



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

October 3, 1989

The Honorable J. Bennett Johnston, Chairman  
Subcommittee on Energy and Water Development  
Committee on Appropriations  
United States Senate  
Washington, D.C. 20510

Dear Mr. Chairman:

Enclosed for the information of the Subcommittee on Energy and Water Development is the final resolution of Unresolved Safety Issue (USI) A-17 "Systems Interactions in Nuclear Power Plants." The resolution consists of the enclosed NUREG reports entitled "Evaluation of Systems Interactions in Nuclear Power Plants - Technical Findings Related to USI A-17", (NUREG-1174), and "Regulatory Analysis for Resolution of USI A-17", (NUREG-1229).

USI A-17 was identified as an Unresolved Safety Issue in the 1978 NRC Annual Report pursuant to Section 210 of the Energy Reorganization Act of 1974 as amended on December 13, 1977.

The staff concluded from its USI A-17 investigations that certain actions should be taken by the NRC. These actions include guidance to the staff for use in the review and development of probabilistic risk assessments (PRA). The staff will disseminate general insights and lessons learned relevant to licensees' ongoing evaluations of reactor plant operating experience. The resolution also provides reactor licensees with more specific guidance and insights regarding flooding (including water intrusion) vulnerabilities from plant internal sources. It is expected that this guidance and insights will be taken into account by licensees in performing the Individual Plant Examinations (IPE) called for by Generic Letter 88-20.

The staff further concluded from its USI A-17 investigations that certain older plants should perform seismic system interaction reviews. However, these reviews are required to be performed as a part of the USI A-46 implementation; therefore, a separate requirement under USI A-17 is not necessary.

The staff has issued the two NUREG reports which include the recommended actions for resolution of USI A-17. The Federal Register notice regarding these issuances is enclosed.

Sincerely,

Eric S. Beckjord, Director  
Office of Nuclear Regulatory Research

Enclosures: See following page

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PDR NUREG  
1174 C PDR

The Honorable J. Bennett Johnston

2

Enclosures:

1. NUREG-1174
2. NUREG-1229
3. Federal Register Notice  
and Summary Statement

cc w/encl: The Honorable Mark O. Hatfield

The Honorable J. Bennett Johnston

2

Enclosures:

- 1. NUREG-1174
- 2. NUREG-1229
- 3. Federal Register Notice  
and Summary Statement

cc w/encl: The Honorable Mark O. Hatfield

Distribution

- RES Chron
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- E. Beckjord
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- W. Houston
- W. Minners
- R. Baer
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- OCA

[LTR HONORABLE J. B. JOHNSTON]

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

October 3, 1989

The Honorable Mike Synar, Chairman  
Subcommittee on Environment, Energy  
and Natural Resources  
Committee on Government Operations  
United States House of Representatives  
Washington, D.C. 20515

Dear Mr. Chairman:

Enclosed for the information of the Subcommittee on Environment, Energy and Natural Resources is the final resolution of Unresolved Safety Issue (USI) A-17 "Systems Interactions in Nuclear Power Plants." The resolution consists of the enclosed NUREG reports entitled, "Evaluation of Systems Interactions in Nuclear Power Plants - Technical Findings Related to USI A-17", (NUREG-1174), and "Regulatory Analysis for Resolution of USI A-17", (NUREG-1229).

USI A-17 was identified as an Unresolved Safety Issue in the 1978 NRC Annual Report pursuant to Section 210 of the Energy Reorganization Act of 1974 as amended on December 13, 1977.

The staff concluded from its USI A-17 investigations that certain actions should be taken by the NRC. These actions include guidance to the staff for use in the review and development of probabilistic risk assessments (PRA). The staff will disseminate general insights and lessons learned relevant to licensees' ongoing evaluations of reactor plant operating experience. The resolution also provides reactor licensees with more specific guidance and insights regarding flooding (including water intrusion) vulnerabilities from plant internal sources. It is expected that this guidance and insights will be taken into account by licensees in performing the Individual Plant Examinations (IPE) called for by Generic Letter 88-20.

The staff further concluded from its USI A-17 investigations that certain older plants should perform seismic system interaction reviews. However, these reviews are required to be performed as a part of the USI A-46 implementation; therefore, a separate requirement under USI A-17 is not necessary.

The staff has issued the two NUREG reports which include the recommended actions for resolution of USI A-17. The Federal Register notice regarding these issuances is enclosed.

Sincerely,

A handwritten signature in cursive script, appearing to read "E. Beckjord".

Eric S. Beckjord, Director  
Office of Nuclear Regulatory Research

Enclosures: See following page

The Honorable Mike Synar

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Enclosures:

1. NUREG-1174
2. NUREG-1229
3. Federal Register Notice  
and Summary Statement

cc w/encl: Representative William F. Clinger, Jr.

The Honorable Mike Synar

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Enclosures:

- 1. NUREG-1174
- 2. NUREG-1229
- 3. Federal Register Notice  
and Summary Statement

cc w/encl: Representative William F. Clinger, Jr.

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[LTR TO HONORABLE MIKE SYNAR]

\*SEE PREVIOUS CONCURRENCE

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

October 3, 1989

The Honorable John B. Breaux, Chairman  
Subcommittee on Nuclear Regulation  
Committee on Environment and Public Works  
United States Senate  
Washington, D.C. 20510

Dear Mr. Chairman:

Enclosed for the information of the Subcommittee on Nuclear Regulation is the final resolution of Unresolved Safety Issue (USI) A-17 "Systems Interactions in Nuclear Power Plants." The resolution consists of the enclosed NUREG reports entitled, "Evaluation of Systems Interactions in Nuclear Power Plants - Technical Findings Related to USI A-17", (NUREG-1174), and "Regulatory Analysis for Resolution of USI A-17", (NUREG-1229).

USI A-17 was identified as an Unresolved Safety Issue in the 1978 NRC Annual Report pursuant to Section 210 of the Energy Reorganization Act of 1974 as amended on December 13, 1977.

The staff concluded from its USI A-17 investigations that certain actions should be taken by the NRC. These actions include guidance to the staff for use in the review and development of probabilistic risk assessments (PRA). The staff will disseminate general insights and lessons learned relevant to licensees' ongoing evaluations of reactor plant operating experience. The resolution also provides reactor licensees with more specific guidance and insights regarding flooding (including water intrusion) vulnerabilities from plant internal sources. It is expected that this guidance and insights will be taken into account by licensees in performing the Individual Plant Examinations (IPE) called for by Generic Letter 88-20.

The staff further concluded from its USI A-17 investigations that certain older plants should perform seismic system interaction reviews. However, these reviews are required to be performed as a part of the USI A-46 implementation; therefore, a separate requirement under USI A-17 is not necessary.

The staff has issued the two NUREG reports which include the recommended actions for resolution of USI A-17. The Federal Register notice regarding these issuances is enclosed.

Sincerely,

A handwritten signature in cursive script, appearing to read "E. S. Beckjord".

Eric S. Beckjord, Director  
Office of Nuclear Regulatory Research

Enclosures: See following page

The Honorable John B. Breaux

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Enclosures:

1. NUREG-1174
2. NUREG-1229
3. Federal Register Notice  
and Summary Statement

cc w/encl: Senator Alan K. Simpson



The Honorable John B. Breaux

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- 3. Federal Register Notice  
and Summary Statement

cc w/encl: Senator Alan K. Simpson

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[LTR HONORABLE JOHN B. BREUX]

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

October 3, 1989

The Honorable Philip R. Sharp, Chairman  
Subcommittee on Energy and Power  
Committee on Energy and Commerce  
United States House of Representatives  
Washington, D.C. 20515

Dear Mr. Chairman:

Enclosed for the information of the Subcommittee on Energy and Power is the final resolution of Unresolved Safety Issue (USI) A-17 "Systems Interactions in Nuclear Power Plants." The resolution consists of the enclosed NUREG reports entitled, "Evaluation of Systems Interactions in Nuclear Power Plants - Technical Findings Related to USI A-17", (NUREG-1174), and "Regulatory Analysis for Resolution of USI A-17", (NUREG-1229).

USI A-17 was identified as an Unresolved Safety Issue in the 1978 NRC Annual Report pursuant to Section 210 of the Energy Reorganization Act of 1974 as amended on December 13, 1977.

The staff concluded from its USI A-17 investigations that certain actions should be taken by the NRC. These actions include guidance to the staff for use in the review and development of probabilistic risk assessments (PRA). The staff will disseminate general insights and lessons learned relevant to licensees' ongoing evaluations of reactor plant operating experience. The resolution also provides reactor licensees with more specific guidance and insights regarding flooding (including water intrusion) vulnerabilities from plant internal sources. It is expected that this guidance and insights will be taken into account by licensees in performing the Individual Plant Examinations (IPE) called for by Generic Letter 88-20.

The staff further concluded from its USI A-17 investigations that certain older plants should perform seismic system interaction reviews. However, these reviews are required to be performed as a part of the USI A-46 implementation; therefore, a separate requirement under USI A-17 is not necessary.

The staff has issued the two NUREG reports which include the recommended actions for resolution of USI A-17. The Federal Register notice regarding these issuances is enclosed.

Sincerely,

A handwritten signature in cursive script, appearing to read "E. Beckjord".

Eric S. Beckjord, Director  
Office of Nuclear Regulatory Research

Enclosures: See following page

The Honorable Philip Sharp

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Enclosures:

1. NUREG-1174
2. NUREG-1229
3. Federal Register Notice  
and Summary Statement

cc w/encl: Representative Carlos J. Morhead

The Honorable Philip Sharp

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cc w/encl: Representative Carlos J. Morhead

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- D. Rathbun, CA

[LTR TO HONORABLE PHILIP SHARP]

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

October 3, 1989

The Honorable Morris K. Udall, Chairman  
Subcommittee on Energy and the Environment  
Committee on Interior and Insular Affairs  
United States House of Representatives  
Washington, D.C. 20515

Dear Mr. Chairman:

Enclosed for the information of the Subcommittee on Energy and the Environment is the final resolution of Unresolved Safety Issue (USI) A-17 "Systems Interactions in Nuclear Power Plants." The resolution consists of the enclosed NUREG reports entitled, "Evaluation of Systems Interactions in Nuclear Power Plants - Technical Findings Related to USI A-17", (NUREG-1174), and "Regulatory Analysis for Resolution of USI A-17", (NUREG-1229).

USI A-17 was identified as an Unresolved Safety Issue in the 1978 NRC Annual Report pursuant to Section 210 of the Energy Reorganization Act of 1974 as amended on December 13, 1977.

The staff concluded from its USI A-17 investigations that certain actions should be taken by the NRC. These actions include guidance to the staff for use in the review and development of probabilistic risk assessments (PRA). The staff will disseminate general insights and lessons learned relevant to licensees' ongoing evaluations of reactor plant operating experience. The resolution also provides reactor licensees with more specific guidance and insights regarding flooding (including water intrusion) vulnerabilities from plant internal sources. It is expected that this guidance and insights will be taken into account by licensees in performing the Individual Plant Examinations (IPE) called for by Generic Letter 88-20.

The staff further concluded from its USI A-17 investigations that certain older plants should perform seismic system interaction reviews. However, these reviews are required to be performed as a part of the USI A-46 implementation; therefore, a separate requirement under USI A-17 is not necessary.

The staff has issued the two NUREG reports which include the recommended actions for resolution of USI A-17. The Federal Register notice regarding these issuances is enclosed.

Sincerely,

A handwritten signature in dark ink, appearing to read "Eric S. Beckjord".

Eric S. Beckjord, Director  
Office of Nuclear Regulatory Research

Enclosures: See following page

The Honorable Morris K. Udall

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3. Federal Register Notice  
and Summary Statement

cc w/encl: Representative James V. Hansen

Enclosures:

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cc w/encl: Representative James V. Hansen

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[LTR HONORABLE MORRIS UDALL]

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