

POLICY ISSUE INFORMATION

May 21, 2001

SECY-01-0092

FOR: The Commissioners

FROM: John T. Larkins, Executive Director /RA/
Advisory Committee on Reactor Safeguards
Advisory Committee on Nuclear Waste

SUBJECT: SELF-ASSESSMENT OF ACRS AND ACNW PERFORMANCE

PURPOSE

The purpose of this paper is to provide the Commission with the results of the ACRS and ACNW self-assessment for Calendar Year (CY) 2000 and to describe the actions that the ACRS and ACNW will undertake as a result of this self-assessment.

BACKGROUND

In response to a draft circular from the Office of Management and Budget dated August 3, 1994, the ACRS and ACNW each reviewed its planned activities and developed performance measures and assessment standards. These were provided to the Commission in a February 14, 1995, memorandum. Subsequently, as part of the agency's strategic assessment, an issue paper was developed on independent oversight (COMSECY-96-028, Strategic Assessment Issue Paper: Independent Oversight [DSI-19]). In a staff requirements memorandum (SRM) of August 21, 1996, the Commission requested that the ACRS and the ACNW produce a set of criteria for assessing the performance of the Committees. The Committees were directed to perform self-assessments periodically and to provide the results of these assessments to the Commission. Results of the ACRS and ACNW self-assessments have been provided to the Commission for the past three years through SECY 98-123, SECY 99-018, and SECY 00-102.

ACTIONS RESULTING FROM PREVIOUS SELF-ASSESSMENT

This section describes actions taken by both Committees in response to previous self-assessment. Both Committees have established the processes needed to ensure that the Commission and the Executive Director for Operations (EDO) priorities are understood and are adequately considered in prioritizing the work of the Committees. The Chairman's Tasking Memorandum, published NRC staff schedules, and discussions with Commissioners, their staff, the NRC staff, and other stakeholders are used to prioritize work. The ACRS and ACNW review priorities and schedules during each Committee meeting. The ACNW uses its Action Plan to establish its priorities and updates this plan annually. The ACNW recently updated its Action Plan to reflect the feedback received from the Commissioners and other stakeholders. The ACRS has

developed its Action Plan for CY 2001. These Action Plans were provided to the Commission and the EDO for comment. The ACRS and ACNW Action Plans will be published and also put on the ACRS/ACNW web site for use by the stakeholders.

The ACNW used its Action Plan to prioritize its activities during CY 2000. The feedback received from the Commissioners and their staffs indicated that the ACNW had, as in CY 1999, addressed all of the Commission's priority interests that were within the scope of the ACNW responsibilities.

The ACNW will continue to work with the Commission offices to improve its information exchanges with the Commissioners during public meetings. During CY 2000, the ACNW has used the information gathered through discussions with the NRC staff, attendance at NRC/Department of Energy(DOE) meetings, and review of predecisional documents to stay currently informed. The new Memorandum of Understanding between the ACNW and the EDO (issued March 2001) establishes improved procedures for ACNW access to and use of predecisional documents.

The ACNW has continued to use its available resources to make its meetings more accessible to its Nevada stakeholders and address public confidence issues. The ACNW plans to continue to meet in Nevada near the proposed Yucca Mountain Repository site once a year and to make its video teleconferencing link in Rockville, Maryland, available to interested stakeholders.

An Action Plan for increasing ACRS and ACNW involvement in decommissioning activities (memorandum dated June 27, 2000, from John T. Larkins to the Commission) has been developed and provided to the Commission. The plan describes the division of responsibilities between the ACRS and the ACNW, the planned involvement of each Committee, and schedules.

The ACRS devoted significant resources in CY 2000 to work related to the agency's initiatives on risk-informed regulation, license renewal, NRC-sponsored research, transient and accident analysis codes, spent fuel pool accident risk, and issues related to a differing professional opinion (DPO) on steam generator tube integrity. The ACRS workload has been and is expected to continue to be high. The ACRS Action Plan for CY 2001 will be used to focus the use of ACRS resources.

The ACRS members and some stakeholders raised a concern about the large number of reviews that ACRS engaged in during CY 1999 to support Commission and staff requests. The Planning and Procedures Subcommittee (the ACRS members' management Subcommittee), which normally meets once a month to review ACRS plans and schedules, has addressed this concern. The Subcommittee has systematically addressed prioritization of ACRS activities and how an ACRS review of a particular issue would help to resolve the issue. The ACRS experience and stakeholder feedback have led the Committee to conclude that the ACRS is most effective when it performs in-depth reviews of important technical issues and minimizes its involvement in resolving routine regulatory issues. The Planning and Procedures Subcommittee has taken this approach in assessing Committee planning, which resulted in the disposition of more routine matters in CY 2000 without significant use of Committee resources.

The areas on which ACRS will focus its resources were identified in the CY 2000 and CY 2001 ACRS retreats. The new ACRS Action Plan, as previously stated, will also be used to focus ACRS reviews. To conserve resources, the ACRS has developed a plan for streamlining its

review of license renewal applications and will test and refine this plan in FY 2002. This plan has been provided to the Commission and the NRC staff.

Stakeholders have stated that it is important for the ACRS to be more aware of plant operational issues as well as the concerns of the regional and headquarters staff, the industry and licensees, and public interest groups. To this end, the ACRS met with Nuclear Energy Institute (NEI) senior management in CY 2000 to discuss matters of mutual interest. The ACRS also met with a representative of the Union of Concerned Scientists to discuss the use of probabilistic risk analysis, and has involved representatives of other public interest groups in the discussion of significant regulatory issues. The ACRS will continue to meet periodically with NEI, other industry groups, and public interest groups. The ACRS will continue to conduct its annual visits to an operating plant site and a regional office, to attend NRC- and stakeholder-sponsored meetings on plant operational and fire protection issues, and to attend the meetings of the Fire Protection Forum. The ACRS will also keep informed of the lessons-learned from foreign operating experience and will schedule Committee discussions, as needed.

DESCRIPTION OF THE SELF-ASSESSMENT PROCESS

Both ACRS and ACNW conduct annual retreats during which they review their agenda and methods of operation, set priorities for the future, and conduct formal self-assessments. Both Committees review their schedules and priorities at each full Committee meeting and make adjustments as needed. Changes reflect feedback from the Commissioners, the EDO, and cognizant NRC staff, and input from ACNW working groups and ACRS Subcommittee Chairmen. The Committees have instituted procedures for reviewing their activities and monitoring their performance during each of their meetings and have increased their interactions with stakeholders to solicit their views on Committee effectiveness.

The ACRS and ACNW carefully evaluate their letters and reports to determine whether they contain advice that addresses safety-significant issues and is (a) effective and timely, (b) technically sound and based on state-of-the-art knowledge, (c) clear and concise, (d) relevant, balanced, and unbiased, and (e) forward-looking. The letters and reports are also assessed to determine whether they are responsive to Commission and staff needs, considered in Commission and staff decisions, and influence NRC's regulatory activities. These assessments have been based on evidence that the advice was accepted or adopted and on unsolicited and solicited feedback from stakeholders.

Matrices summarizing the content and impact of ACRS and ACNW letters and reports were used in the CY 1998, 1999, and 2000 ACRS/ACNW self-assessments. These matrices have proved to be valuable tools for analyzing the effectiveness of the Committees, identifying the need for follow-up actions and communicating information.

The solicitation of feedback from stakeholders for the CY 1999 and 2000 self-assessments was a significant expansion of the process used in earlier self-assessments. The stakeholders interviewed included Commissioners, Commission staff, former ACRS members, NRC staff, staff from other Federal agencies, members of State and local governments, members of public interest groups, and members of the regulated industry. These interviews provided useful insights which the ACRS and the ACNW discussed during their retreats and used in their formal self-

assessments. The stakeholder survey conducted for the CY 2000 self-assessment was more limited than the survey conducted for the CY 1999 self-assessment. Extensive surveys consume critical office resources and we believe that such surveys need not be repeated for every formal self-assessment.

RESULTS OF ACNW SELF-ASSESSMENT FOR CY 2000

The ACNW held an annual planning meeting in January 2001, to assess its priorities and operating processes. The ACNW prepared a matrix of its reports (Attachment 1), which it used in its self-assessment to evaluate its effectiveness against the goals and objectives in its Action Plan. The results of the self-assessment has led the ACNW to conclude that its advice is generally timely, is focused on the priority issues identified in the Action Plan, and is used by the NRC staff and the Commission in their regulatory decisions. The ACNW has issued its updated Action Plan for CY 2001. The focus of the ACNW's efforts in CY 2001 will continue to be on issues associated with high-level waste and decommissioning.

Interactions between the ACNW and its stakeholders have been open and professional, and the ACNW is viewed as an important contributor to the open discussion of and resolution of issues. Feedback received from stakeholders on the ACNW performance continued to be generally very positive. External stakeholders continue to comment very favorably on the ACNW's willingness to provide a forum for the discussion of their views and a window on Commission activities in waste management. The ACNW reports were judged to be well written and of high quality. Stakeholders thought the reports provided adequate explanations for the conclusions and recommendations and were focused on relevant issues. The ACNW is viewed as providing valuable input to the solution of waste management safety issues.

Feedback received from the Commission and Commission staff indicated that in CY 2000 the ACNW had addressed all of the Commission's priority interests that were within the purview of the ACNW. Regular communications with the Commissioners and the EDO and the use of a published Action Plan help ensure this result. The ACNW kept itself currently informed through meetings with the NMSS staff, attendance at public meetings, and through review of predecisional documents.

The reaction of stakeholders to the ACNW's meetings in Nevada and the ACNW's interactions with Yucca Mountain stakeholders continues to be very positive. Some stakeholders commented as to a lack of observed impact of stakeholder input on ACNW positions. Some Nevada stakeholders continue to say that it would be useful if the ACNW met more frequently in Nevada. Because of resource constraints, the ACNW does not plan to have more than one meeting a year in Nevada, but will make use of video teleconferencing to provide enhanced interactions with the Nevada stakeholders and, as suggested, evaluate the feasibility of providing Internet-based broadcasting of ACNW meetings. The ACNW Action Plans for CY 2000 and 2001 listed transportation issues as one of the ACNW priority items in part because of expressed stakeholder concerns. The ACNW has also discussed stakeholder concerns with the Commissioners.

The ACNW meetings are open and the agendas are published in the *Federal Register* and on the ACNW Web site and are described in NRC press releases. All stakeholders may attend these meetings and address the Committee, and stakeholders frequently do so. The ACNW has

contacted stakeholders other than Environmental Protection Agency (EPA), DOE, and NRC and requested presentations related to their work . In CY 2001, the ACNW will take more initiative in soliciting the views of stakeholders who are not directly involved in developing the work products reviewed by the ACNW.

Some stakeholders believe that the ACNW needs a member or a regularly involved consultant with strong health physics expertise. The current limitation of the ACNW to four members and the need for other types of expertise are factors that must be considered in filling ACNW vacancies. The ACNW will discuss with the Commission the appointment of a consultant or a fifth member with this expertise.

RESULTS OF THE ACRS SELF-ASSESSMENT FOR CY 2000

Like the ACNW, the ACRS held an annual planning meeting in January 2001 to assess its priorities and operating processes. The ACRS has also developed an Action Plan and provided it to the Commission and the EDO. The ACRS will use its Action Plan to guide its use of resources. As part of its self-assessment, the ACRS prepared a matrix of its letters and reports (Attachment 2).

This self-assessment has led the ACRS to conclude that its reports are generally clear, have a positive impact on the regulatory process, and address issues of importance to the Commission. Stakeholders view the ACRS as knowledgeable and fair in its consideration of different points of view. Some stakeholders said that the ACRS appreciation of regulatory and industry issues had improved. Stakeholders believe that interactions with the ACRS have been positive and professional and that the ACRS provides constructive input. The NRC staff views the ACRS review as a means of validating and improving staff positions. Stakeholders believe that it is important that the ACRS provide advice that is readily understood and that ACRS should strive to provide possible solutions with its recommendations.

Some stakeholders said that attention should be given to better member preparation for ACRS meetings. This necessitates that documents to be reviewed are received in a timely manner. The new Memorandum of Understanding between the ACRS and the EDO includes requirements for providing information to the ACRS on a schedule that will allow adequate time for Committee review and for ACRS/ACNW staff access to predecisional documents placed in ADAMS.

It is generally believed that the ACRS should plan its work carefully and be sensitive to NRC staff schedules, but should take the time necessary to do in-depth, informed reviews. Early, pro-active ACRS input is believed to benefit the staff and support the efficient use of staff resources and to facilitate timely completion of ACRS reviews. The ACRS will continue to plan its reviews carefully to avoid unnecessary disrupting of staff schedules.

The ACRS and many stakeholders believe that it is most effective when it becomes involved in the resolution of broad technical issues, such as the use of defense-in-depth and the development of a risk-informed 10 CFR Part 50. In CY 2000, the ACRS looked for more opportunities to increase its involvement in important technical issues and to minimize its involvement in routine matters, such as regulatory guides addressing routine regulatory issues and process issues. The ACRS identified areas on which it would focus and used its Planning and Procedures Subcommittee to

guide this effort. The value that ACRS can add to resolution of an issue is systematically evaluated by this Subcommittee. The ACRS believes that this process facilitates success and will continue to use this process. Examples of new important technical issues which the ACRS will engage in CY 2001 are the licensing of Generation 4 reactors, the mixed oxide (MOX) fuel fabrication facility application, proposed use of MOX fuel in licensed commercial reactors, quantification of design margins, and an evaluation of 10 CFR Part 50 Appendices A and B.

Some stakeholders have expressed a concern that the ACRS' early involvement in the NRC staff's development of a regulatory position had, or created the perception of, a negative impact on ACRS independence. Other stakeholders believe that early involvement by the ACRS improved communications and provided ACRS input when it was the most efficient and effective. The NRC staff who worked with the ACRS on reviews in which there was early Committee involvement tended to be very positive as to the benefits of early Committee involvement in complex technical issues. The ACRS believes that the timing of ACRS involvement (early or otherwise) is a separate issue from ACRS independence and continues to believe that its early involvement is, in the balance, the best approach for the resolution of complex issues. The Committee recognizes the need to preserve a level of independence in its reviews. The ACRS will continue to involve itself early in reviewing regulatory positions when the Commission or the Committee decides that early involvement is effective. It appears that there will continue to be disagreement among stakeholders with regard to this issue.

Feedback on the ACRS annual report to the Commission on NRC-sponsored research has generally been positive. Activities associated with this report consume a significant amount of ACRS resources. After obtaining feedback on the CY 2001 report, the ACRS will evaluate the need to devote the current level of resources to this report every year, and will then develop recommendations on the scope, frequency, and focus of future reports and seek the guidance of the Commission.

SUMMARY

The results of the ACRS and ACNW self-assessments showed that both Committees add value to the regulatory process and contribute to the accomplishment of the NRC mission. Each Committee has established performance goals and has developed procedures for measuring the achievement of those goals. The ACRS and ACNW have surveyed stakeholders and identified areas for improvement and will take steps to increase its efficiency and effectiveness. These formal self-assessments have been conducted on an annual basis since 1998. We believe that the interval for conducting self-assessments can now be reasonably extended to two years with essentially equivalent benefits and plan on doing this for the future. This will conserve scarce resources. The Committees will continue to monitor the effectiveness and efficiency of their operations and make improvements, as warranted.

We are developing a revised ACRS/ACNW Operating Plan that will explain each Committee's mission, performance plans, performance reports, planned accomplishments, self-assessments, and metrics. We plan to provide this revised Operating Plan to the Commission in early June 2001. We will maintain this Operating Plan as a living document and periodically provide updated revisions of the Plan to the Commission.

Attachments:

1. ACNW Summary Matrix
2. ACRS Summary Matrix

ACRS SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>#1 Review and Evaluation of the Nuclear Regulatory Commission Safety Research Program, (Advance copy) 2/7/00</p> <p>(Final report NUREG-1635, Vol. 3 was issued in 3/00)</p>	<p>The NRC needs a strong, highly motivated research program. The ACRS sketched out the major roles and desirable features of such a program, and provided the Commission with a perspective on what the needs of the agency are.</p>	<p>Agreed with the ACRS comments and will continue to discuss specific comments with the Committee on an individual basis as work progresses. EDO is inviting the ACRS to present its views to the stakeholders.</p>	<p>The ACRS completed its report and submitted it to the Commission and RES prior to the finalization of RES budget.</p>	<p>The Commission and RES management reviewed the ACRS report and highly regarded and appreciated the ACRS insights. Individual Commissioners suggested that the ACRS, in its next report, provide an objective assessment of research that is needed and research that has reached sufficient maturity that it is adequate for making regulatory decisions.</p>	<p>The Committee continued its follow-up on, and review of, the safety research program for 2001. The Committee addressed individual Commissioner's comments in the 2001 report to the Commission and will continue to do this in future reports.</p>

The information provided in the "main message" and "EDO/Commission Response" columns is intended to summarize the content of the associated documents. The reader should refer to the documents for more detail.

ACRS SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>#2 SECY-00-0011, "Evaluation of the Requirement for Licensees to Update Their Inservice Inspection and Inservice Testing Programs Every 120 Months" 2/8/00</p>	<p>Reiterated the previous recommendation that the Commission retain the 120-month update requirement for ISI and IST programs in 10 CFR 50.55a.</p>	<p>The EDO did not agree with the ACRS recommendation, but supported the staff position in SECY-00-0011 to eliminate 120 month ISI/IST update requirement in 10CFR 50.55a.</p>	<p>The ACRS issued two reports to the Commission and briefed the Commission on this matter prior to its vote.</p>	<p>The Commission issued an SRM on 4/13/00, adopting a position that was consistent with the ACRS recommendation and approving Option 2 of SECY-00-001, which would maintain the current requirement that licensees update their ISI and IST programs every 10 years.</p>	<p>None.</p>

ACRS SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>#3 Importance Measures Derived from Probabilistic Risk Assessment 2/11/00</p>	<p>1) Risk-informed decisions are best made using metrics, such as CDF or LERF, to evaluate the impact of decision options, (2) The definition of importance measures is somewhat arbitrary and they have limitations, including: (a) Importance measures are typically evaluated for individual SSCs, while individual SSCs of a group may not be risk significant, the group itself may be, (b) Importance measures are strongly affected by the scope and quality of the PRA. Even with a full-scope, high-quality PRA, these measures have limitations, (3) The Panel that determines the categorization of SSCs should be fully aware of the limitations, (4) A project should be established to identify the limitations of each proposed approach to importance.</p>	<p>(1) Risk-informed decisions concerning the change in plant risk are best made using metrics such as CDF and LERF, (2) The Expert Panel should be aware of the limitations of each proposed approach to importance measures. The staff has provided guidance in RG 1.174, SRP Chapter 19, and draft Appendix T to 10 CFR Part 50 to address these limitations, (3) The staff has sufficient information and guidance on the use of importance measures to successfully move forward with risk-informed regulation, (4) The staff plans to discuss with NEI the NEI document on categorization of safety significance as well as potential alternatives to the use of importance measures. Lessons learned from this effort will be incorporated into the final version of Appendix T, and revisions to RG 1.174 and SRP Chapter 19. Therefore, at this time, the staff does not intend to establish a new project as recommended by the ACRS.</p>	<p>Review was timely in accordance with SRM schedule.</p>	<p>The Committee identified the limitations associated with the use of importance measures for consideration by both the staff and the industry. The staff planned to discuss with NEI potential alternatives to the use of importance measures.</p>	<p>The Committee plans to follow the staff's and industry's activities in this area.</p>

ACRS SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>#4 Revision of Appendix K, "ECCS Evaluation Models," to 10 CFR Part 50 2/11/00</p>	<p>(1) Commission should approve this rule change, (2) staff should provide guidance to licensees to account appropriately for power measurement uncertainty in safety analyses, and (3) staff should evaluate possible impacts of rule change on other regulations.</p>	<p>(1) The staff revised FRN for rule to include specific references for guidance on how to account for the measurement of uncertainty, (2) staff investigated and did not find any impacts of rule change on other regulations. Staff will modify any guidance documents, as necessary.</p>	<p>Review timely in accordance with staff's schedule.</p>	<p>As a result of Committee comments, the staff included references in the rule for guidance to licensees on how to account for the measurement of uncertainties, and agreed to modify guidance documents, as needed.</p>	<p>The Committee plans to follow-up on the issue of impact of uncertainty reduction on regulatory margin, as raised in 7/22/99 letter on proposed rule version, pursuant to risk-informing 10CFR Part 50.</p>

ACRS SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
#5 Impediments to the Increased Use of Risk-Informed Regulation 2/14/00	Significant technical impediments are: 1) PRA inadequacies and incompleteness in some areas, (2) the need to revisit risk-acceptance criteria., (3) lack of guidance on how to implement defense-in-depth and on how to impose sufficiency limits, (4) lack of guidance on the significance and appropriate use of importance measures, (5) variation of PRA quality and the scope and the need for Standards.	The staff will integrate the resolution of issues identified by ACRS in its future work.	Review was timely. The Committee issued this report in accordance with the schedule established by the Commission.	This report was in response to a Commission request. The Committee identified significant technical impediments for consideration by the Commission and the staff in the increased use of risk-informed regulation.	The Committee plans to follow-up on activities associated with risk-informed regulation.
#6 Response to Follow-up Questions Resulting from the 11/4/99 ACRS meeting with the Commission 2/18/00	Answered Commissioners' questions on license renewal, low-power shutdown operations risk, PRA results and defense-in-depth, the maintenance rule, and the NRC safety research program.	No response required.	Responded in a timely manner.	Enabled the Commissioners to have a better understanding of Committee's positions.	The Committee plans to continue its discussion of these matters, as needed.

ACRS SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>#7 Proposed Final Regulatory Guide 1.XXX, "Assessing and Managing Risk Before Maintenance Activities at Nuclear Power Plants" 3/10/00</p>	<p>The Committee supported the staff's proposed RG and the endorsement of Section 11 of NUMARC 93-01 guidance document. And provided a recommendation regarding "temporary alterations"</p>	<p>The staff agreed with the ACRS recommendations.</p>	<p>The report was timely. The staff revised the RG prior to the Commission's vote on this matter.</p>	<p>Effective. The staff revised the RG to reflect the Committee's recommendation regarding "temporary alterations."</p>	<p>None.</p>
<p>#8 Report on the Safety Aspects of the License Renewal Application for the Oconee Nuclear Station, Units 1, 2 and 3. 3/13/00.</p>	<p>The licensee properly identified those items which are in the scope of 10 CFR Part 54 and has identified appropriate aging management programs.</p>	<p>No response required.</p>	<p>Very timely. Supported the staff's accelerated schedule for issuing the renewal license.</p>	<p>The Committee was very effective and efficient in completing its review to accommodate the accelerated staff schedule, which in turn, enabled the staff to issue the license for extended operation in a timely manner.</p>	<p>The Committee plans to compare the Oconee programs with other plants' programs when reviewing the license renewal applications of those plants.</p>

ACRS SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>#9 SECY-00-0007, "Proposed Staff Plan for Low Power and Shutdown Risk Analysis Research to Support Risk-Informed Decision Making" 3/13/00</p>	<p>(1) Staff should evaluate the adequacy of its tools for independently assessing plant configurations during low-power and shutdown (LPSD), especially during plant transitions; and (2) an assessment of human performance during LPSD and transition periods should be included in ATHEANA. The ACRS agreed with the proposed continued support to ANS for developing an industrial standard for LPSD.</p>	<p>EDO's response reiterated key points in the SRM dated March 31, 2000. Commission approved continued staff participation on the ANS's standard development effort (Phase 2) but disapproved: (1) development of improved guidance for LPSD risk, (2) development of improved methods and tools for assessing human reliability analysis and level 2 risk, and (3) evaluation of areas identified by the ACRS and other stakeholders.</p>	<p>Not timely. The ACRS deferred preparing a report during the 12/99 and 2/00 meetings. Commissioners Diaz, Merrifield, and McGaffigan voted on SECY-00-007 prior to receipt of the ACRS report.</p>	<p>Not effective. The ACRS report did not affect Commission's final decision to terminate all proposed staff activities except those related to the ANS standard and ATHEANA.</p>	<p>The Committee plans to continue to evaluate matters related to LPSD as plant incidents and regulatory activities indicate emergent risk significant issues of concern.</p>

ACRS SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>#10 Proposed Resolution of Generic Issue B-17, "Criteria for Safety-Related Operator Actions," & Generic Issue 27, "Manual vs. Automated Actions" 3/13/00</p>	<p>(1) ACRS agreed with staff resolution approach, (2) Committee would like to review staff's evaluation of ANSI/ANS Standard - 58.8-1994, before it is endorsed.</p>	<p>Staff has closed out these issues. NRC does not intend to endorse ANSI/ANS Standard 58.8-1994.</p>	<p>Timely. The ACRS completed the review to support the schedule specified in the Chairman's Tasking memorandum.</p>	<p>As a result of the concern expressed by the ACRS, the staff has decided not to endorse ANSI/ANS 58.8-1994.</p>	<p>None.</p>

ACRS SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>#11 Revised Reactor Oversight Process (RROP) 3/15/00</p>	<p>(1) RROP makes NRC assessments & actions more objective, predictable & understandable, (2) RROP is ready for initial implementation, (3) choices of PIs and thresholds remain controversial, (4) further development of the SDP and its analytical tools is required for full implementation, and (5) additional PIs are needed for full & effective implementation (e.g., Corrective Action Programs, human performance, safety culture, and LPSD).</p>	<p>EDO's response agreed with most conclusions and recommendations. One exception was the conclusion that additional PIs will be needed for full and effective implementation of the RROP. EDO disagreed and stated that the revised RROP combines use of PIs with inspection to evaluate the more risk-significant aspects of licensee performance.</p>	<p>Timely. The ACRS supported the schedule provided in the EDO's Priority List and Chairman's Tasking Memorandum.</p>	<p>Effective. In an SRM dated 4/5/00, the Commission requested the Committee to continue its review of the use of PIs and the SDP subsequent to initial implementation of the RROP.</p>	<p>A Plant Operations Subcommittee meeting was held on 12/5/00, to review the status of the RROP pilot program. The Committee plans to continue its review of the results of the use of PIs and the SDP during future meetings. The Committee needs to respond to the SRM by the end of September 2001.</p>

ACRS SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>#12 Draft Final Technical Study of Spent Fuel Pool Accident Risk at Decommissioning Nuclear Power Plants 4/13/00</p>	<p>The integrated rulemaking on decommissioning should be put on hold until the staff provides technical justification for the proposed acceptance criteria discussed in the draft final technical study.</p>	<p>The staff in its 5/26/00 response determined that four areas in the technical study will be impacted as a result of the ACRS comments. These areas are: the frequency of zirconium fire; acceptance criteria; timing of a zirconium fire; and the window of vulnerability for zirconium fire. This is work in progress. The staff briefed the ACRS in 9/00 on this matter.</p>	<p>Review timely in accordance with the Staff Requirements Memorandum dated 12/21/99.</p>	<p>The staff agreed to consider the ACRS comments. The ACRS has identified significant shortcomings in the ability to determine the risk associated with spent fuel pool accidents, which in turn, resulted in the staff's consideration of these shortcomings in its evaluation of spent fuel pool accident risk.</p>	<p>The Committee plans to follow-up on this issue and review the staff's resolution of ACRS recommendation.</p>

ACRS SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>#13 NRC Program for Risk-Based Analysis of Reactor Operating Experience 4/13/00</p>	<p>(1) Program is appropriately focused on needs, (2) work with industry to ensure reporting of SSCs that perform risk-significant functions become industry self-imposed requirements, (3) perform systematic evaluation of reliability databases needed for risk-informed regulation, (4) develop a White Paper to provide definition of risk-analysis terms, (5) perform systematic comparison of NRC SPAR models with licensee PRAs.</p>	<p>In general, the EDO agreed with the points raised by the Committee. The EDO extensively discussed the ACRS recommendations but did not commit to specific actions recommended by the Committee (e.g., development of a White Paper).</p>	<p>Timely.</p>	<p>The Committee's input on this matter effectively supports the staff's efforts in risk-informing analysis programs for operating plants.</p>	<p>The Committee plans to continue its review of this program during future meetings.</p>

ACRS SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>#14 Reactor Safety Goal Policy Statement 4/17/00</p>	<p>NRC should develop a new Policy Statement on risk-informed regulation that would include (1) consideration of a “three-region approach” that defines CDF and LERF boundaries consistent with adequate protection and would define “how safe is safe enough,” (2) the concept of risk limits for individual plant applications, and (3) guidance on defense in depth to address risk assessment uncertainties.</p>	<p>Forwarded ACRS letter to Commission for its deliberation, along with staff SECY Paper (SECY-00-0077). Will comment on ACRS proposals, as necessary, subsequent to Commission action on this matter.</p>	<p>Timely, pursuant to CTM schedule.</p>	<p>Commission issued SRM on June 27, 2000 that instructed the staff to proceed with the approach specified in SECY-00-0077, with two caveats. The Commission’s SRM did not incorporate the ACRS recommendations.</p>	<p>ACRS reviewed proposed final Policy Statement in 12/00 and ACRS Executive Director issued memo to EDO stating that Committee has no objection. No follow-up action needed at this time.</p>

ACRS SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>#15 Proposed NRC Research Plan for Digital Instrumentation & Control 4/18/00</p>	<p>(1) Specific anticipated output of each research task should be identified, (2) The approach to be taken or tools to be developed to reduce review time or to increase the assurance of the safety of digital systems should be stated and justified, (3) The staff should show how the Univ. of Virginia's software systems program, which is an integral part of the RES digital I&C research effort, meets the research needs of the NRC, (4) Each task should be analyzed to determine the best approach to accomplish its goal, (5) Priorities for various tasks should be explicitly stated.</p>	<p>The EDO stated that the staff will review all the ACRS comments and recommendations before finalizing the research plan.</p>	<p>Timely. The staff has the opportunity to review the ACRS comments before finalizing the research plan.</p>	<p>RES plans to modify its research plan in accordance with the Committee recommendation, which would result in a clearer, more effective and focused research plan.</p>	<p>The Committee addressed this matter in its 2001 research report and plans to follow up on this matter at a future meeting.</p>

ACRS SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>#16 SECY-00-0053, "NRC Program on Human Performance in Nuclear Power Plant Safety" 5/23/00</p>	<p>(1) Analyzing latent conditions resulting from programmatic deficiencies is important., (2) Activities should focus on supporting the two major agency initiatives, (3) Improve coordination between ATHEANA project and analysis of operating experience.</p>	<p>The staff has undertaken or developed activities that are responsive to the Committee recommendations.</p>	<p>Committee reviewed & commented on the SECY within three months of the SECY being issued. (The staff has agreed to this schedule).</p>	<p>The staff incorporated the results of a significant number of activities that were responsive to previous ACRS recommendations.</p>	<p>The Committee plans to review the results of RES activities as they become available, and to assist the staff in developing an effective and focused plan for addressing human performance issues. The Committee recommended terminating the ATHEANA effort and developing a new plan to quantify the probability of unsafe human acts in its latest report on NRC-sponsored research.</p>

ACRS SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>#17 Use of Defense-in-Depth in Risk-Informing NMSS Activities 5/25/00 (Joint ACRS and ACNW Report).</p>	<p>(1) compensatory measures for defense-in-depth can be graded according to risk, (2) treatment of defense-in-depth for transportation, storage, processing and fabrication should be similar to that for reactors, but can be minimal for medical applications, (3) defense-in-depth for HLW is both a technical and policy issue, and (4) risk acceptance criteria should be developed for all NMSS-related activities.</p>	<p>The EDO agreed with the conclusions and recommendations of the ACRS and ACNW.</p>	<p>Timely</p>	<p>Effective. In general, the EDO plans to consider the conclusions and recommendations of the ACRS and ACNW in risk-informing NMSS activities.</p>	<p>The Committees decided to follow-up during future meetings on selected issues, such as the relationship between defense-in-depth and safety margins.</p>

ACRS SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>#18 Proposed Resolution of Generic Safety Issue-173A, "Spent Fuel Storage Pool for Operating Facilities" 6/20/00</p>	<p>The staff should defer closing out GSI-173A until the reevaluation of spent fuel pool (SFP) accidents for decommissioning plants has been completed. In addition, the staff should develop screening criteria for regulatory analyses at operating plants.</p>	<p>Staff will keep GSI-173A open until the report on SFP accidents at decommissioning plants is complete and can be evaluated for its applicability to operating plant spent fuel storage systems. As part of the evaluation, the need for screening criteria for regulatory analyses at operating plants will be determined.</p>	<p>Timely.</p>	<p>The Committee's input on this matter was effective. The staff will keep GSI-173A open until the report on SFP accidents at decommissioning plants is completed. The staff will evaluate the need for screening criteria for operating plants.</p>	<p>The Committee plans to continue its review of this issue during future meetings.</p>
<p>#19 Proposed Final Regulatory Guide and Standard Review Plan Section Associated with the Alternative Source Term Rule 6/20/00</p>	<p>Both documents are acceptable for issuance. Noted the need for minor editing of the Regulatory Guide. A set of suggested changes was formally transmitted to the NRR staff via a 6/16/00 memorandum from H.J. Larson.</p>	<p>EDO provided detailed response to suggested changes to Regulatory Guide. Agreed with almost all the suggested changes.</p>	<p>Committee met EDO schedule as specified in Chairman's Tasking memorandum.</p>	<p>ACRS input was effective in improving the quality and clarity of these documents.</p>	<p>None.</p>

ACRS SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>#20 Draft Report, "Regulatory Effectiveness of the Station Blackout Rule" 6/22/00</p>	<p>(1) Evaluating the effectiveness of selected regulations is valuable, (2) Regulatory documents should be revised to eliminate inconsistencies, (3) Discontinue use of trigger values, (4) Develop template for evaluating present and future regulations.</p>	<p>The staff has undertaken or planned initiatives that are responsive to the Committee's recommendations.</p>	<p>Prompt review of draft report to support the staff's schedule for issuing the report.</p>	<p>The Committee's review of and comments on the staff's draft report encouraged similar evaluations.</p>	<p>The Committee plans to review future regulatory effectiveness evaluation reports when they become available.</p>
<p>#21 NEI Letter dated 1/9/00, Addressing NRC Plans for Risk-Informing the Technical Requirements in 10 CFR Part 50 7/20/00</p>	<p>(1) The staff should proceed with finalizing the framework for risk-informing the technical requirements of 10 CFR Part 50, (2) The staff should continue to interact with the industry to determine the benefits and burden reduction that could result from rule changes.</p>	<p>The staff will revise the framework to reflect the ACRS comments and plans to hold public meetings and workshops on this matter. The staff is considering possible changes to 10 CFR 50.46 as suggested by the ACRS.</p>	<p>Letter was issued prior to the suspense date contained in the SRM dated April 5, 2000. ACRS ideas on possible changes to 10 CFR 50.46 were particularly timely.</p>	<p>ACRS comments and ideas were useful to the staff in improving the framework (Option 3) for risk-informing the technical requirements of 10 CFR Part 50.</p>	<p>The Committee plans to review staff activities associated with risk-informing 10 CFR Part 50.</p>

ACRS SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>#22 Proposed Final ASME Standard for PRA for Nuclear Power Plant Applications 7/20/00</p>	<p>(1) ASME Standard is not a “design to” Standard, (2) provides framework for the systematic evaluation of PRA elements but staff will continue to need to make case-by-case, (3) three categories deal reasonably with the wide range of risk-informed decisions, (4) Section 1.5, misleading and should be deleted, and (5) guidance should be given on use of supplementary analysis.</p>	<p>The EDO agreed with ACRS conclusions and recommendations, except with respect to the overall usefulness of the Standard.</p>	<p>Timely. This item was on the Chairman’s Tasking Memorandum.</p>	<p>The ASME agreed to consider ACRS comments during reconciliation of stakeholders’ comments.</p>	<p>The Committee plans to continue its review during future meetings.</p>

ACRS SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
#23 Assessment of the Quality of Probabilistic Risk Assessments 9/7/00	(1) The current process for applying PRAs to specific regulatory applications should be continued, (2) a PRA must be judged in the context of the regulatory decision, (3) Att. 1 is a useful tutorial of PRA elements/technical attributes, but it is not a "design-to" standard, (4) staff should augment its examples of risk-informed decisions, and (5) case study ("bottom up") approach in Att. 2 is needed to complement "top-down" in Att. 1.	EDO agreed with Committee's conclusions and recommendations.	Timely. The Committee's report on this matter enabled the EDO to respond to the Commission in accordance with the schedule provided in the SRM.	Effective. The EDO and Commission adopted the Committee's recommendations to augment its collection of examples on risk-informed decision making.	The Committee plans to continue its review of issues related to PRA quality during future meetings.
#24 Causes & Significance of Design Basis Issues at U.S. Nuclear Power Plants 9/8/00	Provided support for continuing the efforts that resided with the former AEOD.	No response required.	Timely	The staff will continue the efforts of the former AEOD.	None.

ACRS SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>#25 Proposed High-Level Guidelines for Performance-Based Activities 9/8/00</p>	<p>(1) The Committee supported the staff's proposal to apply the guidelines for performance based activities to an example regulation, (2) The guidelines should state that the performance levels and reliability parameters should be set at the highest practical level, (3) Guidance should be given to which multiple performance parameters that provide redundant information should be used to satisfy the defense-in-depth philosophy, (4) Expanded discussion should be provided in the guidelines of the responses to the relevant questions that appeared in the Federal Register Notice of 5/9/00.</p>	<p>(1) Guidelines will be applied in ongoing and future rulemakings as stated in SECY-00-191, (2) Staff intends to incorporate guidelines in a Management Directive that will be developed. After gaining experience in applying the guidelines, the staff will incorporate the ACRS recommendation, (3) The staff intends to develop guidance to address multiple performance parameters to satisfy defense-in-depth philosophy and to incorporate guidance in the Management Directive, (4) Staff will include expanded discussions of the staff positions developed in response to the Federal Register questions for the users of guidelines.</p>	<p>Timely. ACRS review was completed to support the staff schedule.</p>	<p>ACRS was effective in assisting the staff in refining the guidelines.</p>	<p>The Committee plans to provide feedback on the application of the guidelines.</p>

ACRS SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
#26 Proposed Final Regulatory Guide DG-1093, "Guidance & Examples for Identifying 10 CFR 50.2 Design Bases" 9/12/00	Issue the final Regulatory Guide, DG-1093, for industry use.	No EDO response was required.	Timely	Agreed with staff position.	None.
#27 Proposed Risk-Informed Revisions to 10 CFR 50.44, "Standards for Combustible Gas Control System in Light-Water-Cooled Power Reactors" 9/13/00	(1) Agreed with the staff's conclusion that there is little or no safety benefit associated with some requirements of 10 CFR 50.44, (2) recommended that the staff be directed to proceed with rulemaking, and (3) recommended expanding the discussion of conditional large early release frequency.	EDO agreed with the Committee's conclusions and recommendations.	Timely. This item was a top priority item on the Chairman's Tasking Memorandum related to risk-informing 10 CFR Part 50.	Effective. The EDO offered to make specific changes in the regulatory analysis to incorporate the Committee's recommendations	The Committee plans to continue its review of initiatives in this area as they become available, e.g., risk-informing 10 CFR 50.46 for ECCS.

ACRS SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>#28 Preapplication review of the AP1000 Standard Plant Design-Phase 1 9/14/00</p>	<p>(1) PRA should include uncertainty distribution on core damage frequency, conditional containment failure probability, and LERF, (2) Seismic analysis should not be left solely to the COL applicant and should be included in the PRA, (3) applicant's results from the codes NOTRUMP, WCOBRA/TRAC, LOFTRAN, and WGOTHIC should be accompanied by uncertainty assessments, (4) staff should obtain and exercise the codes.</p>	<p>(1) Margins approach used to conservatively assess success criteria in AP600 PRA adequately addresses Thermal-hydraulic (T-H) uncertainties in the CDF associated with passive systems. Uncertainty distributions are not needed, (2) A seismic analysis of the AP1000 design for a hard rock site will be provided for NRC review in Phase 3, (3) The T-H and accident analysis codes used in evaluating AP1000 design will be accompanied by uncertainty assessments, where appropriate, (4) The staff's current position for T-H code reviews is that the codes necessary documentation should be submitted for review.</p>	<p>ACRS provided its comments in a timely manner to support the staff's schedule.</p>	<p>Identification of Committee concerns at the early stage of AP1000 review was helpful both to the staff and Westinghouse to have a clear perspective of what the Committee's expectations are. Westinghouse and the staff have adequate time to consider and incorporate, as appropriate, ACRS comments in Phases 2 and 3.</p>	<p>The Committee plans to discuss this matter during its review of the results of the Phase 2 and 3 preapplication review of the AP1000 design.</p>

ACRS SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>#29 Union of Concerned Scientists Report (UCS) , “Nuclear Plant Risk Studies: Failing the Grade” 10/11/00</p>	<p>(1) UCS assertion that risk assessments are flawed and are used inappropriately is not valid, (2) UCS claim that consequences are not evaluated is not valid, (3) UCS description of PRA is misleading, (4) UCS list of “unrealistic” assumptions is not accurate, (5) UCS correctly identifies need for PRA quality standards, (6) UCS statement related to managing all probabilities and consequences is unrealistic, and (7) there is a need to facilitate public access to PRAs.</p>	<p>No response required.</p>	<p>Timely. A representative of UCS met with the Committee during its September and October ACRS meetings.</p>	<p>Effective. The staff does not plan to prepare a separate response to the UCS report, because the staff has agreed with the issues raised by the ACRS.</p>	<p>None.</p>

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ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>#30 Pressurized Thermal Shock (PTS) Technical Basis Reevaluation Project 10/12/00</p>	<p>(1) The reevaluation of the PTS rule is a well thought out project that appears to be proceeding well, (2) The staff should examine the implications of using LERF acceptance guidelines based on an air-oxidation source term for the RPV failure rate.</p>	<p>The EDO's response agreed with the Committee's conclusions and recommendations.</p>	<p>As requested by the staff, the responsible Subcommittee and the ACRS held five meetings on this subject between April and October 2000 during the initial planning stages of the project.</p>	<p>The 9/29/00 Chairman's Tasking Memorandum (CTM) states, "The subcommittee provided substantial and important comment on the draft paper. These comments have implications to both the possible risk-informed rule changes now being studied in the staff's risk-informed Part 50 work."</p>	<p>The Committee plans to review PTS Technical Basis Reevaluation Project results and products as they become available.</p>

ACRS SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>#31 Draft Final Technical Study of Spent Fuel Pool Accident Risk at Decommissioning Nuclear Power Plants 11/08/00</p>	<p>(1) The revised technical study provides an adequate basis for decisions on emergency preparedness at decommissioning plants, (2) the final report should include the calculated consequences for total deaths and land contamination, (3) the staff needs to develop a better phenomenological understanding, and (4) there is a need to reconcile the LLNL and EPRI seismic hazard curves.</p>	<p>(1) Staff believes that the study contains sufficient information, however, the staff will add the additional details if the Commission requests such details. (2) Staff will use the agency's priority ranking process to continue exploring the future needs, (3) Additional work to reconcile the difference between the LLNL and EPRI curves will be considered per the agency's priority process.</p>	<p>Timely</p>	<p>The staff agreed to consider and incorporate the ACRS comments into the Final Study and present it to the Commission.</p>	<p>The Committee plans to follow-up on this matter. Currently the staff is preparing an options paper for the Commission and the ACRS plans to review this paper.</p>

ACRS SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>#32 License Renewal Guidance Documents 11/15/00</p>	<p>(1) Draft guidance documents provide a consistent and understandable process to support the preparation and review of license renewal applications, (2) Staff should update the GALL report as lessons are learned from reviewing future license renewal applications and new editions of codes and standards are approved, (3) Staff should validate that artificially aged cables used in the studies conducted to address GSI-168 issues are representative of 30-40 year old cables, (4) The staff/industry should provide guidance on use of emergency operating procedures/severe accident management guidelines to assure no omissions.</p>	<p>(1) The staff will periodically update the GALL report as lessons are learned through license renewal reviews, (2) The intent of the ACRS recommendation has been addressed in conjunction with the research activities to support resolution of GSI-168. Research showed naturally aged cables, when subjected to equivalent years of service life conditions worked better in their ability to withstand LOCA conditions than artificially aged cables, (3) Staff believes additional testing on aged cables representative of 30-40 year old cables is not warranted. (4) Table 2.1-1 of the SRP lists emergency operating procedures and staff will add severe accident management guidelines to table.</p>	<p>Timely. Committee review is completed in accordance with the staff's pre-established schedule.</p>	<p>As a result of Committee comments, the staff has agreed to update the GALL report periodically. Also, the staff has agreed to include the severe accident management guidelines as possible information source.</p>	<p>The Committee plans to review the proposed resolution of GSI-168 to ensure that the staff has validated that artificially aged cables used in the studies to address GSI-168 issues are representative of 30-40 year old cables. Review the proposed final license renewal guidance documents.</p>

ACRS SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>#33 BWR Owners Group Proposal (BWROG) to Use Safety Relief Valves and Low Pressure Systems as a Redundant Safe Shutdown Path to Satisfy the Requirements of 10 CFR Part 50 Appendix R 11/20/00</p>	<p>The Committee supported the staff's position on the BWROG proposal.</p>	<p>The staff agreed with the Committee and issued the safety evaluation report to endorse the BWROG proposal.</p>	<p>Timely</p>	<p>Timely completion of ACRS review and its endorsement of the staff position enabled the staff to approve the BWROG in a timely manner.</p>	<p>None.</p>

ACRS SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>#34 Proposed Framework for Risk-Informed Changes to the Technical Requirements of 10 CFR Part 50 11/20/00</p>	<p>(1) the tactics for implementing defense-in-depth should be clarified, (2) a rationalist approach should be followed, (3) quantification of safety margins would make the integrated decisionmaking process in RG 1.174 easier to implement, (4) creative definitions of initiating events could be used inappropriately, and (5) treatment of events affecting more than one cornerstone should be discussed.</p>	<p>The EDO's response agreed with the Committee's recommendations and conclusions.</p>	<p>Timely.</p>	<p>Effective. Committee's comments on the proposed framework were effective in developing a refined framework</p>	<p>The Committee plans to review the additional refinements to the framework as progress is made in its application to developing risk-informed alternative regulations.</p>

ACRS SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>#35 NEI Draft Report, NEI 99-03, "Control Room Habitability Assessment Guidance" 12/14/00</p>	<p>(1) Develop a RG on control room (CR) habitability, (2) Require validation of component testing with tracer gas testing, prior to agreeing that component testing alone is sufficient. If component testing is acceptable, use for baseline and periodic testing, (3) Place frequency of periodic testing on performance basis similar to Appendix J requirements, (4) Specify a limit for CR in-leakage in plant licensing basis, (5) Include potential rad doses from adjacent units in CR assessment, (6) Endorse NEI approach for addressing smoke.</p>	<p>EDO will factor Committee's recommendations into staff's development of proposed Regulatory Guide</p>	<p>Timely, the ACRS met the schedule in the Chairman's Tasking Memorandum</p>	<p>ACRS review was effective in moving this issue forward to a proposed regulatory solution approach of developing a Regulatory Guide on this matter. This issue has been extant since the early 1980s.</p>	<p>The Committee plans to review the draft and final versions of the proposed Regulatory Guide.</p>

ACRS SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
#36 Proposed Final Regulatory Guide DG-1053, "Calculational and Dosimetry Methods for Determining Pressure Vessel Neutron Fluence" 12/15/00	(1) DG-1053 should be issued for use by the industry, (2) the new guidance will result in more accurate calculations of the fluence and expedite review of licensee submittals.	The EDO has agreed with the Committee's conclusion and recommendation.	Timely	Timely completion of ACRS review enabled the staff to complete this guide in accordance with the preestablished schedule.	None.

Definition of Acronyms

ACNW	Advisory Committee on Nuclear Waste
ACRS	Advisory Committee on Reactor Safeguards
AEOD	Office for Analysis and Evaluation of Operational Data
ANO	Arkansas Nuclear One
ANS	American Nuclear Society
ANSI	American National Standards Institute
ASME	American Society of Mechanical Engineers
ATHEANA	A Technique for Human Event Analysis
ATWS	Anticipated Transients Without Scram
BWR	Boiling Water Reactor
BWROG	Boiling Water Reactor Owners Group
BWRVIP	Boiling Water Reactor Vessel and internals Project
CAP	Corrective Action Program
CDF	Core Damage Frequency
CFR	Code of Federal Regulations
COL	Combined License
CR	Control Room
CTM	Chairman Tasking Memorandum
DG	Draft Guide
DID	Defense-in-Depth
ECCS	Emergency Core Cooling System
EDO	Executive Director for Operations
EP	Emergency Preparedness
EPRI	Electric Power Research Institute
EQ	Environmental Qualification
FSAR	Final Safety Analysis Report
GALL	Generic Aging Lessons Learned
GSI	Generic Safety Issues
HPP	Human Performance Plan
HLW	High-Level Waste

IPE/IPEEE	Individual Plant Examination/Individual Plant Examination of External Events
ISI	Inservice Inspection
IST	Inservice Testing
LERF	Large, Early Release Frequency
LLNL	Lawrence Livermore National Laboratory
LOCA	Loss-of-Coolant Accident
LPSD	Low-Power and Shutdown
MOV's	Motor-Operated Valves
NEI	Nuclear Energy Institute
NMSS	Office of Nuclear Material Safety and Safeguards
NRR	Office of Nuclear Reactor Regulation
PI	Performance Indicator
PRA	Probabilistic Risk Assessment
PTS	Pressurized Thermal Shock
QA	Quality Assurance
RES	Office of Nuclear Regulatory research
RG	Regulatory Guide
RPV	Reactor Pressure Vessel
RROP	Revised Reactor Oversight Process
SAM	Severe Accident Management
SDP	Significance determination process
SER	Safety Evaluation Report
SFP	Spent Fuel Pool
SRM	Staff requirements Memorandum
SRP	Standard Review Plan
SSC	Structures, Systems, and Components
U.S.	United States
UCS	Union of Concerned Scientists

ACNW SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACNW Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>#1 Comments on the Importance of Chemistry in the Near Field to DOE's Yucca Mountain Repository Application, 1/11/00</p>	<p>DOE has not fully addressed many of the important chemical processes that will significantly affect the performance of the Yucca Mountain repository. NRC and CNWRA staff need to be prepared to further evaluate backfill, secondary phases and natural analogs, corrosion rates and mechanisms and coupled processes.</p>	<p>EDO response stated that ACNW "recommendations concerning ongoing work on natural analogs, corrosion processes, and assessment of coupled processes are being factored into our program." Specific responses to four key issues provided in attachment.</p>	<p>ACNW-initiated report. Specific issues raised are currently important topics in the NRC's issue resolution process.</p> <p>Quick action by ACNW on alloy 22 corrosion studies was due in part to background provided by this paper and by the EBS and Near-field Environment Working Group, 6/98 and letter in 9/98.</p>	<p>Letter raises a number of key issues to the Commission and Staff that have subsequently become important in the context of the issue resolution process. Examples are:</p> <ul style="list-style-type: none"> - alloy 22 corrosion - near-field chemical environment - Pu transport by colloids - Coupled processes 	<p>ACNW working group meeting conducted on February 21-22, 2001, followed-up on issues, such as:</p> <ul style="list-style-type: none"> - alloy-22 corrosion - Chemical environment contacting waste package - near-field and EBS chemistry affecting estimated radionuclide releases - radionuclide transport, including effects of colloidal species - coupled processes

The information provided in the "main message" and "EDO/Commission Response" columns is intended to summarize the content of the associated documents. The reader should refer to the documents for more detail.

ACNW SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACNW Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>#2 Comments on Draft Environmental Impact Statement for Yucca Mountain, 1/20/00.</p>	<p>ACNW provided comments/recommendations in three areas: (1) the basis as presented in the DOE Viability Assessment (VA) for the consideration of pre- and post-closure impacts in the DEIS, (2) treatment of no-action alternative scenarios, and (3) impacts from transportation of high-level waste (HLW) and spent nuclear fuel .</p>	<p>The staff requested that the DOE consider relevant technical comments previously submitted on DOE's VA in the development of final environmental impact statement (FEIS).</p>	<p>Advice was timely because DOE had time to consider ACNW's comments in the preparation of FEIS.</p>	<p>Effective in providing ACNW comments on DEIS, which will assist DOE in its deliberation on a supplement to DEIS and the FEIS</p>	<p>Follow up when supplements on FEIS are issued.</p>

ACNW SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACNW Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>#3 Rubblization- A Decommissioning Option 1/24/00.</p>	<p>Rubblization is a potentially attractive approach to license termination. However, it is important to study a test case to understand problems and potential solutions.</p> <p>Methods must be developed for verifying radiation doses of rubblized sites.</p>	<p>Staff agrees with Committee's recommendation.</p>	<p>Timely</p>	<p>Rubblization request withdrawn. ACNW report raised important technical and policy issues that need to be resolved prior to acceptability of concept.</p>	<p>None. Maine Yankee, the utility first proposing rubblization, has withdrawn its proposal. No other proposals are currently before the NRC.</p>

ACNW SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACNW Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>#4 Regulatory Approaches for Control of Solid Materials (Clearance Rule) 3/21/00.</p>	<p>Recycling and reuse of slightly contaminated material is a reasonable course of action, subject to adoption of a dose limit and rational, consistent criteria. Recommendation 1: Regulations for control and release of radioactive material should be based on radiation dose. Recommendation 2: Criteria must provide a consistent and rational basis for regulating materials. Consistency should be based on dose.</p>	<p>Response 1: Staff recognizes importance of this issue and recommends the Commission request the National Academy of Sciences (NAS) to conduct a study. Also, staff will continue to develop an information base.</p>	<p>Timely</p>	<p>Provided useful insights for staff's consideration in defining work scope for NAS study.</p>	<p>Continue to follow the NAS study and staff efforts. Review letter recommendations when staff returns with proposed course of action.</p>

ACNW SUMMARY MATRIX OF 2000 LETTERS AND OUTCOMES

ACNW Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>#5 Comments and recommendations on the Draft Final Rule, 10 CFR Part 63, "Disposal of High-Level Radioactive Waste in a Proposed Geologic Repository at Yucca Mountain, Nevada 3/31/00.</p>	<p>Committee supports calculating barrier underperformance to quantify contribution of individual barriers, and using stylized calculation for human intrusion. Avoid using surrogate risk values, e.g., 1 rem/yr, in the rule for comparison with hypothetical assessments. Instead, compare results of hypothetical analyses with performance assessment.</p>	<p>No reply yet. Commission has not yet voted on rule.</p>	<p>Timely because advice was issued prior to the Commission decision on the rule, allowing opportunity to influence Commissioners' votes. This was possible because staff allowed the Committee access to draft pre-decisional material.</p>	<p>Report appears to have been very useful to the Commission.</p>	<p>ACNW will work with NRC staff to revise draft 10 CFR 63 after receipt of Commission comments.</p>

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<p>#6-Advisory Committee on Nuclear Waste 2000 Action Plan and Priority Issues, 3/18/00.</p>	<p>This plan develops a top-down approach to setting priorities for the ACNW for a year or more. This plan has 5 first-tier issues and 3 second-tier issues. It also gives operational objectives.</p>	<p>The EDO response included a number of suggestions for further review. The EDO believed that the ACNW priorities reflected important and timely radioactive waste management and disposal concerns. ACNW priorities appeared consistent with those of the staff.</p>	<p>The advice was consistent with staff schedules.</p>	<p>The Action Plan is useful in providing the Commission with Committee priorities. The plan provides an opportunity for the Commission to provide direction on ACNW planned review activities.</p>	<p>ACNW will update their Action Plan based upon comments from Commission and NRC staff and changes in NRC planning.</p>

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<p>#7 Use of Defense-in-Depth in Risk-Informing NMSS Activities, dated 5/25/00 (Joint ACRS and ACNW Report).</p>	<p>The Joint Committees recommended that: (1) compensatory measures for defense-in-depth can be graded according to risk, (2) treatment of defense-in-depth for transportation, storage, processing and fabrication should be similar to that for reactors, but can be minimal for medical applications, (3) defense-in-depth for HLW is both a technical and policy issue, and (4) risk acceptance criteria should be developed for all NMSS-related activities.</p>	<p>The ACRS/ACNW was satisfied with the EDO's response.</p>	<p>Timely</p>	<p>Effective. In general, the EDO plans to consider the conclusions and recommendations of the ACRS and ACNW in risk-informing NMSS activities.</p>	<p>The Committees decided to follow-up during future meetings on selected issues, such as the relationship between defense in depth and safety margins.</p>

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<p>#8-Draft Regulatory Guides DG-1067, "Decommissioning of Nuclear Power Reactors," & DG-1071, "Standard Format & Content for Post-Shutdown Decommissioning Activities Report," 6/6/00.</p>	<p>Recommends issuing the guides for comment. The purpose of this review was to familiarize the Committee with the Decommissioning process for nuclear power plants. The Committee has no objection to issuance of these guides.</p>	<p>Not Needed</p>	<p>Consistent with the staff's schedule</p>	<p>Committee did not object to the issuance of DG-1067 and DG-1071</p>	<p>Stay informed of staff actions to develop a unified set of guidance for power plant decommissioning.</p>
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<p>#9 NRC Evaluation of DOE's Site Recommendation Considerations Report, 6/29/00.</p>	<p>Staff's approach to sufficiency review and YMRP appear to be well-thought out, logical, and RIPB. ACNW will follow how staff integrates its sufficiency review with the YMRP and issue resolution. ACNW wants to understand how staff prioritizes open issues and how open issues affect staff's sufficiency review.</p>	<p>Staff is developing guidance to implement the sufficiency review strategy. Staff briefed ACNW in November 2000. Sufficiency review differs from LA review in that staff determines whether information/analyses are sufficient for an LA. Sufficiency review will take advantage of issue resolution. Staff will keep ACNW informed about progress in sufficiency review, issue closure, and prioritization.</p>	<p>Advice was timely in that staff briefed the ACNW on the sufficiency strategy prior to preparing a Commission paper. The ACNW provided its recommendations prior to any Commission decision.</p>	<p>The letter was effective in that it elicited a thoughtful response, and staff made several important commitments to follow up with ACNW.</p>	<p>Review YMRP guidance. Stay informed about staff's progress in its sufficiency review and issue closure, and gain better understanding of how YMRP, sufficiency review, and issue resolution are being integrated.</p>

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<p>#10 Development of Risk-informed Regulation in the Office of Nuclear Material Safety and Safeguards, 7/27/00</p>	<p>NMSS should:</p> <p>(1) Establish a policy for implementing RIPB practices consistent with "high-level principles,"</p> <p>(2) In revising SRP for Part 70: (a) seek assistance from NRR & RES staffs with experience in implementing risk-assessment practices and developing risk-acceptance criteria, and (b) solicit external stakeholder participation,</p> <p>(3) In applying ISA: (a) take advantage of Agency's experience in PRA, and (b) adopt common language based on Commission's White Paper on RIPBR,</p> <p>(4) Use a risk-informed approach to prioritize contributors to risk in other nuclear materials regulated by NMSS.</p>	<p>(1) Risk Task Group established in NMSS. Staff developing high-level mission statement as part of the NRC Risk-Informed Regulatory Implementation Plan,</p> <p>(2) SRP for Part 70 involved experienced staff and stakeholder input. Staff will continue using this approach in future revisions of SRP,</p> <p>(3) Staff will take advantage of agency's experience in PRA. ISA documents consistent with white paper.</p> <p>(4) Staff envisions using risk assessment results to prioritize nuclear materials risks.</p>	<p>Letter addressed current issues in the development of risk-informed regulation in NMSS.</p>	<p>Staff agreed to pursue all four recommendations. Staff provided further information in briefing on ISA on 1/19/00. Staff will continue to seek Joint-Subcommittee advice in this area.</p>	<p>Meeting with the staff to discuss application of ISA, development of the SRP for special nuclear materials, and Risk Task Group on 1/19/01.</p> <p>ACNW will follow progress on safety goals for different categories of nuclear material activities and selection of risk measures. ACNW is interested in learning more about the practices for recording and archiving data, for example, how the Nuclear Material Events Database is operated.</p>

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<p>#11 Branch Technical Position (BTP) on a Performance Assessment Methodology for Low-Level Radioactive waste Disposal Facilities, 8/2/00</p>	<p>Supports efforts to develop a rigorous & consistent method for performance assessment. Recommends that staff issue the document as a BTP. The guidance should indicate the following are acceptable approaches to safety assessment:</p> <ul style="list-style-type: none"> - use scenario-driven risk assessments that are commensurate with facility complexity - use realistic ranges and distributions of parameter values and conceptual models - use complementary cumulative distribution function (CCDF) approach for interpretation of dose standard. <p>As per previous ACNW recommendations:</p> <ul style="list-style-type: none"> - eliminate prescribing a 500-year barrier lifetime, - Consider using peak dose on a case-by-case basis for compliance with regulations. 	<p>Provides rationale for NUREG. Agrees with 1st and 2nd recommendations and changes language in document. Disagrees with CCDF approach and retains mean of peaks and 95th % for dose compliance (consistent with HLW and License Termination Rule (LTR). Rationale for retaining 500 year engineered barrier (EB) lifetime and 10K yr compliance time.</p>	<p>Staff briefings took place before final draft of BTP scheduled to go to Commission so that staff could address ACNW concerns. Letter finalized and transmitted in time for staff to address committee concerns.</p> <p>Note that disposition of ACNW comments included as Appendix E in the BTP.</p>	<p>Interactions with ACNW during meeting, individual discussions and in letterwriting resulted in a number of specific and global changes in the document. (e.g., approaches to risk assessment, and the use of realistic assumptions and parameters). In addition, staff provided updated material and better rationales for specific approaches. Specific recommendations about the use of CCDF approach, time-frame and the prescriptive lifetime of engineered barriers, were not accepted by staff.</p>	<p>No specific follow-up at this time. Document issued as NUREG 1573 in 10/00.</p>

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#12-Advisory Committee on Nuclear Waste 2000 Action Plan, 8/2/00.	This was a point-by-point response to the EDO's response to the Committee's Action Plan. The Action Plan sets the Committee's goals. ACNW must be judicious in deciding which review topics to consider. The Committee should review the letter to see if there are topics the ACNW should include in its next plan.	N/A	Timely.	The detail of the EDO response indicates that the staff is carefully reviewing the ACNW Action Plan. Committee received additional review topics for consideration. ACNW is continuing its dialogue with the NRC staff over priorities. Effective in coordination of ACNW activities with NRC staff priorities	Continue to consider the topics suggested by the EDO to see if they fit into future ACNW priorities.

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<p>#13 ACNW Visits to Nuclear Sites and Information Exchanges in the United Kingdom and France, 5/15-19/00, 8/18/00.</p>	<p>Committee observations and recommendations with respect to issues of interest to the Commission. Includes the following: the critical role of clearing materials resulting from facility decommissioning, stakeholder involvement in repository siting, risk-informed regulation, and the management and disposal of low-level radioactive waste.</p>	<p>Discussed: (1) Staff actions in areas of clearance, disposal of source material, exemptions under Part 40 and disposal of other radioactive wastes in mill tailings piles, (2) Possible volumetric specifications for disposal of material, (3) Case-by-case consideration for treating surface contamination, (4) Recent public outreach efforts (5) Observed that color-coded rad symbols have value but are too costly for NRC.</p>	<p>ACNW observations and recommendations are timely for implementing License Termination Rule (LTR) and finalizing guidance as well as for implementing public confidence goals in strategic plan.</p>	<p>ACNW observations and recommendations will be considered by staff in implementing LTR and finalizing guidance. Recommendations provide suggestions for implementing public confidence goals in strategic plan.</p>	<p>Continue following specific ACNW recommendations in reviewing staff actions for LTR implementation and developing public communications plans.</p>

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<p>#14-Comments on NRC Draft Policy Statement on Decommissioning Criteria for the West Valley Demonstration Project & West Valley Site, 11/1/00.</p>	<p>In this letter the ACNW questioned whether or not the LTR could be applied effectively (will it produce a risk-informed approach, is it flexible enough to allow exemptions, is the time of compliance appropriate). The overarching concern was whether or not clear lines of regulatory responsibility can be established.</p>	<p>Staff believes existing legislative framework is adequate and protective of public health and safety and that changes could be disruptive with no assurance of success and cause additional delay.</p>	<p>Timely. It arrived for Commission consideration along with the staff's draft final policy statement on decommissioning criteria for the West Valley Demonstration Project.</p>	<p>Effective in providing recommendations for Commission consideration insofar as regulating West Valley, specifically relating to the LTR as the sole decommissioning criterion for West Valley.</p>	<p>West Valley will continue to be a major decommissioning challenge for the agency and the ACNW. Continue to follow developments.</p>

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<p>#15 ACNW Report, Yucca Mountain Stakeholders Meeting” 11/1/00</p>	<p>(1) Commission should ask staff to develop a strategy that conveys in a clear and transparent way the role performance assessment will play in evaluating the Yucca Mountain License Application.</p> <p>(2) Commissioners should consider holding a meeting in NV, possibly with the ACNW and other technical groups.</p>	<p>Staff is seeking ways to improve communication of performance assessment results to the public. Staff has developed handout materials containing “colorful graphics and straightforward text to explain this complex topic.”</p> <p>Staff will continue to keep Commission informed of its expanding outreach activities. Holding a meeting in NV, however, is a determination to be made by the Commission.</p>	<p>Timely.</p>	<p>The advice was useful for Commission consideration for future interactions with public and other stakeholders.</p>	<p>None, although the issues raised in the attachment, “Examples of Public Comments” were not addressed, staff did address performance assessment communications. (Committee did not indicate those comments required action.)</p> <p>Committee should:</p> <p>(1) Continue to follow relevant staff activities.</p> <p>(2) Work with Commission should they decide to hold a joint meeting in NV in the Fall of 2001.</p>

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#16 Alloy C-22 Corrosion Studies, 12/6/00	Alloy-22 shown by NV consultants to corrode under extreme conditions. These conditions may not represent Yucca Mountain environment. Nevertheless the NRC and CNWRA need to evaluate the role of trace elements and stress on the performance of Alloy- 22 under the full range of conditions that may occur at Yucca Mountain. As part of this work ACNW believes it is essential to better understand corrosion mechanisms to extrapolate waste package performance for 10,000 years.	Staff agreed with ACNW observations and recommendations. Staff will ensure that DOE adequately investigates the role of trace elements and stress in C-22 corrosion in the near-field environment at Yucca Mountain. NRC will verify that previous studies without trace elements did not bias conclusions. CNWRA will do confirmatory work to assess adequacy of DOE information.	Very timely. Prompt issuance of a report addressing issues raised by the state of NV in a briefing to ACNW on 10/18/00 and briefings by CNWRA and DOE on 11/28/00. Letter finalized and transmitted to Commission on 12/06.	ACNW review provided a forum for NV to bring this issue to the Commission's attention. Subsequent staff and DOE briefing provided overview of how issue will be addressed by NRC and DOE.	ACNW Working Group on HLW Chemistry meeting on February 21-22, 2001 focused part of its review activities on alloy-22 corrosion issues. ACNW will follow DOE and NRC- CNWRA work on understanding alloy-22 corrosion mechanisms as a basis for extrapolating waste package performance to 10,000 years.

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<p>#17 Exemption in 10 CFR Part 40 for Materials Less Than 0.05 Percent Source Material—Options and Other Issues Concerning the Control of Source Material, 12/11/00.</p>	<p>Suggests the Commission consider expanding the National Academy of Sciences study of the control of solid material to include low levels of naturally occurring radioactivity and the concentration of naturally occurring radioactive material by commercial processing.</p>	<p>The Commission does not intend to expand scope of Academy study, but will closely follow its progress.</p>	<p>This advice was offered early in the process, as the NRC staff responded to Commission direction.</p>	<p>Committee advice was effective in clarifying significance of the issue and in identifying the need to develop a comprehensive understanding of the relevant technical issues as they relate to assuring public health and safety.</p>	<p>Continue to follow this topic. There appears to be risk significance associated with this issue.</p>

ACNW Definition of Acronyms

ACNW	Advisory Committee on Nuclear Waste	VA	Viability Assessment
AHP	Analytical Hierarch Process	YM	Yucca Mountain
BTP	Branch Technical Position	YMRP	Yucca Mountain Review Plan
CNWRA	Center for Nuclear Waste Regulatory Analyses		
CCDF	Complimentary Cumulative Distribution Function		
DEIS	Draft Environmental Impact Standard		
D&D	Decontamination and Decommissioning		
DID	Defense in Depth		
DOE	Department of Energy		
DWM	Division of Waste Management		
EBS	Engineered Barrier System		
EIS	Environmental Impact Statement		
FEIS	Final Environmental Impact Standard		
HLW	High Level Waste		
IA	Igneous Activity		
ICRP	International Commission on Radiological Protection		
IM	Importance Measure		
IRSR	Issue Resolution Summary Report		
ISA	Intergrated Safety Assessment		
KTI	Key Technical Issue		
LA	License Application		
LADS	License Application Design Selection		
LTR	License Termination Rule		
NCRP	National Council on Radiation Protection		
NMSS	Nuclear Material Safety and Safeguards		
PA	Performance Assessment		
PRA	Probabilistic Performance Assessment		
RI	Risk-Informed		
RIPB	Risk-Informed, Performance Based		
RIPBR	Risk-Informed, Performance-Based Regulation		
SRM	Staff Requirements Memorandum		
SRP	Standard Review Plan		
TPA	Total Performance Assessment		
TSPA	Total System Performance Assessment		