

D861113

MEMORANDUM FOR: Victor Stello, Jr.  
Executive Director for Operations

FROM: R. F. Fraley  
Executive Director, ACRS

SUBJECT: ACRS COMMENTS ON THE PRIORITIZATION OF THE FOURTH  
GROUP OF GENERIC ISSUES

During its 319th meeting, November 6-8, 1986, the ACRS reviewed the adequacy of the proposed priority rankings for a group of Generic Issues identified in the attached Table 1, and its comments are contained in the following attachments.

- ~ Attachment 1 lists those issues for which the ACRS agrees with the priority rankings proposed by the NRC Staff.
- ~ Attachment 2 includes a list of issues for which the ACRS agrees with the priority rankings proposed by the NRC Staff, but has comments.
- ~ Attachment 3 identifies the Generic Issue for which the ACRS disagrees with the NRC Staff's proposed priority ranking along with the reasons therefor.

Comments on Generic Issue 61, "SRV Line Break Inside the BWR Wetwell Airspace of Mark I and Mark II Containments," have been deferred pending additional review by the ACRS.

It is requested that the NRC Staff provide written responses to the ACRS comments identified in Attachments 2 and 3.

The ACRS will continue its review of the adequacy of the proposed priority rankings for additional Generic Issues when they become available.

Attachments: As Stated

TABLE 1

GENERIC ISSUES REVIEWED BY THE ACRS DURING  
THE 319TH, NOVEMBER 6-8, 1986 MEETING

GENERIC ISSUE NUMBER	TITLE	PRIORITY RANKINGS PROPOSED BY THE STAFF	REFERENCE DOCUMENT
21	Vibration Qualification of Equipment	DROP	Memorandum from Denton, dated June 23, 1986
61	SRV Line Break Inside the BWR Wetwell Airspace of Mark I and Mark II Containments	RESOLVED	Memorandum from Denton, dated August 8, 1986
74	Reactor Coolant Activity Limits for Operating Reactors	DROP	Memorandum from Denton, dated May 30, 1986
103	Design for Probable Maximum Precipitation	NEARLY RESOLVED	Memorandum from Denton, dated September 4, 1985
111	Stress Corrosion Cracking of Pressure Boundary Ferritic Steels in Selected Environments	LICENSING ISSUE	Memorandum from Denton, dated November 22, 1985
114	Seismic-Induced Relay Chatter	Covered in USI A-46, "Seismic Qualification of Equipment in Operating Plants"	Memorandum from Denton, dated June 25, 1986
115	Enhancement of the Reliability of Westinghouse Solid State Protection System	HIGH	Memorandum from Denton, dated July 7, 1986

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TABLE 1 (Cont'd)

GENERIC ISSUE NUMBER	TITLE	PRIORITY RANKINGS PROPOSED BY THE STAFF	REFERENCE DOCUMENT
122	Davis-Besse Loss of All		Memorandum from

Feedwater Event - Short-Term  
Actions

Denton, dated  
January 28, 1986

122.1.a	Common Mode Failure of Isolation Valves in Closed Position	HIGH	
122.1.b	Recovery of Auxiliary Feedwater	MEDIUM	
122.1.c	Interruption of Auxiliary Feedwater Flow	HIGH	
122.2	Initiating Feed-and-Bleed	HIGH	
122.3	Physical Security System Constraints	LOW	
125	Davis-Besse Loss of All Feedwater Event - Long-Term Actions		Memorandum from Denton, dated June 30, 1986
125.I.2.a	Need for a Test Program to Establish Reliability of the PORV	Covered in Generic Issue 70, "PORV and Block Valve Reliability"	
125.I.2.b	Need for PORV Surveillance Tests to Confirm Operational Readiness	Covered in Generic Issue 70, "PORV and Block Valve Reliability"	
125.I.2.c	Need for Additional Protection Against PORV Failure	RESOLVED	
125.I.2.d	Capability of the PORV to Support Feed-and-Bleed	Covered in USI A-45, "Shutdown Decay Heat Removal Requirements"	

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TABLE 1 (Cont'd)

GENERIC ISSUE NUMBER	TITLE	PRIORITY RANKINGS PROPOSED BY THE STAFF	REFERENCE DOCUMENT
125.II.3	Review Steam/Feedline Break Mitigation Systems for Single Failure	DROP (Safety Concerns of this Issue have	Memorandum from Denton, dated August 27, 1986

been addressed in  
Generic Issues  
125.II.1.b and  
125.II.7)

125.II.4	Thermal Stress of Once-Through Steam Generator Components	DROP	Memorandum from Denton, dated Sept. 10, 1986
125.II.7	Reevaluate Provisions to Automatically Isolate Feedwater from Steam Generator During a Line Break	HIGH	Memorandum from Denton, dated Sept. 10, 1986
125.II.9	Enhanced Feed-and-Bleed Capability	Covered in USI A-45, "Shutdown Decay Heat Removal Requirements"	Memorandum from Denton, dated August 27, 1986
125.II.14	Remote Operation of Equipment Which Must Now be Operated Locally	LOW	Memorandum from Denton, dated August 27, 1986
C-4	Statistical Methods for ECCS Analysis	REGULATORY IMPACT ISSUE (RESOLVED)	Memorandum from Denton, dated June 23, 1986
C-5	Decay Heat Update	REGULATORY IMPACT ISSUE (RESOLVED)	Memorandum from Denton, dated June 23, 1986
C-6	LOCA Heat Sources	REGULATORY IMPACT ISSUE (RESOLVED)	Memorandum from Denton, dated June 24, 1986

ATTACHMENT 1

LIST OF GENERIC ISSUES FOR WHICH  
THE ACRS AGREES WITH THE  
PRIORITY RANKINGS PROPOSED BY THE NRC STAFF

GENERIC ISSUE NO.	TITLE
21	Vibration Qualification of Equipment
111	Stress Corrosion Cracking of Pressure Boundary Ferritic Steels in Selected Environments
122.1.a	Common Mode Failure of Isolation Valves in Closed Position
122.1.b	Recovery of Auxiliary Feedwater
122.1.c	Interruption of Auxiliary Feedwater Flow

- 122.2 Initiating Feed-and-Bleed
- 122.3 Physical Security System Constraints
- 125.I.2.a Need for a Test Program to Establish Reliability of the PORV
- 125.I.2.b Need for PORV Surveillance Tests to Confirm Operational Readiness
- 125.I.2.c Need for Additional Protection Against PORV Failure
- 125.I.2.d Capability of the PORV to support Feed-and-Bleed
- 125.II.3 Review Steam/Feedline Break Mitigation Systems for Single Failure
- 125.II.4 Thermal Stress of Once-Through Steam Generator Components
- 125.II.7 Reevaluate Provisions to Automatically Isolate Feedwater from Steam Generator During a Line Break
- 125.II.9 Enhanced Feed-and-Bleed Capability
- 125.II.14 Remote Operation of Equipment Which Must Now be Operated Locally
- C-4 Statistical Methods for ECCS Analysis
- C-5 Decay Heat Update
- C-6 LOCA Heat Sources

ATTACHMENT 2

LIST OF ISSUES FOR WHICH THE ACRS AGREES  
WITH THE PROPOSED PRIORITY RANKINGS,  
BUT WITH COMMENTS

Generic  
Issue No: 74

Title: Reactor Coolant Activity Limits for  
Operating Reactors

Priority Ranking  
Proposed By The NRC Staff: DROP

ACRS Comments:

The ACRS agrees with the proposed priority ranking for this issue. However, it offers the following comment:

Although the ACRS concurs, in general, in the NRC Staff's assessment of the expected savings in occupational radiation exposures at Boiling Water Reactors (BWRs) owing to the assumed implementation of more stringent controls, consideration might be given to refining these calculations when data for BWRs, similar to those published in NUREG/CR-4485, "The Impact of Fuel Cladding Failure Events on Occupational Radiation Exposures at Nuclear Power Plants," for pressurized water reactors, become available.

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ATTACHMENT 2 (Cont'd)

Generic

Issue No:

103

Title:

Design for Probable Maximum Precipitation

Priority Ranking

Proposed By The NRC Staff:

Nearly Resolved

ACRS Comments:

Both the description and the resolution of this issue are unclear.

The technical issue of what probable maximum precipitation (PMP) values should be used to determine flood levels at reactor sites would appear to be moot since the Staff has traditionally relied on the expertise and recommendations of NOAA for such values.

The regulatory issue of whether current NOAA values of PMP should be used to determine flood levels at existing plants has not been resolved. A decision has been made by the Staff that a request for new calculations of flood levels at NTOL plants is a backfit\* and thus is not required; such calculations are being made by the Staff rather than being requested of the applicant. Presumably, no such calculations have been requested or are being made by the Staff for existing plants.

The ACRS believes that the safety issue of

possible flooding at plant sites has not been resolved for either existing or NTOL plants. Apparently, it has been resolved for future plants by changes in the Standard Review Plan.

- \* The ACRS has difficulty in understanding how the backfit rule can be applied because of the absence of any accepted means of quantifying the risk.

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ATTACHMENT 2 (Cont'd)

Generic

Issue No: 115

Title: Enhancement of the Reliability of Westinghouse Solid State Protection System

Priority Ranking

Proposed By The NRC Staff: HIGH

ACRS Comments: The ACRS has concerns about some parts of the Staff's analysis in connection with this Generic Issue:

~ Data used in the analysis appear to result from the treatment of testing-induced failures as random failures. Given this approach, if one chose to increase the testing rate in an effort to increase reliability, the failure rate would probably increase as well.

~ The analysis of risk reduction appears to put principal emphasis on the operation (or lack of operation) of the undervoltage trip system. Since experience indicates that this trip system is less reliable than the shunt trip system, the approach seems incomplete. The ACRS recognizes that the original intent of an undervoltage trip system was to satisfy a

"fail safe" criterion. However, notable failures have occurred in this system that were not "fail safe."

ATTACHMENT 3

GENERIC ISSUE FOR WHICH THE ACRS DISAGREES  
WITH THE PRIORITY RANKING  
PROPOSED BY THE NRC STAFF

Generic Issue No: 114

Title: Seismic-Induced Relay Chatter

Priority Ranking Proposed by the NRC Staff: Covered in USI A-46, "Seismic Qualification of Equipment in Operating Plants"

ACRS Comments: The Staff has concluded that the work being done in connection with resolution of USI A-46 and the Seismic Margins program as well as related programs cover the intent of Generic Issue 114 and therefore it need not be pursued as a separate issue. The ACRS does not agree and finds the proposed resolution to Generic Issue 114 unacceptable, for the following reasons:

- ~ Generic Issue 114 was to address the effects of seismic-induced relay chatter upon the safety and safety-related electrical and control systems as applied to all plants. USI A-46 applies to and is limited to operating plants which were docketed prior to 1972. There is no indication that USI A-46 will be expanded to cover plants docketed since 1972. Therefore, the ACRS concludes that these plants will not have been adequately reviewed for the effects of seismic-induced relay chatter.
- ~ There is no indication that the Seismic Margins Program and related programs will adequately address seismic-induced relay chatter for earthquakes above the SSE.



