

## PHILADELPHIA ELECTRIC COMPANY

NUCLEAR GROUP HEADQUARTERS

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June 29, 1990

Docket Nos. 50-277  
50-278  
50-352  
50-353

License Nos. DPR-44  
DPR-56  
NPF-39  
NPF-85

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555

SUBJECT: Peach Bottom Atomic Power Station, Units 2 and 3  
Limerick Generating Station, Units 1 and 2  
Response to Generic Letter 90-04, "Request for Information  
on the Status of Licensee Implementation of Generic Safety  
Issues Resolved with Imposition of Requirements or Corrective Actions"

Gentlemen:

Enclosed is Philadelphia Electric Company's response to the subject Generic Letter for Peach Bottom Atomic Power Station (Enclosures 1 and 2) and Limerick Generating Station (Enclosures 3 and 4). This provides an update on the implementation status of Generic Safety Issues (GSIs), for which the NRC has imposed requirements or corrective actions, in accordance with the instructions of the Generic Letter. The Attachment to this letter defines the acronyms used in Enclosures 1 through 4.

If you have any questions, or require additional information, please do not hesitate to contact us.

Very truly yours,

*G. A. Hunger, Jr.*  
G. A. Hunger, Jr.

Manager-Licensing  
Nuclear Engineering and Services

Attachment  
Enclosures

9007060128 900629  
PDR ADOCK 05000277  
PDC

cc: T. T. Martin, Administrator, Region I, USNRC  
J. J. Lyash, USNRC Senior Resident Inspector, PBAPS  
T. J. Kenny, USNRC Senior Resident Inspector, LGS

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ATTACHMENT

List of Acronyms

B&W	Babcock & Wilcox
BWR	Boiling Water Reactor
BWROG	BWR Owners' Group
FSAR	Final Safety Analysis Report
GL	Generic Letter (NRC)
IGSCC	Intergranular Stress Corrosion Cracking
ISI	In-Service Inspection
LGS	Limerick Generating Station
NRC	Nuclear Regulatory Commission
OL	Operating license (issued by NRC)
PBAPS	Peach Bottom Atomic Power Station
PECo	Philadelphia Electric Company
PWR	Pressurized Water Reactor
SER	Safety Evaluation Report (NRC)
SPDS	Safety Parameter Display System
W	Westinghouse

PEACH BOTTOM ATOMIC POWER STATION

Enclosure 1

Status of Licensee Implementation of  
Generic Safety Issues Resolved With  
Imposition of Requirements or Corrective Actions

DOCKET Nos.

50-277

50-278



FACILITY NAME: PBAPS Units 2 & 3  
 DOCKET NO.: 50-277, 50-278  
 LICENSEE: PECO

- 1 -

STATUS OF LICENSEE IMPLEMENTATION OF GENERIC SAFETY ISSUES  
RESOLVED WITH IMPOSITION OF REQUIREMENTS OR CORRECTIVE ACTIONS

<u>GSI/(MPA No.)</u>	<u>TITLE</u>	<u>APPLICABILITY</u>	<u>UNIT 2 STATUS*</u>	<u>UNIT 3 STATUS*</u>	<u>COMMENTS</u>
40 (B065)	Safety Concerns Associated With Pipe Breaks In The BWR Scram System	All BWRs	C	C	***
41 (B058)	BWR Scram Discharge Volume Systems	All BWRs	C	C	***
43 (B107)	Reliability Of Air Systems	All Plants	I (2/92)	I (2/92)	***
51 (L913)	Improving the Reliability of Open-Cycle Service Water Systems	All Plants	I (4/92)	I (4/92)	***
67.3.3 (A017)	Improved Accident Monitoring	All Plants	E	E	***
75** (B076)	Item 1.1 - Post-Trip Review (Program Description and Procedure)	All Plants	C	C	See NRC SER dated April 15, 1985
75 (B085)	Item 1.2 - Post-Trip Review - Data and Information Capability	All Plants	I (7/92)	I (6/91)	***

\*Please follow attached guidance for completing this column.

\*\*The 16 items listed for GSI 75 all relate to actions derived from the generic implications of Salem ATWS events. Item numbers correspond to Generic Letter 83-28 action item numbers.

\*\*\*See Enclosure 2 for comment. Each comment applies to both units unless otherwise noted.

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<u>GRI/(MPA No.)</u>	<u>TITLE</u>	<u>APPLICABILITY</u>	<u>UNIT 2 STATUS*</u>	<u>UNIT 3 STATUS*</u>	<u>COMMENTS</u>
75 (B077)	Item 2.1 - Equipment Classification and Vendor Interface (Reactor Trip System Components)	All Plants	C	C	***
75 (B086)	Item 2.2.1 - Equipment Classification for Safety-Related Components	All Plants	C	C	See NRC SER dated April 1, 1988
75 (L003)	Item 2.2.2 - Vendor Interface for Safety-Related Components	All Plants	E (9/90)	E (9/90)	Recent NRC guidance issued (GL 90-3)
75 (B078)	Items 3.1.1 & 3.1.2 - Post-Maintenance Testing (Reactor Trip System Components)	All Plants	C	C	***
75 (B079)	Item 3.1.3 - Post-Maintenance Testing-Changes to Test Requirements (Reactor Trip System Components)	All Plants	C	C	See NRC SER dated July 22, 1985
75 (B087)	Items 3.2.1 & 3.2.2 - Post-Maintenance Testing (All Other Safety-Related Components)	All Plants	C	C	***
75 (B088)	Item 3.2.3 - Post-Maintenance Testing-Changes to Test Requirements (All Other Safety-Related Components)	All Plants	C	C	See NRC SER dated July 22, 1985
75 (B080)	Item 4.1 - Reactor Trip System Reliability (Vendor-Related Modifications)	All Plants***	NA	NA	***

\*\*\*See Enclosure 2 for comment. Each comment applies to both units unless otherwise noted.

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<u>GSI/(MPA No.)</u>	<u>TITLE</u>	<u>APPLICABILITY</u>	<u>UNIT 2 STATUS*</u>	<u>UNIT 3 STATUS*</u>	<u>COMMENTS</u>
75 (B081)	Items 4.2.1 & 4.2.2 - Reactor Trip System Reliability-Maintenance and Testing (Preventative Maintenance and Surveillance Program for Reactor Trip Breakers)	All PWRs	NA	NA	PBAPS units are not PWRs
75 (B082)	Item 4.3 - Reactor Trip System Reliability - Design Modifications (Automatic Actuation of Shunt Trip Attachment for Westinghouse and B&W Plants)	All W and B&W Plants	NA	NA	PBAPS units are not W or B&W plants
75 (B090)	Item 4.3 - Reactor Trip System Reliability - Tech Spec Changes (Automatic Actuation of Shunt Trip Attachment For Westinghouse and B&W Plants)	All W & B&W Plants	NA	NA	PBAPS units are not W or B&W plants
75 (B091)	Item 4.4 - Reactor Trip System Reliability (Improvements in Maintenance and Test Procedures for B&W Plants)	All B&W Plants	NA	NA	PRAPS units are not B&W plants



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<u>GSI/(MPA No.)</u>	<u>TITLE</u>	<u>APPLICABILITY</u>	<u>UNIT 2 STATUS*</u>	<u>UNIT 3 STATUS*</u>	<u>COMMENTS</u>
75 (B092)	Item 4.5.1 - Reactor Trip System Reliability-Diverse Trip Features (System Functional Testing)	All Plants	C	C	See NRC SER dated July 24, 1986
75 (B093)	Items 4.5.2 & 4.5.3 - Reactor Trip System Reliability - Test Alternatives and Intervals (System Functional Testing)	All Plants	C	C	See NRC SER dated June 30, 1989 and NRC letter dated March 14, 1985
86 (B084)	Long Range Plan for Dealing with Stress Corrosion Cracking in BWR Piping	All BWRs	C	C	***
93 (B098)	Steam Binding of Auxiliary Feedwater Pumps	All PWRs	NA	NA	PBAPS units are not PWRs
99 (L817)	RCS/RHR Suction Line Valve Interlock on PWRs	All PWRs	NA	NA	PBAPS units are not PWRs
124	Auxiliary Feedwater System Reliability	ANO-1&2, Rancho Seco, Prairie Island 1&2, Crystal River-3, Ft. Calhoun	NA	NA	
A-13 (B017)	Snubber Operability Assurance - Hydraulic Snubbers	All Plants	C	C	***

\*\*\*See Enclosure 2 for comment. Each comment applies to both units unless otherwise noted.

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<u>GSI/(MPA No.)</u>	<u>TITLE</u>	<u>APPLICABILITY</u>	<u>UNIT 2 STATUS*</u>	<u>UNIT 3 STATUS*</u>	<u>COMMENTS</u>
A-13 (B022)	Snubber Operability Assurance - Mechanical Snubbers	All Plants	C	C	***
A-16 (D012)	Steam Effects on BWR Core Spray Distribution	Oyster Creek & NMP-1	NA	NA	
A-35 (B023)	Adequacy of Offsite Power Systems	All Plants	C	C	***
B-10	Behavior of BWR Mark III Containments	All BWR Mark III Plants	NA	NA	PBAPS units do not have Mark III containments
B-36	Develop Design, Testing and Maintenance Criteria for Atmosphere Cleanup System Air Filtration and Adsorption Units for Engineered Safety Features Systems and for Normal Ventilation Systems	All Plants with OL Applications After 4/1/80	NA	NA	OL Application prior to April 1, 1980
B-63 (B045)	Isolation of Low Pressure Systems Connected to the Reactor Coolant System Pressure Boundary	All Plants	C	C	***

\*\*\*See Enclosure 2 for comment. Each comment applies to both units unless otherwise noted.



ENCLOSURE 2

Peach Bottom Atomic Power Station Comments

<u>GSI/(MPA No.)</u>	<u>Comment</u>
40 (B065)	PBAPS conforms to the BWROG recommendations in report BWROG-8420, "Scram Discharge Pipe Integrity, Response to NRC Request for Information," submitted to the NRC on May 10, 1984 (referenced in GL 86-01, "Safety Concerns Associated with Pipe Breaks in the BWR Scram System," dated January 3, 1984), with one minor exception. Scram Discharge Volume piping is inspected, while pressurized, during the Reactor Pressure Vessel hydrostatic test (each refueling outage) as part of a surveillance test, rather than following a scram once per refueling cycle.
41 (B058)	See February 4, 1983 letter to NRC. See Unit 2 License Amendment Nos. 88 and 90. See Unit 3 License Amendment Nos. 88 and 90.
43 (B107)	Actions will be completed as described in February 13, 1989 letter to NRC in response to GL 88-14, "Instrument Air Supply System Problems Affecting Safety-Related Equipment," dated August 8, 1988. Summary report will be submitted within sixty days following restart from the next Unit 3 refueling outage in accordance with commitment in February 13, 1989 letter. Based on current schedule submittal will be in February 1992.

GSI/(MPA No.)Comment

51 (L913)

Actions will be completed as described in January 29, 1990 letter to NRC in response to GL 39-13, "Service Water System Problems Affecting Safety-Related Equipment," dated July 18, 1989. Summary report currently anticipated to be submitted in April 1992 in accordance with commitment in January 29, 1990 letter.

67.3.3 (A017)

Completion of modifications on Unit 2 scheduled for next refueling outage (January-April 1991) in accordance with commitments in September 27, 1984 letter to NRC. Unit 3 modifications in accordance with September 27, 1984 letter commitments are complete. NRC guidance on compliance for neutron flux variable is anticipated in near future. We are participating in BWROG efforts on this matter. See May 14, 1990 letter to NRC.

75 (B085)

Completion of the Plant Process Computer upgrade modification will close out actions associated with this Item. Unit 2 modification is scheduled for completion in July 1992. Unit 3 modification is scheduled for completion in June 1991. See commitment in August 19, 1987 letter to NRC and see January 15, 1988 letter from NRC to PECO closing out the Item. July 11, 1989 letter to NRC accelerated schedule to support completion of the SPDS pursuant to NUREG-0737, Supplement 1. Providing SPDS is part of the Plant Process Computer upgrade modification.

75 (B077)

A March 1989 revision of an Administrative Procedure completed implementation of this Item. See January 23, 1989 letter to NRC.

GSI/(MPA No.)Comment

75 (B078 &amp; B087)

Review of procedures and revision of procedures, where necessary, in accordance with commitments in September 1, 1988 letter to NRC closed out this Item. See July 24, 1986 and August 9, 1988 NRC SERs.

75 (B080)

This Item only applies to PWRs.

86 (B084)

Susceptible pipe replaced. See letters to NRC dated August 2, 1988 and June 4, 1990 and NRC SER dated March 27, 1990 for discussions on inspection schedules and leakage detection (relative to GL 88-01, "NRC Position on IGSCC in BWR Austenitic Stainless Steel Piping," dated January 25, 1988).

A-13 (B017 &amp; B022)

See Unit 2 License Amendment No. 101 and Unit 3 License Amendment No. 103.

A-35 (B023)

See Unit 2 License Amendment Nos. 97 and 143. See Unit 3 License Amendment Nos. 99 and 145.

B-63 (B045)

Not vulnerable to the failure mode of concern (no "Event V isolation valve configurations" at Peach Bottom). See March 19, 1980 letter to NRC.



LIMERICK GENERATING STATION

Enclosure 3

Status of Licensee Implementation of  
Generic Safety Issues Resolved With  
Imposition of Requirements or Corrective Actions

DOCKET Nos.

50-352

50-353

## ENCLOSURE 3

FACILITY NAME: LGS Units 1 & 2  
 DOCKET NO.: 50-352, 50-353  
 LICENSEE: PECo

- 1 -

STATUS OF LICENSEE IMPLEMENTATION OF GENERIC SAFETY ISSUES  
RESOLVED WITH IMPOSITION OF REQUIREMENTS OR CORRECTIVE ACTIONS

<u>GSI/(MPA No.)</u>	<u>TITLE</u>	<u>APPLICABILITY</u>	<u>UNIT 1 STATUS*</u>	<u>UNIT 2 STATUS*</u>	<u>COMMENTS</u>
40 (B065)	Safety Concerns Associated With Pipe Breaks In The BWR Scram System	All BWRs	C	C	***
41 (B058)	BWR Scram Discharge Volume Systems	All BWRs	NC	NC	***
43 (B107)	Reliability Of Air Systems	All Plants	I (2/92)	I (2/92)	***
51 (L913)	Improving the Reliability of Open-Cycle Service Water Systems	All Plants	I (9/91)	I (9/91)	***
67.3.3 (A017)	Improved Accident Monitoring	All Plants	NC	NC	***
75** (B076)	Item 1.1 - Post-Trip Review (Program Description and Procedure)	All Plants	NC	NC	***
75 (B085)	Item 1.2 - Post-Trip Review - Data and Information Capability	All Plants	C	C	See NRC SER dated April 23, 1986

\*Please follow attached guidance for completing this column.

\*\*The 16 items listed for GSI 75 all relate to actions derived from the generic implications of  
Salem ATWS events. Item numbers correspond to Generic Letter 83-28 action item numbers.

\*\*\*See Enclosure 4 for comment. Each comment applies to both units unless otherwise noted.

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<u>GSI/(MPA No.)</u>	<u>TITLE</u>	<u>APPLICABILITY</u>	<u>UNIT 1 STATUS*</u>	<u>UNIT 2 STATUS*</u>	<u>COMMENTS</u>
75 (P077)	Item 2.1 - Equipment Classification and Vendor Interface (Reactor Trip System Components)	All Plants	C	C	See NRC SER dated August 11, 1989
75 (B086)	Item 2.2.1 - Equipment Classification for Safety-Related Components	All Plants	C	C	See NRC SER dated November 15, 1989
75 (L003)	Item 2.2.2 - Vendor Interface for Safety-Related Components	All Plants	E (9/90)	E (9/90)	Recent NRC guidance issued (GL 90-3)
75 (B078)	Items 3.1.1 & 3.1.2 - Post - Maintenance Testing (Reactor Trip System Components)	All Plants	NC	NC	See NRC SER dated March 26, 1987
75 (B079)	Item 3.1.3 - Post-Maintenance Testing-Changes to Test Requirements (Reactor Trip System Components)	All Plants	C	C	See NRC SER dated January 6, 1986
75 (B087)	Items 3.2.1 & 3.2.2 - Post-Maintenance Testing (All Other Safety-Related Components)	All Plants	NC	NC	See NRC SER dated March 26, 1987
75 (B088)	Item 3.2.3 - Post-Maintenance Testing-Changes to Test Requirements (All Other Safety-Related Components)	All Plants	C	C	See NRC SER dated January 6, 1986
75 (B080)	Item 4.1 - Reactor Trip System Reliability (Vendor-Related Modifications)	All Plants***	NA	NA	***

\*\*\*See Enclosure 4 for comment. Each comment applies to both units unless otherwise noted.



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<u>GSI/(MPA No.)</u>	<u>TITLE</u>	<u>APPLICABILITY</u>	<u>UNIT 1 STATUS*</u>	<u>UNIT 2 STATUS*</u>	<u>COMMENTS</u>
75 (B081)	Items 4.2.1 & 4.2.2 - Reactor Trip System Reliability-Maintenance and Testing (Preventative Maintenance and Surveillance Program for Reactor Trip Breakers)	All PWRs	NA	NA	LGS units are not PWRs
75 (B082)	Item 4.3 - Reactor Trip System Reliability - Design Modifications (Automatic Actuation of Shunt Trip Attachment for Westinghouse and B&W Plants)	All W and B&W Plants	NA	NA	LGS units are not W or B&W plants
75 (B090)	Item 4.3 - Reactor Trip System Reliability - Tech Spec Changes (Automatic Actuation of Shunt Trip Attachment For Westinghouse and B&W Plants)	All W & B&W Plants	NA	NA	LGS units are not W or B&W plants
75 (B091)	Item 4.4 - Reactor Trip System Reliability (Improvements in Maintenance and Test Procedures for B&W Plants)	All B&W Plants	NA	NA	LGS units are not B&W plants

- 4 -

<u>GSI/(MPA No.)</u>	<u>TITLE</u>	<u>APPLICABILITY</u>	<u>UNIT 1 STATUS*</u>	<u>UNIT 2 STATUS*</u>	<u>COMMENTS</u>
75 (B092)	Item 4.5.1 - Reactor Trip System Reliability-Diverse Trip Features (System Functional Testing)	All Plants	C	C	See NRC SER dated March 26, 1987
75 (B093)	Items 4.5.2 & 4.5.3 - Reactor Trip System Reliability - Test Alternatives and Intervals (System Functional Testing)	All Plants	C	C	***
86 (B084)	Long Range Plan for Dealing with Stress Corrosion Cracking in BWR Piping	All BWRs	I (12/90)	I (12/90)	***
93 (B098)	Steam Binding of Auxiliary Feedwater Pumps	All PWRs	NA	NA	LGS units are not PWRs
99 (L817)	RCS/RHR Suction Line Valve Interlock on PWRs	All PWRs	NA	NA	LGS units are not PWRs
124	Auxiliary Feedwater System Reliability	ANO-1&2, Rancho Seco, Prairie Island 1&2, Crystal River-3, Ft. Calhoun	NA	NA	
A-13 (B017)	Snubber Operability Assurance - Hydraulic Snubbers	All Plants	NA	NA	There are no hydraulic snubbers at LGS (see FSAR Section 3.9.3.5.2)

\*\*\*See Enclosure 4 for comment. Each comment applies to both units unless otherwise noted.



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<u>GSI/(MPA No.)</u>	<u>TITLE</u>	<u>APPLICABILITY</u>	<u>UNIT 1 STATUS*</u>	<u>UNIT 2 STATUS*</u>	<u>COMMENTS</u>
A-13 (B022)	Snubber Operability Assurance - Mechanical Snubbers	All Plants	NC	NC	***
A-16 (D012)	Steam Effects on BWR Core Spray Distribution	Oyster Creek & NMP-1	NA	NA	
A-35 (B023)	Adequacy of Offsite Power Systems	All Plants	NC	NC	***
B-10	Behavior of BWR Mark III Containments	All BWR Mark III Plants	NA	NA	LGS units do not have Mark III containments
B-36	Develop Design, Testing and Maintenance Criteria for Atmosphere Cleanup System Air Filtration and Adsorption Units for Engineered Safety Features Systems and for Normal Ventilation Systems	All Plants with OL Applications After 4/1/80	NA	NA	OL Application prior to April 1, 1980
B-63 (B045)	Isolation of Low Pressure Systems Connected to the Reactor Coolant System Pressure Boundary	All Plants	NC	NC	***

\*\*\*See Enclosure 4 for comment. Each comment applies to both units unless otherwise noted.



ENCLOSURE 4

Limerick Generating Station Comments

GSI/(MPA No.)

Comment

40 (B065)

See NUREG-0991, "Safety Evaluation Report Related to the Operation of Limerick Generating Station, Units 1 and 2," dated August 1983 (Section 4.6) and Supplement No. 3 (Section 4.6) dated October 1984. LGS conforms to the BWROG recommendations in report BWROG-8420, "Scram Discharge Pipe Integrity, Response to NRC Request for Information," submitted to the NRC on May 10, 1984 (referenced in GL 86-01, "Safety Concerns Associated with Pipe Breaks in the BWR Scram System," dated January 3, 1984) with one minor exception. Scram Discharge Volume piping is inspected, while pressurized, during each Reactor Pressure Vessel hydrostatic test (each refueling outage) as part of a surveillance test, rather than following a scram once per refueling cycle.

41 (B058)

See response to LGS FSAR Question No. 410.20 (Section 4.6) and NUREG-0991, Section 4.6.

43 (B107)

Actions will be completed as described in February 13, 1989 letter to NRC in response to GL 88-14, "Instrument Air Supply System Problems Affecting Safety-Related Equipment," dated August 8, 1988. Summary report will be submitted within sixty days following restart from the next PBAPS, Unit 3 refueling outage in accordance with commitment in February 13, 1989 letter. Based on current schedule, submittal will be in February 1992.

GSI/(MPA No.)Comment

51 (L913)

Actions will be completed as described in January 29, 1990 letter to NRC in response to GL 89-13, "Service Water System Problems Affecting Safety-Related Equipment," dated July 18, 1989. Summary report currently anticipated to be submitted in September 1991 in accordance with commitment in January 29, 1990 letter.

67.3.3 (A017)

See NUREG-0991, Supplement No. 4, dated May 1985, Section 7.5.2.

75 (B076)

See NUREG-0991, Supplement No. 5, dated July 1985, Section 15.8.

75 (B080)

This Item only applies to PWRs.

75 (B093)

Item 4.5.2: See NRC SER dated May 9, 1989. Item 4.5.3: See NRC SER dated June 21, 1989.

86 (B084)

GL 88-01, "NRC Position on IGSCC in BWR Austenitic Stainless Steel Piping," dated January 25, 1988, superseded GL 84-11, "Inspections of BWR Stainless Steel Piping," dated April 19, 1989, and transmitted NUREG-0313, "Technical Report on Material Selection and Processing Guidelines for BWR Coolant Pressure Boundary Piping," Revision 2, dated January 1988, which provided long-term resolution of IGSCC in BWR piping. See letters to NRC dated August 2, 1988, April 28, 1989, May 30, 1989, September 11, 1989, and June 8, 1990. As committed to in our June 8, 1990 submittal, Technical Specifications Change Requests will be submitted to the NRC by December 31, 1990.



GSI/(MPA No.)Comment

A-13 (B022)

Changes resulting from the resolution of this GSI were incorporated into the BWR Standard Technical Specifications. LGS units are licensed to operate with Technical Specifications modeled after the BWR Standard Technical Specifications. Additionally, LGS is licensed to NUREG-0800, "Standard Review Plan," Section 3.9.3, Revision 1, and Appendix A, Revision 0, July 1981.

A-35 (B023)

LGS is licensed to NUREG-0800, Section 8.3, Appendix A, Branch Technical Position PSB-1, July 1981.

B-63 (B045)

LGS is licensed to NUREG-0800, Section 3.9.6, Revision 2, July 1981. (See NUREG-0991 (Section 3.9.6) dated August 1983 and Supplement No. 3 (Section 3.9.6) dated October 1984).