AA1150105

2001 Annual Report: Review of Federal Advisory Committee

Committee Menu

12/3/2001 11:20:35 AM

1. Department or Agency
Nuclear Regulatory Commission

2. Fiscal Year
2001

3. Committee or SubCommittee
Advisory Committee on Reactor Safeguards

3b. GSA Committee No.
207

4. Is this New During Fiscal Year?	5. Current Charter	6. Expected Renewal Date	7. Expected Term Date
No	12/20/2000	12/20/2002	

8a. Was Terminated During FY?	8b. Specific Termination Authority	8c.Actual Termination Date
No	42 U.S.C. Sect. 2039 & 2232	

9. Agency Recommendation for Next FY	10a.Legislation Req to Terminate?	10b.Legislation Pending?
Continue	No	

11. Establishment Authority: **Statutory(Congress Created)**

12. Specific Establishment Authority	13. Effective Date	14. Committee Type	14c. Presidential?
42 U.S.C. Sect. 2039 & 2232	1/1/1957	Continuing	No

15. Description of Committee: **Scientific Technical Program Advisory Board**

16a. Total Number of Reports

34

16b. Report Titles and Dates

Proposed Revision to 10 CFR 73.55, "Requirements for Physical Protection of Licensed Activities in Nuclear Power Reactors Against Radiological Sabotage"	10/11/2000
Union of Concerned Scientists Report, "Nuclear Plant Risk Studies: Failing the Grade"	10/11/2000
Pressurized Thermal Shock Technical Basis Reevaluation Project	10/12/2000
Draft Final Technical Study of Spent Fuel Pool Accident Risk at Decommissioning Nuclear Power Plants	11/8/2000
License Renewal Guidance Documents	11/15/2000
BWROG Proposal to Use Safety Relief Valves and Low Pressure Systems as a Redundant Safe Shutdown Path to Satisfy the Requirements of 10 CFR 50, Appendix R	11/20/2000
Proposed Framework for Risk-Informed Changes to the Technical Requirements of 10 CFR Part 50	11/20/2000
Nuclear Energy Institute Draft Report, NEI 99-03, "Control Room Habitability Assessment Guidance"	12/14/2000
Proposed Final Regulatory Guide DG-1053, "Calculational and Dosimetry Methods for Determining Pressure Vessel Neutron Fluence"	12/15/2000
Issues Associated with Industry-Developed Thermal-Hydraulic Codes	1/11/2001
Proposed Resolution of Generic Safety Issue-152, "Design Basis for Valves That Might Be Subjected to Significant Blowdown Loads"	2/8/2001
Draft ANS External Events PRA Methodology Standard	2/9/2001
Review of the Siemens Power Corporation S-RELAP5 Code to Appendix K Small-Break Loss-of-Coolant Accident Analyses	2/13/2001
NUREG-1740,"Voltage-Based Alternative Repair Criteria -- A Report to the ACRS by the Ad Hoc Subcommittee on a Differing Professional Opinion"	3/1/2001
Draft Report, "Regulatory Effectiveness of the Anticipated Transient Without Scram Rule"	3/8/2001
Electric Power Research Institute RETRAN-3D Thermal-Hydraulic Transient Analysis Code	3/15/2001
Proposed Final License Renewal Guidance Documents	4/13/2001
Closure of Generic Safety Issue-170, "Reactivity Transients and Fuel Damage Criteria for High Burnup Fuel"	4/13/2001
Interim Letter Related to the License Renewal of Edwin I. Hatch Nuclear Station, Units 1 and 2	4/16/2001
NUREG-1635, Vol. 4, "Review and Evaluation of the Nuclear Regulatory Commission Safety Research Program - A Report to the U.S. NRC"	5/1/2001

Report on the Safety Aspects of the License Renewal Application for Arkansas Nuclear One, Unit 1	5/18/2001
Proposed Final Management Directive 6.4, "Generic Issue Program"	5/18/2001
Response to Chairman Meserve's May 7, 2001 Memorandum Regarding Differing Professional Opinion on Steam Generator Tube Integrity Issues	6/14/2001
Response to Chairman Meserve's April 12, 2001 Letter on Issues Raised by ACRS Pertaining to Industry Use of Thermal-Hydraulic Codes	6/19/2001
Risk-Based Performance Indicators: Phase 1 Report	6/19/2001
Draft NUREG-1742, "Perspectives Gained from the Individual Plant Examination of External Events (IPEEE) Program"	7/20/2001
Recommendation on the Need to Revise 10 CFR Part 54, "Requirements for Renewal of Operating Licenses for Nuclear Power Plants"	7/20/2001
So. Texas Proj. Nuclear Operating Co. Requests for Exemption to Exclude Certain Components from Scope of Special Treatment Reqmnts Required by Regs. (Option 2)	7/23/2001
Circumferential Cracking of PWR Vessel Head Penetrations	7/23/2001
SECY-01-0100 - Policy Issues Re to Safeguards, Insurance, & Emergency Preparedness Regs. at Decommissioning Nuc. Power Plants Storing Fuel in Spent Fuel Pools	7/24/2001
Feasibility Study on Risk-Informing the Technical Requirements of 10 CFR 50.46 for Emergency Core Cooling Systems	7/25/2001
Proposed Final Rev. to Regulatory Guide 1.78, " "Evaluating the Habitability of a Nuc. Power Plant Control Room During a Postulated Hazardous Chemical Release"	9/13/2001
Generic Safety Issue-191, "Assessment of Debris Accumulation on PWR Sump Pump Performance"	9/14/2001
Application of GE Nuclear Energy TRACG Code to Anticipated Operational Occurrences	9/17/2001

17a Open: 49 17b. Closed: 0 17c. Partially Closed: 6 17d. Total Meetings 55

Meeting Purposes and Dates

Planning & Procedures Subcommittee	10/4/2000 10/4/2000
476th Full Committee	10/5/2000 10/7/2000
Ad Hoc Subcommittee on Differing Professional Opinion	10/10/2000 10/14/2000
Fire Protection Subcommittee	10/16/2000 10/17/2000
Reactor Fuels Subcommittee	10/18/2000 10/18/2000
Plant License Renewal Subcommittee	10/19/2000 10/20/2000
Planning & Procedures Subcommittee	10/31/2000 10/31/2000
Plant Systems Subcommittee	10/31/2000 10/31/2000
Safety Research Program Subcommittee	11/1/2000 11/1/2000
477th Full Committee	11/2/2000 11/4/2000
Thermal-Hydraulic Phenomena Subcommittee	11/13/2000 11/14/2000
Severe Accident Management Subcommittee	11/15/2000 11/15/2000
Materials & Metallurgy Subcommittee	11/16/2000 11/16/2000
Planning & Procedures Subcommittee	12/5/2000 12/5/2000
Plant Operations Subcommittee	12/6/2000 12/6/2000
478th Full Committee	12/6/2000 12/9/2000
Thermal-Hydraulic Phenomena Subcommittee	1/16/2001 1/17/2001
Jt. Materials & Metallurgy and Thermal-Hydraulic Phenomena Subcommittee	1/18/2001 1/18/2001
ACRS/ACNW Joint Subcommittee	1/19/2001 1/19/2001
Planning & Procedures Subcommittee Meeting and Retreat	1/22/2001 1/24/2001
Planning & Procedures Subcommittee	1/31/2001 1/31/2001
479th Full Committee	2/1/2001 2/3/2001
Thermal-Hydraulic Phenomena Subcommittee	2/20/2001 2/20/2001
Jt. Plant Operations and Reliability & Probabilistic Risk Assessment Subcommittee	2/21/2001 2/21/2001
Plant License Renewal Subcommittee	2/22/2001 2/22/2001

Planning & Procedures Subcommittee	**2/28/2001 2/28/2001**
480th Full Committee	**3/1/2001 3/3/2001**
Thermal-Hydraulic Phenomena Subcommittee	**3/15/2001 3/15/2001**
Jt. Materials & Metallurgy and Thermal-Hydraulic Phenomena and Probabilistic Risk Assessment Subcommittees	**3/16/2001 3/16/2001**
Plant License Renewal Subcommittee	**3/27/2001 3/28/2001**
Reactor Fuels Subcommittee	**4/4/2001 4/4/2001**
Planning & Procedures Subcommittee	**4/4/2001 4/4/2001**
481st Full Committee	**4/5/2001 4/7/2001**
Reliability & Probabilistic Risk Assessment Subcommittee	**4/17/2001 4/17/2001**
Plant Operations Subcommittee	**5/9/2001 5/9/2001**
Planning & Procedures Subcommittee	**5/9/2001 5/9/2001**
482nd Full Committee	**5/10/2001 5/12/2001**
Advanced Reactors Subcommittee Workshop on Regulatory Challenges for Future Nuclear Power Plants	**6/4/2001 6/5/2001**
Planning & Procedures Subcommittee	**6/6/2001 6/6/2001**
483rd Full Committee	**6/6/2001 6/8/2001**
Thermal-Hydraulic Phenomena Subcommittee	**6/12/2001 6/12/2001**
Reliability & Probabilistic Risk Assessment Subcommittee	**6/22/2001 6/22/2001**
Jt. Plant Operations and Fire Protection Subcommittee and Waterford Site Visit	**6/27/2001 6/28/2001**
Plant Operations Subcommittee	**7/9/2001 7/9/2001**
Jt. Materials & Metallurgy and Thermal-Hydraulic Phenomena and Probabilistic Risk Assessment Subcommittee	**7/9/2001 7/9/2001**
Jt. Materials & Metallurgy and Plant Operations Subcommittee	**7/10/2001 7/10/2001**
Planning & Procedures Subcommittee	**7/10/2001 7/10/2001**
484th Full Committee	**7/11/2001 7/13/2001**
Thermal-Hydraulic Phenomena Subcommittee	**7/17/2001 7/18/2001**
Thermal-Hydraulic Phenomena Subcommittee	**8/22/2001 8/23/2001**
Planning & Procedures Subcommittee	**9/4/2001 9/4/2001**
485th Full Committee	**9/5/2001 9/8/2001**
Plant License Renewal Subcommittee	**9/25/2001 9/25/2001**
Materials & Metallurgy Subcommittee	**9/26/2001 9/26/2001**
Thermal-Hydraulic Phenomena Subcommittee	**9/26/2001 9/27/2001**

	Current Fiscal Year	Next Fiscal Year
18a(1) Personnel Pmts to Non-Federal Members	**$541,394**	**$566,298**
18a(2) Personnel Pmts to Federal Members	**$0**	**$0**
18a(3) Personnel Pmts to Federal Staff	**$2,554,157**	**$2,671,648**
18a(4) Personnel Pmts to Non-member Consultants	**$23,620**	**$47,080**
18b(1) Travel and Per Diem to Non-Federal Members	**$251,640**	**$255,000**
18b(2) Travel and Per Diem to Federal Members	**$0**	**$0**
18b(3) Travel and Per Diem to Federal Staff	**$19,138**	**$22,000**
18b(4) Travel and Per Diem to Non-Member Consultants	**$10,694**	**$20,000**
18c.Other(rents,user charges,graphics,printing,mail etc.)	**$33,180**	**$43,500**
18d Total	**$3,433,823**	**$3,625,526**
19. Federal Staff Support Years	**20.8**	**21.3**

20a. How does the Committee accomplish its purpose?

The Advisory Committee on Reactor Safeguards (ACRS) reports to the Nuclear Regulatory Commission (NRC) and provides the Commission with independent reviews of and advice on, the safety of proposed or existing NRC licensed reactor facilities and the adequacy of applicable safety standards. The ACRS was established as a statutory committee by a 1957 amendment to the Atomic Energy Act of 1954. With the enactment of the Energy Reorganization Act of 1974, the licensing functions of the Atomic Energy Commission (AEC) were transferred intact from the AEC to the NRC. The ACRS has continued in the same advisory role to the NRC with its work changing with the needs of the Commission. Some ACRS tasks are mandated by statute or regulation, some are in response to direction by the Commission, or requests from the NRC staff, or other stakeholders, and some are self initiated in response to ACRS concerns on important regulatory matters. The ACRS, upon request from the Department of Energy (DOE), provides advice on the safety of U.S. naval reactor designs. Upon request, the ACRS also provides technical advice to the Defense Nuclear Facilities Safety Board. The ACRS and its subcommittees meet regularly in public, Federal Advisory Committee Act (FACA)-regulated meetings to work on matters within the scope of the ACRS responsibilities. ACRS meeting agenda, meeting transcripts, and letter reports are available for downloading or viewing on the internet at the ACRS/ACNW website. The ACRS and its subcommittees held 55 meetings during FY 2001, including 10 Full Committee meetings that were attended by all ACRS members. The ACRS members are chosen for their technical expertise relevant to the safety issues important to the Commission. Consultants are used on occasion to augment the expertise of the ACRS members. The Committee has a full-time staff that provides technical support and administrative services in compliance with FACA requirements. ACRS subcommittees normally consist of three to six ACRS members with the expertise needed to review in detail the regulatory and safety issues and to report to the Full Committee. Stakeholder participation in ACRS meetings is encouraged and routinely occurs. The Committee's advice, in the form of written reports, is only produced by the Full Committee and is discussed with the Commission in public meetings. The ACRS conducts an ongoing review of its plans and schedules to ensure that regulatory matters within its scope of responsibility are being properly addressed and within its resources, and on schedules that are consistent with the needs of its stakeholders. Input from the Commission, the NRC staff, and affected stakeholders is used in this process. A Memorandum of Understanding with the NRC Executive Director for Operations (EDO) provides a framework for NRC staff interaction with the ACRS. The ACRS conducts formal self assessments to improve its effectiveness and efficiency. A report is provided to the Commission on the outcome of this process. The focus of the ACRS work during FY 2001 was on risk-informed and performance-based regulatory initiatives, license renewal applications, boiling water reactor extended core power uprates, thermal-hydraulic codes, differing professional opinion on steam generator tube integrity issues, spent fuel pool fire risk issues, and the NRC safety research program.

20b. How does the Committee balance its membership?

The Commission appoints ACRS members with the scientific and engineering expertise needed to address the safety issues of importance to the Commission. Members are sought who can provide an independent perspective on nuclear safety issues, outstanding scientific and technical ability, balanced and mature judgment, and a willingness to devote the time required to the demanding work involved. Members are appointed for 4-year terms and, absent unusual circumstances, do not serve for more than three terms. Members are reappointed at the end of a 4-year term only if there is a compelling continuing need for their expertise. Vacancies in the ACRS membership are filled from the pool of applicants which exists after solicitations of interest are published in the Federal Register, trade and professional society publications, and the press. Recommendations to the Commission as to the selection of qualified candidates from this pool are made by the ACRS Member Candidate Screening Panel. The ACRS normally provides input to this Panel. During FY 2001, the membership was comprised of individuals with diverse employment backgrounds and included those experienced in the areas of nuclear power plant operations; probabilistic risk assessment; analysis of severe reactor accident phenomena; design of nuclear power plant structures, systems, and components; chemical engineering; materials and metallurgy; and thermal-hydraulics and computational fluid dynamics. The diversity of viewpoints represented by current members is based on special fields of interest, employment experience, and technical expertise. These member attributes provide the Committee with the balance of highly qualified technical expertise and diverse safety perspectives necessary to carry out the Committee's statutory responsibilities effectively.

20c. How frequent and relevant are the Committee meetings?

The ACRS and its subcommittees held 55 meetings during FY 2001, of which 10 were Full Committee meetings. The number of meetings held in a reporting period is directly related to the number of nuclear safety matters to be reviewed as required by statute; the number of rules and regulatory guidance referred to the Committee for review and comment; the number of special reviews requested by the Commission, EDO, or other Federal Government organizations; and other safety issues of particular concern to the Committee and its stakeholders. All of the Committee members normally meet 10 times a year for 3 or 4 days in Full Committee meetings, to consider important safety-related nuclear issues, generic and special issues, rules, and regulatory guidance. The ACRS subcommittees, which normally are comprised of three to six members with the relevant expertise, meet as necessary with stakeholders to conduct in-depth reviews of particular matters for later consideration by the full membership during Full Committee meetings. Subcommittee meetings are conducted under the same FACA procedures as the Full Committee meetings and are utilized to make efficient use of Committee resources. Reviews are conducted during each Full Committee meeting to assess the relevance of proposed review topics, resource needs, and the priority of each activity. These assessments have the benefit of input from the Commission, EDO, and other stakeholders. The self assessment conducted by the ACRS for its CY 2000 activities involved collection of input from a variety of stakeholders. This information was used to assess the relevance of ACRS activities. All ACRS meetings for this reporting period addressed either matters for which ACRS review was required by statute or regulation, specific requests from either the Commission or the EDO, or other important regulatory matters within the ACRS scope of responsibility.

20d. Why can't the advice or information this committee provides be obtained elsewhere?

The ACRS is an independent body of recognized experts in the field of nuclear reactor safety whose Congressional mandate is to provide the Commission with independent advice. Particular duties of the ACRS (e.g., review of reactor operating license renewal applications, standard design applications, and construction permit and operating license applications for nuclear power plants) are dictated by statute or regulation. In addition, functional arrangements exist wherein, upon request, the ACRS also provides advice to the U.S. Navy, the Department of Energy, and the Defense Nuclear Facilities Safety Board. The Commission has its own expert staff on whom it relies in the day-to-day regulation of nuclear power facilities. The ACRS provides the Commission and the NRC staff with an independent, critical review of high-level regulatory issues under consideration by the NRC and independent technical insights as to important matters needing Commission attention. The ACRS members are part-time special government employees with other full-time interests and activities in related fields, and provide a breadth of experience, an independent perspective on issues, and technical knowledge that is not duplicated by the NRC's full-time government employees. A standing committee such as the ACRS remains current with respect to nuclear safety issues of importance to the NRC, including those related to reactor operating experience, regulatory reform, and NRC's needs for safety research, and provides an independent, collegial judgment regarding these issues that part-time consultants could not provide. The ACRS meetings provide an important forum to stakeholders to express freely their concerns on safety issues and regulatory process. A number of important safety initiatives have had their origins in ACRS deliberations. Through the ACRS, the public and the Congress are ensured of an independent technical review and evaluation of nuclear reactor projects and safety issues and of an opportunity for stakeholder input.

20e. Why is it necessary to close and/or partially close committee meetings?

During this period, the Committee held 10 full Committee meetings, of these 10 meetings one meeting was partially closed to discuss information that was classified as "Confidential - Restricted Data - Government Sensitive" to protect information provided in confidence by a foreign source and the other meeting was partially closed to protect proprietary information (5 U.S.C. 552b(c)(4).

21. Remarks

None

Designated Federal Official: **Michele S Kelton DFO**

Committee Members	Start	End	Occupation
Apostolakis, Dr. George E.	**6/4/1995**	**6/2/2003**	**Professor, Nuclear Engineering Department, Massachusetts Institute of Technology**
Bonaca, Dr. Mario V.	**1/6/1999**	**1/5/2003**	**Retired Director, Nuclear Engineering Department, Northeast Utilities**
Ford, Dr. Peter F.	**3/23/2001**	**3/22/2005**	**Consultant and retired Program Manager, General Electric Research and Development Center**
Kress, Dr. Thomas S.	**9/4/1999**	**9/3/2003**	**Retired Head of Applied Systems Technology Section, Oak Ridge National Laboratory**
Leitch, Mr. Graham B.	**7/10/2000**	**7/9/2004**	**Retired Vice-President, Limerick Generating Station, PECO Energy; Retired Vice-President, Maine Yankee Atomic Power Co., Member, Offsite Safety Review Committee, Calvert Cliffs Nuclear Power Plant**
Powers, Dr. Dana A.	**6/6/1998**	**6/5/2002**	**Senior Scientist, Nuclear Facilities Safety Department, Sandia National Laboratories**
Rosen, Mr. Stephen L.	**6/12/2001**	**6/11/2005**	**Retired Manager, Risk Management and Industry Relations, STP Nuclear Operating Company at South Texas Project Electric Generating Station**
Seale, Dr. Robert L.	**2/8/1997**	**2/7/2001**	**Professor Emeritus of Nuclear & Energy Engineering, University of Arizona**
Shack, Dr. William J.	**8/1/2001**	**7/31/2005**	**Associate Director, Energy Technology Division, Argonne National Laboratory**
Sieber, Mr. John D.	**7/12/1999**	**7/11/2003**	**Retired Senior Vice-President, Nuclear Power Division, Duquesne Light Company**
Urig, Dr. Robert E.	**8/25/1997**	**8/24/2001**	**Distinguished Professor, Nuclear Engineering Department, University of Tennessee**
Wallis, Dr. Graham B.	**1/23/1998**	**1/22/2002**	**Professor, Thayer School of Engineering, Dartmouth College**
Total Count of Committee Members			12