report (Tent.)	PLR 9/25	P&P 10/3 M&M 9/26(a.m)
Ford		Dudley	Subcommittee Report- Steam Generator Tube Integrity Issues discussed at the September 26, 2001 Materials and Metallurgy Subcommittee Meeting.		M&M 9/26 (a.m.)	PLR 9/25 THP 9/26-27
Kress	--	Boehnert	EPRI Report on Resolution of GL 96-06 Waterhammer Issues	Report	--	THP 9/26-27
		El-Zeftawy	Proposed Resolution of GSI-173A, "Spent Fuel Pool for Operating Facilities"	Report	--	M&M 9/26(a.m) P&P 10/3
		El-Zeftawy	Readiness Assessment for Future Plant Designs and Staff's Proposal Regarding Exelon's Regulatory Licensing Approach for the Pebble Bed Modular Reactor	Report (Tentative)		

**ANTICIPATED WORKLOAD
OCTOBER 4-6, 2001 (CONTINUED)**

LEAD MEMBER	BACKUP	ENGINEER	ISSUE	FULL COMM. REPORT	SUBC. MTG.	
Powers	Ford	Duraiswamy	Action Plan on Steam Generator DPO Issues	Report	THP 9/26-27 (Co-Chair)	M&M 9/26(a.m)
		Boehnert	Duane Arnold Core Power Uprate	Report		
Sieber	Apostolakis	Weston	Reactor Oversight Process	Report	--	M&M 9/26(a.m)

12

**ANTICIPATED WORKLOAD
NOVEMBER 8-10, 2001**

LEAD MEMBER	BACKUP	ENGINEER	ISSUE	FULL COMM. REPORT	SUBC. MTG.	
					CHAIR.	MEMBER
Apostolakis	All Members	Markley	Risk-Informed Regulation Implementation Plan	Report (Tentative)	P&P 11/7 (p.m.)	NR 11/6- (Groton) NR 11/7 (a.m.)
		Larkins, et.al	Preparation for meeting with the NRC Commissioners, December 5, 2001, 1:30-3:30 p.m	--		
Bonaca	--	El-Zeftawy	Safety Research Report-Format, Content, Assignments, and Discussion with the NRC staff	--	PLR 10/25 (a.m.)	NR 11/6- (Groton) P&P 11/7(p.m.) NR 11/7 (a.m.)
		Dudley	Final Review of the Hatch License Renewal Application	Report		
Ford	--	Weston	Status of Staff activities associated with resolving CRDM cracking issues	--		PLR 10/25(a.m) THP 10/25 - (p.m.) - 26 NR 11/6- (Groton) NR 11/7 (a.m.)
Kress	Powers	El-Zeftawy	Report by cognizant Members on the October 10-12 RES meeting on the Pebble Bed Modular Gas Cooled Reactor Design	--		NR 11/6- (Groton) NR 11/7 (a.m.) P&P 11/7 (p.m.) THP 10/25 (p.m.)

13

**ANTICIPATED WORKLOAD
NOVEMBER 8-10, 2001 (CONTINUED)**

Shack	Bonaca	Duraiswamy	Proposed Update to 10 CFR Part 52	Report (Tentative)	--	PLR 10/25 NR 11/6 (Groton) NR 11/7 (a.m.)
Wallis	Sieber	Boehnert	Dresden/Quad Cities Core Power Uprate	Report	THP 10/25 (a.m.) - 26	NR 11/6- (Groton) NR 11/7 (a.m.)

14

**ANTICIPATED WORKLOAD
DECEMBER 5-8, 2001**

LEAD MEMBER	BACKUP	ENGINEER	ISSUE	FULL COMM. REPORT	SUBC. MTG.	
					CHAIR.	MEMBER
Apostolakis	All Members	Markley	Risk-Informed 10 CFR Part 50 Pilot Program (Option 2)	Report	P&P 12/4 (a.m.) RPRA 12/4 (p.m.)	HF/SRP 11/15 RF 11/16
		Markley	Proposed Revision to Regulatory Guide 1.174 to address PRA quality in risk-informed activities	Report		
		Larkins, et.al	Meeting with the Commissioners	--		
Bonaca	--	El-Zeftawy	Safety Research Program Report to the Commission	Draft Report	--	HF/SRP 11/15 RF 11/16 P&P 12/4(a.m.) RPRA 12/4 (p.m)
Ford	--	Dudley	NEI 97-06, Steam Generator Inspection Guidelines	Report	M&M 11/29	HF/SRP 11/15 RF 11/16 RPRA 12/4 THP 11/28
Powers	Bonaca	Markley	NRC Human Reliability Analysis Research Plan	Report (Tentative)	HF/SRP 11/15 RF 11/16	THP 11/28 RPRA 12/4 (p.m)
Apostolakis	All Members	Larkins, et.al	ACRS Members/Staff Retreat	--	--	--

15

II. ITEMS REQUIRING COMMITTEE ACTION

1. Review of DOE/DOD Naval Reactors Virginia Class Nuclear Propulsion Plant Submarine Design (JDS/PAB) ESTIMATED TIME: 2 hours

Purpose: Determine a Course of Action

DOD/DOE Naval Reactors Review Request. [A. Adams, NRR]. The Naval Reactors (NR) Organization has submitted documentation pertaining to its new nuclear propulsion plant (NPP) submarine design (VIRGINIA Class, successor to the LOS ANGELES Class) to the NRC and ACRS for review. The Committee last reviewed an NR NPP plant design (SEAWOLF) in 1994. Only three of the current ACRS members were on the Committee at the time of that review.

Dr. Powers, as ACRS Chairman, had suggested that the Committee interact with NR, early on, to become familiar with its organization, history, and approach. Subsequently, the Committee Members visited the NR Headquarters Office at Crystal City, Virginia and discussed the Naval Reactors program on the morning of April 4, 2000. Committee Members also visited the NR training complex located at the Charleston, South Carolina Naval Base on August 7, 2000. This complex is comprised of the Moored Training Ships and the Nuclear Power Training School.

Recently, a NR representative held a discussion with Dr. Apostolakis regarding scheduling and potential options for the Committee's review of the VIRGINIA NPP. Among the specifics discussed included a tour of the shipyard construction site in Groton, CT this November. It was also proposed that the Committee tour a nuclear powered submarine, probably in early-2002. Subsequently, the Committee agreed, in response to NR's suggestion, that it would tour the Groton CT shipyard on November 6. Transportation from Washington (Andrews Air Force Base) would be provided by NR, via a Navy plane, allowing the Committee to depart and return the same day. The Committee also agreed to an overview briefing from NR regarding details of the VIRGINIA NPP design. **NR has requested that this briefing be held at its Headquarters Offices, given the extensive logistics involved.**

NR had also proposed a submarine tour for the Committee from south-Florida on either January 23 or 24 (NR's preferred date) or March 20 or 21, 2002. The Committee agreed to the January 23, 2002 date.

The Committee is now scheduled to conclude review of the VIRGINIA NPP design during its September 2002 meeting. The Naval Reactors Subcommittee plans to hold a meeting during August 2002. During the September 2001 ACRS meeting, Mr. Sieber has provided a list of specific Member assignments pertaining to this review and requested comments.

The Planning and Procedures Subcommittee recommends that the members provide comments on the assignments proposed by Mr. Sieber.

2. Proposed Final Revisions to Regulatory Guides Associated With the Proposed Revision to 10 CFR 73.55, Requirements for Physical Protection (Open)
(TSK/NFD) ESTIMATED TIME: 1 hour

Purpose: Determine a Course of Action

Review requested by the NRC staff. [V. Ordaz] The staff has developed a proposed revision to 10 CFR 73.55, "Requirements for physical protection of licensed activities in nuclear power reactors against radiological sabotage." During the October 2000 ACRS meeting, the Committee decided to review the proposed revision after the staff resolved public comments. In support of the proposed revision, the staff is developing three draft regulatory guides. The staff has provided copies of these guides to the ACRS on September 26, 2001.

The Planning and Procedures Subcommittee recommends that Dr. Kress propose a course of action.

3. Proposed Rule on Revision of the Skin Dose Limit (Open) (DAP/MWW)
ESTIMATED TIME: 1 hour.

Purpose: Determine a Course of Action

Review requested by NRC staff [A. Roecklein, NRR]. In 1998, the staff submitted a rulemaking plan to the ACRS and then to the Commission proposing to establish a constraint of 300 rad per 1 cm² as a program design guideline or action level to control doses from DRPs on or near the skin. The plan also included a 1000 rem (10Sv) limit intended to prevent an excessive number of high DRP doses. On December 14, 1998, a memorandum from Dr. Larkins was sent to the EDO indicating that the Committee had no objection to issuing the rulemaking plan. In an SRM (SECY 98-245), dated December 23, 1998, the Commission directed the staff to proceed with the constraint, but to establish the limit at 500 rem to be consistent with draft recommendations from the National Council of Radiation Protection and Measurements (NCRP). In January 2000 (COMSECY-00-0009), the staff sent a memorandum to the Commission recommending a single, unified skin dose limit that would apply to any shallow-dose equivalent. The limit would be 50 rem (.5 Sv) averaged over 10 square cm. In an SRM dated March 16, 2000, the Commission approved the staff recommendation and directed the staff to contract with the NCRP to evaluate the use of the DRP limit. In March 2001, NCRP recommended that the absorbed dose to the skin at a depth of 70 μm (7mg/cm²) from any source of irradiation be limited to 0.5 Gy (50 rads). The proposed rule on the revision of the skin dose limit incorporates the NCRP recommendation in 10 CFR Part 20. The proposed rule was published for a seventy five day public comment period that ended September 25, 2001. The proposed final rule is due to the ACRS in late October after incorporation of the public comments.

Dr. Powers will recommend a course of action when the rule is received.

4. Draft Regulatory Guide DG-1085 and Draft NUREG - 1713 Regarding Decommissioning Cost Estimates (Open) (TSK/MME) ESTIMATED TIME: 1 hour

Purpose: Determine a Course of Action

Review requested by the NRC Staff [M. Ripley, NRR]. The ACRS has received copies of Draft Regulatory Guide DG-1085, "Standard Format and Content of Decommissioning Cost Estimates for Nuclear Power Reactors," and Draft NUREG-1713, "Standard Review Plan on Decommissioning Cost Estimates for Nuclear Power Reactors." DG-1085 will provide guidance to licensees for preparing and reporting decommissioning cost estimates specified in the regulations. NUREG-1713 will provide guidance to the staff to evaluate each of the required cost estimates. The staff would like to obtain ACRS concurrence prior to issuing these documents for public comments.

The Planning and Procedures Subcommittee agrees with the recommendation by Dr. Kress, the cognizant Subcommittee Chairman, that the Committee not review these documents.

5. Draft ASME Code Case Regulatory Guides (Open) (FPF/WJS/NFD) ESTIMATED TIME: 1 hour

Purpose: Determine a Course of Action

Review requested by the NRC Staff [W. Norris, RES] The staff has provided the ACRS with copies of four Draft Regulatory Guides: 1) DG-1089, "Operation and Maintenance Code Case Acceptability," ASME OM Code; 2) DG-1090, "Design, Fabrication, and Materials Code Case Acceptability," ASME Section III; 3) DG-1091, "Inservice Inspection Code Case Acceptability," ASME Section XI; and DG-1112, "ASME Code Case Not Approved for Use." The staff is preparing a proposed amendment to 10 CFR 50.55a to incorporate by reference DG-1089, DG-1090, and DG-1091. DG-1112 will not be incorporated by reference into 10CFR 50.5a because the staff has determined that the code cases listed in this Guide are not acceptable for use by licensees. The staff plans to issue these Guides for public comment in the near future and the proposed amendment to 10 CFR 50.55a in Spring 2002. The staff requests that the ACRS review these Draft Guides after reconciliation of public comments.

The Planning Procedures Subcommittee recommends that Drs. Ford and Shack propose a course of action.

File

RSK

- Chairman -

To the Chairmen of the
ACRS
ACNW
GPR
GPD
NSC

Datum und Zeichen Ihres Schreibens

(Bitte bei Antwort angeben)
Mein Zeichen

Meine Durchwahl

Datum
August 6th 2001

Quadrilateral Meeting 2002

Bundesamt für Strahlenschutz
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- kra

Seite 1 von 3

19

Dear Sirs,

I have the pleasure to inform you that the German Commission for Reactor Safety (RSK) is prepared to organise the next Quadrilateral Meeting

The meeting is suggested to take place from June 24 to 28, 2002, in Berlin, with the following framework programme.

Monday, June 24	Arrival, Registration, Welcome
Tuesday, June 25	Sessions 1 and 2
Tuesday, June 25, evening	Reception / Dinner
Wednesday, June 26	Sessions 3 and 4
Thursday, June 27, morning	Session 5
Thursday, June 27, afternoon	Final discussion
Friday, June 28	Technical tour
Saturday, June 29	Departure

A separate Ladies' programme is planned on Tuesday, Wednesday and Thursday.

In contrast to previous meetings we would like to suggest that at least one member of the advisory bodies on waste management should be invited to the meeting additionally

As possible topics the RSK would like to propose

- Risk-informed regulation
- High-burn-up fuel
- Thermal hydraulic analysis and code issues
- Ageing management
- Maintaining competence and knowledge management
- Effects of deregulation
- Safety culture and safety management
- Philosophy and approach to deal with stress corrosion cracks in pressure retaining

Bundesamt für Strahlenschutz
RSK-Geschäftsstelle
Postfach 12 06 29, D-53048 Bonn
Telefon ↔ 228-305-3720 oder 3725
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- RSK\qm02\Einladung 010727-1
- kra

Seite 2 von 3

components in NPPs

- Use and reduction of plutonium
- Safety assessment of final repositories
- Waste disposal concepts
- Risk analysis of spent fuel storage
- Transport of spent fuel and waste
- Technical visits (options):
 - Pilot conditioning plant in Gorleben
 - Exploration mine
 - Decommissioning of Rheinsberg or Greifswald NPP

Please inform us whether the proposed date for the meeting is suitable for you. Also, it would be very much welcomed if you could check the list of topics and make comments and further suggestions. Due to the short time available it will only be possible to deal with a few topics at length. It therefore would be appreciated if you could indicate your priorities.

In addition we would like to ask whether a consent would be possible to invite one member of the Swiss, Spanish and Swedish advisory bodies as an observer.

An answer by end of september would be very much appreciated.

Sincerely yours,

- Lothar Hahn -
Chairman of RSK

9/24/01

HATCH SAFETY EVALUATION REPORT
PROPOSED ACRS MEMBER REVIEW ASSIGNMENTS

The staff's Safety Evaluation Report (SER) issued February 2001 identified 17 open items. In an interim letter dated April 16, 2001, the ACRS stated that with the exception of these 17 open items, the Committee concurred with the staff conclusion that Southern Nuclear Operating Company, Inc., had implemented adequate processes to identify structures, systems, and components (SSCs) subject to an aging management review and to manage age-induced degradation of these SCCs. The staff has documented its resolution of the open items in the SER issued on October 5, 2001. Resolution of four of the open items required the application of the staff's appeal process.

The following proposed assignments for the ACRS Members and Consultants to verify that the staff has provided adequate justification for closure of each open item are provided for the Committee's consideration. The summary of the Hatch Open Item Appeal Meeting, which was prepared by Robert Elliott, is attached .

2.1.2.1-1: Appeal Item M. Bonaca, S. Rosen, G. Apostolakis, J. Sieber

The staff does not agree with the applicant's scoping criteria for seismic II over I piping systems.

2.3.3.2-1: M. Bonaca, G. Leitch, S. Rosen, G. Apostolakis

The applicant should identify any applicable aging effects associated with any long-lived components performing a passive function associated with hydrogen recombiners and emergency diesel generators, and identify aging management programs (AMPs) credited with managing the aging effects.

2.3.3.2-2: Appeal Item G. Leitch, S. Rosen, G. Apostolakis

Applicant should identify the passive functions for fans, dampers, and heating and cooling coils that are within the scope of license renewal.

2.3.4.2-1 : M. Bonaca, J. Sieber, T. Kress, J. Barton

The radwaste suppression system should be included within the scope of license renewal and subject to an AMP.

3.0-1 : M. Bonaca, G. Leitch

The resolution of the information that needs to be added to the FSAR supplement will be addressed after the other open items are resolved, prior to the issuance of the renewed license.

3.1.1-1: W. Shack, D. Powers

The applicant should clarify the difference between Rev 1 and Rev 2 of the "BWR Water Chemistry Guidelines."

3.1.3-1: P. Ford, S. Rosen, J. Barton

The applicant should provide specific attributes of an inspection program, consistent with the other one-time inspections for the diesel fuel oil tanks.

3.1.11-1: W. Shack, T. Kress, J. Barton

The applicant should explain how to avoid the possibility of stress corrosion cracking if the yield strength for ASME SA-193 (Grade B7) bolts or any other bolts is limited to less than 150 ksi.

3.1.13-1: S. Rosen, J. Sieber, J. Barton

The applicant should provide additional information concerning the plant service water and residual heat removal service water systems for buried piping, inspections of heat exchangers, and one time visual inspection of the exterior of guard pipes.

3.1.17-1: W. Shack, P. Ford

The integrated surveillance program or plant-specific program should address the 10 attributes of an AMP.

3.1.18-1: W. Shack, P. Ford

The applicant should discuss the specific considerations for addressing the service water problems affecting safety-related equipment in the automatic wet-pipe sprinkler systems and 10-year inspection intervals recommended in NFPA 25.

3.1.28-1: W. Shack, T. Kress, G. Wallis, J. Barton

The applicant should provide additional information concerning vibration-induced cracking of residual heat removal system heat exchangers.

3.2.3.1.1-1: W. Shack, P. Ford

The applicant should address the 10 attributes of the AMP for inspecting the cast austenitic stainless steel (CASS) jet pump assembly components.

3.2.3.2.3-1: W. Shack, P. Ford

The applicant should supplement the existing ASME Class 1 inspection program with volumetric examination of the limiting locations in small-bore piping systems, excluding socket welds, which could have thermal stratification or turbulent penetration.

3.6.3.1-1: Appeal Item

D. Powers, G. Leitch, J. Barton

The applicant should have an AMP to demonstrate that the overall effect of numerous degradations in containment penetrations has not violated the leakage characteristics of the reactor building.

3.6.3.2-1:

D. Powers, G. Leitch, J. Barton

The applicant should provide justification as to why the program to manage torus degradation should not be a separate program in the license renewal application. The applicant should provide additional information to demonstrate how gears, latches and linkages for personnel hatches and penetrations will meet the staff position.

4.1.3-1: Appeal Item

M. Bonaca, D. Powers, W. Shack

The applicant should explain how the fatigue analysis of the vessel internals was found to be acceptable for the 60-year period. The Applicant should include pipe break postulations based on fatigue usage factor as a time limited aging analysis (TLAA).

4.2.3-1:

W. Shack, G. Wallis

The applicant should assess the six locations identified in NUREG/CR-6260, "Application of NUREG/CR-5999, 'Interim Fatigue Curves to Selected Nuclear Power Plant Components'."

The staff met with representatives of Southern Nuclear Operating Company (SNC) on March 29, 2001. The purpose of the meeting was to discuss four specific open items in order to move forward in achieving a resolution. The meeting was highly successful, and it appears that forward progress was made on all items. The following summarizes the issues discussed and the current status:

Summary of Hatch Open Item Appeal Meeting

Open Item 3.6.3.1-1: Reactor Building Controlled Leakage

Issue: Whether the Standby Gas Treatment System (SGTS) drawdown test required by the Hatch Technical Specifications should be included as part of the Aging Management Program (AMP) for the Reactor Building.

Staff Position: The SGTS test should be part of the AMP for the Reactor Building because it provides a verification of the Reactor Building's ability to perform its intended function. The test is a technical specification requirement, and as such, places no additional regulatory burden on the applicant. It should be included in the AMP for completeness.

SNC Position: Failure of this test does not indicate degradation of the Reactor Building, nor does

passing this test demonstrate that the Reactor Building is free of age related degradation. More likely, failure of the test is indicative of problems with seals, access doors, etc. These are adequately managed through their specific AMPs.

Status: Still an open issue. Ball is in Hatch's court to decide how strong their view is. It appears

that this issue is on a path to resolution.

Open Item 2.1.2.1-1: Seismic II/I

Issue: Whether Seismic II/I piping should be considered within the scope of license renewal.

Staff Position: The license renewal rule, statement of considerations (SOC) and draft SRP specifically consider Seismic II/I piping to be within scope. Previous reviews considered the piping within scope also. This piping should be considered within scope consistent with the rule.

SNC Position: Seismic II/I piping will cannot fall on safety equipment because it is seismically supported. All consequences of the failure of Category II piping has been evaluated in the current licensing basis (CLB) for Hatch. The CLB demonstrates that there would be no significant adverse consequences from the failure of a Category II pipe. Because of the design features of the plant (e.g., pipe restraints, shield barriers, seismic supports, etc.), this piping cannot fail in a way that it would prevent: the safe shutdown of the plant, the ability of the plant to remain safely shutdown, or a safety system from performing its intended function.

Status: Still an open issue. The staff needs to understand how Hatch has dispositioned all the potential effects of a break in a nonsafety pipe. Hatch will provide additional information. Further dialog is planned.

Open Item 4.1.3-1: Pipe Break Criteria as a TLAA

Issue: Whether pipe break criteria should be considered as a TLAA because it was based on a fatigue usage factor that is based on a 40 year life. The specific issue of contention is whether the cumulative usage factor (CUF) of 0.1 used in determining postulated pipe break locations at Hatch (consistent with the Standard Review Plan, Section 3.6.2, Branch Technical Position MEB 3-1) was a number that was actually a time limited value or a design standard that was not time limited.

Staff Position: The value is time limited, and therefore, a TLAA should be performed based on a 60 year life.

SNC Position: The value is not time limited. It was merely a design value used as a baseline value for determining the number and location of postulated pipe breaks to be assumed for designing shield walls, pipe whip restraints, etc.

Status: Still an open issue. The ball is in the staff's court. The staff will reconsider whether it considers the CUF as used in the Hatch pipe break analysis to be time limited.

Open Item 2.3.3.2-2: Active Component Housings

Issue: Whether housings for active components such as fans, dampers and cooling coils should be included in the scope of license renewal based on their intended function of providing a system pressure boundary.

Staff Position: These components are analagous to pump housings and valve bodies which are specifically called out in the rule and the SOC as examples of passive components that are within the scope of license renewal.

SNC Position: The applicant is concerned that this will lead to piece part evaluations of active components. In addition, NEI 95-10 which has been virtually endorsed by the staff implies that these housings do not need to be considered as within the scope of license renewal.

Status: SNC will re-evaluate the specific components listed in the SER for passive intended functions and provide an update to the staff. The staff will continue to seek improvements in the generic guidance as a result of lessons learned from this discussion.

ACRS TOUR OF VIRGINIA CONSTRUCTION SITE

NOVEMBER 6, 2001

ELECTRIC BOAT (EB) SHIPYARD-GROTON, CT.

1. Depart Andrews AFB 730 a.m.
2. Arrive Groton Airport 830 a.m.
3. Virginia Design Review 900-12:30 p.m.
4. Lunch 1230-1:00 p.m.
5. Tour Virginia Mockup 1:00-2:30 p.m.
6. Tour Virginia Construction 2:30-4:45.p.m.
7. Final Questions 4:45-5:00 p.m.
8. Depart EB 5:00 p.m.
9. Depart Groton 6:00 p.m.
10. Return Andrews AFB 7:00 p.m.

ACRS BRIEFING ON VIRGINIA REVIEW DOCUMENTS

NOVEMBER 7, 2001

NR HQ - WASHINGTON NAVY YARD (NR Model Room)

- | | |
|------------------------------|------------------|
| 1. Safety Analysis Results | 9:30-10:15 a.m. |
| 2. SAR Appendix 4 Results | 10:15-11:15 a.m. |
| 3. SAR Appendix 5 Results | 11:15-12:00 p.m. |
| 4. CSAU (best estimate LOCC) | 12:00-1:00 p.m. |

ACRS MEMBER ASSIGNMENTS FOR DOD/DOE VIRGINIA - CLASS NUCLEAR
PROPULSION PLANT DESIGN REVIEW

<u>SAR CHAPTER</u>	<u>TOPIC</u>	<u>LEAD</u>
2	<ul style="list-style-type: none"> ● Design of Structures, Systems and Components ● Materials Summary 	<p>P. Ford</p> <p>W. Shack</p>
3	Reactor	T. Kress
4	Reactor Coolant System	G. Wallis
5	<ul style="list-style-type: none"> ● Safety Features ● CSAU 	<p>M. Bonaca</p> <p>G. Wallis</p>
6	I&C	J. Sieber
7	Electric Power	J. Sieber
8	Auxiliary Systems	J. Sieber
9	Steam and Power Conversion Systems	J. Sieber
10	Shielding and Radiation Protection	J. Sieber
11	Conduct of Operations	G. Leitch
12	Initial Test Program	G. Leitch
13	Casualty Analysis	M. Bonaca
14	Technical Specifications	G. Leitch
15	QA	G. Leitch/S. Rosen
■	PRA	G. Apostolakis/ S. Rosen
■	Severe Accidents	D. Powers/ T. Kress

From: Network Announcement
To: Network Announcement
Date: 9/24/01 1:50PM
Subject: Press Release Issued: NRC Reacts to Terrorist Attacks

For further information on NRC's involvement in the national crisis that occurred on September 11, NRC employees may wish to read the following press release, which was issued last Friday.

Further questions may be referred to the Office of Public Affairs, (301) 415-8200

No. 01-112
September 21, 2001

NRC REACTS TO TERRORIST ATTACKS

In light of the recent terrorist attacks, U.S. Nuclear Regulatory Commission officials and staff have been working around the clock to ensure adequate protection of nuclear power plants and nuclear fuel facilities. This has involved close coordination with the Federal Bureau of Investigation, other intelligence and law enforcement agencies, NRC licensees, and military, state and local authorities.

Immediately after the attacks, the NRC advised nuclear power plants to go to the highest level of security, which they promptly did. The NRC has advised its licensees to maintain heightened security. The agency continues to monitor the situation, and is prepared to make any adjustments to security measures as may be deemed appropriate.

In view of the recent unprecedented events, Chairman Richard A. Meserve, with the full support of the Commission, has directed the staff to review the NRC's security regulations and procedures.

A number of questions have come in from reporters and members of the public since the tragic events of September 11. The following questions and answers are offered in response.

Q: What would happen if a large commercial airliner was intentionally crashed into a nuclear power plant?

A: Nuclear power plants have inherent capability to protect public health and safety through such features as robust containment buildings, redundant safety systems, and highly trained operators. They are among the most hardened structures in the country and are designed to withstand extreme events, such as hurricanes, tornadoes and earthquakes. In addition, all NRC licenses with significant radiological material have emergency response plans to enable the mitigation of impacts on the public in the event of a release. However, the NRC did not specifically contemplate attacks by aircraft such as Boeing 757s or 767s and nuclear power plants were not designed to withstand such crashes. Detailed engineering analyses of a large airliner crash have not yet been performed.

Q: What measures have the NRC and its power plant licensees taken in face of this potential threat?

A: Immediately after the attacks, the NRC advised licensees to go to the highest level of security, which all did promptly. The specific actions are understandably sensitive, but they generally included such things as increased patrols, augmented security forces and capabilities, additional security posts, heightened coordination with law enforcement and military authorities, and limited access of personnel and vehicles to the sites.

Q: What, precisely, did the NRC do in response to the attacks?

A: At 10 a.m. on September 11, the NRC activated its Emergency Operations Center in headquarters and assembled a team of top officials and specialists. The same was done in each of its four regional offices. In addition to communicating with its licensees about the need to go to the highest level of security, the NRC established communications with the FBI, the Department of Energy, and the Federal Emergency

Management Agency among others. NRC personnel were dispatched to the FBI's Strategic Information Operations Center. The NRC has also established close communications with nuclear regulators in Canada and Mexico.

Q: What would happen if a large aircraft should crash into a spent fuel dry storage cask?

A: The capacity of spent fuel dry storage casks to withstand a crash by a large commercial aircraft has not been analyzed. Nonetheless, storage casks are robust and must be capable of withstanding severe impacts, such as might occur during tornadoes, hurricanes or earthquakes. In the event that a cask were breached, any impacts would be localized. All spent fuel storage facilities have plans to respond to such an emergency, drawn up in consultation with local officials.

Q: What if a large aircraft crashed into a spent fuel transportation cask in a heavily populated area?

A: Again, the capacity of shipping casks to withstand such a crash has not been analyzed. However, they are designed to protect the public in severe transportation accidents. The cask must be able to withstand a 30-foot drop puncture test, exposure to a 30-minute fire at 1475 degrees Fahrenheit, and submersion under water for an extended period. Moreover, the location of loaded casks is not publicly disclosed and such a cask would present a small target to an aircraft.

If an airliner crashed into a cask, there could be some localized impacts. Regulations require special accident response training of those involved in shipping, as well as coordination with state, local and tribal emergency response personnel. In addition, redundant communications must be maintained during shipment with the transporter vehicle, this would facilitate emergency response, if necessary.

Q: Could such a crash into a nuclear power plant, or a storage or shipping cask trigger a nuclear explosion?

A: No.

Q: What are the consequences if an airliner crashed into a uranium fuel cycle facility?

A: Because of the nature of the material, there would likely be only minimal off-site radiological consequences. Some such facilities use chemicals similar to those found at many industrial facilities. In the event of a release, comprehensive emergency response procedures would be immediately implemented.

Q: Have nuclear power plants been subject to attack in the past?

A: There has never been an attack on a nuclear power plant. On very rare occasions there have been intrusions. For example, there was a 1993 car crash through the gates of Three Mile Island plant by an individual with a history of treatment for mental illness. Such intrusions have not resulted in harm to public health or safety.

Q: What are the normal security measures at commercial nuclear power plants.

A: Licensees are required to implement security programs that include well-armed civilian guard forces, physical barriers, detection systems, access controls, alarm stations, and detailed response strategies. NRC routinely inspects security measures as part of its normal reactor oversight process and periodically undertakes various exercises, including force-on-force exercises, so as to assure that any vulnerabilities are exposed and corrected.

Q: Is an attack using an airplane part of the NRC's design basis threat against which its licensees have to defend?

A: No. The NRC has been in close and continuing contact with law enforcement and the military regarding

such a threat

Q What exactly is the so-called design basis threat?

A: The details of the design basis threat are classified, but it includes the characteristics of a possible sabotage attempt that NRC licensees are required to protect against. The agency continually assesses the adequacy of the design basis threat in consultation with local law enforcement and federal intelligence agencies.

Q Is the NRC contemplating a modification of the design basis threat?

A: The agency will continue to coordinate with law enforcement and intelligence agencies to assess the implications of this new manifestation of terrorism. If the NRC determines that the design basis threat warrants revision, such changes would occur through a public rulemaking