



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
WASHINGTON, D. C. 20555

FEB 17 1981

William J. Dircks  
Acting Executive Director for Operations

Attn: T. Rehm

Subj: 246TH ACRS ACTIONS, AGREEMENTS, ASSIGNMENTS, AND REQUESTS

Based on discussions regarding methods for improved implementation and follow-up of ACRS recommendations, the Committee agreed that a summary of Actions, Agreements, Assignments, and Requests made during each full Committee meeting will be sent to the NRC Staff following each meeting.

Attached in response to this agreement is a summary for the 246th ACRS meeting. This list has the concurrence of the ACRS Chairman and designated ACRS members as will all future lists provided for follow-up purposes.

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Please note the appearance of a series of numbers on the attached ACRS letters and reports. The numbers will identify the "ACRS requests" to the NRC Staff, and are being used by the ACRS Office as control numbers to these requests. We would find it helpful if the NRC Staff would use these numbers to identify their responses to these requests. Questions regarding this system can be addressed to J. M. Jacobs, 634-1406.

*R. F. Fraley*  
R. F. Fraley  
Executive Director

cc: C. Michelson, AEOD  
H. Denton, NRR  
R. Minogue, SS  
T. Murley, RES  
V. Stello, I&E  
R. Cunningham, NMSS  
ACRS Members

attachments:  
As stated

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Date... 2/12/81  
Time... 9:24

Issue Date:  
FEB 17 1981

(FOIA EXEMPTION (b)5)

ACTIONS, AGREEMENTS, ASSIGNMENTS AND REQUESTS  
246TH ACRS MEETING, OCTOBER 9-11, 1980

1. Seismic Qualification of Auxiliary Feedwater Systems

The Committee prepared a memorandum to the Executive Director for Operations providing its comments on the use of quantitative risk analysis in making decisions regarding the seismic qualification of auxiliary feedwater systems.

2. ACRS Comments on ATWS

The Committee prepared a memorandum to the Executive Director for Operations requesting the NRC Staff's views regarding the reliability of the GE BWR/6 nuclear power plant high pressure injection system.

3. Bingham Amendment

The Committee authorized a memorandum from the ACRS Executive Director to the Executive Director for Operations providing comments on the NRC Staff's preliminary plans for addressing the requirements in Sec. 110 of the FY-80 NRC Authorization Bill (Bingham Amendment).

SCHEDULE OF 1981 ACRS MEETINGS

Meeting No. Date

249 - January 8-10  
250 - February 5-7  
251 - March 12-14  
252 - April 9-11  
253 - May 7-9  
254 - June 4-6

Meeting No. Date

255 - July 9-11  
256 - August 6-8  
257 - September 10-12  
258 - October 15-17  
259 - November 12-14  
260 - December 10-12



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October 15, 1980

**POOR ORIGINAL**

Mr. William J. Dircks  
Executive Director for Operations  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

SUBJECT: SEISMIC QUALIFICATION OF AUXILIARY FEEDWATER SYSTEMS

Dear Mr. Dircks:

In a letter to you dated June 10, 1980, the Advisory Committee on Reactor Safeguards expressed its concern that the NRC Staff's level of effort in reviewing the seismic qualification of auxiliary feedwater systems might not be consistent with timely resolution of the matter. We recommended that the necessary manpower be committed to assure completion of the Staff's short-term review in two or three months. We recommended also that the affected licensees perform independent reviews of this matter on the same time scale.

In a memorandum to Chairman Ahearn dated August 27, 1980 Harold R. Denton transmitted a memorandum dated August 8, 1980 from Roger J. Mattson to Darrell G. Eisenhut which described an interim risk study. Mr. Denton stated that the study indicates that the risk to the public health and safety for the next three years is acceptable and that the plants could be permitted to continue to operate during this period. Mr. Denton also stated that a bounding analysis, using conservative assumptions regarding seismic damage to auxiliary feedwater equipment, shows that operation for the next several months would not result in an unacceptable increase in risk to the public.

We continued to review this matter during our 246th meeting, October 9-11, 1980. In our review we had the benefit of a Subcommittee meeting on October 8, 1980.

We offer the following observations and recommendations:

1. The interim risk analysis performed by the Staff is useful. The Committee notes that this study does not appear to have been subjected to independent peer review or given the necessary degree of quality assurance that a risk analysis, which may enter importantly into safety decision making, should receive.

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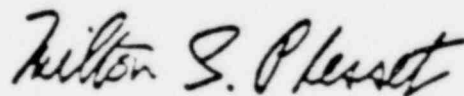
A-643

**DUPLICATE**

October 15, 1980

2. The August 8, 1980 memorandum from Roger Mattson does not provide the expected (or mean) value of risk. Since detailed knowledge of all the components, equipment, and systems important to the auxiliary feedwater function is not available to the Staff, it is not clear that a sound basis exists for the terms "conservative" or "very conservative" which are used in this memorandum. Under these circumstances, it is possible that for one or more of the plants, the risk will be found to be larger than that estimated.
3. The Staff's estimated risks of a seismic event causing a serious accident due to loss of shutdown heat removal capability range from six to fifteen times the estimated risk of core melt due to all causes for the PWR examined in WASH-1400. The Staff has proposed a course of action in terms of these estimated risks which implies a quantitative safety goal and a threshold risk level for certain kinds of action. Such safety goals and action levels may prove to be acceptable to the NRC after review and evaluation. However, we believe that these should not become de facto criteria without the benefit of proper consideration. Furthermore, in the absence of an evaluation of the uncertainties in and the expected value of the risk, the risk estimates presented may not be representative of the actual risk.  
*80-10-01-Q01*
4. The risk estimates presented in the memorandum from Roger Mattson of August 8, 1980 are large enough, if accurate, to warrant considerable priority by the NRC and the affected utilities. In particular, efforts should be made to better quantify the risk on a plant specific basis in the next few months. Furthermore, we recommend that each affected licensee be asked to review his specific plant design and to take early remedial measures, as practical, if there is reason to suspect that any important aspect of the auxiliary feedwater system is likely not to perform its function during an earthquake similar to a safe shutdown earthquake for the plant.
5. We agree with the Staff that high priority should be given to resolution of this matter. We expect to continue to follow this subject closely.

Sincerely,

Milton S. Plesset  
Chairman**POOR ORIGINAL**

A-644



CLEAR REGULATORY COMMISSION  
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
WASHINGTON, D. C. 20555

October 14, 1980

MEMORANDUM FOR: William J. Dincks, Executive Director for Operations  
FROM: R. F. Fraley, *R.F. Fraley* Executive Director  
SUBJECT: ACRS COMMENTS ON ATWS

In its April 16, 1980 letter on ATWS, the ACRS commented that "For new GE plants and those in early stages of construction, it is recommended that increased reliability be incorporated in systems which can deliver water to the vessel under the operating pressure expected after an ATWS". This recommendation was based primarily on the Committee's interpretation of operating experience with early BWRs and was not meant to imply that the BWR 5/6 system necessarily had similar problems.

It is the Committee's understanding that the Staff's concerns about high pressure injection system reliability were also based on performance of earlier BWR systems.

80-10-02-Q01

Please provide us the Staff's view on whether the BWR 5/6 system is judged to have the reliability appropriate to a source of high pressure water which might be needed under ATWS conditions.

**POOR ORIGINAL**

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UNITED STATES  
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WASHINGTON, D. C. 20555

October 14, 1980

MEMORANDUM FOR: William J. Dircks, Executive Director for Operations  
FROM: Raymond F. Fraley, *Raymond F. Fraley* Executive Director, ACRS  
SUBJECT: COMMENTS ON THE NRC STAFF'S PRELIMINARY PLANS FOR ADDRESSING  
THE REQUIREMENTS IN SECTION 110 OF THE FY-80 NRC AUTHORIZA-  
TION BILL

During its 246th meeting, October 9-11, 1980, the ACRS discussed with the NRC Staff their preliminary plans for addressing the requirements of Section 110 of the NRC FY-80 Authorization Bill. The Staff also discussed this subject with the Reactor Operations Subcommittee on October 7, 1980 and requested ACRS comments. The Committee had the benefit of written comments by the Atomic Industrial Forum.

80-10-03-001

It is the Committee's view that the lists derived from Criteria II and III as currently presented by the NRC Staff do not include all the items of particular significance to safety. For example, General Design Criterion 29 is not included. Additional screening should be done to ensure that all items of particular significance are included. The Committee also recommends that some other groups within the NRC Staff, such as PAS and AEOD, carry out an independent review in order to increase the likelihood that the screening process has not omitted items of particular significance. This review could also be used to establish a priority, based on risk reduction potential, in which the review items should be addressed.

The Committee noted your comment on SECY-80-414 and endorses your intent to implement tight management controls to limit staff and industry effort to areas of potential safety payoff; guarding against the potential for a large drain on Staff and licensee resources that would not produce commensurate improvements in safety. The Committee would appreciate being kept informed of additional developments in this area, particularly on the nature of comments received as a result of the call for public comments scheduled to begin following issuance by the Staff of the final draft plan for addressing Section 110.

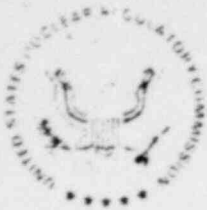
cc: ACRS Members  
H. Denton, NRR  
F. Schroeder, DST  
M. Ernst, DST  
G. Zech, NRR  
S. Chilk, SECY

**POOR ORIGINAL**

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ACRS Members  
attachment:  
As stated

**POOR ORIGINAL**

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Issue Date:

FEB 17 1981

(FOIA EXEMPTION (b)5)

ACTIONS, AGREEMENTS, ASSIGNMENTS, AND REQUESTS  
247TH ACRS MEETING, NOVEMBER 6-8, 1980

1. During discussion of the Diablo Canyon Study on seismically induced systems interactions, M. Bender requested that the NRC Staff provide the Committee with a list of items still outstanding regarding the issuance of an OL for Diablo Canyon. B. Buckley, NRC Staff, agreed to provide such a list. *by B. Buckley 12/22/80* 80-11-01-Q01
2. The Committee requested that the NRC provide man-rem doses resulting from the planned "walk-through" of Indian Point for the systems interactions study suggested by the Committee. The NRC project manager will be requested to provide this information 80-11-02-Q01