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E. T. Boulette, PhD
Senior Vice President – Nuclear

January 15, 1997

Dr. David L. Morrison, Director
Office of Nuclear Regulatory Research
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Dr. Morrison:

The Nuclear Safety Research Review Committee (NSRRC) met on November 14-15, 1996, at NRC Headquarters. NSRRC members present included E. T. Boulette, Chair, Michael Golay, Robert Hatcher, Charles Mayo, John Taylor, and Sumio Yukawa. S. George Bankoff joined the committee on the 15th. Also present were David Morrison, Director, Office of Nuclear Regulatory Research; Jose Luis M. Cortez, NSRRC Federal Designated Official, and his assistant, Ms. Sandra Young.

At this meeting, the NSRRC undertook a self-examination of the value it is contributing to the Agency and generated a set of criteria by which the future performance of the Committee could be assessed. In addition, the Committee compared its activities with those of other advisory committees and it developed a set of operating principles and criteria to improve its advisory effectiveness and coordination with other advisory committees, including the ACRS.

The Committee covered the above topics extensively and several conclusions and recommendations resulted from the Committee's discussions. A detailed listing of values and performance evaluation criteria is included in the enclosed meeting minutes. These values and criteria will be used by the NSRRC in the future as a guide to enhance its advisory effectiveness.

In addition, the Committee revised the NSRRC Subcommittee structure assignments and renamed a Subcommittee to reflect RES's new responsibilities in the nuclear waste area. A tentative NSRRC Committee/Subcommittee meeting schedule was agreed to for the coming year in the March-April 1997 time frame.

Other topics of general interest to the Committee were also discussed and some recommendations made regarding committee organization of future meetings, committee charter and committee evaluation and review procedures. As discussed below, various recommendations were unanimously adapted.

Relationship of the ACRS and NSRRC:

The relationship between the ACRS and the NSRRC committees was discussed at length and various ideas and suggestions were considered by the Committee in order to improve the manner in which the NSRRC receives RES staff input and Agency regulatory requirements and the way NSRRC provides advice on safety research issues and programs. A table, showing the major differences in assignments and responsibilities of these committees, is included in the meeting minutes. This table will be used as a guide by the NSRRC in conducting its advisory role to the Office of Research.

One key recommendation was that relevant NSRRC and ACRS Subcommittees meet jointly or attend each other's meetings on the topics of mutual interest and in some cases jointly hear RES staff presentations to avoid duplication. Moreover this would save RES staff time and resources. At present, the NSRRC does not see the need for joint meetings as long as NSRRC members are informed about the issues being discussed in full ACRS committee and ACRS subcommittee meetings.

As to NSRRC participation in ACRS meetings, the NSRRC Committee will look to RES staff to identify appropriate ACRS meetings for NSRRC members to attend. NSRRC members and the Chairman of the NSRRC should be kept informed about ACRS Subcommittee meetings, schedules and agenda subjects as soon as they become available to RES staff.

Discussion on NSRRC Subcommittee Structure and Activities:

There are presently five NSRRC Subcommittees: Materials Engineering, Accident Analysis, I&C and Human Factors, Waste, and PRA.

Initially, the discussions centered around the Waste Subcommittee and its present role in view of the fact that the high level waste program has been transferred to NMSS and the only research within RES is related to radionuclide transport in the environment. It was suggested and agreed to by the NSRRC that the Waste Subcommittee name be changed to Radionuclide Transport and that it meet whenever it is desirable, but probably no more than once per year.

The Committee also considered whether the PRA and the I&C and Human Factors Subcommittees should be combined. It was agreed to keep these subcommittees separate because the PRA Subcommittee is focused on the research needs in support of performance-based regulation, which is quite different from the responsibilities of the other Subcommittee. One of the big issues in PRA is the handling of uncertainty in the broad range of phenomena that are dealt with in nuclear reactor safety.

It was also agreed to leave the Accident Analysis Subcommittee in place and have George Bankoff as the new chairman.

Regarding subcommittee meetings it was suggested by Dr. Morrison that we have subcommittee meetings in February/March, 1997, and a full committee meeting in late March or April, 1997. It was also suggested that all subcommittees (other than the Radionuclide Subcommittee) meet at least twice a year and to schedule two full committee meetings during 1997. See the meeting minutes for more details on meeting dates.

Discussion on NSRRC Meeting Structure and Procedures:

The NSRRC would like to have more feedback from the RES staff on the recommendations that have been made by the NSRRC, in terms of what advice has been useful, accepted/not accepted, modified, including the reasons for the RES staff positions. In addition, the NSRRC feels that committee performance evaluations should be done by RES staff and the NSRRC every two years to better determine the effectiveness of the advice and guidance given to the NRC by the NSRRC.

Past performance of the Committee should be based on their past recommendations (2-3 years worth of subcommittee reports) to see what impacts the Committee's recommendations have made on the program, citing specific examples. Feedback from RES staff on Committee recommendations and/or suggestions would also allow the Committee to evaluate its effectiveness on a continuing basis. The idea is for NSRRC to be able to develop a "score" sheet on the Committee's recommendations to the staff and staff disposition of these recommendations as a function of time.

April 1997 Meeting - Tentative Plans

The meeting in April should focus on core competencies by the RES office to carry out its duties to the Commission and help ensure that the Commission maintains an independent technical base. In addition, the NSRRC will review its charter for modifications as needed, consistent with the assessment criteria.

Sincerely,

E. Thomas Boulette

E. Thomas Boulette, Chairman
Nuclear Safety Research Review Committee

MEETING MINUTES - NOVEMBER 14-15, 1996

The NSRRC Committee meeting was held on the afternoon of November 14 and the morning of November 15, 1996.

Members present included E. T. Boulette, Chair; Michael Golay, Robert Hatcher, Charles Mayo, John Taylor, Sumio Yakawa. George Bankoff joined the Committee on the 15th. Also present were David Morrison, Director - Office of Nuclear Regulatory Research, Jose Cortez and Sandra Young.

At this meeting, the NSRRC undertook a self-examination of the value it is contributing to the Agency and generated a set of criteria by which the future performance of the Committee could be assessed. In addition, the Committee compared its activities with those of other NRC advisory committees and it developed a set of operating principles and criteria to improve its advisory effectiveness and coordination with other advisory committees.

The stated purpose of the meeting as noted in the Federal Register was to:

1. Evaluate the value and contributions of this Committee, in assisting the Office of Nuclear Regulatory Research (RES) in carrying out the NRC's regulatory responsibility and at the same time, develop a set of criteria under which the performance of the NSRRC could be evaluated in the future.

2. Discuss the roles of the NSRRC and the NRC's Advisory Committee on Reactor Safeguards (ACRS) in terms of areas of common interest of the two Committees and to find ways to effectively coordinate activities of common interest to make sure the Committees' activities are supportive and complementary in nature and avoid duplication.

The Committee discussed both of the above topics in detail and several conclusions and recommendations resulted from the Committee's discussions. A detailed listing of values and performance evaluation criteria is presented in the next section.

In addition, the Committee revised the NSRRC Subcommittee structure and assignments. One of the subcommittees has now been renamed to reflect RES's new responsibilities in the nuclear waste area. A tentative NSRRC Committee/Subcommittee meeting schedule was agreed to for the coming year in the March-April 1997 time frame.

Other topics of general interest to the Committee were also discussed and recommendations were made regarding Committee organization of future meetings, Committee charter and Committee evaluation and review procedures to facilitate future assessment of NSRRC usefulness and effectiveness.

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I. VALUES AND CONTRIBUTIONS OF THE NSRRC

With respect to the values of the NSRRC, the Committee concluded that the most important values of the Committee to the Office of Research include:

1. The NSRRC is the only NRC Advisory Committee that has a broad scope and complete responsibility to cover all of the safety research programs. This is a real benefit because other committees look only at specialized research areas, and only when regulatory issues are discussed.

2. The NSRRC appraises the research priorities and RES core competencies independent of regulatory issues, and by so doing assists in the identification of core capabilities of the Office of Research.

3. The NSRRC provides independent opinions and technical advice on RES program content because most Committee members are affiliated with the research community and have relevant technical backgrounds outside the nuclear industry.

4. The NSRRC is in a position to support the RES Director in controversial safety research issues by offering an independent strictly technical perspective.

5. The NSRRC assists the Director of RES in determining the appropriateness and correctness (total balance and content) of the direction of the research program keeping in mind the research priorities consistent with available budgets.

6. The NSRRC assists the RES Director in evaluating whether the most qualified people are doing the research work at the best possible research establishments, making their recommendations on the best resources available.

7. Assessment of the likelihood of the program meeting NRC regulatory needs and providing insights on long-term anticipatory research needs is a unique function of the NSRRC.

8. A comprehensive global view of research is provided by the NSRRC including advice on priorities and an assessment of program leverage obtained through international cooperative R&D.

9. The NSRRC assists the RES Director with identification of critical research areas that are not being pursued by staff or being supported under the RES program by making alternative recommendations to resolve existing safety problems using new techniques or methods as necessary (e.g., the ROSA-AP600 test program in Japan recommendation).

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II. PERFORMANCE CRITERIA FOR THE NSRRC

The Committee noted the following as possible criteria to be used by both the Committee and the NRC staff receiving the Committee's advice and counsel for future evaluation of the performance of the NSRRC:

1. Provide independent technical assessment of the scope and priorities of the research program against near-term and long-range needs of the Agency, consistent with available resources (people and dollars).

2. Recommend areas where RES can more effectively and efficiently address the needs of its customers through collaborative research projects, implementation of technologies developed by others, and use of best performers.

3. Audit and effectively communicate the value of NRC's research program to the Commission and licensees (provide independent technical oversight for those areas that improve external support for decisions, i.e. budgets).

4. Provide guidance in defining an appropriate level of core competencies in prioritizing individual programs including identifying improvements in research program planning and execution.

5. Provide the RES Director with independent guidance on controversial programs or those having large uncertainty as to the use and application of potential results.

6. Monitor the frequency of acceptance and implementation of NSRRC recommendations regarding RES programs based on the quality and timeliness of NSRRC recommendations.

7. Evaluate the effectiveness of interfaces of NSRRC with the ACRS and other committees.

8. Identify and nurture critical research issues to ensure that NRC safety research remains of the highest quality.

9. Help formulate a broad-based safety research program and assess program results to ensure timely closure or extension and support when appropriate.

10. Periodic effectiveness review.

III. NSRRC/ACRS RELATIONSHIPS AND RESPONSIBILITIES

The relationship between these two Committees was discussed at length and various ideas and suggestions were considered by the NSRRC in order to improve the manner in which the NSRRC receives RES staff input and Agency regulatory requirements and the way NSRRC provides advice on safety research issues and programs.

Other ideas and suggestions were offered regarding ways in which the NRC could better obtain advice and counsel from the NSRRC on RES programs including interaction and coordination with other advisory committees such as the ACRS.

One of the recommendations was that relevant NSRRC and ACRS Subcommittees meet jointly or attend each other's meetings on the topics of mutual interest and in some cases jointly hear pertinent RES staff presentations to avoid duplication. Moreover, this would save RES staff time and resources. NOTE: NSRRC members have already agreed to participate in some ACRS Subcommittee activities. This will allow the NSRRC to beter understand the ACRS's nuclear safety research needs. At present, the NSRRC does not see the need for joint meetings as long as NSRRC members are informed about the issues being discussed in full ACRS Committee and ACRS Subcommittee meetings.

As to NSRRC participation in ACRS meetings, the NSRRC will look to RES staff to identify appropriate ACRS meetings for NSRRC members to attend. NSRRC members and the Chairman of the NSRRC should be kept informed about ACRS Subcommittee meetings, schedules and agenda subjects as soon as they become available to RES staff. NSRRC members agreed to share the burden of attending the many ACRS Subcommittee meetings by designating only one Committee member to cover each meeting and report back to their respective subcommittees followed by a presentation or report to the full Committee.

The following table compares the various roles and functions of the NSRRC and the ACRS. This table was prepared to point out the differences in Committee assignments and responsibilities, as noted above.

COMPARISON OF ACRS/NSRRC COMMITTEE RESPONSIBILITIES

ACRS	NSRRC
• License application focus.	• Research focus.
• Review safety studies and facility license applications and submit reports as required by NRC regulations.	• Reviews technical content of techniques or methods used to study a given nuclear safety concern or technical issue.
• Focus is on the safety of operations that may require research results.	• Focus on the content and management of research programs.
• Advise NRC on hazards of proposed or existing reactor facilities and the adequacy of proposed safety standards.	• Advises the NRC on the best technical capabilities to address scientific basis for standards.
• Perform other duties NRC may request (including review of the RES program).	• NSRRC primary focus is on safety research methodologies.
• The ACRS may conduct reviews on specific generic matters or nuclear facility safety related items requiring scientific analysis (e.g. steam generator failure modes).	• Kind of safety research to be done in any area of concern (e.g. steam generator tube flaws or cracks occurring as a result of overpressurization).
• Example: The ACRS is concerned with whether risk-informed performance-based regulation (PBR) is a good idea and would lead the NRC in the direction of improving safety with fewer regulations.	• Example: The NSRRC is more concerned with the tools that research needs to provide in order to allow the NRC to be able to go in that direction (PBR).
• ACRS is a safety review committee.	• The NSRRC is a safety research review committee.
• Reviews the effectiveness of RES programs and other NRC offices in connection with the development of rules and standards.	• Reviews RES programs only, looking at the priorities, costs and technical content of safety research programs.

IV. DISCUSSION ON SUBCOMMITTEE ACTIVITIES

NSRRC Subcommittees are: Materials Engineering, Accident Analysis, I&C and Human Factors, Waste and PRA.

Initially, the discussions centered around the Waste Subcommittee and its present role in view of the fact that the high-level waste program has been transferred to NMSS. The ACNW Committee has responsibility in the area of overall risk assessment and performance assessment of the long-term nuclear waste repository, and presently, the only research within RES is related to radionuclide transport in the environment. This program is funded at about $2 million in FY 1996. It was suggested and agreed to by the NSRRC that the Waste Subcommittee name be changed to Radionuclide Transport and that it meet whenever it is desirable but probably no more than once per year.

The Committee also considered whether the PRA and the I&C and Human Factors Subcommittees should be combined. After some discussion, it was agreed to keep these Subcommittees separate because the PRA Subcommittee is focused on the research needs in support of performance-based regulation, which is quite different from the responsibilities of the other Subcommittee. One of the big issues in PRA is the handling of uncertainty in the broad range of phenomena that are dealt with in nuclear reactor safety.

It was also agreed to leave the Accident Analysis Subcommittee in place and have George Bankoff named as the new Chairman now that Tony Baratta has officially resigned from the NSRRC. Bankoff would not serve on the PRA Subcommittee.

Regarding Subcommittee meetings, it was suggested by Dr. Morrison that we have at least one Subcommittee meeting in February/March 1997, before the budget calls and prior to a full Committee meeting which should be in late March or April 1997. Preliminary Committee schedules are to be proposed and sent out to all members in the coming weeks. This schedule would then be used to inform the ACRS about the NSRRC calendar of meetings. Dr. Cortez will get a proposed calendar from T. Boulette and inform everyone including the ACRS. Dr. Boulette suggested that all Subcommittees (other than the Radionuclide Subcommittee) meet at least twice a year and he also plans to schedule two full Committee meetings during 1997. These meetings should be in April and October in such a way as to satisfy the RES Director's needs. Dr. Boulette suggested that meeting dates be set by the 1st of December of this year for the meetings to be held in March/April 1997, and only tentative dates established for all the fall meetings.

V. DISCUSSIONS ON MEETING STRUCTURE AND PROCEDURES

Committee Chairman (Boulette) requested feedback from the RES staff on the recommendations made by the NSRRC, in terms of what has been useful, accepted, not accepted, modified, as well as the reasons why. In addition, an NSRRC performance evaluation should be done by RES staff and the NSRRC every 2 years to determine the effectiveness of the advice and guidance given by the Committee.

Past performance of Committee should be based on their past recommendations (2-3 years worth of Subcommittee reports) to see what impacts the Committee's recommendations have made on the program. Specific examples of impact should be reported. Feedback from staff on Committee recommendations and/or suggestions is needed in order for the Committee to evaluate its effectiveness on a continuing basis. Specifically, the NSRRC wants response from the staff as to the disposition of recommendations to date. For future meetings, the NSRRC requests an assessment of the actions taken by RES with regard to the recommendations made in previous meetings. NSRRC will develop a "score" sheet on the Committee's recommendations and staff disposition of these recommendations over the years. The responses from the staff should include the basis for the action on recommendation disposition.

VI. APRIL 1997 MEETING - TENTATIVE PLANS

The meeting in April should focus on core competencies by the RES office to carry out its duties to the Commission and help ensure that the Commission maintains an independent technical base. A set of assessment criteria will be developed at this meeting. In addition, the Committee will review its charter for modifications to be consistent with the assessment criteria.

We recommended that the staff provide background materials to Committee members two weeks prior to meetings, including instruction notes to identify what is included and how these materials are to be used during meeting.

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MEETING SUMMARY - ACRS SUBCOMMITTEE ON
REGULATORY POLICIES AND PRACTICES
OCTOBER 17-19, 1996

Introduction

A meeting of the ACRS Subcommittee on Regulatory Policies and Practices was held on October 17-19, 1996 at the Royal Sonesta Hotel, 5 Cambridge Parkway, Cambridge, Massachusetts. The meeting was attended by all of the ACRS members, Dr. Neil Todreas, Dr. John Larkins, and Dr. Richard Savio. The meeting agenda and handouts are included as attachments A and B. The meeting began at 8:30 a.m. on Thursday, October 17, 1996 and adjourned at 12:00 noon on Saturday, October 19, 1996. The slides and other presentation materials used in these discussions are attached.

Meeting Highlights

1. Current ACRS work processes were discussed at some length, There was a general consensus that too much of the Committee members' time is spent on reviews that involve oversight of nearly completed NRC staff work and that there is a strong need for the ACRS to be more proactive in its reviews and in

its selection of areas in which it can best serve the Commission. It was agreed that better and more forward-looking planning and strong ACRS staff technical support would be required if this was to be accomplished. It was noted that there were a number of new Commissioners, new regulatory initiatives, and the likelihood of significant changes in the NRC staff organization.

2. It was generally agreed to that a number of specific ACRS work processes needed to be improved. It was decided that the following changes in work processes would be implemented on a trial basis.

A. Subcommittees should take on more of the functions of "working groups." Specific suggestions/observations were:

(a) Time should be set aside for development of proposed positions at the end of the subcommittee meeting

(b) The development of letters and position papers for ACRS consideration should become more of a subcommittee function rather than a subcommittee chairman function as it currently often is.

B. The present process should be modified to provide more

time for reflection on ACRS letter prior to issuance. NRC staff schedules should be modified when needed as permitted by the Commission.

C. The Subcommittee chairman will provide written or oral summaries prior to presentations on matters under Subcommittee discussion being brought to the ACRS. Where practical, written summaries should be provided before the ACRS discussion to allow time for members' reflection on the issues reviewed by the Subcommittee.

D. The current process for drafting letters suffers from a lack of guidance to the author (now usually the subcommittee chairman) from other members which results in a lack of adequate reflection, and a time-consuming full Committee editing process.

E. The present practice of having Subcommittee meetings scheduled a day or two before the ACRS discussion does not allow adequate time for the development of proposed positions and reflection on the information presented. Attempts should be made in the planning of subcommittees to avoid this type of scheduling. Proposed ACRS letters, developed by the Subcommittee should be distributed prior to the ACRS Full Committee discussion. When needed, written questions should be

provided to the NRC staff to facilitate the NRC staff's preparation for future ACRS discussions. It may be necessary to have NRC staff schedules adjusted to permit this type of process.

3. ACRS Fellows' assignments were discussed. The following three new tasks were assigned:

(a) An analysis of the impact of unresolved GSIs and limitation in the scope of the resolutions for GSIs on reactor operating experiences.

(b) Development of specific examples of how some current high-impact regulatory issues could be resolved using risk-informed or risk-based regulatory approaches.

(c) Development of a trial set of plant system reliability goals that could be used in conjunction with the Safety Goal Policy.

It is expected that the ACRS will in the near future agree to a plan for its review of nuclear safety research. The ACRS Fellows will be assigned the task of providing support for this review.

4. There were discussions relating to what the current

important regulatory safety issues were. It was general agreement on the following list of issues.

(a) Regulatory reform and the use of risk information in regulatory decision making.

(b) Implementation and use of the NRC Safety Goal Policy.

(c) Adequacy of engineering analysis tools and industry codes and standards.

(d) Regulatory safety research, including:

(1) Effectiveness of the NRC-sponsored research programs

(2) Regulatory Safety issues that are not adequately being addressed in any research program

(e) Issues arising from utility deregulation and increased competiveness, including use of high burnup fuel, power increases, changes in technical specifications, and personnel reductions

(f) Lessons learned from plant operating experience.

(g) Lessons learned from Maine Yankee and Millstone experiences

(h) Utility involvement with DOE work, including tritium production, the use of mixed oxide fuel, and the disposal of weapons plutonium

(i) International activities

(j) Use of risk monitors and other "online" PRA calculations as operator information devices

(k) Thermal hydraulic phenomena issues

(l) Consideration of the use of French codes (or other non-U.S. codes) to the extent that such codes exist and are available in the NRC thermal hydraulic code improvement effort.

(m) Safety issues associated with onsite spent fuel storage

(n) Maintenance Rule implementation

(o) Scope of the resolution of GSIs and impact of the lack of resolution for unresolved GSIs

(p) Sabotage

(q) License renewal

(r) Materials performance issues

5. The regulatory need for Level-3 PRAs was debated. Arguments for performance of Level-3 PRA were (a) that this level of analysis was needed to quantify health effect risk, (b) that the Safety Goal Policy Goals were stated in terms of health effects, and (c) that performance measurement based on Level 1 criteria (such as core-melt-frequency) did not provide credit for the benefits associated with isolated sites. Arguments against reliance on Level 3 analysis were the uncertainties associated with this type of analysis and the cost and difficulty of implementing such a program.

6. The underlying philosophy for and the use of ALARA and defense-in-depth principles were discussed. It was suggested that defense-in-depth could be viewed as an approach for managing the effects of uncertainty in the prediction of the design performance. It was also noted that ALARA was directed toward the use of available technology rather than the reduction of risk and was often costly relative to its risk-reduction benefit. There was some discussion as to at what "levels" in the plant design

that defense-in-depth principles should be applied. There appeared to be a consensus that defense-in-depth should be applied at the highest system level of plant design and not at component or subsystems levels.

7. The ACRS review of the NRC staff proposed rule on shutdown risk was discussed. There was a general consensus that the ACRS should strongly encourage the NRC staff to perform Level 3 PRAs which include substantitive uncertainty analysis for a representative sample of plants.

8. The impact of the utility deregulation (brought about by the enactment of the Energy Policy Act of 1992) and the impact of an increased focus on economics on plant operating margins was discussed. The members' concerns were: (1) that cost-driven changes in technical specifications would significantly reduce operating margins, (2) that there would be an increased use of on-line maintenance with attendant potential for adverse impact on safety margins, and (3) the margins for fuel rod integrity would be significantly reduced as the allowable burnup was increased.

To: **PLANNING AND PROCEDURES SUBCOMMITTEE**

From: D.A. Powers

Subject: **SAFETY OVERSIGHT OF DOE NUCLEAR FACILITIES**

I have been told by sources within the Department of Energy that there is now a ten-year plan for the NRC to assume responsibilities for the safety oversight of DOE nuclear facilities. Clinton is to propose legislation quite soon - perhaps even as part of the State of the Union Address. If not then within a month or two of the inauguration!

I think all this could have an enormous impact on our work load and certainly has ramifications concerning our report to Congress.

To: **PLANNING AND PROCEDURES SUBCOMMITTEE**

From: D.A. Powers

Subject: **Amendments to 10CFR Part 71.18, 71.22, and 71.53**

I have examined the proposed amendments to 10CFR Part 71 to deal with the shipment of fissile materials containing special moderators. I do not feel it essential that ACRS review the proposed amendments or the circumstances surrounding the need for these amendments.

The proposed amendments to 10 CFR 71 deal with the shipment of fissile materials containing moderators other than water. These other moderators include deuterium, graphite and beryllium. The need to amend the regulation was identified by engineers at Babcock and Wilcox in connection with their work to degrade weapons grade fissile materials from Kazikstan. The original rule anticipated that fissile materials would not be shipped with moderators other than water. The unusual work now being done at Babcock and Wilcox involves production of uranium beryllium mixtures. Engineers there found they could not provide adequate assurance that critical configurations of this material would be prevented even though shipment would be in compliance with all applicable regulations.

Additional instances may arise in which the specificity of NRC regulations has been based on assumptions concerning conventional activities especially nuclear power activities. As new, unusual activities arise, the existing regulations may not provide adequate protection of the public health and safety. It seems that this is especially likely as:

- DOE embarks on the use of commercial power reactors to produce tritium,
- DOE explores the use of commercial power reactors to burn plutonium in mixed oxide fuels, and
- more generally as NRC embarks on regulating nuclear activities at DOE sites.

Similar situations may arise as the U.S. nuclear industry strives to become more cost competitive.

It may therefore be of some use to begin a systematic process of re-examination of regulations that are overly specific to the point that they do not provide adequate protection of the public when new or innovative nuclear activities are undertaken. The Commissioners have asked ACRS to look at things the rest of the agency is not examining. This might, then, be a fertile field for ACRS to examine in the future.

cc:

Medhat El-Zeftawy

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