

# POLICY ISSUE INFORMATION

May 5, 2000

SECY-00-0102

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) 1999 and to describe the actions that the ACRS and the ACNW will take as a result of this self assessment and how future assessments will be reported.

## BACKGROUND

In response to a draft circular from the Office of Management and Budget dated August 3, 1994, the ACRS and the ACNW each reviewed its planned activities and developed performance measures and assessment standards. These were provided to the Commission in a memorandum dated February 14, 1995. 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 each Committee "produce a set of criteria, for Commission consideration, under which the performance of the Committee would be evaluated in the future. The Committee would then periodically perform self assessments using these criteria and provide the results of these evaluations to the Commission."

I responded to this Commission request in a memorandum dated December 23, 1996. Subsequently, the Commission announced the development of an agency-wide Strategic Plan that included a requirement for each NRC Office to prepare an Operating Plan. Because the requirements of the Operating Plan overlapped those of the SRM of August 21, 1996, I met with representatives of each Commissioner's office to discuss performance criteria that would meet both the requirements of the SRM and the Strategic Plan initiative. It was agreed that the ACRS and the ACNW would prepare an Operating Plan that would include self-assessment criteria and other suggestions contained in the SRM.

I provided ACRS/ACNW self assessments to the Commission on June 1, 1998 and on June 18, 1999 (SECY-98-123 and SECY-99-018). The report of June 18, 1999, contained self assessment summary matrices that provided concise evaluations of the effectiveness of the ACRS and ACNW letters and reports. In the report of June 18, 1999, I requested that the ACRS/ACNW be allowed to replace its separate periodic self assessment report with the ACRS/ACNW Operating Plan. The Commission has agreed (SRM dated August 6, 1999) that the periodic self assessment report and the ACRS/ACNW Operating Plan could be combined into one annual report to the Commission and that this could replace the periodic self assessment report. The Commission stated that this report should incorporate the information included in the self assessment summary matrices. We are in the process of modifying our Operating Plan in accordance with the NRC's new planning initiatives and draft FY2000-FY2005 Strategic Plan and will incorporate this change.

### ACTIONS RESULTING FROM PREVIOUS SELF ASSESSMENTS

I reported to the Commission on the results of the self assessments conducted in CY 1997 and CY 1998, including areas for improvement (SECY-98-123 and SECY-99-018). Both Committees have addressed the issues that were raised by the stakeholders. Both Committees have placed more emphasis on making their letters and reports clear and concise. Feedback from staff and the evaluations of the Executive Director for Operations' (EDO's) response to the Committee's letters and reports were used to assess these qualities. Both Committees have devoted more time to ensuring that Commission and EDO priorities are understood and are adequately considered in setting the Committee's agendas. The Chairman's Tasking Memorandum and discussions with Commissioners and their staff, the NRC staff, and other stakeholders were used to support this work. The ACRS focused its resources on the review of the license renewal applications for Calvert Cliffs and Oconee and other activities (e.g., risk-informed regulation and technical aspects of the revised reactor oversight process) listed in the Chairman's Tasking Memorandum to support the agency's schedules for expedited reviews. The ACNW focused its resources, to a large extent, on the Department of Energy's (DOE's) Viability Assessment for Yucca Mountain repository, other high-level radioactive waste (HLW) matters, and decommissioning issues. Both Committees have included time for more discussion of forward-looking issues in their agendas, interacted with the NRC staff early in the review of complex issues, and utilized white papers to encourage innovative thinking on complex issues.

The ACNW used its Action Plan to prioritize its activities during CY 1999. The feedback that we received from the Commissioners and their staffs indicated that the ACNW had addressed all of the Commission's priority interests that were within the scope of the ACNW's responsibilities. As a result of its observations of international experience and public interactions, the ACNW placed a higher priority on risk communication and last fall conducted a workshop in Nevada with Yucca Mountain repository stakeholders. The ACNW will continue to update its Action Plan periodically and provide this Action Plan to the Commission for comment.

During CY 1999, the ACRS reviewed several regulatory matters, most of which were Commission initiatives in response to Congress and other stakeholders and generated 57 reports. Additionally, the ACRS changed its schedule for the issuance of its annual report on the NRC safety research program so as to provide earlier input into the budget process. The ACRS member who had the lead for the recent report interviewed a number of key

stakeholders, including the Commissioners, to obtain their views on how the report could be made more useful to the NRC. The insights were factored into the preparation of this report.

### DESCRIPTION OF THE SELF-ASSESSMENT PROCESS

Both the ACRS and the ACNW conduct annual planning meetings during which the Committees review their agendas and methods of operation and set priorities for the future. The ACNW has also established the practice of developing an Action Plan and providing this Plan to the Commission. Both Committees review their schedules and priorities at each full Committee meeting and make adjustments as needed. Changes reflect communications with the Commission, the EDO, and cognizant NRC staff, and input from the Chairmen of Committee Working Groups and Subcommittees. The Committees have instituted procedures for reviewing their activities and monitoring their performance during each of their meetings and have allocated more resources in CY 1999 to interacting with stakeholders and soliciting their views on Committee effectiveness. The ACRS/ACNW Office issues updates to the office Operating Plan, which reflect the ACRS and ACNW review plans, report schedules, and longer term priorities.

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

Matrices in which the content and impact of ACRS and ACNW letters and reports are summarized were used in the CY 1998 ACRS/ACNW self assessment. At the Commission's request, these summaries were also used for the CY1999 self assessments. The matrices have proven to be a valuable tool for the analysis of Committee effectiveness and for the communication of information.

Feedback was solicited from a variety of stakeholders for the CY 1999 self assessment and was a significant expansion of similar efforts in the past. The stakeholders interviews included Commissioners and their staffs, former ACRS members, NRC staff, staff from other Federal Government agencies, members of state and local governments, members of public interest groups, and members of the regulated industry. These interviews provided useful insights that were addressed by the ACRS and the ACNW during the Committee retreats.

### RESULTS OF CY 1999 SELF ASSESSMENT

The ACNW held an annual planning meeting in February 2000, during which it assessed its priorities and operating processes. As part of its self assessment, the ACNW prepared a matrix of its reports, as it did for CY 1998, assessing the effectiveness against the goals and objectives in its 1998 Action Plan. This matrix is included as Attachment 1. This self assessment has led ACNW to conclude that its advice is generally timely, is focused on the

priority issues identified in the Action Plan, and is being used, as appropriate, by the NRC staff and the Commission in their regulatory decisions. 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 and resolution of issues. A number of external stakeholders commented 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 areas. The ACNW has issued its Action Plan for CY 2000 on April 18, 2000. The focus of the ACNW's efforts in CY 2000 will be on HLW issues and decommissioning.

Feedback received from stakeholders on the ACNW was generally very positive. Criticisms tended to be unique to an individual stakeholder and not recurring. The ACNW reports were judged to be well written, to provide adequate explanations for the conclusions and recommendations, to be focused on relevant issues, and to have improved over the past few years. Feedback received from the Commissioners and their staffs indicated that in CY 1999, the ACNW had addressed all of the Commission's priority interests that were within the scope of the ACNW's responsibility. The ACNW is viewed as providing valuable input to the solution of waste management safety issues. Comments were received from some Commissioners to the effect that the ACNW was sometimes not current on the status of particular issues. ACNW will focus on this criticism during CY 2000. The ACNW will continue to work with the Office of Nuclear Material Safety and Safeguards (NMSS) staff in keeping itself informed through meetings with the NMSS staff, through attendance at public meetings, and through access to predecisional documents. The ACNW did receive some Commissioners' comments related to its presentations and discussions at public Commission meetings and will attempt to develop agendas that allow sufficient time for discussions.

The reaction of stakeholders to the ACNW's recent risk communication workshop and interactions with Yucca Mountain stakeholders was very positive. Some stakeholders stated that it would be useful if the ACNW met more frequently in Nevada. Because of resource constraints, the ACNW does not plan on having additional meetings in Nevada, but will make use of video teleconferencing to provide enhanced interactions with the Nevada stakeholders.

Some stakeholders stated that decommissioning is an area in which the ACNW should devote more effort. We are currently developing an action plan that will identify and allocate resources for ACNW and ACRS review of selected decommissioning issues. We have also established a Joint ACRS/ACNW Subcommittee that will help coordinate work on decommissioning issues between the two advisory committees.

The ACRS held a planning meeting in January 2000 during which it, like the ACNW, assessed its priorities and operating processes. As part of its self assessment, the ACRS prepared a matrix of its reports, which is included as Attachment 2. This self assessment has led the ACRS to conclude that its reports are generally clear and have a positive impact on the regulatory process. Most stakeholders view the ACRS as knowledgeable and fair in its consideration of different points of view.

As in the past, some stakeholders expressed a concern that the ACRS's early involvement in the NRC staff's development of a regulatory position either had or created the perception of a negative impact on ACRS independence. Other stakeholders believed 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 or the ACNW on reviews in which there was early Committee involvement tended to be very positive regarding the benefits of early Committee involvement in complex technical issues. The ACRS believes that the timing of Committee involvement (early or otherwise) is a separate issue from ACRS independence and believes that early involvement is, in the balance, the best approach for the resolution of complex issues. The Committee will continue to maintain an awareness of the need to preserve a level of independence in its reviews. Early involvement of the ACRS in the review of regulatory positions will be employed when the Commission or the Committee decides that this is effective.

The ACRS believes that it is most effective when it involves itself 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 the future, the ACRS will look for more opportunities to increase its involvement on important technical issues and will minimize its involvement in routine matters, such as rules and regulatory guides addressing routine and process issues. Examples of areas in which the ACRS will work to increase its involvement are risk-informed initiatives for improving existing regulation (examples are 10 CFR Part 50, pressurized thermal shock technical basis reevaluation project, and decommissioning), future NRC research needs, risk-based performance indicators, Probabilistic Risk Assessment-quality standards, human performance, digital instrumentation and control, transient and accident analysis code certification, and the emerging uses of mixed-oxide fuel and high-burnup fuels.

A concern was raised by ACRS members and some stakeholders about the large number of reviews that the ACRS had engaged in during CY 1999, as a result of Commission and staff requests. (The ACRS issued 57 reports in CY 1999.) It was suggested that the large number of reviews had diluted the Committee's ability to take an in-depth look into some significant issues. Related to this concern was that the ACRS needed to establish value-added-based criteria for when to end its reviews of certain issues. In part, the number of reviews conducted by the ACRS in CY 1999 was the result of the need for Committee support of a large number of Commission and NRC staff commitments made to Congress and other stakeholders. The ACRS believes that it can now return to a mode of operation that will afford a more in-depth look into issues, when warranted. To support this effort to devote more resources to these in-depth reviews, the ACRS will, except when requested by the Commission and sometimes the EDO, essentially end ACRS review efforts on technical issues when such issues have been resolved satisfactorily and the staff is looking at implementation. The Committee will continue to systematically assess how it, as a Commission-level advisory committee, can add value to an issue, prior to agreeing to review a particular matter.

The ACRS, in accordance with 10 CFR Part 54, is required to review each license renewal application. These reviews have the potential for using a significant portion of ACRS resources. The ACRS is concerned that the expected number of these reviews will strain the ACRS resources and detract from its ability to address broad technical issues such as those discussed above. The ACRS has worked in CY 1999 to streamline its process for reviewing license renewal applications and will use the experience gained in its reviews of the Calvert Cliffs and Oconee applications to further improve its process. We have developed a plan for future reviews based on its work with Calvert Cliffs and Oconee and has shared this plan with the Commission and the EDO. The ACRS will further test and refine this approach in its review of the next license renewal application.

With the current changing regulatory environment, the ACRS believes that it is important to be aware of plant operations issues, taking into account the concerns of the regional offices and Headquarters staff involved in the analysis of operating events, the industry and licensees, and public interest groups. The ACRS plans to continue to interact with these groups in the future and is in the process of evaluating its action plan for such interactions. We plan to conduct some of this interaction within the framework of the ACRS license renewal application reviews. The ACRS will augment its annual visits to a Region in connection with its Fire Protection Subcommittee and Plant Operations Subcommittee activities with visits to plants submitting applications for license renewal.

The feedback that the ACRS received on its most recent annual research report to the Commission has provided useful insights as to how the report can be improved and made more useful to the Commission and the staff. The ACRS plans to continue to solicit this type of feedback and to incorporate the insights obtained into future reports.

#### SUMMARY

Results of the ACRS and ACNW self assessments have shown that both Committees add value to the regulatory process and contribute to the accomplishment of the NRC mission. Each Committee has, in response to the Commission's request, established goals for assessing its performance and has developed procedures for measuring the achievement of those goals. The ACRS and the ACNW have surveyed stakeholders, identified areas for improvement, and will take steps to increase their efficiency and effectiveness. The Committees will continue to monitor the efficiency of their operations and make improvements as warranted.

#### Attachments:

1. ACNW Summary Matrix
2. ACRS Summary Matrix

cc: SECY  
EDO

## ACNW SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACNW Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
Development of a Standard Review Plan (SRP) for Decommissioning, January 11, 1999.	The ACNW (1) supports staff's plans and activities to develop the SRP; (2) applauds increased staff interactions and stakeholder involvement; (3) endorses use of D&D Management Board; (4) supports plans to test D&D and site-specific codes and to develop guidance on code selection; and (5) supports making clearance criteria for D&D sites a priority.	The staff finds ACNW comments useful and constructive and will continue with plan to develop the SRP including stakeholder involvement. The staff has initiated development of clearance criteria and is working with ACNW staff on SRP issues.	Timely. The ACNW review and product were coordinated to accommodate staff's schedule.	The staff concurs with ACNW recommendations. A final evaluation will be performed when the multi-year effort is completed.	Continue to follow effort. The ACNW intends to conduct more in-depth reviews of D&D issues and devoting more time and resources into D&D in CY2000.

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 1999 LETTERS AND OUTCOMES

ACNW Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Comments on the Regulatory Uses of Importance Measures (IMs) for Waste Management and Possible Application to the Proposed High-Level Radioactive Waste Repository at Yucca Mountain, NV, January 12, 1999.</p>	<p>The ACNW is encouraged by the staff's work. The Staff should (1) develop IMs for waste management as part of an assortment of tools for evaluating risk significance and establishing priorities; and (2) develop post-processor to rank-order contributors; review application of IMs to reactors; and (3) apply methodology at scenario level.</p>	<p>The staff agrees that IMs should be developed for waste management and plans to pursue ACNW recommendations in addition to other tools to display system output; The staff is not convinced it can display results in same way as reactors. The staff requests ACNW to provide any additional examples of application of IMs.</p>	<p>Timely. Advice provided in time to potentially influence NMSS HLW rule and guidance development.</p>	<p>Staff indicates it will pursue ACNW advice. Final outcome is to be determined.</p>	<p>Continue to evaluate staff's development of IMs and their incorporation into YMRP; request briefing on status of IMs. Determine whether ACNW finds the staff's proposed approach to DID using degraded barriers acceptable. Continue to follow</p>



## ACNW SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACNW Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Advisory Committee on Nuclear Waste 1999 Action Plan and Priority Issues, January 22, 1999.</p>	<p>A top-down framework was developed to guide ACNW in setting its priorities and focus; updates CY1998 near- and far-term priorities and process improvements.</p>	<p>The Commission encouraged ACNW to continue dialogue with NMSS and stated that ACNW priorities are generally consistent with staff's. The Commission stated that the ACNW should avoid spending time on risk communication at the expense of other key technical issues in HLW and D&amp;D and encouraged continued use of informal meetings with staff.</p>	<p>Timely. Advice was proactive, and was coordinated with NMSS priority planning.</p>	<p>Favorable Commission response; provided clear direction for ACNW in carrying out its CY1999 activities; enabled ACNW to carry out all of its first-tier and some second-tier topics; helped bring risk communication topic to forefront of ACNW and DWM activities.</p>	<p>Conduct top-down planning session 2/23/00-2/25/00. Respond to new Commission requests during planning. Request briefing on NMSS Arthur Andersen strategic planning and priority activities and schedules for CY2000.</p>

## ACNW SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACNW Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Comments on the Department of Energy's Viability Assessment for the Proposed High-Level Radioactive Waste Repository at Yucca Mountain, NV, April 8, 1999.</p>	<p>The ACNW recommended that (1) as part of 10CFR Part 63 rulemaking and guidance development, require DOE to provide transparent TSPA model and supporting evidence in LA; (2) provide guidance on acceptable data and assumptions; (3) be prepared to evaluate engineering designs; and (4) outline steps in the licensing process; and (5) define DID for waste repositories.</p>	<p>The EDO stated that the staff will work with DOE to ensure clarity of PA and will outline in YMRP what will be acceptable in PA. The EDO agreed that the LA should clearly reference supporting data and have augmented engineering design review capability. 10 CFR Part 63 does outline the steps in licensing process. The staff is developing a strategy for DID.</p>	<p>Timely. Advice was developed on a schedule which allowed an opportunity for ACNW to brief the Commission in a public meeting. Resources were used to preform a detailed review of the VA prior to ACNW's discussions with the staff Advice was provided prior to Commission review of staff's VA comments.</p>	<p>At Commission's request, advice was transmitted to DOE along with NRC staff's VA comments.</p>	<p>Ensure that past advice and advice in the VA letter regarding 10 CFR Part 63 rulemaking have been considered. Review latest rev. of TSPA IRSR and other IRSRs to ensure these documents require DOE to provide adequate quantification of the contribution of individual barriers.</p>

## ACNW SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACNW Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Review and Evaluation of the Nuclear Regulatory Commission Safety Research Program, NUREG-1635, Vol. 2, provided to ACRS in April, 1999, Final Joint NUREG report issued June 1999 .</p>	<p>ACNW was impressed with specific projects but questioned whether NMSS is using PA to prioritize work as recommended previously. The ACNW stated that NMSS should adopt a procedure to prioritize on basis of TPA results, phase out work on igneous activity (IA), and make greater use of external experts.</p>	<p>The EDO provided detailed response to the recommendations in the report. The ACNW and the staff have discussed (June 1999 ACNW visit to CNWRA) (1) how its four step process is used to establish priorities; (2) that it must maintain minimum level of effort in igneous activity (IA) due to IA's contribution to total risk and (3) that it has expanded its use of external experts.</p>	<p>Timely. The report was provided in accordance with the Commission schedule. Additional resources were allocated to the work on the CY1999 research report to provide earlier and more effective input into the budget process.</p>	<p>The ACNW provided valuable input into the research planning process. Subsequent discussions with the staff indicate several of the recommendations have been or are in process of being adopted.</p>	<p>Committee must decide if EDO's reply is responsive and will discuss this matter during the November 2000 visit to the CNWRA. A response to EDO letter will be included as part of next letter report to Commission.</p>

## ACNW SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACNW Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Advisory Committee on Nuclear Waste Metrics and Self-Assessment Evaluation for Fiscal Year 1998, April 29, 1999.</p>	<p>The ACNW developed a three-tired system to measure performance against desired outcomes and goals described in 1998 strategic plan. Committee concludes significant progress has been made in achieving desired effectiveness and timeliness.</p>	<p>The Commission stated that it supports the effort and acknowledges significant progress. Future assessments should (1) acknowledge that adopting some advice may be limited by budget,(2) consider whether advice resulted in changes to or supported staff plans or positions, (3) continue to address recommendations resulting in no staff action with the staff.</p>	<p>Advice provided within four months after evaluation period and was sufficiently timely to help focus ACNW efforts in CY1999.</p>	<p>Letter helped focus Committee efforts and received Commission acknowledgment and request for follow-up action; drew staff attention to and stimulated CNWRA to address those areas highlighted as having resulted in no staff action.</p>	<p>Conduct self assessment for CY1999. This matrix in part comprises the self assessment.</p>

## ACNW SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACNW Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Linear No Threshold Hypothesis, June 4, 1999.</p>	<p>The ACNW believes that 100 mrem provides sufficient protection and the collective doses should not be used in setting radiation standards. The ACNW stated NRC should monitor DOE research program on biological effects of low-dose radiation; and the NRC should support needed research on effects of long-term exposure.</p>	<p>The Commission stated that it must use collective dose for analyzing cost benefit for now and will follow ICRP deliberations on appropriateness of using collective dose. RES will monitor DOE research activities and evaluate the feasibility of conducting additional research.</p>	<p>Letter was proactive. The ACNW continues to have a significant impact on the efforts to resolve this issue.</p>	<p>Letter resulted in direct response from Chairman of NRC stating that agency will continue to follow developments related to this issue.</p>	<p>Monitor staff and DOE activities. Schedule ACNW discussions on the status of issue in 2001 unless developments warrant earlier reconsideration. Monitor BEIR VII NCRP/ICRP activities.</p>

## ACNW SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACNW Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Comments on DOE's License Application Design Selection Process (LADS) and Recommended Repository Design, August 9, 1999.</p>	<p>Innovative ways to engineer natural setting to improve overall performance were described. The ACNW stated that the staff should conduct independent evaluations of alternative designs and remain flexible to implement design changes that improve performance and may enhance cost-effectiveness. The ACNW stated that it was too early to reject the hot repository concept.</p>	<p>NRC staff reviews DOE proposals and does not undertake development or evaluation of innovative alternative designs. The YMRP will provide guidance for the review of alternate designs. The EDO agrees that the NRC should allow DOE flexibility to propose design revisions. [One Commissioner stated that the ACNW recommendations go beyond NRC mandate (from 12/15/99 Commission meeting)].</p>	<p>Message to remain flexible and consider cost-effective approaches is timely as staff approaches the licensing phase of Yucca Mountain and begins considering performance confirmation needs.</p>	<p>Work on 10 CFR Part 63 and YMRP is still in progress. Staff agrees that it is important to retain the flexibility to implement design changes that improve performance and enhance cost-effectiveness. The NRC staff response to public comments on 10 CFR Part 63 may indicate that additional attention is required on design alternatives.</p>	<p>Review details of staff's performance confirmation plans in 10 CFR Part 63 and YMRP. Focus on repository design as part of Committee's effort under site recommendation priority.</p>

## ACNW SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACNW Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Implementing a Framework for Risk-Informed Regulation in the Office of Nuclear Material Safety and Safeguards (NMSS) 11/17/99 (Joint ACRS/ACNW letter).</p>	<p>The ACRS and ACNW recommended that NMSS develop a set of principles and a safety goal approach for each of its regulated activities to guide in implementation of risk-informed and performance-based regulation. The ACRS and the ACNW also recommended that NMSS should identify analytical methods to be applied in risk-informed and performance-based regulation on an application-specific basis.</p>	<p>The EDO addressed and, in general, agreed with the ACRS/ACNW recommendations. The staff is examining a new approach for screening/qualifying potential risk-informed elements for each NMSS regulatory activity and has begun to examine risk methods applied to NMSS activities.</p>	<p>Report was issued on a schedule that provided timely input into the staff's work. The report was issued after the Commission had issued a SRM on this matter.</p>	<p>Effective interaction has been established between the ACRS/ACNW and the staff.</p>	<p>The Joint ACRS/ACNW Subcommittee plans to continue its review of staff activities in this area during future meetings. The ACRS and the ACNW are working to improve the process used to issue joint Committee work products.</p>

## ACNW SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACNW Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>ACNW Round-Table Discussion with Yucca Mountain Stakeholders on the Role of Safety Assessment in Regulatory Decision-Making-Observations and Recommendations, December 23, 1999.</p>	<p>The ACNW noted that risk communication involves listening and involving stakeholders, rather than simply soliciting public comments. The ACNW stated that NRC should (1) evaluate feasibility of involving public in its performance assessment; (2) achieve greater consistency and clarity in its risk assessments; and (3) take lead on clarifying roles in HLW transportation.</p>	<p>The EDO (1) agreed that stakeholders should be involved in the decision-making process and is doing this with 10CFR Part 63 rulemaking; (2) agreed that stakeholders should be involved in performance assessment and is doing this by holding public DOE/NRC interactions on TSPA and YMRP; (3) agreed with need for consistency, clarity, and transparency in NRC's risk assessments, and stated that a framework for risk assessment (SECY-99-100) was developed for this purpose; (4) agreed that transportation is important but stated that it would be redundant for NRC to</p>	<p>The ACNW recognized the importance of risk communication early and helped focus the NRCs attention on this issue.</p>	<p>ACNW focus and emphasis on topic appears to have stimulated greater activity and awareness within the NRC on the importance of public involvement. Staff may have not understood ACNW's recommendation to consider directly involving public in PA process.</p>	<p>Follow-up as per Commission request at December 1999 public meeting to hold additional meetings with stakeholders in Nevada. Continue to serve as an agent for improving public and stakeholder involvement. Meet with staff to discuss ACNW recommendation to evaluate feasibility of involving public in PA process.</p>



## ACNW SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACNW Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Update on the ACNW Review of the NRC Safety Research Program Concerning Work Related to Waste Management, NUREG 1635-Vol 3 (ACNW section transmitted to ACRS 12/99).</p>	<p>NRC's efforts in research concerning waste management are fundamentally sound. ACNW remains concerned about whether resources available for RES and NMSS are adequate. The ACNW is encouraged by RES use of a formal process to establish priorities.</p>	<p>Response not issued yet.</p>	<p>Letter provided early input into FY2001 budget decisions.</p>	<p>To be determined</p>	<p>Continue to follow research activities related to waste management and evaluate RES use of a formal process. Determine what approach to use in the review research program in 2001.</p>

## ACNW Definition of Acronyms

ACNW	Advisory Committee Nuclear Waste
AHP	Analytical Hierarchy Process
CNWRA	Center for Nuclear Waste Regulatory Analyses
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
HLW	High Level Waste
IA	Igneous Activity
ICRP	International Commission on Radiological Protection
IM	Importance Measure
IRSR	Issue Resolution Summary Report
KTI	Key Technical Issue
LA	License Application
LADS	License Applications Design Selection
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 Assistant
VA	Viability Assessment
YM	Yucca Mountain
YMRP	Yucca Mountain Review Plan

Attachment 2

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>NFPA 805, "Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants" 2/18/99.</p>	<p>The ACRS stated that the draft Standard was not a distinct, risk-informed, performance-based alternative to the existing fire protection requirements. The ACRS recommended that the staff consider initiating work on an alternate rule that is distinctly performance-based and makes good use of risk information.</p>	<p>Overall, the EDO agreed with the Committee's comments on NFPA 805. The staff provided a copy of the ACRS report to the NFPA Technical Committee on Nuclear Facilities, which is developing the Standard. The staff believes that NFPA 805 when completed will be an acceptable risk-informed, performance-based alternative.</p>	<p>Timely.</p>	<p>The EDO has agreed with the Committee's comments. NEPA is considered the ACRS comments in the revision of the Standard.</p>	<p>Follow the work on this issue and discuss in CY 2000.</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 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>SECY-98-244, "NRC Human Performance Plan" (HPP) 2/19/99.</p>	<p>The ACRS stated (1) that well-planned research effort is needed to support the transition to risk-informed, performance-based regulations, (2) that the NRC staff has formulated a disciplined strategy for developing a better HPP, (3) expressed an interest in continued dialogue with the staff, and (4) provided comments on staff's proposal. The ACRS recommended specific steps for completion of the development of the HPP.</p>	<p>The EDO was responsive to the ACRS comments and stated that the staff would schedule additional discussions with the ACRS.</p>	<p>Timely. The report was issued on a schedule that provided meaningful input into the staff's work. Review of the SECY had to be deferred from 4 months to provide resources for higher priority work.</p>	<p>ACRS input is being incorporated into the development of a revised HPP.</p>	<p>Follow the progress of the staff's work and review the next revision of the HPP.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>List of Questions to be Addressed for Possible Resolution of Key Issues Associated with the Proposed Revision to 10 CFR 50.59 (Changes, Tests and Experiments) 2/18/99.</p>	<p>The ACRS provided questions related to (1) reconciliation of differences between 10 CFR 50.59 and NEI 96-07 and (2) consideration of safety margin and definition of the term "change." This activity was in response to a Commission request to provide a list of questions that, if answered, would aid in the resolution of key issues associated with the near-term revision of 10 CFR 50.59.</p>	<p>In general, the EDO response stated that the ACRS questions were addressed in SECY-99-054 or were not within the scope of the near-term revision of 10 CFR 50.59. The EDO did not provide detailed responses to each of the ACRS comments.</p>	<p>Timely. During the February 1999 ACRS meeting, the Commission requested the Committee to provide a list of questions which, if answered, would aid in the resolution of key issues. The Committee provided the list of questions during the same meeting.</p>	<p>Based on feedback from individual Commissioners, the Committee's report facilitated the Commission decision on this matter.</p>	<p>The Committee continued its review of the proposed revisions to 10 CFR 50.59. during the May 5-8, 1999 ACRS meeting.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Resolution of GSI B-61, "Allowable ECCS Equipment Outage Periods" 2/19/99.</p>	<p>The ACRS agreed with the staff proposal to close out GSI B-61, given that concerns identified under this GSI will be addressed through implementation of the Maintenance Rule. The ACRS noted that the results of the staff analyses of the four representative plants were not compared to results in the IPE insights report and that the uncertainties in the staff analysis were not evaluated.</p>	<p>The EDO stated that comparison to the IPE insights report would not be a prudent use of resources, but that the ACRS comments on the staff's regulatory analysis would be considered in the staff's reevaluation of the generic issues process.</p>	<p>Timely. Review completed in accordance with NRC's commitment to Congress.</p>	<p>The ACRS agreed with the staff's proposal to close out GSI B-61.</p>	<p>None.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Proposed Improvements to the NRC Inspection and Assessment Program 2/23/99.</p>	<p>The ACRS stated that (1) the process outlined in SECY-99-007 represents a substantial positive step; (2) program objectives should be clearly formulated; and (3) the choice of thresholds for increased NRC attention should be made consistent with the definition of objectives. The ACRS expressed a concern as to the limitations of a 6-month pilot program and the potential for ratcheting of performance expectations.</p>	<p>The EDO generally disagreed with the points made in the Committee's letter. Committee was dissatisfied with EDO's response and decided to revisit its concerns during future discussions of the revised inspection and assessment program.</p>	<p>Timely. Review completed in accordance with EDO and Commission schedules.</p>	<p>To be determined.</p>	<p>The Committee decided to continue its review of this matter during the May 5-8, 1999 ACRS meeting. The Committee was tasked with reviewing the use of performance indicators and the significant determination process in an April 5, 2000 SRM.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>SECY-99-054, "Plans for Final Rule - Revisions to 10 CFR Parts 50, 52, and 72: Requirements Concerning Changes, Tests and Experiments" 3/22/99.</p>	<p>The ACRS noted that the NRC staff's proposed changes to 10 CFR 50.59 largely codified past practices and supported completion of the proposed rulemaking to provide stability to the 10 CFR 50.59 process. The ACRS stated that the focus of the staff's work should soon shift to developing a risk-informed version of 10 CFR 50.59.</p>	<p>The EDO acknowledged the ACRS support for completion of the proposed rulemaking. However, the EDO did not address ACRS comments as to the shift in the focus of the staff's work to the development of a risk-informed 10 CFR 50.59 and points ACRS raised concerning minimal versus negligible and fission product barriers as design limits.</p>	<p>Timely. The ACRS effectively supported the EDO and Commission schedules for resolution of this issue.</p>	<p>The Committee's feedback during the early stages of development effectively contributed to the resolution of issues related to the proposed rulemaking on 10 CFR 50.59.</p>	<p>Continue view of this matter during future meetings.</p>



## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Lessons Learned From the ACRS Review of the AP600 Design 3/22/99.</p>	<p>The ACRS provided comments on the need for (1) improved document quality and timely submittals; (2) improved SER discussions of the technical rationale; (3) improvement of T/H codes; (4) improved guidance for scaling and use of test data; (5) guidelines for control room staffing levels; (6) improved understanding of the licensing basis criteria for in-vessel core debris retention; and (7) improved standards for catalytic hydrogen recombiners.</p>	<p>The EDO provided a detailed discussion of the ACRS comments. The EDO disagreed with the ACRS as to the need for Item (7).</p>	<p>Work on this report was deferred to provide resources to work on tasks in the CTM. The staff had already approved the use of PARs before the ACRS recommended against approval.</p>	<p>The staff agreed with the ACRS comments expect that associated with qualification lists for PARs.</p>	<p>Continue review of the requirements for PARs.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
Proposed Amendment to 10 CFR 50.72, Immediate Notification and 50.73, Licensee Event Reporting System 3/23/99.	The ACRS provided four recommendations and recommended issuance for public comment.	The EDO addressed and solicited public comments on ACRS recommendations.	Timely.	The staff was responsive to ACRS input.	Review the proposed final amendment at a future meeting.
Guidance Memorandum for Implementation of the Revised Enforcement Policy 3/24/99.	The ACRS noted that a comprehensive Enforcement Guidance Memorandum had been issued and a pilot study had been initiated to evaluate the implementation of the revised policy. The ACRS made five recommendations, some of which addressed the improved use of risk information.	The EDO stated that the ACRS recommendations and comments merited attention and that the staff would continue to keep the ACRS informed of the staff's activities.	Timely. The ACRS report was available during the Commission's deliberations.	To be determined.	Stay informed as to the implementation of the revised policy and revisit this work as requested by the Commission.

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Application of Westinghouse Best-Estimate Loss-of-Coolant Accident Analysis Methodology to Upper Plenum Injection Plants 3/24/99.</p>	<p>The ACRS (1) agreed that UPI plants as currently configured will have assured core cooling in a LBLOCA event; (2) believes that WCOBRA/TRAC predictions of PCT are either conservative or insensitive to modeling details; and (3) believes that NRC needs a more structured process for review of T/H codes.</p>	<p>The EDO addressed the ACRS comments. The EDO stated that the staff has begun the development of an improved review process for T/H codes.</p>	<p>Timely. Committee review supported NRC and Westinghouse schedules for code review and approval.</p>	<p>Staff adopted most of the Committee's recommendations. Detailed comments on modeling concerns were not adopted on the basis that the code already met the regulatory requirements of the ECCS Rule.</p>	<p>T/H Phenomena Subcommittee to address ACRS concerns in its discussion of the NRC staff's development of a code review process.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>High Burnup Fuel Phenomena Identification and Ranking 3/24/99.</p>	<p>The ACRS stated that (1) PIRT and the use of expert elicitation should provide a sound technical basis for NRC's research program; (2) RES should develop formalism for conducting expert opinion elicitation; (3) RES should address source term issues; (4) NRR and NEI should participate in the elicitation of expert opinion; and (5) the ACRS Quadripartite Working Group on High Burnup Fuel could contribute to this work.</p>	<p>The EDO acknowledged the ACRS input and support and stated a desire to continue to work with the ACRS and with the Quadripartite Working Group.</p>	<p>Timely. ACRS letter was issued prior to the RES development of the PIRT process and the expert opinion elicitation.</p>	<p>The ACRS provided useful input to the staff's work.</p>	<p>Follow the staff's work and discuss the NRC staff's development of the PIRT and expert elicitation process during a future meeting.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Proposed ASME Standard for PRA for Nuclear Power Plant Applications (Phase 1) 3/25/99.</p>	<p>The ACRS stated that although additional work needs to be done, the overall approach to defining necessary PRA requirements is good and the standard has the potential for being very useful. The ACRS recommended that consideration be given to participatory peer review. A number of detailed comments were also provided.</p>	<p>In general, the EDO agreed with the ACRS comments. The EDO did not agree with the ACRS recommendation concerning participatory peer reviews.</p>	<p>Timely. The ACRS reviewed the draft ASME Standard during the early stages of development. The staff plans to endorse the proposed final ASME Standard by way of an update to Regulatory Guide 1.174. The ACRS effectively supported the EDO and Commission schedules for completion of the task.</p>	<p>The staff provided the ACRS report to the ASME. Effectiveness and outcome will be determined after reviewing the proposed final standard.</p>	<p>Review the proposed revision to Regulatory Guide 1.174 and associated final ASME Standard, when available.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Proposed Final Revision to 10 CFR 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants" 4/14/99.</p>	<p>The ACRS recommended that the staff proceed with the proposed revision. The ACRS supported the staff position as to the need to consider all components taken out of service at the same time in the safety assessments and the staff position as to extending the rule to cover a wider range of maintenance activities. The ACRS recommends holding workshops involving licensees and regional staff to ensure consistent implementation.</p>	<p>The EDO provided a combined response to the ACRS's 4/14/99 and 5/11/99 reports in which the Committee's concerns were addressed.</p>	<p>Timely.</p>	<p>The ACRS provided valuable input to the Commission decision process on a controversial issue.</p>	<p>The staff plans to brief the ACRS before the issuance of the final rule and the associated regulatory guide.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>SECY-99-017, "Proposed Amendment to 10 CFR 50.55a" 4/19/99.</p>	<p>The ACRS recommended against eliminating the requirement to update inservice inspection and inservice testing programs to the latest version of the ASME Code.</p>	<p>The EDO stated that the staff believes that licensees should not be required to implement periodic updates to the ASME code unless such changes can be justified in accordance with the Backfit Rule.</p>	<p>Timely.</p>	<p>The Commission directed the staff to retain the requirement for a 120-month update and to address elimination of the requirement in a separate rulemaking.</p>	<p>The ACRS commented on this issue during its July 1999, December 1999, and February 2000 ACRS meetings and Dr. Shack participated in a March 2000 Commission discussion of this matter. ACRS action on this matter is complete.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Status of Efforts on Revising the Commission's Safety Goal Policy Statement 4/19/99.</p>	<p>The ACRS stated that a revision of the Safety Goal Policy statement is needed and recommended that the revision be accomplished expeditiously. The ACRS agreed it was conceptually desirable to have an "overarching" policy statement for all NRC regulatory activities but was not of a single mind on the feasibility of or approach to this work.</p>	<p>The EDO stated that ACRS comments and recommendations were incorporated in the draft paper submitted to the Commission.</p>	<p>Timely. The Committee reviewed the staff's proposal during the early stages of development.</p>	<p>Effective, in part the staff modified its proposed positions in response to ACRS comments and recommendations. The Commission approved further study to consider developing a revised Policy Statement for reactors but disapproved NRC staff work on the development of an "overarching principles" policy statement.</p>	<p>ACRS reviewed and reported on this matter during the April 2000 ACRS meeting (See ACRS report dated 4/17/00).</p>



## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Reevaluation of Generic Safety Issue Process 4/19/99.</p>	<p>The ACRS stated that the staff's draft management directive (MD) and associated handbook appeared to provide an effective process but recommended that the screening of new generic issues include an examination of the results of the IPE/IPEEE and an uncertainty analysis. The Committee recommended that the staff conduct a pilot study to evaluate the effectiveness of using the MD.</p>	<p>The EDO response addressed the ACRS comments.</p>	<p>Timely.</p>	<p>The staff adopted the Committee's recommendations. The staff is in the process of conducting a pilot study, to evaluate the effectiveness of using the MD to implement the revised GSI process.</p>	<p>Discuss the results of the pilot study during a future meeting.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Status of Resolution of Steam Generator Tube Integrity Issues 4/22/99.</p>	<p>The ACRS stated (1) that the NRC staff and industry should continue to work toward resolution of technical and regulatory differences and (2) that the ACRS will review DPO after public comments are reconciled.</p>	<p>None required.</p>	<p>Timely. Met the staff's schedule.</p>	<p>As recommended by the ACRS, the staff continued to interact with the industry to resolve differences.</p>	<p>Review the staff's safety evaluation report related to NEI's performance-based technical specifications for steam generator tube integrity.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Proposed Revisions to the NRC Generic Communications Process 4/23/99.</p>	<p>The ACRS agreed with the staff's proposal for resolving concerns about the current process. The ACRS provided comments including a recommendation that the staff clarify guidance for deciding when an issue is urgent and when a limited cost-benefit analysis would be performed.</p>	<p>The EDO addressed the ACRS recommendations but did not commit to the actions suggested by the Committee.</p>	<p>Timely. ACRS effectively supported the schedules of the EDO and the Commission.</p>	<p>ACRS provided support for the approach proposed by the staff.</p>	<p>None.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Modified Proposed Final Revision to 10 CFR 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at NPPs" 5/11/99.</p>	<p>The ACRS recommended that scope of the assessment may be limited to SSCs that a risk-informed evaluation process has shown to be significant. The ACRS stated that it supported the use of on-line maintenance but expressed concern as to the adequacy of assessments of SSC configurations affected by out-of-service alignments and different modes of operation.</p>	<p>The EDO provided a combined response to the 4/14/99 and 5/11/99 ACRS reports. The EDO response addressed the ACRS concerns and committed to addressing the ACRS recommendations in the proposed revisions to RG 1.160.</p>	<p>Timely.</p>	<p>Provided valuable input to the Commission decision on a controversial issue.</p>	<p>Continue to follow operating experience, including ASP analysis, related to the implementation of 10 CFR 50.65.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Proposed Resolution of GSI-158, "Performance of Safety-Related Power-Operated Valves (POVs) under Design Basis Conditions" 5/14/99.</p>	<p>The ACRS recommended that GSI-158 not be considered resolved as proposed by the staff and stated that the adequacy of functioning of POVs under design basis dynamic conditions had not been adequately addressed.</p>	<p>The EDO agreed that additional regulatory action was necessary but closed GSI-158 within the context of the GSI resolution process. The staff will consider the associated technical issues to be open until the licensees have taken actions that are acceptable to the NRC staff.</p>	<p>Timely. The ACRS review completed in accordance with the NRC's commitment to Congress.</p>	<p>The staff closed GSI-158 but has committed to addressing ACRS concerns.</p>	<p>Continue to interact with the staff as the effectiveness of industry actions becomes better known.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Use of Mixed Oxide Fuel (MOX) in Commercial Nuclear Power Plants 5/17/99.</p>	<p>The ACRS encouraged the use of the risk-informed approach delineated in RG 1.174 and the use of the revised accident source term. The ACRS noted that the experimental studies have shown enhanced release of fission gases to the fuel cladding gap for MOX fuels and the issues associated with the higher MOX fuel actinide activity.</p>	<p>The EDO provided thorough and detailed response to the ACRS report. In general, the staff agrees with the ACRS and will continue to address the issues raised by the ACRS.</p>	<p>Timely. The Commission included ACRS comments on the use of the revised source term in its March 5, 1999 SRM.</p>	<p>The ACRS provided valuable input to and support for the staff's work.</p>	<p>Continue to follow progress regarding the use of MOX fuels and schedule Subcommittee and Full Committee discussions as needed.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Proposed Final Rule - Revisions to 10 CFR Parts 50 and 72 Concerning Changes, Tests and Experiments 5/17/99.</p>	<p>The ACRS recommended issuance of the proposed final rule and conforming changes subject to the resolution of ACRS comments. The ACRS comments addressed the importance of the reduction of margin between a design basis limit and failure, the need for NRC review of any change in the evaluation methodology, and the specified enforcement process.</p>	<p>The EDO in his response offers additional insights on ACRS recommendations but did not adopt changes to the rule language.</p>	<p>Timely. The ACRS supported the EDO and Commission schedules for addressing this matter.</p>	<p>The EDO issued proposed rulemaking to Commission prior to receipt of ACRS report. Earlier reviews were effective in resolving major ACRS comments and recommendations. The alternate rule language suggested by the ACRS was not adopted.</p>	<p>Review the proposed NRC regulatory guide, inspection procedures, and industry guidance in NEI 96-07 during future meetings.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>The Role of Defense in Depth (DID) in a Risk-Informed Regulatory System 5/19/99.</p>	<p>The ACRS discussed the “structuralist” and “rationalist” approaches to DID and the value of DID in a design philosophy, and (1) noted that arbitrary appeals to DID could inhibit the effective use of risk information; (2) stated the use of DID must be related to the uncertainties associated with the assessment of risk; and (3) noted the need for acceptance values on the level of uncertainty associated with each Commission safety objective.</p>	<p>No response.</p>	<p>Timely.</p>	<p>Effective. The ACRS views are being incorporated into the discussion process and the topic is being addressed by a Joint ACRS/ACNW Subcommittee. ACRS views appear to be having a significant impact.</p>	<p>Issue was discussed during a Joint ACRS/ACNW Subcommittee meeting on 1/13-14/00. Continue discussion of this matter during future ACRS meetings.</p>



## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Interim Letter on the Safety Aspects of the Baltimore Gas &amp; Electric Company's (BG&amp;E's) License Renewal Application for Calvert Cliffs Nuclear Power Plant, Units 1 &amp; 2 5/19/99.</p>	<p>The ACRS stated that the staff performed a thorough review and that BG&amp;E appears to have implemented adequate processes for the management of aging-induced degradation. The ACRS noted that effective inspections are needed to identify unanticipated aging efforts. The ACRS stated that methodology used to resolve thermal aging of cast stainless steels could be used by future applicants.</p>	<p>The EDO stated that the staff will brief ACRS on the resolution of open and confirmatory items. The staff will consider the ACRS recommendations when it reflects on lessons learned. The staff briefed the Committee on existing program issues on June 3, 1999.</p>	<p>Timely. Resources were used to issue an interim letter which expedited ACRS review and comment on the staff SER.</p>	<p>ACRS efforts aided the staff in the expedited completion of its review.</p>	<p>The ACRS issued its final report during its December 1999 ACRS meeting.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Modifications proposed by the Westinghouse Owners Group (WOG) to the Core Damage Assessment Guidelines (CDAG) and Post Accident Sampling System (PASS) Requirements 5/19/99.</p>	<p>The ACRS recommends that the WOG proposal to modify the CDAG and PASS requirements be approved, with the quantification that sump pH measurements be required. The ACRS recommended that the regulations be revised to make clear that the PASS samples be used to assist long-term post-accident management decisions.</p>	<p>The EDO addressed but did not agree with the ACRS comments.</p>	<p>Timely.</p>	<p>The staff did not modify its proposal and the ACRS reinitiated its concerns in its 9/17/99 report on this subject.</p>	<p>Continue to follow staff's and industry's actions on this matter.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
NUREG-1635, Vol. 2, "Review and Evaluation of the Nuclear Regulatory Commission Safety Research Program" 6/99.	The ACRS continues to support the conclusions and recommendations of NUREG-1635, Vol. 2 and provided recommendations in various research areas.	The EDO provided a detailed response to the ACRS recommendations.	Timely. The report was provided in accordance with the Commission schedule. Additional resources were allocated to the work on the CY1999 research report to provide earlier and more effective input into the budget process.	The ACRS provided valuable input into the research planning effort.	The ACRS Subcommittee on Safety Research Program and the Full Committee are continuing to review the NRC Safety Research Program. The ACRS issued its CY2000 report on RES-sponsored research in February 2000.
Proposed Resolution of GSI-165, Spring-Actuated Safety and Relief Valve Reliability 6/09/99.	The ACRS agreed with the staff's proposed resolution of GSI-165.	None required.	Timely. Completed in accordance with the NRC's commitment to the Congress.	The ACRS agreed with the staff proposal.	None.

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Pilot Application of the Revised Inspection and Assessment Programs, Risk-Based Performance Indicators (PIs), and Performance-Based Regulatory Initiatives and Related Matters 6/10/99.</p>	<p>The ACRS recommended that (1) PI thresholds be plant or design specific and that the technical basis for sampling intervals be explained; (2) the hypothesis to be tested be made explicit; (3) action levels be related explicitly to risk metrics when possible; (4) existing studies be examined to determine if a PI for safety culture can be developed; and (5) lessons-learned from current NRC activities be documented.</p>	<p>The EDO response contained a discussion of the ACRS comments but did not address the issues to the ACRS's satisfaction. Committee decided that it was not satisfied with the EDO's response and would continue to pursue its concerns in future discussions of this matter.</p>	<p>Timely. The ACRS supported the EDO and Commission schedules for addressing this matter.</p>	<p>The staff considered but did not accept the ACRS recommendations.</p>	<p>Continue to review this matter in accordance with Commission priorities.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Proposed Options for Using Averted Onsite Costs and Voluntary Initiatives in Regulatory Analyses 6/11/99.</p>	<p>The ACRS agreed with the NRC staff position and recommended that these costs be included in regulatory analyses and supported Option B in the staff's proposal. The ACRS stated that it expected a transition in the staff's approach to this matter as the agency moves more toward a risk-informed regulatory system.</p>	<p>The EDO addressed the ACRS comments and stated that it is anticipated that the cost-benefit estimates incorporated in regulatory analyses will include "full credit" for voluntary initiatives as NRC moves toward a risk-informed process.</p>	<p>Timely. The Committee reviewed predecisional draft documents to expedite the issuance of the SECY papers.</p>	<p>The Commission accepted the staff's recommendations and directed the staff to prepare draft changes to the regulatory analysis technical evaluation handbook.</p>	<p>None.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Development of a Low-Power and Shutdown Risk Assessment (LPSD) Program 6/11/99.</p>	<p>The ACRS stated that (1) risk during LPSD operations has been estimated to be comparable to that of full power operations; (2) there are two distinct types of applications for LPSD risk assessment: a) risk management of outages, and b) risk-informing regulations and decisionmaking; and (3) the PRA support needs for risk-informed regulation are different and more difficult to satisfy than those for outage management.</p>	<p>RES staff is currently developing a detailed plan for its LPSD risk assessment research. This plan will address the ACRS issues and is scheduled to be completed in December 1999.</p>	<p>The ACRS report was issued prior to the staff's development of a LPSD research plan.</p>	<p>To be determined.</p>	<p>Continue to follow this matter.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>SECY-99-148, "Credit for Existing Programs for License Renewal" 7/19/99.</p>	<p>The ACRS endorsed Option 3 of the staff's proposal and stated that the staff must have a basis for deciding that existing programs are adequate.</p>	<p>None required.</p>	<p>Not timely. The ACRS report was issued after SECY-99-148 was issued and after an associated Commission meeting on this subject.</p>	<p>The Commission approved the NRC staff's recommendation for Option 3 of its proposal.</p>	<p>None.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Proposed Rev. 3 to Reg. Guide 1.160 (DG-1082), "Assessing and Managing Risk Before Maintenance Activities at Nuclear Power Plants" 7/21/99.</p>	<p>The ACRS recommended the staff defer endorsing Section 11 of NUMARC 93-01 until it has been revised by NEI and is made available for ACRS review. The ACRS provided comments to be incorporated in the revised RG 1.160 before issuance for public comment and encouraged the staff to provide additional guidance for evaluating the impact of disabling multiple SSCs.</p>	<p>The EDO agreed with the ACRS comments.</p>	<p>Timely.</p>	<p>The EDO addressed and took action on the ACRS concerns.</p>	<p>Section II of NUMARC 93-01 was revised and reviewed by ACRS during its November 1999 meeting.</p>



## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Proposed Final Reg. Guide 1.181, "Content of the Updated Final Safety Analysis Report (FSAR) in Accordance with 10 CFR 50.71(e)" 7/21/99.</p>	<p>The ACRS recommended approval of the proposed final Regulatory Guide for use by the industry. The ACRS stated that the staff should consider how the content of the FSAR should evolve to support risk-informed regulation.</p>	<p>The EDO forwarded the ACRS comment on the evolution of the content of the FSAR to NRC managers responsible for risk-informed initiatives.</p>	<p>Timely. The ACRS effectively supported the EDO and Commission schedules for the completion of this work.</p>	<p>The ACRS offered forward-looking advice on the role of the FSAR in a risk-informed regulatory environment.</p>	<p>None.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Revision of Appendix K, "ECCS Evaluation Models," to 10 CFR Part 50 7/22/99.</p>	<p>The ACRS (1) agreed with the intent of the proposed rule (2) stated that the staff should evaluate the possible impact of the proposed rule on part of the regulations other than Appendix K; and (3) stated that the staff should consider carefully the sometimes complex relationships between uncertainties and design margins.</p>	<p>The EDO response contained a thorough discussion of the ACRS comments. The impact of reduction in design margins beyond what is addressed in the revised Appendix K will be reviewed on a plant-specific basis.</p>	<p>Timely.</p>	<p>The proposed rule was published for public comment.</p>	<p>The review of the final rule was completed in February 2000.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Proposed Final Amendment to 10 CFR 50.55a, "Codes and Standards" 7/23/99.</p>	<p>The ACRS recommended approval of the proposed amendment. The ACRS noted that the NRC staff was addressing the issues associated with a mandated 120-month update to the latest version of the ASME code in a separate rulemaking and indicated that the ACRS would discuss the matter with the staff in the future.</p>	<p>The staff will brief ACRS on resolution of public comment associated with the staff's recommendation to eliminate the requirement to update ISI and IST programs every 120 months. The elimination of the requirement for a 120-month update will be addressed in a separate rulemaking.</p>	<p>Timely. The ACRS expedited its review to support the staff's schedule.</p>	<p>The amendment was issued.</p>	<p>The ACRS commented on this issue during its December 1999 and February 2000 meetings and ACRS member Dr. Shack participated in the March 2000 Commission discussion of this matter. ACRS action on this matter is complete.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Proposed Final Revision 3 to Regulatory Guide 1.105, "Setpoints for Safety-Related Instrumentation" 9/13/99.</p>	<p>The ACRS recommended that the final Revision 3 to Regulatory Guide 1.105 be issued for industry use and encouraged the development of a graded approach to setpoint methodology.</p>	<p>The EDO stated that the staff was currently working with industry on developing a graded approach to setpoint methodology.</p>	<p>Timely.</p>	<p>The ACRS provided valuable input to staff work.</p>	<p>Continue to follow work on graded approach to setpoint methodology.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Interim Letter Related to the License Renewal of Oconee Nuclear Station 9/13/99.</p>	<p>The ACRS stated that the staff performed thorough review and concurred with the staff's favorable assessment of BAW-2251 (management of RPV aging effects). The ACRS recommended additional research on void swelling. The ACRS also provided generic recommendations related to the license renewal process.</p>	<p>The staff will brief the ACRS on the resolution of open and confirmatory items. ACRS generic license renewal process recommendations will be considered in the license renewal issues evaluation process.</p>	<p>Interim letter issued to expedite review and comment on SER.</p>	<p>The interim letter and associated ACRS comments were used to expedite review.</p>	<p>The ACRS completed its review of the Oconee license renewal application in March 2000.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Safety Evaluation Report Related to Electric Power Research Institute Risk-Informed Methods to Inservice Inspection of Piping (EPRI TR-112657, Rev. B, July 1999) 9/15/99.</p>	<p>The ACRS (1) agreed with the staff conclusion that the EPRI methodology can be used to develop risk-informed ISI programs; (2) stated that EPRI methods will better focus inspections and lead to reduced occupational radiation exposure and associated inspection costs; and (3) suggested that use of this methodology could result in a reduction in risk and that it may be possible to further reduce the number and frequency of inspections.</p>	<p>EDO agreed with ACRS conclusions and recommendations.</p>	<p>Timely. The ACRS effectively supported the EDO and Commission schedules for resolution of this issue.</p>	<p>Committee review during the early stages of development facilitated the incorporation of ACRS comments and recommendations in the proposed final version of the topical report and associated staff SER.</p>	<p>None.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Proposed Rev. 1 to R.G. 1.78 (DG-1087) Evaluating the Habitability of a Nuclear Power Plant Control Room During a Postulated Hazardous Chemical Release 9/16/99.</p>	<p>The ACRS recommended that the staff (1) revise the regulatory guide to facilitate risk-informed license amendment requests to eliminate Technical Specification requirements for toxic gas monitoring systems; (2) provide performance-based guidance rather than prescriptive guidance; and (3) document validity and capability of all computer codes endorsed in regulatory guides.</p>	<p>The EDO agreed with ACRS recommendations on (1) and (2) and addressed the recommendations in (3) for the HABIT code. The EDO did not address the broader question of all computer codes endorsed in regulatory guides.</p>	<p>Timely. The review was completed in accordance with the EDO schedule for addressing this matter.</p>	<p>The proposed revision to RG 1.78 was modified in accordance with ACRS recommendations.</p>	<p>Review final version of RG, after public comment. ACRS will continue to have discussions with the staff on issue of documentation of codes endorsed in regulatory guides.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Modifications Proposed by the Westinghouse Owners Group to the Core Damage Assessment Guidelines and Post-Accident Sampling System (PASS) Requirements 9/17/99.</p>	<p>The ACRS reiterated recommendations that it made in its 5/19/99 letter on this subject and stated that it was the ACRS's view that the PASS in Westinghouse plants do not meet the intent of the TMI Action Plan.</p>	<p>The EDO addressed the ACRS comments and committed to thorough consideration of the ACRS comments.</p>	<p>Timely.</p>	<p>The staff did not modify its proposal but committed to consideration of the ACRS comments.</p>	<p>Continue to follow the staff and industry's actions on this matter.</p>



## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Proposed Resolution of Generic Safety Issue-145, "Actions to Reduce Common Cause Failures" 9/17/99.</p>	<p>The ACRS recommended that the staff issue an additional Administrative Letter summarizing the major insights derived from the common cause failure research project to make them more readily available and agreed that GSI-145 could be closed out without further regulatory action.</p>	<p>The EDO agreed with the ACRS recommendation.</p>	<p>Timely. The review was completed in accordance with the NRC's commitment to Congress for resolution of this GSI.</p>	<p>The NRC staff committed to the issuance of the Administrative Letter.</p>	<p>None.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Proposed Final Rule on Use of Alternative Source Term at Operating Reactors, Draft Regulatory Guide, and Standard Review Plan (SRP) 9/17/99.</p>	<p>The ACRS stated that the staff has done an excellent job in developing a workable rule, regulatory guides, and SRP section. The ACRS provided comments on the staff work including a recommendation that the staff determine if the proposed requirement for evaluating CDF and LERF could be done within the 10 CFR 50.59 change process.</p>	<p>The EDO addressed the ACRS comments but did not change the NRC staff's proposal.</p>	<p>Timely.</p>	<p>The staff committed to considering the ACRS comments during the public comment period.</p>	<p>Review the staff responses during review of final version of Regulatory Guide and SRP Section.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Combustion Engineering Owners Group (CEOG) Application to Eliminate the Post-Accident Sampling System (PASS) from the Plant Design Bases for CEOG Utilities 10/8/99.</p>	<p>The ACRS recommended that the staff approve the CEOG proposal to eliminate PASS from the plant design and licensing basis and evaluate the need for new generic requirements on post-accident measurement of in-containment fission products and sump pH.</p>	<p>The EDO stated that the staff believes that the WOG and CEOG proposals have merit, but will seek public comment prior to making a decision.</p>	<p>Timely.</p>	<p>The staff did not modify its proposal but committed to consideration of the ACRS comments.</p>	<p>Review outcomes of staff's actions.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Proposed Resolution of Generic Safety Issue 23 (GSI-23), "Reactor Coolant Pump Seal Failure" 10/8/99.</p>	<p>The ACRS agreed with the staff's proposed resolution of GSI-23 and recommended that the staff assess the impact of uncertainties in the evaluation on a plant-specific basis and the need to require the use of available improved seal materials. The staff is currently analyzing non-Westinghouse pump seal performance using Westinghouse pump based models. The ACRS recommended that a more realistic analysis be developed.</p>	<p>The EDO agreed with the ACRS recommendation.</p>	<p>Timely. The review was completed in accordance with the NRC's commitment to Congress.</p>	<p>EDO agreed with and committed to take actions on all of the ACRS recommendations.</p>	<p>Follow the NRC staff's work on a task action plan to determine the need for plant-specific backfits.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Draft Commission Paper Regarding Proposed Guidelines for Applying Risk-Informed Decisionmaking in License Amendment Reviews (SECY-99-246) 10/8/99.</p>	<p>The ACRS agreed that additional guidance is needed on staff requests for additional information and agreed that the process outlined by the staff is acceptable. The ACRS noted that the process used should neither discourage risk-informed submittals nor require probabilistic risk assessments for all licensing actions. The ACRS also noted that the staff needs to improve its own risk and accident analysis tools.</p>	<p>The EDO's response states that the staff will give full consideration to the ACRS recommendations subject to the Commission's approval of SECY-99-246. The EDO also agreed that it is important for the staff to have appropriate accident analysis tools.</p>	<p>Timely.</p>	<p>To be determined.</p>	<p>Follow the NRC staff's work in this area and schedule discussion with the staff as needed.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
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<p>Proposed Resolution of GSI B-55, "Improved Reliability of Target Rock Safety Relief Valves" 10/8/99.</p>	<p>ACRS agreed with the staff's proposed resolution of GSI B-55 and recommended that the staff perform a statistical analysis to confirm the apparent improvement in valve performance.</p>	<p>The EDO agreed with the ACRS recommendation and committed to performing the recommended statistical analysis.</p>	<p>Timely. The review was completed in accordance with the NRC's commitment to Congress.</p>	<p>The EDO agreed with and committed to taking action on the ACRS recommendation.</p>	<p>None.</p>
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## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Proposed Plans for Developing Risk-Informed Revisions to 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities" 10/12/99.</p>	<p>The ACRS agreed with the staff's proposed new 10 CFR 50.69 and associated Appendix T and the staff general approach to categorizing SSC's. The ACRS provided comments on the use of importance measures and the staff's proposed Option 2 and Option 3. The ACRS noted that policy issues related to the role of defense in depth in a risk-informed regulatory system needed to be resolved before implementing this work.</p>	<p>The EDO agreed with ACRS conclusions and recommendations.</p>	<p>Timely. The ACRS effectively supported the EDO and Commission schedules for completion of this review. The Subcommittee on Reliability and PRA made a number of important contributions during the early stages of the development of this regulatory position.</p>	<p>Effective. Early input contributed significantly to the staff's work.</p>	<p>Continue to review this matter during future meetings as requested by the Commissioners. (SRM dated 4/5/00)</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Proposed Final Design Certification Rule and Changes to the Design Control Document Associated with AP600 Design 11/12/99.</p>	<p>The ACRS stated that its review of these changes did not change the conclusions of its 7/23/98 report in which the ACRS concluded that the AP600 design can be used to engineer and construct plants that can be operated without undue risk to the health and safety of the public.</p>	<p>None required.</p>	<p>Timely.</p>	<p>The ACRS did not change the position taken in its 7/23/98 letter.</p>	<p>None.</p>
<p>Proposed Resolution of GSI-148, "Smoke Control and Manual Fire-Fighting Effectiveness" 11/12/99.</p>	<p>The ACRS concurred with the staff proposal for resolving GSI-148 and recommended that the guidance document be revised to address the effects of smoke.</p>	<p>The EDO addressed the ACRS comments but did not change its guidance document.</p>	<p>Timely. The review was completed in accordance with the NRC's commitment to Congress.</p>	<p>The staff considered ACRS comments but did not change its position.</p>	<p>None planned.</p>



## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Spent Fuel Fires Associated with Decommissioning 11/12/99.</p>	<p>The ACRS provided a number of comments on the staff's analysis and models and stated that it would be reviewing the staff's progress in this area. The ACRS noted that the issue would be a good candidate for the use of a rationalist regulatory approach as discussed in its 5/19/99 report on defense-in-depth.</p>	<p>The EDO agreed with the ACRS regarding uncertainties related to oxidation kinetics and heat rejection mechanisms that the staff will employ conservative assumptions for decay times. The EDO also agreed with the ACRS regarding uncertainties in the analysis for the critical temperature. The staff will adjust the critical temperature and decay time to compensate for the lack of knowledge.</p>	<p>Timely. The ACRS reviewed this matter early and reviewed the draft technical study. ACRS discussed this issue with NRC staff, NEI, and two members of the public prior to a Commission meeting to facilitate input into the Commission decision process.</p>	<p>Effective. The staff will consider the ACRS recommendations and modify its technical study accordingly. The ACRS input provided valuable input to the Commission decision process.</p>	<p>The ACRS reviewed the revised technical study during its April 2000 ACRS meeting.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
Draft RG DG-1093, "Guidance and Examples for Identifying 10 CFR 50.2 Design Bases" 11/12/99.	The ACRS stated that the technical issues have been satisfactorily addressed and recommended issuance of DG-1093 for public comment.	No response required.	Timely. ACRS effectively supported the EDO and Commission schedules for completion of this work.	The ACRS agreed with the staff's proposal.	Review the proposed final version of DG-1093 following the reconciliation of public comments.

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
Proposed Rev. 3 to RG 1.160 (DG-1082), "Assessing and Managing Risk Before Maintenance Activities at Nuclear Power Plants" 11/12/99.	The ACRS recommended that the revised RG 1.160 be issued for public comment and supported the staff endorsement of the NEI guidance as revised to incorporate staff comments and a concise definition of unavailability.	The EDO addressed and implemented the ACRS recommendation.	Timely.	The ACRS supported the staff's position.	None.

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Implementing a Framework for Risk-Informed Regulation in the Office of Nuclear Material Safety and Safeguards (NMSS) 11/17/99 (Joint ACRS/ACNW letter).</p>	<p>The ACRS and ACNW recommended that NMSS develop a set of principles and a safety goal approach for each of its regulated activities to guide in implementation of risk-informed and performance-based regulation. The ACRS and the ACNW also recommended that NMSS should identify analytical methods to be applied in risk-informed and performance-based regulation on an application-specific basis.</p>	<p>The EDO addressed and, in general, agreed with the ACRS/ACNW recommendations. The staff is examining a new approach for screening/qualifying potential risk-informed elements for each NMSS regulatory activity and has begun to examine risk methods applied to NMSS activities.</p>	<p>Report was issued on a schedule that provided timely input into the staff's work. The report was issued after the Commission had issued an SRM on this matter.</p>	<p>Effective interaction has been established between the ACRS/ACNW and the staff.</p>	<p>The Joint ACRS/ACNW Subcommittee plans to continue its review of staff activities in this area during future meetings. The ACRS and the ACNW are working to improve the process used to issue joint Committee work products.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
Draft Commission Paper Regarding the 120-Month Update Requirement for Inservice Inspection (ISI) and Inservice Testing Programs (IST) 12/8/99.	The ACRS recommended the adoption of Option 2, retaining the 120-month update requirement for ISI and IST programs in 10 CFR 50.55a and provided comments on the application of defense in depth.	The EDO addressed the ACRS comments but did not agree with the ACRS recommendation to retain the requirement for a 120-month update requirement.	Timely.	The staff has not modified its position. The ACRS provided additional comments in a 2/18/00 report.	The ACRS provided comments during February 2000 ACRS meeting and ACRS member Dr. Shack participated in the March 2000 Commission discussion of the matter. ACRS action on this matter is complete.
Report on the Safety Aspects of the License Renewal Application for Calvert Cliffs Nuclear Power Plant, Units 1 and 2 12/10/99.	The ACRS stated that Calvert Cliffs can be operated for the period of the extended license without undue risk to the health and safety of the public.	The EDO provided the ACRS with additional information on several topics discussed and found acceptable in the ACRS letter.	Very timely. Completed review 2-months ahead of its original schedule to support the staff's accelerated review.	The ACRS was effective in working with the staff and completing its review of the first license renewal application on an expedited schedule.	None.

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>Proposed Resolution of Generic Safety Issue-190, "Fatigue Evaluation of Metal Components for 60-Year Plant Life" 12/10/99.</p>	<p>The ACRS agreed with the staff's proposal to resolve GSI-190. The ACRS recommended that environmentally assisted fatigue degradation be addressed in agency management programs developed for license renewal.</p>	<p>The EDO stated that NRR would ensure that environmentally assisted fatigue degradation would be addressed in the agency management programs.</p>	<p>Timely. Review was completed in accordance with the NRC's commitment to Congress.</p>	<p>The ACRS agreed with the staff's proposal for resolution of GSI-190.</p>	<p>None.</p>

## ACRS SUMMARY MATRIX OF 1999 LETTERS AND OUTCOMES

ACRS Letter	Main Message	EDO/Commission Response	Timeliness	Effectiveness/ Outcome	Recommended Follow-up
<p>NUREG-1624, Revision 1, "Technical Basis and Implementation Guidelines for a Technique for Human Event Analysis ATHEANA" 12/15/99.</p>	<p>The ACRS made a number of comments on the staff's work, including that the scope of the methodology should be extended to include normal activity that may cause a plant event and that a screening process needed to be developed to identify the appropriate level of analysis.</p>	<p>The EDO, in general, agreed with the ACRS recommendations and agreed to address and implement them as resources permitted.</p>	<p>Timely.</p>	<p>No effect on the content of Revision 1 of the NUREG-1624 technical basis and implementation guidelines for ATHEANA.</p>	<p>Work with staff in improving ATHEANA methodology.</p>

## ACRS Definition of Acronyms

ACRS	Advisory Committee on Reactor Safeguards
ANS	American Nuclear Society
ANSI	American National Standards Institute
ASME	American Society of Mechanical Engineers
ASP	Accident Sequence Precursor
ATWS	Anticipated Transient without Scram
BG&E	Baltimore Gas and Electric
BWRVIP	Boiling Water Reactor Pressure Vessel Shell Weld Inspection
CDAG	Core Damage Assessment Guideline
CDF	Core Damage Frequency
CEOG	Combustion Engineering Owners Group
CFR	Code of Federal Regulations
CNWRA	Center for Nuclear Waste Regulatory
CTM	Chairman's Tasking Memorandum
DID	Defense in Depth
DPO	Differing Professional Opinion
DQSR	Director's Quarterly Status Report
ECCS	Emergency Core Cooling System
EDO	Executive Director for Operations
EPRI	Electric Power Research Institute
GIMCS	Generic Issue Management Control System
GSI	Generic Safety Issue
HPP	Human Performance Plan
INEEL	Idaho National Engineering and Environmental Laboratory
IPE	Individual Plant Examination
IPEEE	Individual Plant Examination of External Events
ISI	Inservice Inspections
IST	Inservice Testing
LBLOCA	Large Break Loss of Coolant Accident
LERF	Large Early Release Frequency
LOCA	Loss of Coolant Accident
LPSD	Low Power Shutdown



MD	Management Directive
MOVs	Motor-Operated Valves
MOX	Mixed Oxide Fuel
NEI	Nuclear Energy Institute
NFPA	National Fire Protection Association
NMSS -	Nuclear Material Safety and Safeguards
NPP	Nuclear Power Plant
PAR	Passive Autocatalytic Recombiner
PASS	Post Accident Sampling System
PIRT	Phenomena & Identification and Ranking Table
POV	Power Operated Valve
PRA	Probabilistic Risk Assessment
PSAR	Final Safety Analysis Report
RES	Office of Nuclear Regulatory Research
RG	Regulatory Guide
SER	Safety Evaluation Report
SRM	Staff Requirements Memorandum
SSC	Structure, System, and Component
T/H	Thermal/Hydraulics
W	Westinghouse Electric Company
WOG	Westinghouse Owners Group