UNITED STATES
NUCLEAR REGULATORY COMMISSION
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS
WASHINGTON, DC 20555 - 0001

October 23, 2009

MEMORANDUM TO: ACRS Members

FROM: Sherry Meador **/RA/**
Technical Secretary, ACRS

SUBJECT: CERTIFICATION OF THE MEETING MINUTES FROM THE ADVISORY COMMITTEE ON REACTOR SAFEGUARDS 563rd FULL COMMITTEE MEETING HELD ON JUNE 3-5, 2009 IN ROCKVILLE, MARYLAND

The minutes of the subject meeting were certified on June 24, 2009 as the official record of the proceedings of that meeting. A copy of the certified minutes is attached.

Attachment:
As stated

UNITED STATES
NUCLEAR REGULATORY COMMISSION
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS
WASHINGTON, DC 20555 - 0001

June 24, 2009

MEMORANDUM TO: Sherry Meador, Technical Secretary
Advisory Committee on Reactor Safeguards

FROM: Cayetano Santos, Chief ***/RA/***
Reactor Safety Branch
Advisory Committee on Reactor Safeguards

SUBJECT: MINUTES OF THE 563rd MEETING OF THE ADVISORY COMMITTEE ON REACTOR SAFEGUARDS (ACRS), JUNE 3-5, 2009

I certify that based on my review of the minutes from the 563rd ACRS Full Committee meeting, and to the best of my knowledge and belief, I have observed no substantive errors or omissions in the record of this proceeding subject to the comments noted below.

OFFICE	ACRS	ACRS:RSB
NAME	SMeador	CSantos/sam
DATE	06/ 24 /09	06/24/09

OFFICIAL RECORD COPY

CERTIFIED Date Certified: 06/24/09

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MINUTES OF THE 563rd ACRS MEETING

June 3-5, 2009

During its 563rd meeting, June 3-4, 2009, the Advisory Committee on Reactor Safeguards (ACRS) discussed several matters and completed the following report, letters, and memorandum:

REPORT

Report to Gregory B. Jaczko, Chairman, NRC, from Mario V. Bonaca, Chairman, ACRS:

- Report on the Safety Aspects of the License Renewal Application for the National Bureau of Standards Test Reactor, dated June 16, 2009

LETTERS

Letters to R. W. Borchardt, Executive Director for Operations, NRC, from Mario V. Bonaca, Chairman, ACRS:

- Draft Final Revision 2 to Regulatory Guides 1.21, "Measuring, Evaluating and Reporting Radioactive Material in Liquid and Gaseous Effluents and Solid Waste," and 4.1, "Radiological Environmental Monitoring for Nuclear Power Plants," dated June 17, 2009

- Safety Evaluation for the Mitsubishi Heavy Industries Topical Report MUAP-07006-P, Revision 2, "Defense-In-Depth and Diversity," Related to the US-APWR Design, dated June 25, 2009

MEMORANDUM

Memorandum to R. W. Borchardt, Executive Director for Operations, NRC, from Edwin M. Hackett, Executive Director, ACRS:

- Proposed Revisions to Regulatory Guides 1.174, 1.177, 1.40, 1.68.2, 1.159, DG-3037, and 1.183, dated June 9, 2009

MINUTES OF THE 563rd MEETING OF THE ADVISORY COMMITTEE ON REACTOR SAFEGUARDS

ROCKVILLE, MARYLAND

The 563rd meeting of the Advisory Committee on Reactor Safeguards (ACRS) was held in Conference Room 2B3, Two White Flint North Building, Rockville, Maryland, on June 3-5, 2009. Notice of this meeting was published in the *Federal Register* on May 18, 2009 (72 FR 23222-23224). The purpose of this meeting was to discuss and take appropriate action on the items listed in the meeting agenda. The meeting was open to public attendance.

A transcript of selected portions of the meeting is available in the NRC's Public Document Room at One White Flint North, Room 1F-19, 11555 Rockville Pike, Rockville, Maryland. Copies of the transcript are available for purchase from Neal R. Gross and Co., Inc., 1323 Rhode Island Avenue, NW, Washington, DC 20005. Transcripts are also available at no cost to download from, or review on, the Internet at http://www.nrc.gov/ACRS/ACNW.

ATTENDEES

ACRS Members: Dr. Mario Bonaca (Chairman), Dr. Said Abdel-Khalik (Vice-Chairman), Mr. J. Sam Armijo (Member-at-Large), Dr. George E. Apostolakis, Dr. Sanjoy Banerjee, Dr. Dennis Bley, Mr. Charles Brown, Dr. Michael Corradini, Mr. Otto L. Maynard, Dr. Dana A. Powers, Mr. Harold Ray, Dr. Michael Ryan, Dr. William Shack, Mr. John Sieber, and Mr. John Stetkar.

I. Chairman's Report (Open)

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

Dr. Mario Bonaca, Committee Chairman, convened the meeting at 8:30 a.m. In his opening remarks he announced that the meeting was being conducted in accordance with the provisions of the Federal Advisory Committee Act. He reviewed the agenda items for discussion and noted that no written comments or requests for time to make oral statements from members of the public had been received. Dr. Bonaca also noted that a transcript of the open portions of the meeting was being kept and speakers were requested to identify themselves and speak with clarity and volume.

II. License Renewal Application and the Revised Final Safety Evaluation Report for the National Institute of Standards and Technology (NIST) Reactor

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

The Committee met with representatives of the National Institute of Standards and Technology (NIST), the applicant, and the NRC staff to discuss the license renewal application for the National Bureau of Standards Reactor (NBSR) and the associated NRC staff's revised final Safety Evaluation Report (SER). Specifically, the discussion was focused on the resolution of one open item related to flow coast-down data used in the loss-of-offsite power accident analysis.

While responding to a question raised at an earlier ACRS Subcommittee meeting, the applicant discovered that the pump coast-down curve for the RELAP analysis was compared to the data measured under different conditions. The applicant promptly reported the error to the NRC on March 30, 2009, and it was briefly discussed during the previous ACRS meeting on April 2, 2009. This was treated as a license renewal open item.

Since then, the applicant has completed its re-analysis. During the meeting, the applicant showed a comparison of the revised flow coast-down data and the flow used in the prior analysis. NIST representatives described the results of the re-analysis and stated that the results do not alter the conclusions presented in the SER.

The NRC staff described its independent review and calculation to assess the safety significance of the error. The staff also discussed the review of the applicant's re-analysis. Based on its review, the staff concluded that there is reasonable assurance that a loss-of-offsite power will not result in fuel damage and that the consequences of the accident are bounded by the Maximum Hypothetical Accident.

The Committee issued a report to the NRC Chairman on this matter, dated June 16, 2009, recommending that the NIST application for renewal of the NBSR operating license be approved.

III. Draft Final Regulatory Guides 1.21 and 4.1

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

The Committee met with representatives of the NRC staff and the Nuclear Energy Institute to discuss Draft Final Regulatory Guide 1.21 (DG-1186), "Measuring, Evaluating, and Reporting Radioactive Materials in Liquid and Gaseous Effluents and Solid Waste," and Draft Final Regulatory Guide 4.1 (DG-4013), "Radiological Environmental Monitoring for Nuclear Power Plants." Both Regulatory Guides were issued for public comment in November 2008. The staff described how the public comments were addressed. The representative from NEI noted a need for an integrated approach implementing guidance documents in this area. The current guides are more than 30 years old, and the revisions are intended to update the NRC staff's guidance and incorporate insights and recommendations from NRC's Liquid Radioactive Release Lessons Learned Task Force.

The Committee issued a letter to the Executive Director for Operations on this matter, dated June 17, 2009, recommending that Revision 2 of Regulatory Guide 1.21 and of Regulatory Guide 4.1 be issued.

IV. Pellet-Clad Interaction Failures under Extended Power Uprate Conditions

[Note: Dr. Michael Benson was the Designated Federal Official for this portion of the meeting.]

The Committee met with representatives of the NRC staff and industry to discuss the potential need for developing regulatory criteria to protect against pellet-clad interaction (PCI) failures. On December 20, 2007, the ACRS issued a report to the Commission on the Susquehanna Steam Electric Station Extended Power Uprate. The added comments in that report expressed concern about the use of non-barrier fuel, which is not specifically designed to protect against PCI failures. During the June 3-4, 2009, ACRS meeting, data were presented to the Committee showing that PCI failures may occur in less than five minutes during certain transients, thereby precluding operator actions. NRC staff stated that PCI failures are of low safety significance. Further, developing rules for PCI failures constitutes a change in regulatory position and requires consideration of backfitting. Industry representatives from AREVA, Global Nuclear Fuel, and the Electric Power Research Institute presented various views opposing new regulatory criteria on PCI failures. The Committee decided that this is not an immediate safety concern and a letter is not needed.

V. Diversity and Defense-in-Depth Topical Report Associated with the US-APWR Design

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

The Committee met with representatives of the NRC staff to discuss the Safety Evaluation for Revision 2 of Mitsubishi Heavy Industries (MHI) Topical Report MUAP-07006-P, “Defense-in-Depth and Diversity,” for the U.S. Advanced Pressurized Water Reactor (US-APWR). The Topical Report describes MHI’s generic methodology to address defense-in-depth and diversity in digital I&C systems. The staff discussed the scope of the topical report and points of discussion identified during the May 21, 2009, Subcommittee meeting to review this matter. The staff also described its findings and conclusions. The staff concluded that the approach documented in the Topical Report and responses to the requests for additional information conform to regulatory requirements. This conclusion is subject to the satisfactory completion of 11 design certification application specific action items documented in the Safety Evaluation.

The Committee issued a letter to the Executive Director for Operations on this matter, dated June 25, 2009, recommending that the staff’s Safety Evaluation be issued.

VI. Subcommittee Report

The Chairman of the Reliability and PRA Subcommittee provided a report to the Committee summarizing the results of the June 1-2, 2009, meeting with the NRC staff on the (i) proposed Revision 1 to Regulatory Guide (RG) 1.205, "Risk-Informed, Performance-Based Fire Protection for Existing Light-Water Nuclear Power Plants," and proposed Standard Review Plan (SRP) Section 9.5.1.2, "Risk-Informed, Performance-Based Fire Protection," (ii) development of guidelines for performing human reliability analysis in fire probabilistic risk assessments, and (iii) risk metrics for new light-water reactor risk-informed applications.

During the Subcommittee meeting, the staff explained proposed changes to RG 1.205 (DG-1218). This Guide endorses Revision 2 to NEI 04-02, "Guidance for Implementing a Risk-Informed, Performance-Based Fire Protection Program under 10 CFR 50.48(c)," and includes integrated lessons learned from observation visits, fire PRA reviews, and plant License Amendment Request (LAR) reviews. The guidance in the proposed new SRP Section 9.5.1.2 is consistent with the proposed changes to RG 1.205.

The EPRI representative stated that RG 1.205 requires the use of conservative methods from NUREG/CR-6850, "EPRI/NRC-RES Fire PRA Methodology for Nuclear Power Facilities," and deviations from these methods will require prior NRC approvals. He further stated that outdated prescriptive and conservative methods should not be imposed on the licensees and, instead, the guidance provided in RG 1.200, "An Approach for Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Risk-Informed Activities," should be considered appropriate.

The staff also presented the issues and options for the implementation of risk metrics for new light water reactor risk-informed applications. The staff discussed the risk-informed initiatives and high level goals and objectives for new reactors, the current risk-informed framework, the new reactor implementation issues, the revised options based on stakeholder feedback, and the preliminary evaluation of options. The staff stated that in the near term, risk-informed applications for new reactors have been proposed as risk-managed technical specifications.

VII. Quality Assessment of Selected Research Projects

The Committee discussed the results of the ACRS Panels' review of the quality assessment of the NRC research projects on the following topics: NUREG/CR-6964, "Crack Growth Rates and Metallographic Examinations of Alloy 600 and Alloy 82/182 from Field and Laboratory Materials Testing in PWR Environments," and Draft NUREG/CR-XXXX, "Diversity Strategies for Nuclear Power Plant Instrumentation and Control Systems." The Committee plans to discuss its draft report on the assessment of the quality of the above projects during its meeting on July 8-10, 2009.

VIII. Executive Session

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

A. Reconciliation of ACRS Comments and Recommendations/EDO Commitments

- The Committee considered the EDO's response of May 8, 2009, to comments and recommendations included in the April 9, 2009, ACRS letter on the Draft Final Revision 2 to Regulatory Guide 1.200, "An Approach for Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Risk-Informed Activities." The Committee decided that it was satisfied with the EDO's response.

- The Committee considered the EDO's response of May 18, 2009, to comments and recommendations included in the April 21, 2009, ACRS letter on Draft Final Regulatory Guide 1.211, "Qualification of Safety-Related Cables and Field Splices for Nuclear Power Plants." The Committee decided that it was satisfied with the EDO's response.

- The Committee considered the EDO's response of April 28, 2009, to comments and recommendations included in the March 19, 2009 ACRS letter on Draft Final Regulatory Guide 5.73, "Fatigue Management of Nuclear Power Plant Personnel." The Committee decided that it was satisfied with the EDO's response.

B. Report of the Planning and Procedures Subcommittee Meeting

Review of the Member Assignments and Priorities for ACRS Reports and Letters for the June ACRS Meeting

Member assignments and priorities for ACRS reports and letters for the June ACRS meeting were discussed. Reports and letters that would benefit from additional consideration at a future ACRS meeting were also discussed.

Anticipated Workload for ACRS Members

The anticipated workload for ACRS members through September 2009 were discussed and the objectives were 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 issues

REVISED ACRS SUBCOMMITTEE STRUCTURE

The revised ACRS Subcommittee Structure was discussed. The revision involves core member assignments for each Subcommittee; elimination of completed tasks and addition of new tasks; reinstatement of the Naval Reactors Subcommittee; Chairmanship assignments; and the creation of a new "Siting" Subcommittee that replaces the Early Site Permits Subcommittee. A brief description of the above change is as follows:

Core Member Assignments

During its January 2009 retreat, the Committee asked the ACRS staff to assign core members to each ACRS Subcommittee. Accordingly, such assignments have been made and discussed with individual ACRS members (pp.). The members are reminded that core member assignments will not prohibit them from attending Subcommittee meetings of interest to them even though they are not members of those Subcommittees. However, it is the responsibility of the members to make sure that they do not exceed the 130-day limit.

Subcommittee Tasks

Completed tasks have been eliminated, some task have been revised, and new tasks have been added.

Reinstatement of the Naval Reactors Subcommittee

Naval Reactors Subcommittee has been reinstated to review the technical aspects of the reactor for the new aircraft carrier.

Creation of a New Subcommittee

A new Subcommittee named "Siting" has been created to replace the existing Early Site Permits Subcommittee. There are no new early site permit applications expected in the future. Site permit review is expected to be conducted in parallel with the design certification and COL review. The Siting Subcommittee will review the site-related issues such as seismic issues, implementation of the lessons learned form the review of the early site permit applications, and other site-related issues.

Chairmanship Assignments

-Mr. Stetkar will Chair the Subcommittee on Naval Reactors

-Dr. Powers, current Chairman of the Early Site Permits Subcommittee, will Chair the Subcommittee on Siting.

-Dr. Bley will Chair the Subcommittee on Future Plant Designs.

-Dr. Corradini, the current Chairman, will remain as a member and will Chair this Subcommittee when reviewing the Advanced Reactor Research Plan.

The revised Subcommittee Structure was sent to the members on May 26, 2009 for comment. This revision reflects incorporation of comments received. This revised Subcommittee Structure will become effective on June 8, 2009. The ACRS Subcommittee structure will be revised as needed to balance the workload among members and ACRS staff.

WEBSTREAMING OF THE ACRS MEETINGS

During its April and May 2009 meetings, the Committee discussed the March 6, 2009 Staff Requirements Memorandum (SRM) in which the Commission stated that:

If the ACRS decides to pursue Webstreaming of the ACRS Meetings, the ACRS should prepare a proposed plan reflecting their interest, in coordination with the Office of Administration.

During the May meeting, the Committee decided to establish a Panel to discuss the pros and cons of participating in the Webstreaming program and provide recommendations for use in making its decision. The panel consists of:

Dr. Corradini, Chairman, Dr. Armijo, Dr. Banerjee, Mr. Ray, and Mr. Stetkar.

The Panel should provide its recommendations by September 15, 2009.

ACRS REVIEW OF SAFEGUARS AND SECURITY MATTERS (EMH)

The ACRS has been reviewing regulatory matters in the areas of Safeguards and Security consistent with the Commission guidance in the October 31, 2003 Staff Requirements Memorandum (SRM). In that SRM, the Commission stated the following:

In the security arena, the ACRS should continue to focus attention and expertise on technical issues associated with the progression and potential consequences of postulated terrorist actions, and the assessment of the effectiveness mitigation strategies. The ACRS should not involve itself in issues associated with threat assessment (i.e. assessment of the likelihood of various types of events), physical security, or force-on-force assessments since these are outside the Committees area of expertise, and involves intelligence information not available to the Committee.

As a result of his recent conversations with some Commissioners, Dr. Bley raises the issue of whether the ACRS should become more involved in safeguards/security issues than it has been.

Please note that unless the Commission issues another SRM to supersede the October 2003 SRM, the Committee has no choice but to comply with the directions in the October 2003 SRM. The Committee should discuss whether it really wants to get involved in reviewing issues associated with the physical security and force-on-force assessments.

SCHEDULING OF SUBCOMMITTE MEETINGS

The Committee has a long-standing policy not to hold Subcommittee meetings in August so that the members and staff can take vacation. The new members may not be aware of this policy and some of the experienced members have forgotten about the existence of this policy. Consequently, meetings have been scheduled to be held in August. Such a practice precludes some members and staff from taking vacation. Some members propose an alternative that Subcommittee meetings not be held between mid-July and mid- August.

REGULATORY GUIDES

a) Draft Final Regulatory Guides

The staff plans to issue the following Draft Final Regulatory Guides and would like to know whether the Committee wants to review this Guide prior to being issued final.

Draft Final Revision 3 Regulatory Guide 1.100, "Seismic Qualification of Electrical and Active Mechanical Equipment and Functional Qualification of Active Mechanical Equipment for Nuclear Power Plants"

Revision 3 to Regulatory Guide 1.100 was issued for public comment as draft guide (DG) 1175 in May 2008. Regulatory Guide 1.100 endorses, with exceptions, IEEE Standard 344-2004, "IEEE Recommended Practice for Seismic Qualification of Class 1E Equipment for Nuclear Power Generating Stations," and ASME QME-1-2007, "Qualification of Active Mechanical Equipment Used in Nuclear Power Plants." Several important changes have been made in this revision. First, Regulatory Guide 1.148, "Functional Specification for Active Valve Assemblies in Systems Important to Safety in Nuclear Power Plants," is being subsumed into this revision so that all guidance for seismic qualification of equipment will be contained in one document. (Regulatory Guide 1.148 will be withdrawn after issuance of Revision 3 of Regulatory Guide 1.100.) Second, the guidance for use of earthquake and test experience data has been greatly expanded for seismic qualification of both electrical and active mechanical equipment. Finally, guidance has been added for plants with high-frequency ground motion, i.e., greater than 33 Hz, in their required response spectra.

Draft Final Regulatory Guide 1.215, "Guidance for ITAAC Closure Under 10 CFR Part 52"

Regulatory Guide 1.215 (DG-1204) was issued for public comments on March 13, 2009. The comment period closed on May 13, 2009. This Guide describes a method that the staff considers acceptable for use in satisfying the requirements for documenting the completion of inspections, tests, analyses, and acceptance criteria (ITAAC). In particular, this guide endorses the methodologies described in the industry guidance document Nuclear Energy Institute (NEI) 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52," Revision 3, issued January 2009, for the implementation of 10 CFR 52.99, "Inspection During Construction."

A December 5, 2008 SRM states that "*[t]he staff should provide the Commission an opportunity to review the guidance before reaching a decision to endorse the 'Industry Guideline for ITAAC Closure Process under 10 CFR Part 52,' NEI 08-01."* The staff's due date to the Commission is 8/27/09. The staff requests that if the ACRS review this guide, it do so during the July 2009 meeting.

b) Proposed Regulatory Guides

The staff plans to issue the following Proposed Regulatory Guides for public comment and would like to know whether the Committee wants to review these Guides prior to being issued for public comment.

Proposed Revision 2 to Regulatory Guide 1.174 (DG 1226), "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis"

The staff issued Revision 1 to RG 1.174 in November 2002. This Guide provides guidance for using risk information in support of licensee-initiated licensing basis (LB) changes to a nuclear power plant that require such review and approval. The guidance provided does not preclude other approaches for requesting LB changes. Rather, this Guide is intended to improve consistency in regulatory decisions in areas in which the results of risk analyses are used to help justify regulatory action. As such, this Guide, the use of which is voluntary, provides general guidance concerning one approach that the NRC has determined to be acceptable for analyzing issues associated with proposed changes to a plant's LB and for assessing the impact of such proposed changes on the risk associated with plant design and operation. This guidance does not address the specific analyses needed for each nuclear power plant activity or design characteristic that may be amenable to risk-informed regulation.

Based on his review of this Proposed Regulatory Guide, Dr. Apostolakis recommends that the Committee review the draft final revision to Regulatory Guide 1.174 after reconciliation of public comments.

Proposed Revision 1 to Regulatory Guide 1.177 (DG 1227), "An Approach for Plant-Specific, Risk-Informed Decisionmaking: Technical Specifications"

The staff issued RG 1.177 in August 1998. The respective revised rule 10 CFR 50.86, is in the process of being issued for public comment. This Guide provides the staff's guidance for using risk information to evaluate changes to nuclear power plant technical specifications allowed outage times (AOTs) and (surveillance time intervals (STIs) in order to assess the impact of such changes on the risk associated with plant operation. Other types of TS changes that follow the principles outlined in this Guide may be proposed and will be considered on their own merit. The guidance provided here does not preclude other approaches for requesting TS changes. Rather, this Guide is intended to improve consistency in regulatory decisions related to TS changes in which the results of risk analyses are used to help justify the change. As such, this Guide, the use of which is voluntary, provides guidance concerning an approach that the NRC has determined to be acceptable for analyzing issues associated with proposed changes to a plant's TS and for assessing the impact of such changes on the risk associated with plant design and operation.

Based on his review of this Proposed Regulatory Guide, Dr. Bley recommends that the Committee review the draft final revision to Regulatory Guide 1.177 after reconciliation of public comments.

Proposed Revision 1 to Regulatory Guide 1.40 (DG 1150), "Qualification of Continuous Duty Safety-Related Motors for Nuclear Power Plants"

Revision 1 to this Guide endorses the updated IEEE Standard. The Working Group on Qualification of Motors of the Nuclear Power Engineering Committee of the IEEE; developed IEEE Std. 334-2006, "Qualifying Continuous Duty Class 1E Motors for Nuclear Power Generating Stations." The IEEE Standards Board approved IEEE Std. 334-2006 on September 15, 2006, and it was published on January 31, 2007. This standard establishes criteria for qualifying continuous duty Class 1E motors used in mild and harsh environments in nuclear power plants to demonstrate their ability to perform their intended safety functions. The standard also provides guidance for the qualification of refurbished motors and insulation systems for motor rewinds. The standard is the updated version of IEEE Std. 334-1971, which the NRC endorsed in Regulatory Guide 1.40, "Qualification Tests of Continuous-Duty Motors Installed inside the Containment of Water-Cooled Nuclear Power Plants," issued March 1973.

Based on his review of this Proposed Regulatory Guide, Mr. Stetkar recommends that the Committee review the draft final revision to Regulatory Guide 1.40 after reconciliation of public comments.

Proposed Revision 2 to Regulatory Guide 1.68.2 (DG 1236), "Initial Startup Test Program to Demonstrate Remote Shutdown Capability for Water Cooled Nuclear Power Plants"

Revision 1 of Regulatory Guide 1.68.2 was issued in July 1978. The objective of this revision is to provide clear and up-to-date guidance for developing and conducting a test program to demonstrate remote shutdown capability. Staff experience and interaction with applicants since that time have identified deficiencies in the guide that should be corrected. For example, some applicants did not understand that GDC 19 requires the licensee to demonstrate the ability to trip the reactor from outside the control room as well as maintain it in a safe condition during hot shutdown. Additionally, questions and comments from licensees identified the need for clarification on the role of additional personal in the control room during the testing. These individuals may be performing non-safety-related activities that would not be required during an actual emergency. Finally, many of the initial startup test programs submitted for review did not fully address the second requirement in GDC 19, namely, the ability to take a reactor from hot shutdown to cold shutdown from outside the control room. This last provision is of considerable importance since demonstration of this capability lends the added assurance that, in the event a fire or other event causes the control room to become unusable for an indeterminate length of time, no danger to the health and safety of the public from potential loss of controlled residual heat removal capability would result.

Based on his review of this Proposed Regulatory Guide, Mr. Sieber recommends that the Committee review the final revision to Regulatory Guide 1.68.2 after reconciliation of public comments.

Proposed Revision 2 to Regulatory Guide 1.159 (DG 1229), "Assuring the Availability of Funds for Decommissioning Nuclear Reactors"

The staff published Revision 1 to Regulatory Guide 1.159 in October 2003 to reflect changes in the regulations and to include guidance on the amendments to 10 CFR 50.75. Revision 2 of Regulatory Guide 1.159 provides clarification of certain concepts. The most substantive changes are found in Section C, "Regulatory Position," and involve: (1) paragraph 3 of Subsection 1.3, "Decommissioning Cost Estimates"; (2) Subsection 2.1.5 of Section 2.1, "Guidance Applicable to All Methods of Financial Assurance"; and (3) Subsection 2.2.8 of Section 2.2, "Prepayment and External Sinking Fund." The changes in (1) are primarily word changes in paragraph 3 for clarification. The changes in (2) relate to a change in the timing for making adjustments to the licensee's financial assurance amount(s) and mechanism(s). The changes to (3) specify when a greater than 2 percent real rate of return will be allowed and reflect any withdrawals made during the safe-store period when taking the allowed credit through the projected decommissioning period.

Based on his review of this Proposed Regulatory Guide, Dr. Ryan recommends that the Committee review the final revision to Regulatory Guide 1.159 after reconciliation of public comments.

Proposed New Draft Regulatory Guide

The staff plans to issue the following new Draft Regulatory Guide for public comment and would like to know whether the Committee wants to review this Guide prior to being issued for public comment.

Proposed New Draft Regulatory Guide (DG 3037), "Guidance for Fuel Cycle Facility Change Process"

DG-3037 is a proposed new Regulatory Guide. This proposed guidance is to assist licensees in providing more consistent evaluations and reports with the fact that fuel cycle facilities have different purposes, designs, and safety programs. The requirements in 10 CFR 70.72, "Facility Changes and Change Process," require certain processes to be implemented to control facility configuration. Based on a threshold, some facility changes require NRC approval. Other facility changes, which do not require NRC approval, are required to be summarized and reported annually.

Based on his review of this Proposed New Draft Regulatory Guide, Dr. Ryan recommends that the Committee review the final revision to this new Guide after reconciliation of public comments.

THIRD QUADRIPARTITE WORKING GROUP MEETING

Japan's Nuclear Safety Commission (NSC) will host the third Quadripartite Working Group (WG) Meeting in Tokyo scheduled for October 13-15, 2009 on the main topic of Digital I&C. Japan proposed an additional day to discuss seismic issues. France and Germany have

indicated their preference for 1.5 days on Digital I&C and an afternoon on seismic issues. France has confirmed they will not present on the seismic issues. The third day, October 15th, is the site tour.

REAPPOINTMENT OF ACRS MEMBERS (EMH)

The Commission has reappointed Dr. Powers for a fifth term, Drs. Armijo and Banerjee for a second term. In the SRM related to the reappointment of Dr. Powers, the Commission states the following:

The staff should continue to recruit new members to the Committee. In safety significant matters, it is important to continually evaluate staff positions from diverse point of view. With an overarching priority of maintaining the highest level of technical competency, the Committee should maintain a mix of new members and more senior members to ensure diversity while still maintaining some continuity of knowledge during the review of safety issues.

FEDERAL REGISTER NOTICE AND PRESS RELEASE TO SOLICIT CANDIDATES FOR MEMBERSHIP ON THE ACRS

Draft federal register notice and press release to solicit candidates for membership on the ACRS were sent to the Commission for approval. In the SRM approving issuance of these documents for publication, the Commission states the following:

> With an overarching priority of maintaining the highest level technical competency, the ACRS should work to ensure a diverse group of individuals is considered during the interview process.

The meeting was adjourned at 12:00 noon on June 5, 2009.

ADVISORY COMMITTEE ON REACTOR SAFEGUARDS
563rd FULL COMMITTEE MEETING

June 3-5, 2009

PLEASE PRINT

TODAY'S DATE: June 3, 2009

	NAME	NRC ORGANIZATION
1	William B Kennedy	NRR/DPR/PRTA
2	Steve Garry	NRR/DIRS
3	Richard L. Conatser	NRR/DIRS
4	Thomas Blount	NRR/DPR
5	Jaemy Silver	NRR
6	Kathryn Brock	NRR/DPR
7	JC SHEPHERD	FSME/DWMEP
8	Edward O'Donnell	RGS
9	James A. Isom	NRR/DIRS
10	JOHN VOGLEWEDE	RES/DSA
11	PAUL GUFFORD	NRR/DSS
12	Bill Ruland	NRR/DSS
13	Joe Ashcraft	NRO/DE/ICE2
14	PAUL KRUMM	NRO/DNRL/NMIP
15	Royce Beacom	NRO/DE/ICE1
16	TONY Attard	NRR/DSS/SNPB
17	Jeff Ciocco	NRO
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ADVISORY COMMITTEE ON REACTOR SAFEGUARDS
563rd FULL COMMITTEE MEETING

June 3-5, 2009

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TODAY'S DATE: June 3, 2009

	NAME	AFFILIATION
1	Tom Myers	NIST
2	Rob Dimeo	NIST
3	DAVID BROWN	NIST
4	MIKE ROWE	NIST
5	Robert Williams	NIST
6	WADE Richards	NIST
7	PAUL BRAND	NIST
8	GEORGE OLIVER	NEI
9	Douglas Pruitt	AREVA
10	Chris Hoffman	PPL
11	Anthony Giancotarino	Exelon
12	JASON HARRELL	PPL
13	RONNIE Gardner	AREVA
14	GORDON CLEFTON	NEI
15	Tom Eichenberg	TVA
16	DAVE BOATZ	Duke
17	Robert Montgomery	ANATECH/EPRI
18	Nayem Jahingir	GNF
19	Bert Dunn	AREVA
20	RUSS FAWCETT	GNF
21	William Slagle	Westinghouse
22	Thomas Lindqvist	Westinghouse
23	KENJI MASHIO	MHI
24	Ryan Sprengel	NUES
25	MASANORI ONOZUKA	MNEI
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ADVISORY COMMITTEE ON REACTOR SAFEGUARDS
563rd FULL COMMITTEE MEETING

June 3-5, 2009

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TODAY'S DATE: June 4, 2009

	NAME	NRC ORGANIZATION
1	Jocelyn Mitchell	RES
2	Steven A. Laur	NRR/DRA
3	Bill Ruland	NRR/DSS
4	Steve Smith	NRR/DSS
5	Sanara Wastler	NSIR/DSP
6	Kimyata Morgan Butler	FSME/DILR
7	Mike Waterman	RES/DE/DICB
8	Terry Jackson	NRO/DE/ICE2
9	Royce Beacon	NRO/DE/ICE2
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TODAY'S DATE: June 4, 2009

	NAME	AFFILIATION
1	JD Wolcott	TVA
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