SOUTHERN NUCLEAR OPERATING COMPANY
INSPECTION AND TESTING SERVICES
FOR
GEORGIA POWER COMPANY

ISI/IST APPROVAL

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INSERVICE INSPECTION PROGRAM

THIRD 10-YEAR INTERVAL

E. I. HATCH NUCLEAR PLANT

UNITS 1 and 2

SE 10/4/95 ~~Dept. Mgr.~~ :

~~PRB 95-87 Recommended for Approval 10-3-95~~

REV	DATE	DESCRIPTION	SNC				GPC	
			PREP'D BY (ITS)	REV'D BY (ITS)	APPV. BY (ITS)	APPV. GEN OFFICE	SITE REV'D BY	APPV. PLANT SUPP. MGR.
0	9/15/95	BASIC ISSUE	WC	MD	MB	CWS	See Stamp Above	

LIST OF EFFECTIVE PAGES

	Pages	Revision
Distribution List	1	0
Table of Contents	1	0
Introduction	1-3	0
Index of Relief Requests	1-2	0
Relief Requests	RR-1 thru RR-11	0
Table 1 for Class 1 Components	1-14	0
Table 2 for Class 2 Components	1-6	0
Table 3 for Class 3 Components	1-3	0
Table 4 for Class 1, 2, and 3 Component Supports	1	0
NUREG		
Hatch Unit 1 NUREG-0313 Summary	1-12	0
Hatch Unit 2 NUREG-0313 Summary	1-3	0

Hatch Nuclear Plant Units 1 and 2 ISI Program

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W. M. Wright	10

TABLE OF CONTENTS

GEORGIA POWER COMPANY
PLANT HATCH, UNIT 1 & 2
THIRD 10-YEAR INTERVAL
INSERVICE INSPECTION PROGRAM

INTRODUCTION

This ISI Program document was developed to comply with the requirements of the ASME Boiler and Pressure Vessel Code, Section XI, 1989 Edition, to the extent practicable. Where Code requirements are impractical, relief requests were developed to provide for alternative examinations and/or tests. The use of relief requests and Code Cases are documented in the Program Tables where applicable. The Requests for Relief are numbered RR-1, RR-2, etc. Some may be generic in nature and not applicable to a particular Code Category.

Third 10-Year Interval

This program document is applicable for the Third 10-Year Interval ISI update. The Third 10-Year Interval begins on January 1, 1996 and ends on December 31, 2005. In order to use the same edition of the Code, Georgia Power Company has historically received relief from the NRC to early update Hatch Unit 2. Therefore, relief has been requested (see RR-8) to continue this practice for the Third Interval and for the remainder of plant life. Upon approval of relief request, the Third Interval for Hatch Unit 2 will begin on January 1, 1996 and end on December 31, 2005 (the same as for Unit 1).

Code Cases

The Code Cases that may be applied for specific Code Categories and Items are listed in the Program Tables. Code Cases that are generic in nature and would be applied on a case-by-case basis are not listed in the Program Tables. The use of generic Code Cases will be documented in the applicable Owner's Summary Report which is filed with the enforcement and regulatory authorities having jurisdiction over Plant Hatch. Code Cases applied at Hatch during the Third 10-Year Interval will be those initially selected from Regulatory Guide 1.147, revision 11, dated October, 1994, unless relief has been received by Georgia Power Company to use a Code Case not listed in the Reg. Guide. As new or revised Code Cases are approved for use through subsequent revisions of the Reg. Guide, such Code Cases may be used at Hatch when deemed appropriate by Georgia Power Company.

Reactor Pressure Vessel Welds

The examination coverage for B-A, item numbers B1.11 and B1.12, cannot be accurately determined until completion of the Second 10-Year Interval exams. At that time, the Program will be updated to describe the exam coverage, including any necessary requests for relief.

Class 1 Piping Selection

Class 1 piping welds were selected for Interval 1 from the requirements of IWB-1220 and IWB-2500 of the 1974 Edition of Section XI with Addenda through Summer 1975 (1974/S75). Examination techniques, required examination areas, required examination volumes, acceptance criteria, etc. were also to the requirements of 1974/S75.

As allowed by 10CFR50.55a(b)(2)(ii), Category B-J welds to be examined in Interval 2 were also selected to 1974/S75. In keeping with the later Code philosophy of re-examining components in subsequent intervals, essentially the same 25% scope was picked for Interval 2 as was picked for Interval 1. The scope was adjusted, as a conservative measure, by selecting terminal ends and high stress welds to the extent practical. Examination techniques, required examination areas, required examination volumes, acceptance criteria, etc. were to the requirements of the 1980 Code with Addenda through Winter 1981.

As allowed by 10CFR50.55a(b)(2)(ii), the scope of B-J welds for Interval 3 will be essentially the same 25% scope as for Interval 2 (accordingly, the footnotes of Table IWB-2500-1 will not be used). Variations may be made to account for ALARA goals and limited access as long as the required number of welds are examined.

Control Rod Drive Housing Welds

Peripheral Control Rod Drive housing welds, Category B-O, Item B14.10, IWB-2500-1 requires a volumetric or surface examination. However, according to the FSAR for Unit 2, and GE supplied information regarding makeup capacities, the available makeup systems for postulated loss due to CRD break are RCIC (400 gal/min), CRD (160 gal/min), and the transfer system to feedwater (1000 gal/min). Therefore, these welds are exempt from the volumetric and surface examination requirements. This same logic is applicable for Unit 1.

Snubbers

Functional testing of snubbers is not within the scope of 10 CFR 50.55a. Therefore, it is not considered to be within the scope of this ISI Program. Snubber functional testing is required by and is implemented in accordance with the Plant Hatch Snubber Program. However, since snubbers are considered to be Code components, the repair and replacement activities associated with snubbers will be performed in accordance with ASME Section XI, articles IWF-4000 and IWF-7000. Visual examination of nonintegral attachments for snubbers is also covered in the Snubber Program. Visual examination of integral attachments is covered in the ISI Program (see RR-11).

Repair/Replacement Program

The ASME Section XI repair/replacements requirements are controlled and implemented by plant administrative control procedures. These procedures provide for adequate control and implementation of Code required repairs and replacements.

IWE/Class MC

Only Class 1, 2, and 3 pressure retaining components and their supports are included in the scope of 10 CFR 50.55a. The requirements of Subsection IWE, "Requirements for Class MC Components of Light-Water Cooled Power Plants" is not within the scope of the ISI Program as defined by 10CFR50.55a.

GL 88-01 Change in Previous Commitments (see NUREG section for details)

The GL 88-01 commitments are added to the ISI Program for convenience since the exams are done at the same time as the ISI exams.

INDEX OF RELIEF REQUESTS

Item	Code Category	Description	Status
RR-1	B-G-1	RPV Closure Head Nuts	Submitted to NRC
RR-2	B-E, B-P, C-H, D-A, D-B, D-C	All ASME Class 1, 2, and 3 Piping and Components included within the scope of the ISI Program (Code Case N-498-1)	Submitted to NRC
RR-3	B-D	Shell-to-Nozzle and Inside Radius Weld	Submitted to NRC
RR-4	B-K-1, C-C, D-A, D-B, D-C	All ASME Class 1, 2, and 3 Integrally Welded Attachments included within the scope of the ISI Program (Code Case N-509)	Submitted to NRC
RR-5	C-A	Shell to Shell, Head to Shell, and Shell to Flange Welds on Heat Exchangers	Submitted to NRC
RR-6	B-F	RPV Nozzle-to-Safe-End Butt Welds	Submitted to NRC
RR-7	B-J, C-F-2	All ASME Class 1 and 2 Piping included within the scope of the ISI Program (Code Case N-524)	Submitted to NRC
RR-8	Various	All ASME Class 1, 2, and 3 Piping and Components included within the scope of the ISI Program	Submitted to NRC
RR-9	Various	All ASME Class 1, 2, and 3 Piping and Components included within the scope of the ISI Program (Code Case N-416-1)	Submitted to NRC
RR-10	Various	All welds and areas subject to surface or volumetric examination	Submitted to NRC

INDEX OF RELIEF REQUESTS

Item	Code Category	Description	Status
RR-11	F-A	All ASME Class 1, 2, and 3 Snubbers included within the scope of the ISI Program.	Submitted to NRC

GEORGIA POWER COMPANY
PLANT HATCH, UNIT 1 & 2
THIRD 10-YEAR INTERVAL
REQUEST FOR RELIEF NO. RR-1

I. System/Component(s) for Which Relief is Requested:

Examination Category B-G-1, Item B6.10, RPV Closure Head Nuts

Unit 1; NUT-1 thru NUT-52
Unit 2; 2-NUT-1 thru 2-NUT-56

II. Code Requirement: Section XI, Table IWB-2500-1, Examination Category B-G-1, Item B6.10 requires a surface examination of the Reactor Vessel Closure Head Nuts.

II. Code Requirement from Which Relief is Requested: Relief is requested from performing the Code-required surface examination on above identified Reactor Vessel Closure Head Nuts.

IV. Basis for Relief: The ASME, Section XI, 1989 Addenda, Table IWB-2500-1, Category B-G-1, Item B6.10, allows Visual Examination Method, VT-1 in lieu of the Surface Examination Method required by the 1989 Code.

V. Alternate Examinations: Georgia Power Company proposes that, in lieu of the 1989 Edition, Code-required surface examination, the subject RPV Closure Head Nuts will receive a Visual Exam, VT-1 in accordance with the ASME, Section XI, 1989 Addenda.

VI. Justification for the Granting of Relief: The closure head nut configuration does not allow for an adequate Magnetic Particle examination. The MT method requires two directional coverage to detect the surface flaws. The configuration permits examination in one direction and limits the coverage in the other direction. The Liquid Penetrant method is not practical, due to the lubricant applied to the inside surface. The lubricant is difficult to completely remove in order to get a proper exam.

ISI optimization did a survey on bolting. Results did not reveal any service induced cracking. No cracks have been detected at Plant Hatch, Units 1 &2. No flaws have been detected at Plant Farley or Vogtle. This survey was part of the technical basis for changing the surface requirement to a VT-1.

Later editions of the ASME Code changed the examination requirement to a VT-1. Since the change (visual examination) was issued by ASME, the alternative examination should be technically acceptable for determining flaws. The proposed alternative visual examination, VT- 1 will provide reasonable assurance that unallowable inservice flaws

have not developed in the subject components or that they will be detected and repaired prior to return of the reactor vessel to service. If relevant indications are detected, alternate surface/volumetric techniques will be performed as necessary. Thus an acceptable level of quality and safety will have been achieved and public health and safety will not be endangered by allowing the proposed alternative examination in lieu of the Code requirement. By implementing the alternative examinations, cost savings, personnel radiation dose, and outage time can be realized by Georgia Power Company at Plant Hatch. Time spent performing the examinations will be minimized, while ALARA principles will be adhered to by reducing contact with contaminated components.

VII. Implementation Schedule: The subject examinations will be performed during the Third 10-Year Interval.

GEORGIA POWER COMPANY
PLANT HATCH, UNIT 1 & 2
THIRD 10-YEAR INTERVAL
REQUEST FOR RELIEF NO. RR-2

I. System/component(s) for Which Relief is Requested: All ASME Class 1,2 and 3 piping and components included within the scope of the ISI Program

Examination Category B-E, Item B4.11, B4.12 and B4.13
Examination Category B-P, Item B15.11, B15.51, B15.61, B15.71
Examination Category C-H, Item C7.20. C7.40, C7.60 and C7.80
Examination Category D-A, Item D1.10
Examination Category D-B, Item D2.10
Examination Category D-C, Item D3.10

II. Code Requirement: The listed ASME XI item number components are required to be subjected to a hydrostatic test once each inspection interval in accordance with paragraphs IWB-5222, IWC-5222 and IWD-5223 as applicable.

III. Code Requirement for Which Relief is Requested: Relief is requested from performing the required hydrostatic test for each of the listed Code item numbers.

IV. Basis for Relief: ASME Section XI Code Case N-498-1 was issued on May 11, 1994. This Code Case has been approved by the NRC staff for use at Plant Hatch and other plants, but has not been formally endorsed by inclusion in NRC Regulatory Guide 1.147. It was previously approved for Plant Hatch for the 2nd Interval by SER dated 7/5/95.

V. Alternate Examinations: Georgia Power Company will comply with the pressure testing requirements of ASME Section XI Code Case N-498-1 for the listed Code item numbers.

VI. Justification for the Granting of Relief: The proposed alternative testing requirements have been evaluated by the ASME Code Committee and the NRC and have been deemed acceptable for determining the pressure boundary integrity of the affected components. Implementation of pressure testing in accordance with the subject Code Case will ensure an acceptable level of quality and safety, does not decrease the margin of public health and safety and is thus authorized pursuant to 10 CFR 50.55a(a)(3)(i). By implementing the alternative examinations, cost savings, personnel radiation dose, and outage time can be realized by Georgia Power Company at Plant Hatch.

VI. Implementation Schedule: Pressure testing in accordance with Code Case N-498-1 will be substituted for the 10-year hydrostatic test on the affected components in accordance with the test schedule defined in the applicable Inservice Inspection Plan, for the Third 10-Year Interval.

Approval Date: May 11, 1994

See Numerical Index for expiration and any reaffirmation dates.

Case N-498-1
Alternative Rules for 10-Year System Hydrostatic Testing for Class 1, 2, and 3 Systems
Section XI, Division 1

Inquiry: What alternative rules may be used in lieu of those required by Section XI, Division 1, Table IWB-2500-1, Category B-P, Table IWC-2500-1, Category C-H, and Table IWD-2500-1, Categories D-A, D-B, and D-C, as applicable, for the 10-year system hydrostatic test?

Reply:

(a) It is the opinion of the Committee that as an alternative to the 10-year system hydrostatic test required by Table IWB-2500-1, Category B-P, the following rules shall be used.

(1) A system leakage test (IWB-5221) shall be conducted at or near the end of each inspection interval, prior to reactor startup.

(2) The boundary subject to test pressurization during the system leakage test shall extend to all Class 1 pressure retaining components within the system boundary.

(3) Prior to performing the VT-2 visual examination, the system shall be pressurized to nominal operating pressure for at least 4 hours for insulated systems and 10 minutes for noninsulated systems. The system shall be maintained at nominal operating pressure during performance of the VT-2 visual examination.

(4) Test temperatures and pressures shall not exceed limiting conditions for the hydrostatic test curve as contained in the plant Technical Specifications.

(5) The VT-2 visual examination shall include all components within the boundary identified in (a)(2) above.

(6) Test instrumentation requirements of IWA-5260 are not applicable.

(b) It is the opinion of the Committee that, as an alternative to the 10-year system hydrostatic test required by Table IWC-2500-1, Category C-H, the following rules shall be used.

(1) A system pressure test shall be conducted at or near the end of each inspection interval or during the same inspection period of each inspection interval of Inspection Program B.

(2) The boundary subject to test pressurization during the system pressure test shall extend to all Class 2 components included in those portions of systems required to operate or support the safety system function up to and including the first normally closed valve, including a safety or relief valve, or valve capable of automatic closure when the safety function is required.

(3) Prior to performing the VT-2 visual examination, the system shall be pressurized to nominal operating pressure for a minimum of 4 hours for insulated systems and 10 minutes for noninsulated systems. The system shall be maintained at nominal operating pressure during performance of the VT-2 visual examination.

(4) The VT-2 visual examination shall include all components within the boundary identified in (b)(2) above.

(5) Test instrumentation requirements of IWA-5260 are not applicable.

(c) It is the opinion of the Committee that, as an alternative to the 10-year system hydrostatic test required by Table IWD-2500-1, Categories D-A, D-B, or D-C (D-B for the 1989 Edition with the 1991 and subsequent Addenda), as applicable, the following rules shall be used.

(1) A system pressure test shall be conducted at or near the end of each inspection interval or during the same inspection period of each inspection interval of Inspection Program B.

(2) The boundary subject to test pressurization during the system pressure test shall extend to all Class 3 components included in those portions of systems required to operate or support the safety system function up to and including the first normally closed valve, including a safety or relief valve, or valve capable of automatic closure when the safety function is required.

(3) Prior to performing the VT-2 visual examination, the system shall be pressurized to nominal operating pressure for at least 4 hours for insulated systems and 10 minutes for noninsulated systems. The system shall be maintained at nominal operating pressure during performance of the VT-2 visual examination.

(4) The VT-2 visual examination shall include all components within the boundary identified in (c)(2) above.

(5) Test instrumentation requirements of IWA-5260 are not applicable.

GEORGIA POWER COMPANY
PLANT HATCH, UNIT 1 & 2
THIRD 10-YEAR INTERVAL
REQUEST FOR RELIEF NO. RR-3

I. System/Component(s) for Which Relief is Requested:

Examination Category B-D, Item B3.90, Shell-to-Nozzle Welds
2" NPS Bottom Head Drain Vessel-to-Nozzle Weld (N15 (SH-N))
2" NPS Bottom Head Drain Vessel-to-Nozzle Weld (2N15 (SH-N))

Examination Category B-D, Item B3.100, Inside Radius Welds
2" NPS Bottom Head Drain Nozzle Inside Radius Section (N15 (IR))
2" NPS Bottom Head Drain Nozzle Inside Radius Section (2N15 (IR))

II. Code Requirement: Section XI, Table IWB-2500-1, Examination Category B-D, Item B3.90 and B3.100 requires a volumetric examination of the Reactor Vessel Nozzle-to-Vessel Welds and Nozzle Inside Radius Section as defined by Figures IWB-2500-7(a) through (d).

III. Code Requirement from Which Relief is Requested: Relief is requested from performing the Code-required volumetric examination of the above identified Reactor Pressure Vessel Nozzle-to-Vessel Welds and Nozzle Inside Radius Section.

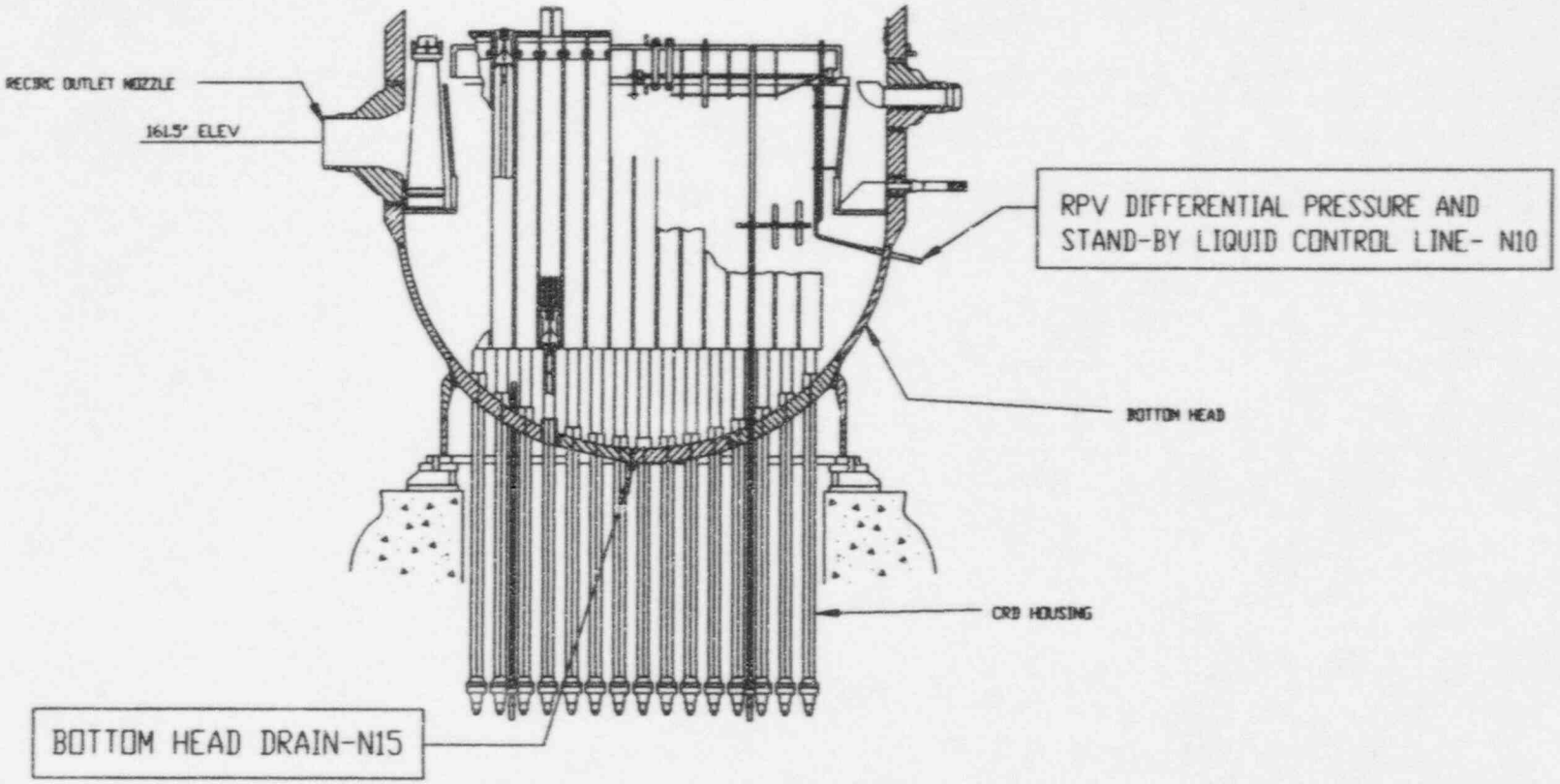
IV. Basis for Relief: The subject welds are located in the center of the Bottom Head and are not accessible due to the Control Rod Drive Housings (see attached drawings).

V. Alternate Examinations: Georgia Power Company proposes that, in lieu of the Code-required volumetric examination, the subject nozzle welds will receive a visual (VT-2) examination during the Leakage Test/Hydrostatic Test.

VI. Justification for the Granting of Relief: There is no known technique that can be used on the inside of the vessel to examine the nozzle. Access in not available to examine from the outside of the vessel. During the Leakage Test/Hydrostatic Test, GPC will ensure there is no leakage coming from the area of the subject nozzles. The VT-2 visual examination should provide reasonable assurance that unallowable inservice flaws have not developed in the subject welds or that they will be detected and repaired prior to return of the reactor vessel to service.

VII. Implementation Schedule: The subject examinations (Leakage Test/Hydrostatic Test) will be performed during the Third 10-Year Interval.

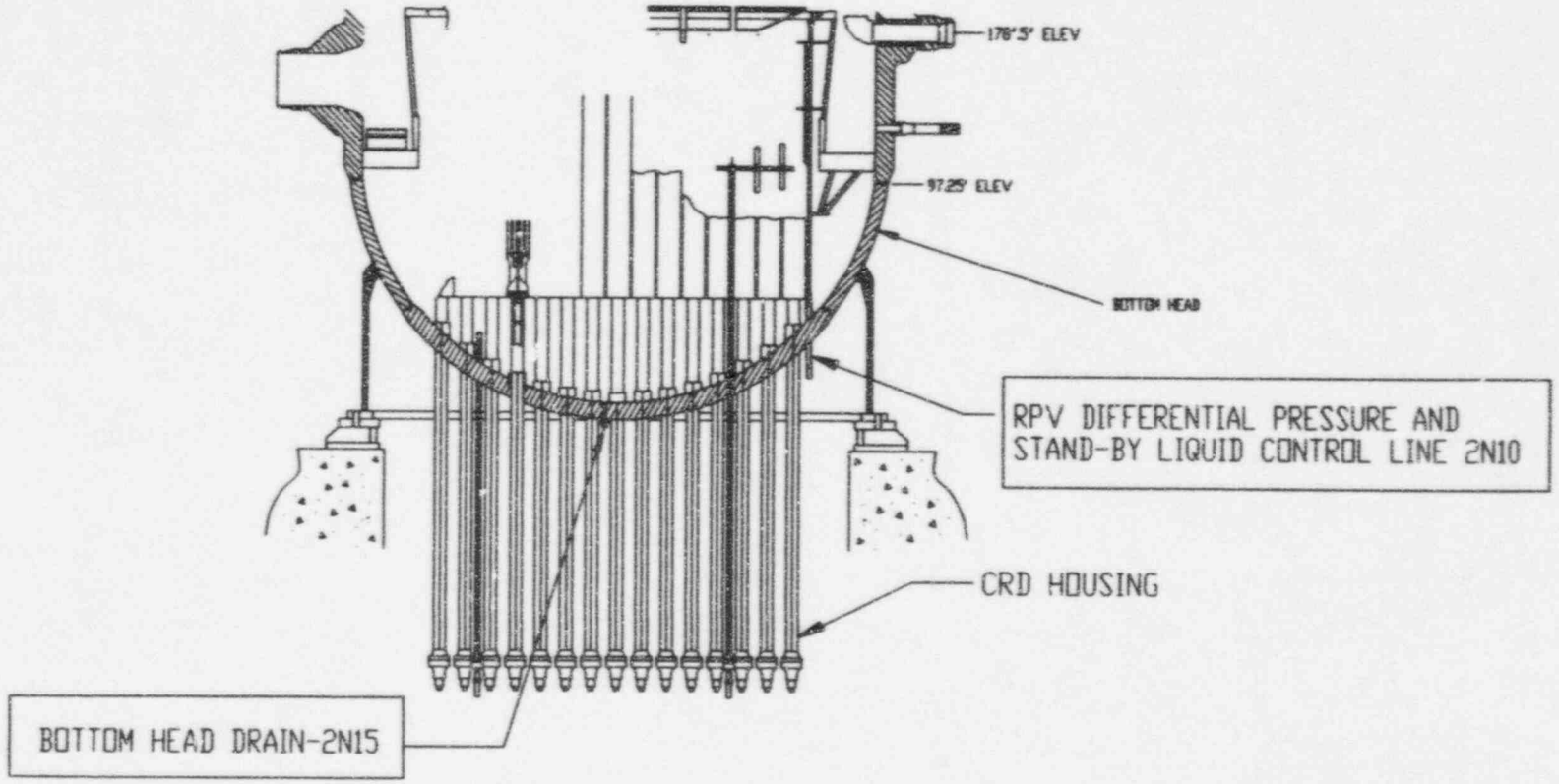
NOTE: This Relief Request was previously approved on 9/29/86 and 6/22/89 for the Second Interval. The Relief Request number was 2.1.3.



RPV BOTTOM HEAD DRAIN AND CORE D.P.& STAND-BY LIQUID CONTROL NOZZLE

HATCH UNIT 1 - ATTACHMENT TO RR-3 AND RR-6

RVBRAIN



RPV BOTTOM HEAD DRAIN AND CORE D.P. & STAND-BY LIQUID CONTROL NOZZLE

HATCH UNIT 2 - ATTACHMENT TO RR-3 AND RR-6

RPVDRAIN

GEORGIA POWER COMPANY
PLANT HATCH, UNIT 1 & 2
THIRD 10-YEAR INTERVAL
REQUEST FOR RELIEF NO. RR-4

I. System/Component(s) for Which Relief is Requested: All ASME Class 1, 2, and 3 Integrally Welded Attachments included within the scope of the ISI Program.

Examination Category B-K-1, Item B10.10, B10.20 for Piping and Pumps
Examination Category C-C, Item C3.10, C3.20 Pressure Vessels and Piping
Examination Category D-A, Item D1.20, D1.30, D1.40, D1.50, D1.60
Examination Category D-B, Item D2.20, D2.30, D2.40, D2.50, D2.60
Examination Category D-C, Item D3.20, D3.30, D3.40, D3.50, D3.60

II. Code Requirement: Section XI, Table IWB-2500-1, Examination Category B-K-1, Item B10.10 and B10.20 requires a volumetric or surface examination of the integrally welded attachments that meet certain conditions noted in the Table. Table IWC-2500-1, Examination Category C-C, Item C3.10 and C3.20 requires a surface examination of the integrally welded attachments that meet certain conditions noted in the Table. Table IWD-2500-1, Examination Category D-A, Item D1.20, D1.30, D1.40, D1.50, D1.60, Category D-B, Item D2.20, D2.30, D2.40, D2.50, D2.60, and Category D-C, Item D3.20, D3.30, D3.40, D3.50, D3.60 requires a visual examination of the integrally welded attachments that meet certain conditions noted in the Table.

III. Code Requirement from Which Relief is Requested: Relief is requested from performing the Code-required volumetric, surface, or visual examination on those Integral Attachments required by the above referenced Tables.

IV. Basis for Relief: On November 25, 1992, ASME issued Code Case N-509 which approved a set of alternative rules for the selection and examination of Class 1 and 2 Integrally Welded Attachments.

V. Alternate Examinations: Georgia Power Company proposes that, in lieu of the Code-required volumetric, surface, or visual examination on those Integrally Welded Attachments required by Table IWB-2500-1, IWC-2500-1, or IWD-2500-1 in the 1989 Edition, a surface examination be performed on those Integrally Welded Attachments as noted in the Code Case, Table 2500-1, Examination Category B-K, Integral Attachments for Class 1 Vessels, Piping, Pumps, and Valves; Examination Category C-C, Integral Attachments for Class 2 Vessels, Piping, Pumps, and Valves; and a visual examination for Examination Category D-A, Integral Attachments for Class 3 Vessels, Piping, Pumps, and Valves. GPC will ensure that the sample will be a minimum of 10% of the IWB/IWC/IWD items.

VI. Justification for the Granting of Relief: Code Case N-509 provides an alternative sampling which will retain an acceptable level of quality and safety for Class 1, 2, and 3 Integrally Welded Attachments. Since approval was granted by ASME, the alternative requirements should be technically acceptable for determining flaws. By implementing the alternative examinations, cost savings, personnel radiation dose, and outage time can be realized by Georgia Power Company at Plant Hatch.

VII. Implementation Schedule: The subject examinations will be performed during the Third 10-Year Interval.

Approval Date: November 25, 1992

See Numeric Index for expiration and any reaffirmation dates.

Case N-509

Alternative Rules for the Selection and Examinaion of Class 1, 2, and 3 Integrally Welded Attachments Section XI, Division 1

Inquiry: What alternative requirements to those of IWB, IWC, and IWD may be used to select and examine integrally welded attachments?

Reply: It is the opinion of the Committee that the following rules may be used to select and examine integrally welded attachments:

(a) This Case is limited to Examination Categories B-H, B-K-1, C-C, D-A, D-B, and D-C.

(b) Class 1, 2, and 3 component supports shall be selected for examination in accordance with IWF of the 1989 Edition with the 1990 Addenda.

(c) Except for the selection of component supports for examination, all references to Section XI within this Case shall be from the edition and addenda specified in the Owner's Inservice Inspection Program.

1.0 SCOPE

These requirements apply to examination and sample selection of Class 1, 2, and 3 integrally welded attachments of vessels, piping, pumps, and valves listed in Table 2500-1 as follows:

(a) Table 2500-1, Examination Category B-K shall be used for Class 1 integrally welded attachments in Examination Categories B-H and B-K-1 of IWB.

(b) Table 2500-1, Examination Category C-C shall be used for Class 2 integrally welded attachments in Examination Category C-C of IWC.

(c) Table 2500-1, Examination Category D-A shall be used for Class 3 integrally welded attachments in Examination Categories D-A, D-B, and D-C of IWD.

1.1 Exemption Criteria

(a) The exemption criteria provided in IWB-1220, IWC-1220, and IWD-1220 may be applied to Class 1, 2, and 3 components respectively, with integrally welded attachments, required to be examined in accordance with Table 2500-1.

(b) Class 1, 2, and 3 integrally welded attachment examinations performed as a result of component support deformation cannot be credited under the requirements of IWB-2411 or IWB-2412, IWC-2411 or IWC-2412, and IWD-2411 or IWD-2412, respectively. E

1.2 Inspection Schedule

Class 1, 2, or 3 integrally welded attachments selected for examination by sample selection criteria in accordance with Table 2500-1, Examination Categories B-K, C-C, and D-A, shall meet the requirements of IWB-2411 or IWB-2412, IWC-2411 or IWC-2412, or IWD-2411 or IWD-2412, repectively.

1.3 Additional and Successive Examinations

(a) Class 1, 2, and 3 additional and successive examination requirements of IWB-2430 and IWB-2420 for Class 1, IWC-2430 and IWC-2420 for Class 2 and 3 as applicable, shall be applied to integrally welded attachments whose examinations reveal flaws or relevant conditions that exceed the acceptance standards of IWB-3000, IWC-3000, and IWD-3000, respectively.

(b) When integrally welded attachments are examined as a result of identified component support deformation and the results of these examinations exceed the applicable acceptance standards listed above, additional or successive examinations shall be performed when determined necessary based on an evaluation by the Owner.

TABLE 2500-1
EXAMINATION CATEGORIES

EXAMINATION CATEGORY B-K, INTEGRAL ATTACHMENTS FOR CLASS 1 VESSELS, PIPING, PUMPS, AND VALVES						
Item No.	Parts Examined[2]	Examination Requirements/ Fig. No.	Examination Method	Acceptance Standard	Extent of Examination[2,3]	Frequency of Examination[4]
B10.10	Pressure Vessels Integrally Welded Attachments	IWB-2500-13, -14, and -15	Surface[7]	IWB-3516	100% of required areas of each welded attachment	Each identified occurrence and each inspection interval[4]
B10.20	Piping Integrally Welded Attachments	IWB-2500-13, -14, and -15	Surface	IWB-3516	100% of required areas of each welded attachment	Each identified occurrence and each inspection interval[5]
B10.30	Pumps Integrally Welded Attachments	IWB-2500-13, -14, and -15	Surface	IWB-3516	100% of required areas of each welded attachment	Each identified occurrence and each inspection interval[5]
B10.40	Valves Integrally Welded Attachments	IWB-2500-13, -14, and -15	Surface	IWB-3516	100% of required areas of each welded attachment	Each identified occurrence and each inspection interval[5]

NOTES:
(1) Examination is limited to those integrally welded attachments that meet the following conditions:
  (a) the attachment is on the outside surface of the pressure retaining component;
  (b) the attachment provides component support as defined in NF-1110; and
  (c) the attachment weld joins the attachment either directly to the surface of the component or to an integrally cast or forged attachment to the component.
(2) The extent of the examination includes essentially 100% of the length of the attachment weld at each attachment subject to examination.
(3) Selected samples of integrally welded attachments shall be examined each inspection interval.
(4) In the case of multiple vessels of similar design, function and service, only one integrally welded attachment of only one of the multiple vessels shall be selected for examination.
(5) For piping, pumps, and valves, a sample of 10% of the welded attachments associated with the component supports selected for examination under the 1990 Addenda, IWF-2510 shall be examined.
(6) Examination is required whenever component support member deformation (e.g., broken, bent, or pulled out parts) is identified during operation, refueling, maintenance, examination, inservice inspection, or testing.
(7) For the configuration shown in Fig. IWB-2500-14, a volumetric examination of volume A-B-C-D from side (B-C) of the circumferential welds may be performed in lieu of the surface examination of surfaces A-D and B-C.

TABLE 2500-1 (CONT'D)
EXAMINATION CATEGORIES

EXAMINATION CATEGORY C-C, INTEGRAL ATTACHMENTS FOR CLASS 2 VESSELS, PIPING, PUMPS, AND VALVES						
Item No.	Parts Examined[1]	Examination Requirements/ Fig. No.	Examination Method	Acceptance Standard	Extent of Examination[2,3]	Frequency of Examination[4]
C3.10	**Pressure Vessels** Integrally Welded Attachments	IWC-2500-5	Surface	IWC-3512	100% of required areas of each welded attachment	Each identified occurrence and each inspection interval[5]
C3.20	**Piping** Integrally Welded Attachments	IWC-2500-5	Surface	IWC-3512	100% of required areas of each welded attachment	Each identified occurrence and each inspection interval[5]
C3.30	**Pumps** Integrally Welded Attachments	IWC-2500-5	Surface	IWC-3512	100% of required areas of each welded attachment	Each identified occurrence and each inspection interval[5]
C3.40	**Valves** Integrally Welded Attachments	IWC-2500-5	Surface	IWC-3512	100% of required areas of each welded attachment	Each identified occurrence and each inspection interval[5]

NOTES:
(1) Examination is limited to those integrally welded attachments that meet the following conditions:
(a) the attachment is on the outside surface of the pressure retaining component;
(b) the attachment provides component support as defined in NF-1110; and
(c) The attachment weld joins the attachment either directly to the surface of the component or to an integrally cast or forged attachment to the component.
(2) The extent of the examination includes essentially 100% of the length of the attachment weld at each attachment subject to examination.
(3) Selected samples of integrally welded attachments shall be examined each inspection interval.
(4) In the case of multiple vessels of similar design, function and service, only one integrally welded attachment of only one of the multiple vessels shall be selected for examination.
(5) For piping, pumps, and valves, a sample of 10% of the welded attachments associated with the component supports selected for examination under the 1990 Addenda, IWF-2510 shall be examined.
(6) Examination is required whenever component support member deformation (e.g., broken, bent, or pulled out parts) is identified during operation, refueling, maintenance, examination, inservice inspection, or testing.

TABLE 2500-1 (CONT'D)
EXAMINATION CATEGORIES

EXAMINATION CATEGORY D-A, INTEGRAL ATTACHMENTS FOR CLASS 3 VESSELS, PIPING, PUMPS, AND VALVES						
Item No.	Parts Examined[1]	Examination Requirements/ Fig. No.	Examination Method	Acceptance Standard	Extent of Examination[2,3]	Frequency of Examination[3,4]
D1.10	**Pressure Vessels** Integrally Welded Attachments	IWD-2500-1	Visual, VT-1	IWD-3000	100% of required areas of each welded attachment	Each identified occurrence and each inspection interval
D1.20	**Piping** Integrally Welded Attachments	IWD-2500-1	Visual, VT-1	IWD-3000	100% of required areas of each welded attachment	Each identified occurrence and each inspection interval
D1.30	**Pumps** Integrally Welded Attachments	IWD-2500-1	Visual, VT-1	IWD-3000	100% of required areas of each welded attachment	Each identified occurrence and each inspection interval
D1.40	**Valves** Integrally Welded Attachments	IWD-2500-1	Visual, VT-1	IWD-3000	100% of required areas of each welded attachment	Each identified occurrence and each inspection interval

NOTES:
(1) Examination is limited to those integrally welded attachments that meet the following conditions:
(a) the attachment is on the outside surface of the pressure retaining component;
(b) the attachment provides component support as defined in NF-1110; and
(c) the attachment weld joins the attachment either directly to the surface of the component or to an integrally cast or forged attachment to the component.
(2) The extent of the examination includes essentially 100% of the length of the attachment weld at each attachment subject to examination.
(3) Selected samples of integrally welded attachments shall be examined each inspection interval. All integrally welded attachments selected for examination shall be subject to corrosion, as determined by the Owner, such as the integrally welded attachments of the Service Water or Emergency Service Water systems. In the case of multiple vessels of similar design, function and service, the integrally welded attachments of only one of the multiple vessels shall be selected for examination. For integrally welded attachments of piping, pumps, and valves a 10% sample shall be selected for examination. This percentage sample shall be proportional to the total number of nonexempt integrally welded attachments connected to the piping, pumps, and valves, located within each system subject to these examinations.
(4) Examination is required whenever component support member deformation (e.g., broken, bent, or pulled out parts) is identified during operation, refueling, maintenance, examination, inservice inspection, or testing.

GEORGIA POWER COMPANY
PLANT HATCH, UNIT 1 & 2
THIRD 10-YEAR INTERVAL
REQUEST FOR RELIEF NO. RR-5

I. System/Component(s) for Which Relief is Requested: Four Head to Shell Welds for Heat Exchangers.

Examination Category C-A, Item C1.20 (Head Circumferential Welds)

Shell Head to Upper Shell Ring Weld (1E11-2HX-A-1)
Shell Head to Upper Shell Ring Weld (1E11-2HX-B-1)
Shell Head to Upper Shell Ring Weld (2HX-A-1)
Shell Head to Upper Shell Ring Weld (2HX-B-1)

II. Code Requirement: Section XI, Table IWC-2500-1, Examination Category C-A, Item C1.20 requires a volumetric examination of one of the two welds on each unit as defined by Figure IWC-2500-1.

III. Code Requirement from Which Relief is Requested: Relief is requested from performing the Code-required volumetric examination on the subject welds.

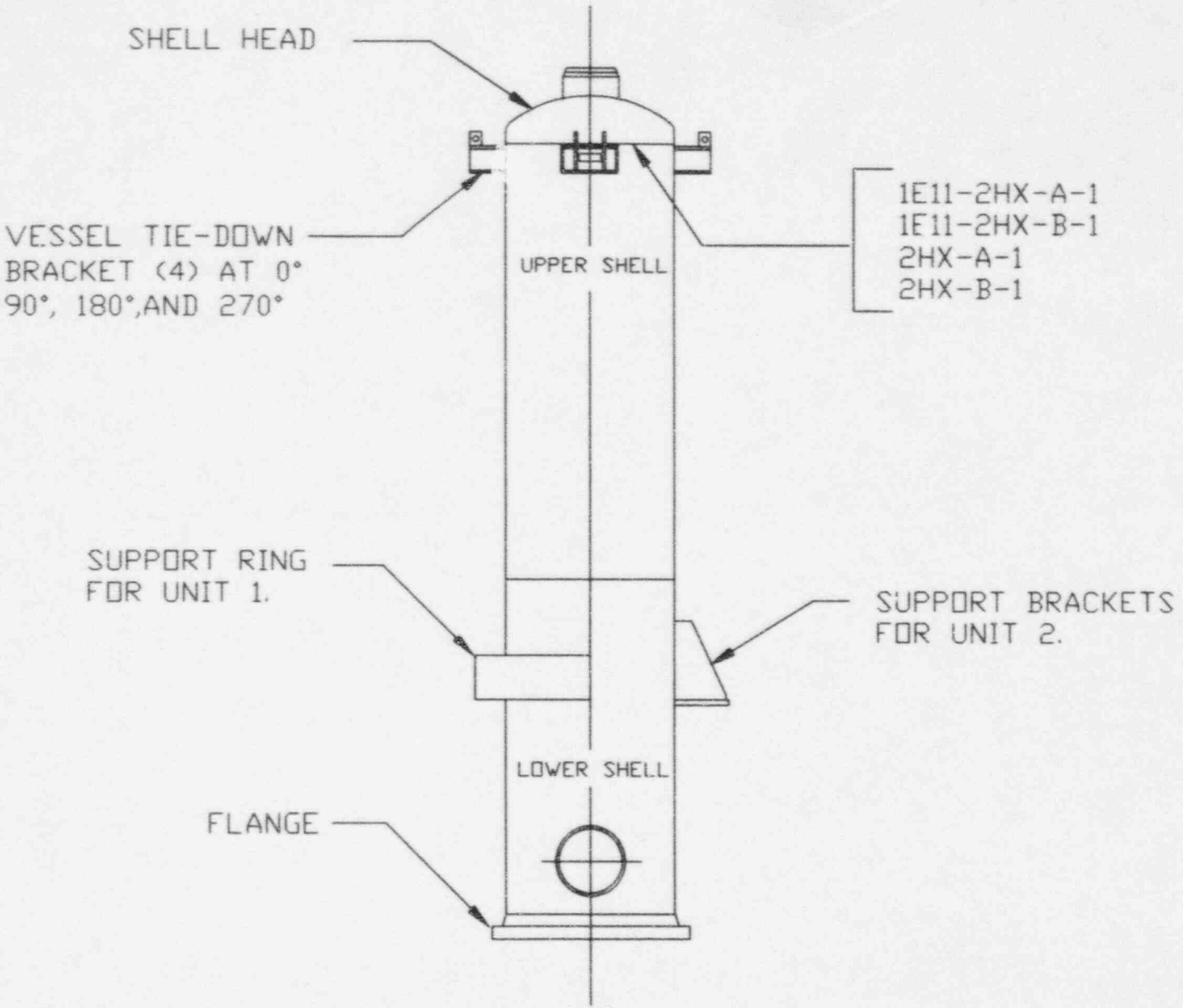
IV Basis for Relief: The subject welds cannot be completely ultrasonically examined due to permanent welded brackets located at 0, 90, 180, and 270 degrees (see attached figure). These brackets are located in the examination area and prohibit full coverage from either side of the weld. Estimated coverage based on previous examination data is 72% of the required volume.

V. Alternate Examinations: Georgia Power Company proposes to supplement the volumetric examination of the Head to Shell Welds with a surface examination, to the extent practical.

VI. Justification for the Granting of Relief: The proposed supplemental surface examination and the Code required volumetric examination (to the extent practical considering the physical limitations) will provide reasonable assurance that unallowable inservice flaws have not developed in the subject welds or that they will be detected and repaired prior to return of the reactor vessel to service. Thus an acceptable level of quality and safety will have been achieved and public health and safety will not be endangered by allowing the limited examinations and the proposed alternative examinations in lieu of the full Code requirement.

VII. Implementation Schedule: The subject examinations will be performed during the Third 10-Year Interval.

NOTE: Relief for this Code Category was previously approved on 9/29/86 and 6/22/89 for the Second Interval. The Relief Request number was 3.1.1.



RHR HEAT EXCHANGER - HATCH UNIT 1 AND 2.

ATTACHMENT TO RR-5

RHRHTEX

GEORGIA POWER COMPANY
PLANT HATCH, UNIT 1 & 2
THIRD 10-YEAR INTERVAL
REQUEST FOR RELIEF NO. RR-6

I. System/Component(s) for Which Relief is Requested:

Examination Category B-F, Item B5.20, RPV Nozzle-to-Safe-End Butt Welds

Unit 1

2.5"	Core D.P. & Liquid Control Nozzle-to-Safe-End Weld, N10
3"	Bottom Head Drain Nozzle-to-Safe-End Weld, N15
2.5"	RPV Instrumentation Nozzle-to-Safe-End Weld, N16A
2.5"	RPV Instrumentation Nozzle-to-Safe-End Weld, N16B

Unit 2

2.985"	Core D.P. & Liquid Control Nozzle-to-Safe-End Weld, 2N10
3"	Bottom Head Drain Nozzle-to-Safe-End Weld, 2N15
2.5"	RPV Instrumentation Nozzle-to-Safe-End Weld, 2N16A
2.5"	RPV Instrumentation Nozzle-to-Safe-End Weld, 2N16B

II. Code Requirement: Section XI, Table IWB-2500-1, Examination Category B-F, Item B5.20 requires a surface examinations of the nozzle-to-safe-end welds on pressure retaining dissimilar metal welds as defined by Figure IWB-2500-8.

III. Code Requirement from Which Relief is Requested: Relief is requested from performing the Code-required surface examination of the above identified RPV nozzle-to-safe-end pipe welds.

IV. Basis for Relief: These instrument nozzles (N10, N16A/B, 2N10, 2N16A/B) have very limited access due to the design of the concrete shield. Each nozzle has small doors that can be opened allowing 12 to 18 inches of access. However, due to the distance the RPV wall is recessed from the outside of the shield wall (e.g., insulation thickness, air gap, and shield thickness), the welds cannot be physically reached with enough room to perform the surface examination.

The N15 and 2N15 welds are the Bottom Head Drain Nozzles. These welds are located in the center of the Bottom Head and are not accessible due to the Control Rod Drive Housings (see attached drawings).

VT-2 examination in conjunction with the Class 1 system leakage/hydrostatic test each refueling outage will provide adequate assurance that any flaw(s) that might have propagated through the subject welds are identified and repaired prior to returning the plant to power operation.

V. Alternate Examinations: Georgia Power Company proposes that, in lieu of the Code-required surface examination, the following reactor vessel nozzle-to-safe-end butt welds will receive a VT-2 examination: N10, N15, N16A/B, 2N10, 2N15, 2N16A/B.

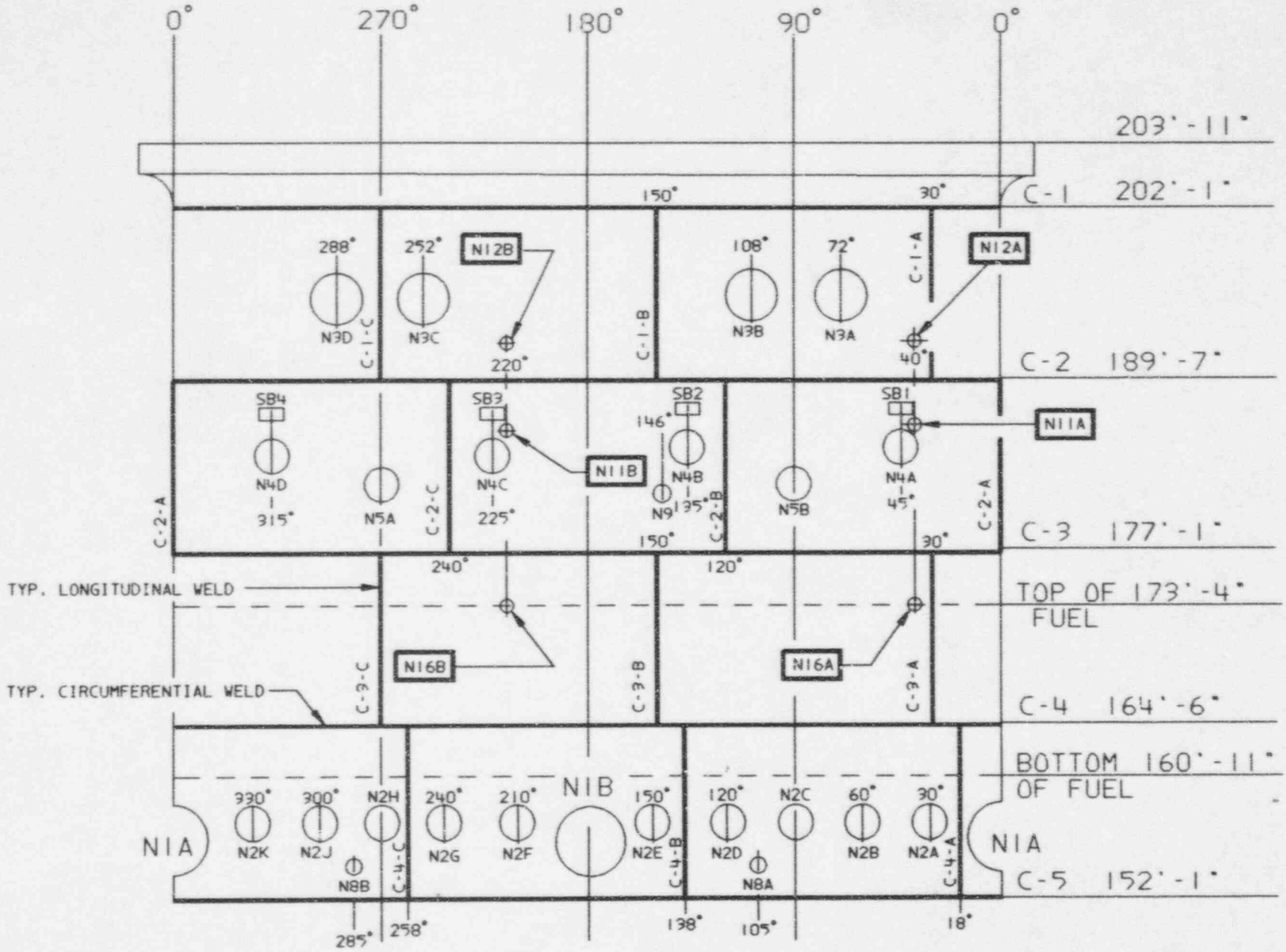
VI. Justification for the Granting of Relief: The nozzles are subjected to the Leakage/Hydrostatic Test.

In addition, other RPV Instrument Nozzles which have adequate access (N11A/B, N12A/B, 2N11A/B, 2N12A/B) will receive a Code required surface exam and a supplemental volumetric examination. Therefore, a 50% sample will receive in excess of Code required surface exams.

The visual examination of the subject nozzles as well as the Code surface exam and supplemental volumetric examination of similar nozzles within the same Code category, will provide reasonable assurance that unallowable inservice flaws have not developed in the subject welds or that they will be detected and repaired prior to return of the reactor vessel to service. Thus an acceptable level of quality and safety will have been achieved and public health and safety will not be endangered by allowing the proposed alternative examination in lieu of the Code requirement.

VII. Implementation Schedule: The subject examinations will be performed during the Third 10-Year Interval.

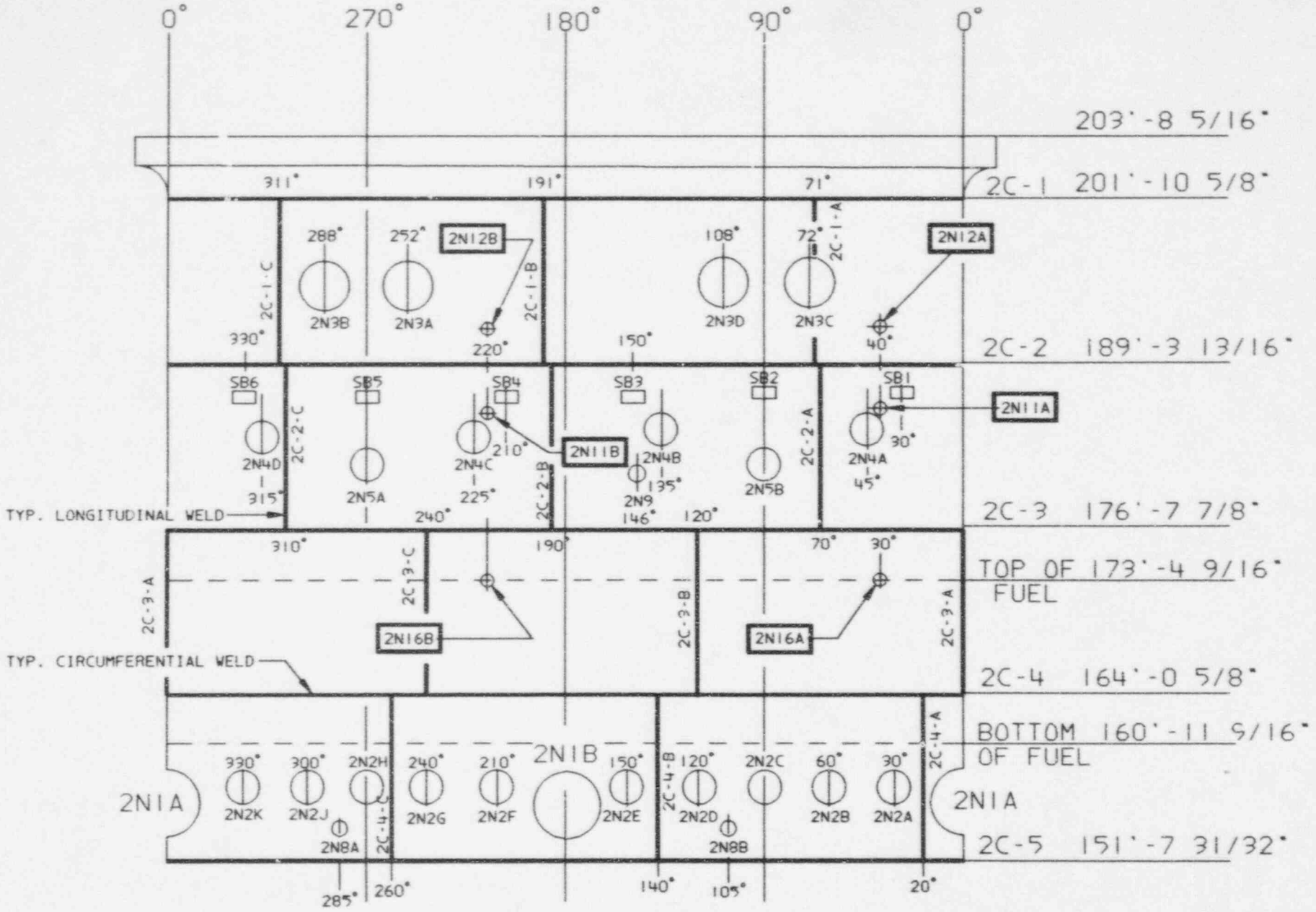
NOTE: This Relief Request (although somewhat different) was previously approved on 9/29/86 and 6/22/89 for the Second Interval. The Relief Request number was 2.1.6.



RPV NOZZLE TO VESSEL WELDS

EDWIN I. HATCH UNIT 1

ATTACHMENT
TO RR-6

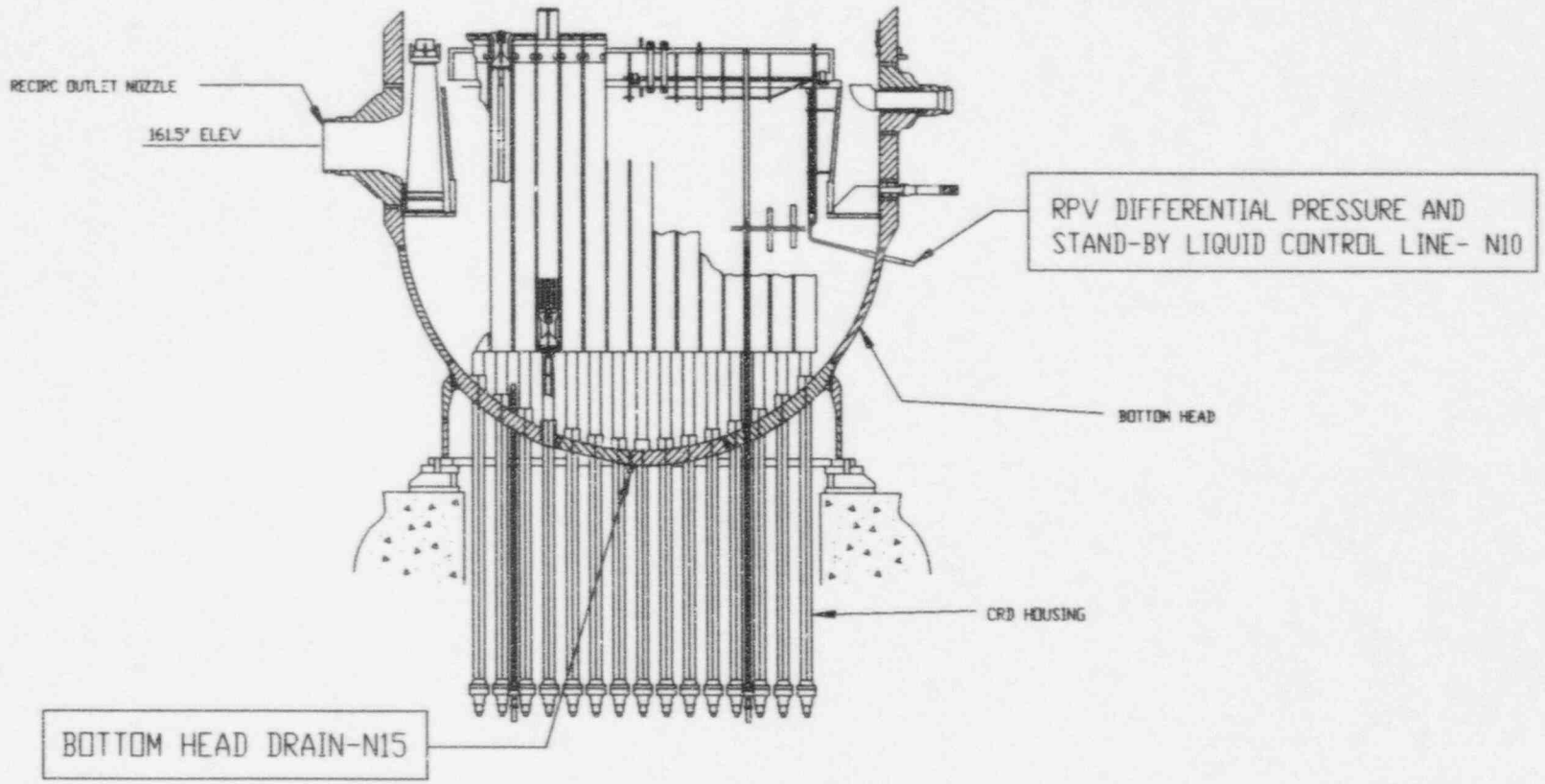


ATTACHMENT
TO RR-6

RPV NOZZLE TO VESSEL WELDS

EDWIN I. HATCH UNIT 2

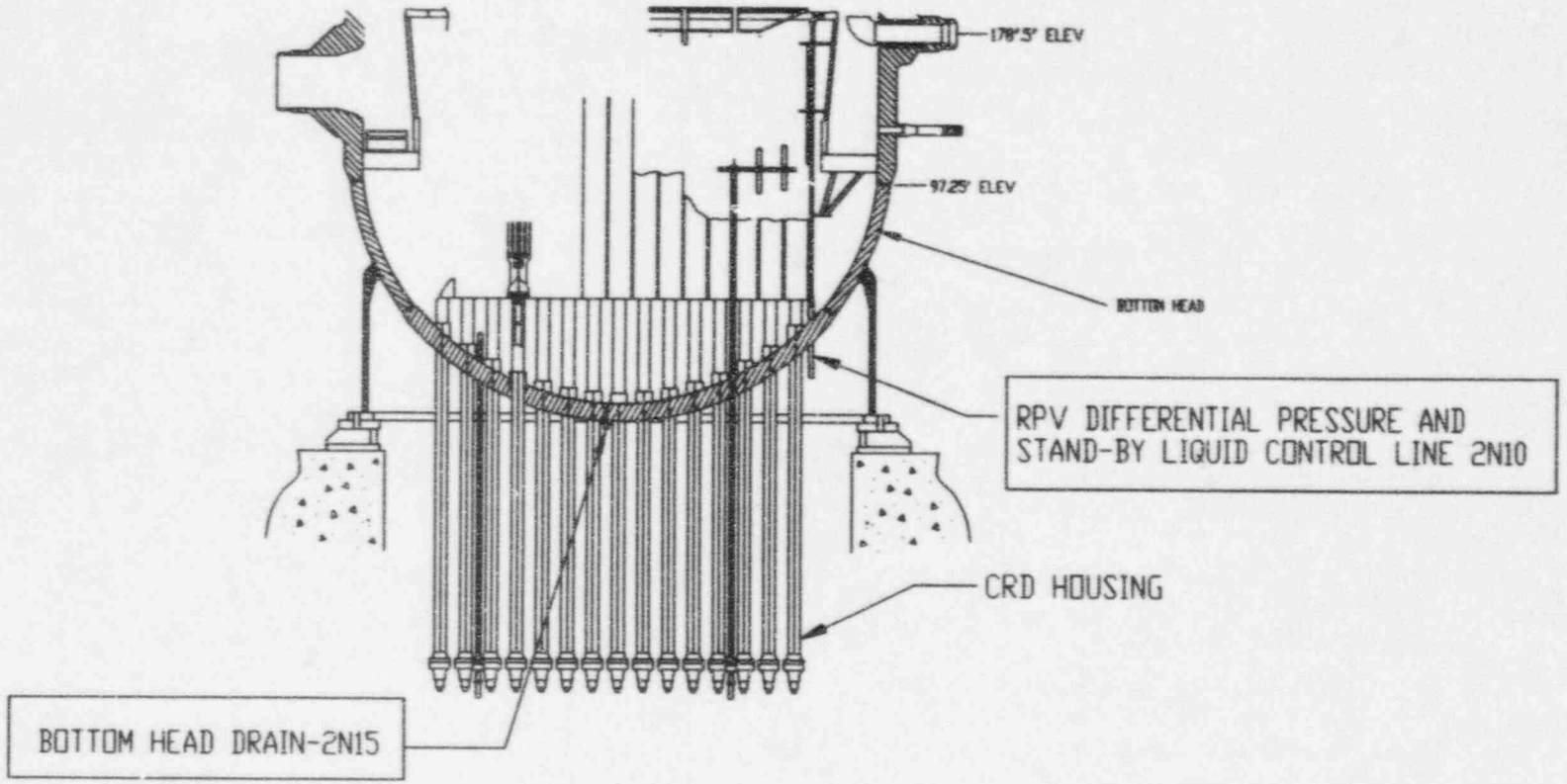
A-1RPV2



RPV BOTTOM HEAD DRAIN AND CORE D.P.& STAND-BY LIQUID CONTROL NOZZLE

HATCH UNIT 1 - ATTACHMENT TO RR-3 AND RR-6

RVDRAIN



RPV BOTTOM HEAD DRAIN AND CORE D.P. & STAND-BY LIQUID CONTROL NOZZLE

HATCH UNIT 2 - ATTACHMENT TO RR-3 AND RR-6

RPVDRAIN

GEORGIA POWER COMPANY
PLANT HATCH, UNIT 1 & 2
THIRD 10-YEAR INTERVAL
REQUEST FOR RELIEF NO. RR-7

I. System/Component(s) for Which Relief is Requested: All ASME Class 1 and 2 piping included within the scope of the ISI Program.

Examination Category B-J, Item B9.12
Examination Category C-F-2, Item C5.52, C5.82

II. Code Requirement: Section XI, Table IWB-2500-1, Examination Category B-J, Item B9.12 requires a surface and volumetric examination as defined by Figure IWB-2500-8; and Table IWC-2500-1, Examination Category C-F-2, Item C5.52 requires a surface and volumetric examination as defined by Figure IWC-2500-7, and Item C5.82 requires a surface examination as defined by Figure IWC-2500-12 and -13.

III. Code Requirement from Which Relief is Requested: Relief is requested from performing the Code-required surface and volumetric examination of the above identified piping longitudinal welds

IV. Basis for Relief: Code Case N-524 (approved August 9, 1993) of the ASME Boiler and Pressure Vessel Code addresses the alternative requirements for surface and volumetric examination requirements of longitudinal piping welds. By implementing the provisions of this Code Case, personnel radiation exposure, outage examination time, and costs can be significantly reduced at Plant Hatch.

V. Alternate Examinations: Georgia Power Company will comply with the requirements of ASME Section XI, Code Case N-524 as follows: (a) When only a surface examination is required, examination of longitudinal piping welds is not required beyond those portions of the welds within the examination boundaries of the intersecting circumferential welds. (b) When both surface and volumetric examination are required, examination of longitudinal piping welds is not required beyond those portions of the welds within the examination boundaries of intersecting circumferential welds provided the following requirements are met. (1) Where longitudinal welds are specified and locations are known, examination requirements shall be met for both transverse and parallel flaws at the intersection of the welds and for that length of longitudinal weld within the circumferential weld examination volume; (2) Where longitudinal welds are specified but locations are unknown, or the existence of longitudinal welds is uncertain, the examination requirements shall be met for both transverse and parallel flaws within the entire examination volume of intersecting circumferential welds.

VI. Justification for the Granting of Relief: The proposed alternative testing requirements have been evaluated by the ASME Code Committee and have been deemed acceptable for determining the pressure boundary integrity of the affected components. The proposed alternative requirements, in accordance with the Code Case, will provide reasonable assurance that unallowable inservice flaws have not developed in the subject welds or that they will be detected and repaired prior to return of the reactor vessel to service. Thus an acceptable level of quality and safety will have been achieved and public health and safety will not be endangered by allowing the proposed alternative examination in lieu of the Code requirements.

VII. Implementation Schedule: The subject examinations, as noted in the Code Case, will be performed during the Third 10-Year Interval.

Approval Date: August 9, 1993

See Numerical Index for expiration and any reaffirmation dates.

Case N-524
Alternative Examination Requirements for Longitudinal Welds in Class 1 and 2 Piping Section XI, Division 1

Inquiry: What alternative requirements may be applied to the surface and volumetric examination of longitudinal piping welds specified in Table IWB-2500-1, Examination Category B-J, Table IWC-2500-1, Examination Categories C-F-1 and C-F-2 (Examination Category C-F prior to Winter 1983 Addenda), and Table IWC-2520, Examination Category C-G (1974 Edition, Summer 1975 Addenda)?

Reply: It is the opinion of the Committee that the following shall apply:

(a) When only a surface examination is required, examination of longitudinal piping welds is not required beyond those portions of the welds within the examination boundaries of intersecting circumferential welds.

(b) When both surface and volumetric examinations are required, examination of longitudinal piping welds is not required beyond those portions of the welds within the examination boundaries of intersecting circumferential welds provided the following requirements are met.

(1) Where longitudinal welds are specified and locations are known, examination requirements shall be met for both transverse and parallel flaws at the intersection of the welds and for that length of longitudinal weld within the circumferential weld examination volume;

(2) Where longitudinal welds are specified but locations are unknown, or the existence of longitudinal welds is uncertain, the examination requirements shall be met for both transverse and parallel flaws within the entire examination volume of intersecting circumferential welds.

GEORGIA POWER COMPANY
PLANT NAME, UNIT 2
THIRD 10-YEAR INTERVAL
REQUEST FOR RELIEF NO. RR-8

I. System/Component(s) for Which Relief is Requested: This Relief Request applies to the Class 1, 2, & 3 Tables included in the ISI Program.

II. Code Requirement: According to 10 CFR Part 50.55a(g)(4)(ii), "Inservice examination of components and system pressure test conducted during successive 120-month inspection intervals must comply with the requirements of the latest edition and addenda of the Code incorporated by reference in paragraph (b) of this section 12 months prior to the start of the 120-month inspection interval, subject to the limitations and modifications listed in paragraph (b) of this section."

The ASME, Section XI, 1989 Edition, IWA-2413 states, "The inspection plan for each successive inspection interval shall comply with the Edition and Addenda of this Division that has been adopted by the regulatory authority 12 months prior to the start of the inspection interval, or subsequent Edition and Addenda that have been adopted by the regulatory authority. Specific portions of such subsequent Editions or Addenda may be used provided all related requirements are met."

Permission is requested to start the Hatch Unit 2 Third 10-Year Inspection Interval (and subsequent Inspection Intervals, for the remainder of the plant life) ahead of schedule such that the two Hatch units will be under the same edition of the Code. Hatch Unit 2 would normally update for the Third 10-Year Interval in September, 1999.

Permission was previously sought and granted (9/86) for early update at the start of the Second 10-Year Inspection Interval for Hatch Unit 2. This relief will simply continue the practice already established during Interval 2.

III. Code Requirement from Which Relief is Requested: Relief is requested to start the Hatch Unit 2 Third 10-Year Inspection Interval (and subsequent Inspection Intervals, for the remainder of the plant life) ahead of schedule such that the two Hatch units will be under the same edition/addenda of the Code.

IV. Basis for Relief: Previously, during the second 40-month inspection period for Hatch Unit 2, permission was sought and granted to begin the new Second 10-Year Inspection Interval in the same time frame as Hatch Unit 1. This allowed one Code edition/addenda to be used. By being able to continue using the same Code for the Third 10-Year Inspection Interval (and subsequent Inspection Intervals, for the remainder of the plant life): A more comprehensive examination will be achieved which will enhance the possibility of detecting a generic problem and will also reduce costs involved in maintaining two separate programs. Components will be examined at the same point in time as was planned in the earlier program.

V. Alternate Examinations: Not Applicable. Georgia Power Company will continue to schedule Code-required examinations as required by IWA-2413.

VI. Justification for the Granting of Relief: (See item IV. Basis for Relief). By being able to continue using the same Code edition for the Third 10-Year Inspection Interval (and subsequent Inspection Intervals, for the remainder of the plant life), a more comprehensive examination will be achieved which will enhance the possibility of detecting a generic problem. It will also reduce costs involved in maintaining two separate programs and prevent possible errors associated with maintaining two programs with different requirements.

Granting of this Relief Request will ensure that an acceptable level of quality and safety will have been achieved and public health and safety will not be endangered.

VII. Implementation Schedule: The Code-required examinations will be performed during the Third 10-Year Interval (and subsequent Inspection Intervals, for the remainder of the plant life).

NOTE: This Relief Request was previously approved on 9/29/86 and 6/22/89 for the Second Interval. The Relief Request number was 8.1.2, later changed to 6.1.2.

GEORGIA POWER COMPANY
PLANT HATCH, UNIT 1 & 2
THIRD 10-YEAR INTERVAL
REQUEST FOR RELIEF NO. RR-9

I. System/component(s) for Which Relief is Requested: All ASME Class 1,2 and 3 piping and components included within the scope of the ISI Program

II. Code Requirement: ASME Section XI components require a hydrostatic pressure test after welded repairs or installation of replacement items by welding, as noted in IWA-4000.

III. Code Requirement for Which Relief is Requested: Relief is requested from performing the required hydrostatic test for Section XI components after welded repairs or installation of replacement items by welding.

IV. Basis for Relief: ASME Section XI Code Case N-416-1 was issued on February 15, 1994. This Code Case has been approved by the NRC staff for use at Plant Hatch and other plants, but has not been formally endorsed by inclusion in NRC Regulatory Guide 1.147. It was previously approved for Plant Hatch by SER dated 6/15/95.

V. Alternate Examinations: Georgia Power Company will comply with the pressure testing requirements of ASME Section XI Code Case N-416-1 for welded repairs or installation of replacement items by welding. In addition to the alternative rules of Code Case N-416-1, GPC proposes to augment the alternative tests by performing an additional surface examination on the root pass layer of butt and socket welds on the pressure retaining boundary of Class 3 components.

VI. Justification for the Granting of Relief: The proposed alternative testing requirements have been evaluated by the ASME Code Committee and the NRC and have been deemed acceptable for determining the pressure boundary integrity of the affected components. Implementation of pressure testing in accordance with the subject Code Case will ensure an acceptable level of quality and safety, does not decrease the margin of public health and safety and is thus authorized pursuant to 10 CFR 50.55a(a)(3)(i). By implementing the alternative examinations, reduction in costs, personnel radiation dose, and outage time can be realized by Georgia Power Company at Plant Hatch

VII. Implementation Schedule: The alternative rules for post repair/installation hydrostatic testing for Class 1, 2, and 3 systems in accordance with Code Case N-416-1 will be used for the Third 10-Year Interval.

Approval Date: February 15, 1994

See Numeric Index for expiration and any reaffirmation dates.

Case N-416-1
Alternative Pressure Test Requirement for Welded Repairs or Installation of Replacement Items by Welding, Class 1, 2 and 3
Section XI, Division 1

Inquiry: What alternative pressure test may be performed in lieu of the hydrostatic pressure test required by para. IWA-4000 for welded repairs or installation of replacement items by welding?

Reply: It is the opinion of the Committee that in lieu of performing the hydrostatic pressure test required by para. IWA-4000 for welded repairs or installation of replacement items by welding, a system leakage test may be used provided the following requirements are met.

(a) NDE shall be performed in accordance with the methods and acceptance criteria of the applicable Subsection of the 1992 Edition of Section III.

(b) Prior to or immediately upon return to service, a visual examination (VT-2) shall be performed in conjunction with a system leakage test, using the 1992 Edition of Section XI, in accordance with para. IWA-5000, at nominal operating pressure and temperature.

(c) Use of this Case shall be documented on an NIS-2 Form.

If the previous version of this case were used to defer a Class 2 hydrostatic test, the deferred test may be eliminated when the requirements of this revision are met.

GEORGIA POWER COMPANY
PLANT HATCH, UNIT 1 & 2
THIRD 10-YEAR INTERVAL
REQUEST FOR RELIEF NO. RR-10

I. System/Component(s) for Which Relief is Requested: All welds and areas in the ISI Program that are subject to surface or volumetric examination.

II. Code Requirement: Section XI, Table IWA-2610, requires that a reference system be established for all welds and areas subject to surface or volumetric examination.

III. Code Requirement from Which Relief is Requested: Relief is requested from establishing a weld reference system for all welds and areas subject to examination.

IV. Basis for Relief: Physical and radiological limitations prevent the actual marking of the majority of the RPV welds, nozzle welds, and piping welds. Many of these limitations actually prohibit complete examination of the welds. Many of the welds which could be accessed are covered by insulation.

V. Alternate Examinations: N/A

VI. Justification for the Granting of Relief: Each weld is referenced to permanently located fixtures in the immediate area of the subject weld. These references include such items as nozzles, plant azimuth, and floor identifications, welded attachments, and concrete embedments. Each weld is described in the examination plan and on the examination reports in such a manner as to make it unique.

For each weld that is examined, the starting point is identified and the direction of travel is noted on the examination report in order that any indications can be accurately located. The configuration of the welds permits the inspectors to locate the weld edges which are used to locate the weld centerline.

Each weld subject to inservice examination will receive the Code required reference markings and identification, as inservice examinations are being performed.

VII. Implementation Schedule: The applicable examinations and subsequent markings will continue being performed during the Third 10-Year Interval.

NOTE: This Relief Request was previously approved, with conditions on 6/22/89 for the Second Interval. The Relief Request number was 8.1.6, later changed to 6.1.6.

GEORGIA POWER COMPANY
PLANT HATCH, UNIT 1 & 2
THIRD 10-YEAR INTERVAL
REQUEST FOR RELIEF NO. RR-11

I. System/Component(s) for Which Relief is Requested: All ASME Class 1, 2, and 3 Snubbers included within the scope of the ISI Program

II. Code Requirement: Section XI, IWF-5300 (a) and (c) require that visual examinations of snubbers and nonintegral attachments (including lugs (nonintegral), bolting, pins, and clamps) shall be examined by personnel certified to ASME XI VT-3 requirements.

III. Code Requirement from Which Relief is Requested: Relief is requested from using Section XI qualified personnel to perform the Code-required visual examinations of snubbers and their associated nonintegral attachments, including lugs, bolting, pins, and clamps.

IV. Basis for Relief: A selective group of Georgia Power Company (GPC) Maintenance Department personnel have received special training in the examination and testing of snubbers. This training has included specialized classes presented by various snubber vendors and contractors and has included training for the identification of potential problems and deficient conditions relative to snubber operability. These classes have included instructions in snubber repair and complete overhaul and these same maintenance personnel have been trained to perform snubber functional testing. These maintenance personnel have been far more involved and have accumulated many more hours of experience in activities associated with the removal, installation, examination, repair, overhaul, and testing of snubbers than a typical ASME XI VT-3 certified inspector.

The qualification of personnel will be in accordance with the Georgia Power Company Quality Assurance Program for training and qualification of plant personnel. The subject maintenance personnel will have all such training documented to the training program requirements.

These IWF activities will be documented in the Site Snubber Program. Additionally, the GPC snubber examination procedures require that all examination data sheets be reviewed by the site snubber engineer for concurrence and resolution of any reported conditions.

(This Relief Request does not address the IWB, IWC, or IWD examinations which will be performed in accordance with Subarticle IWA-2300, Qualifications of Nondestructive Examination Personnel.)

V. Alternate Examinations: Maintenance personnel who have been trained to recognize potential problems and deficient conditions specifically applicable to snubbers and who are involved with the snubber functional testing program will be utilized to perform the snubber visual examinations required by IWF-5300 (a) and (c) and Table IWF-2500-1 (excluding welded attachments).

VI Justification for the Granting of Relief: Utilization of GPC maintenance personnel who have been specifically trained to inspect, test, repair and overhaul snubber supports and who perform the examinations in conjunction with the Site Snubber Program will:

- eliminate a redundant inspection by VT-3 certified personnel, thus reducing man-power requirements, costs, and radiation exposure,

- provide examination by personnel with extensive experience in snubber applications and maintenance, and

- meet all aspects of IWF, other than the certification of inspection personnel.

These examinations of snubbers and the nonintegral attachments will provide reasonable assurance that unallowable inservice flaws have not developed or that they will be detected and repaired prior to return of the reactor vessel to service. Thus an acceptable level of quality and safety will have been achieved and public health and safety will not be endangered by allowing the proposed alternative qualification of inspection personnel.

VII. Implementation Schedule: The subject examinations will be performed during the Third 10-Year Interval.

TABLE 1
ISI PROGRAM FOR ASME CLASS 1 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

Item No.	Examination Category	System or Component Description	Area(s) to Be Examined	Method Examination	Alternative Examinations
B1.11	B-A	Reactor Pressure Vessel	Circumferential Shell Welds	Volumetric	No
B1.12	B-A	Reactor Pressure Vessel	Longitudinal Shell Weld	Volumetric	No
B1.21	B-A	Reactor Pressure Vessel and Closure Head	Longitudinal Shell Welds	Volumetric	No
B1.22	B-A	Reactor Pressure Vessel and Closure Head	Meriodional Head Welds	Volumetric	No
B.1.30	B-A	Reactor Pressure Vessel	Shell-to Flange Weld	Volumetric	No
B1.40	B-A	Reactor Pressure Vessel Closure Head	Head-to-Flange Weld	Surface and Volumetric	No
B1.51	B-A	Reactor Pressure Vessel Welds	Beltline Region Repair	Volumetric	Not applicable to either Hatch unit.
B2.10	B-B	Pressurizer	Shell-to-Head Welds	Volumetric	Not applicable to either Hatch unit.
B2.20	B-B	Pressurizer	Head Welds	Volumetric	Not applicable to either Hatch unit.
B2.30	B-B	Steam Generator (Primary Side)	Head Welds	Volumetric	Not applicable to either Hatch unit.

TABLE 1
ISI PROGRAM FOR ASME CLASS 1 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

Item No.	Examination Category	System or Component Description	Area(s) to Be Examined	Method Examination	Alternative Examinations
B2.40	B-B	Steam Generator (Primary Side)	Tubesheet-to-Head Welds	Volumetric	Not applicable to either Hatch unit
B2.50	B-B	Heat Exchangers (Primary Side)	Head Welds	Volumetric	Not applicable to either Hatch unit
B2.60	B-B	Heat Exchangers (Primary Side)	Tubesheet-to-Shell (or Head) Welds	Volumetric	Not applicable to either Hatch unit.
B2.70	B-B	Heat Exchangers (Primary Side)	Tubesheet-to-Shell (or Head) Welds	Volumetric	Not applicable to either Hatch unit.
B2.80	B-B	Heat Exchangers (Primary Side)	Tubesheet-to-Shell (or Head) Welds	Volumetric	Not applicable to either Hatch unit.
B3.10	B-D	Reactor Pressure Vessel	Nozzle-to-Vessel Welds	Volumetric	Not applicable to either Hatch unit.; GPC has elected to perform examinations in accordance with Program B.
B3.20	B-D	Reactor Pressure Vessel	Nozzle Inside Radius Section	Volumetric	Not applicable to either Hatch unit.; GPC has elected to perform examinations in accordance with Program B.

TABLE 1
ISI PROGRAM FOR ASME CLASS 1 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

Item No.	Examination Category	System or Component Description	Area(s) to Be Examined	Method Examination	Alternative Examinations
B3.30	B-D	Pressurizer	Nozzle-to-Vessel Welds	Volumetric	Not applicable to either Hatch unit.
B3.40	B-D	Pressurizer	Nozzle Inside Radius Section	Volumetric	Not applicable to either Hatch unit.
B3.50	B-D	Steam Generators (Primary Side)	Nozzle-to-Vessel Welds	Volumetric	Not applicable to either Hatch unit.
B3.60	B-D	Steam Generators (Primary Side)	Nozzle Inside Radius Section	Volumetric	Not applicable to either Hatch unit.
B3.70	B-D	Heat Exchangers (Primary Side)	Nozzle-to-Vessel Welds	Volumetric	Not applicable to either Hatch unit.
B3.80	B-D	Heat Exchangers (Primary Side)	Nozzle Inside Radius Section	Volumetric	Not applicable to either Hatch unit.
B3.90	B-D	Reactor Pressure Vessel	Nozzle-to-Vessel Welds	Volumetric	Yes, RR-3
B3.100	B-D	Reactor Pressure Vessel	Nozzle Inside Radius Section	Volumetric	Yes, RR-3
B3.110	B-D	Pressurizer	Nozzle-to-Vessel Welds	Volumetric	Not applicable to either Hatch unit.
B3.120	B-D	Pressurizer	Nozzle Inside Radius Section	Volumetric	Not applicable to either Hatch unit
B3.130	B-D	Steam Generators (Primary Side)	Nozzle-to-Vessel Welds	Volumetric	Not applicable to either Hatch unit.
B3.140	B-D	Steam Generators (Primary Side)	Nozzle Inside Radius Section	Volumetric	Not applicable to either Hatch unit.

TABLE 1
ISI PROGRAM FOR ASME CLASS 1 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

Item No.	Examination Category	System or Component Description	Area(s) to Be Examined	Method Examination	Alternative Examinations
B3.150	B-D	Heat Exchangers (Primary Side)	Nozzle-to-Vessel Welds	Volumetric	Not applicable to either Hatch unit.
B3.160	B-D	Heat Exchangers (Primary Side)	Nozzle Inside Radius Section	Volumetric	Not applicable to either Hatch unit.
B4.11	B-E	Vessel Nozzles	External Surfaces of Partial Penetration Welds	Visual, VT-2	Yes, RR-2
B4.12	B-E	Control Rod Drive Nozzles	External Surfaces of Partial Penetration Welds	Visual, VT-2	Yes, RR-2
B4.13	B-E	Instrumentation Nozzles	External Surfaces of Partial Penetration Welds	Visual, VT-2	Yes, RR-2
B4.20	B-E	Pressurizer	External Surfaces of Heater Penetration Welds	Visual, VT-2	Not applicable to either Hatch unit
B5.10	B-F	Reactor Pressure Vessel	Nozzle-to-Safe End Butt Welds (Nominal Pipe Size ≥4 in.)	Surface and Volumetric	Yes, N-461
B5.20	B-F	Reactor Pressure Vessel	Nozzle-to-Safe End Butt Welds (Nominal Pipe Size <4 in.)	Surface	Yes, RR-6
B5.30	B-F	Reactor Pressure Vessel	Nozzle-to-Safe End Socket Welds	Surface	Not applicable to either Hatch unit
B5.40	B-F	Pressurizer	Nozzle-to-Safe End Butt Welds (Nominal Pipe Size ≥4 in.)	Surface and Volumetric	Not applicable to either Hatch unit
B5.50	B-F	Pressurizer	Nozzle-to-Safe End Butt Welds (Nominal Pipe Size <4 in.)	Surface	Not applicable to either Hatch unit

TABLE 1
ISI PROGRAM FOR ASME CLASS 1 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

Item No.	Examination Category	System or Component Description	Area(s) to Be Examined	Method Examination	Alternative Examinations
B5.60	B-F	Pressurizer Socket Welds	Nozzle-to-Safe End	Surface	Not applicable to either Hatch unit
B5.70	B-F	Steam Generators (Primary Side)	Nozzle-to-Safe End Butt Welds (Nominal Pipe Size ≥4 in.)	Surface and Volumetric	Not applicable to either Hatch unit
B5.80	B-F	Steam Generators (Primary Side)	Nozzle-to-Safe End Butt Welds (Nominal Pipe Size <4 in.)	Surface	Not applicable to either Hatch unit
B5.90	B-F	Steam Generators (Primary Side)	Nozzle-to-Safe End Socket Welds	Surface	Not applicable to either Hatch unit
B5.100	B-F	Heat Exchangers (Primary Side)	Nozzle-to-Safe End Butt Welds (Nominal Pipe Size ≥4 in.)	Surface and Volumetric	Not applicable to either Hatch unit
B5.110	B-F	Heat Exchangers (Primary Side)	Nozzle-to-Safe End Butt Welds (Nominal Pipe Size <4 in.)	Surface	Not applicable to either Hatch unit
B5.120	B-F	Heat Exchangers (Primary Side)	Nozzle-to-Safe End Socket Welds	Surface	Not applicable to either Hatch unit
B5.130	B-F	Piping	Dissimilar Butt Welds (Nominal Pipe Size ≥4 in.)	Surface and Volumetric	No
B5.140	B-F	Piping	Dissimilar Butt Welds (Nominal Pipe size <4 in.)	Surface	Not applicable to either Hatch unit
B5.150	B-F	Piping	Dissimilar Metal Socket Welds	Surface	Not applicable to either Hatch unit

TABLE 1
ISI PROGRAM FOR ASME CLASS 1 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

Item No.	Examination Category	System or Component Description	Area(s) to Be Examined	Method Examination	Alternative Examinations
B6.10	B-G-1	Reactor Pressure Vessel	Closure Head Nuts	Surface	Yes, RR-1
B6.20	B-G-1	Reactor Pressure Vessel	Closure Studs, in Place	Volumetric	Yes, N-307-1
B6.30	B-G-1	Reactor Pressure Vessel	Closure Studs, When Removed	Surface and Volumetric	Yes, N-307-1
B6.40	B-G-1	Reactor Pressure Vessel	Threads in Flange	Volumetric	No
B6.50	B-G-1	Reactor Pressure Vessel	Closure Washers, Bushings	Visual, VT-1	No
B6.60	B-G-1	Pressurizer	Bolts and Studs	Volumetric	Not applicable to either Hatch unit
B6.70	B-G-1	Pressurizer	Flange Surface, When Connection Disassembled	Visual, VT-1	Not applicable to either Hatch unit
B6.80	B-G-1	Pressurizer	Nuts, Bushings, and Washers	Visual, VT-1	Not applicable to either Hatch unit
B6.90	B-G-1	Steam Generator	Bolts and Studs	Volumetric	Not applicable to either Hatch unit
B6.100	B-G-1	Steam Generator	Flange Surface, When Connection Disassembled	Visual, VT-1	Not applicable to either Hatch unit
B6.110	B-G-1	Steam Generator	Nuts, Bushings, and Washers	Visual, VT-1	Not applicable to either Hatch unit
B6.120	B-G-1	Heat Exchangers	Bolts and Studs	Volumetric	Not applicable to either Hatch unit

TABLE 1
ISI PROGRAM FOR ASME CLASS 1 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

Item No.	Examination Category	System or Component Description	Area(s) to Be Examined	Method Examination	Alternative Examinations
B6.130	B-G-1	Heat Exchangers	Flange Surface, When Connection Disassembled	Visual, VT-1	Not applicable to either Hatch unit
B6.140	B-G-1	Heat Exchangers	Nuts, Bushings, and Washers	Visual, VT-1	Not applicable to either Hatch unit
B6.150	B-G-1	Piping	Bolts and Studs	Volumetric	Not applicable to either Hatch unit
B6.160	B-G-1	Piping	Flange Surface, When Connection Disassembled	Visual, VT-1	Not applicable to either Hatch unit
B6.170	B-G-1	Piping	Nuts, Bushings, and Washers	Visual, VT-1	Not applicable to either Hatch unit
B6.180	B-G-1	Pumps	Bolts and Studs	Volumetric	No
B6.190	B-G-1	Pumps	Flange Surface, When Connection Disassembled	Visual, VT-1	No
B6.200	B-G-1	Pumps	Nuts, Bushings, and Washers	Visual, VT-1	No
B6.210	B-G-1	Valves	Bolts and Studs	Volumetric	Not applicable to either Hatch unit
B6.220	B-G-1	Valves	Flange Surface, When Connection Disassembled	Visual, VT-1	Not applicable to either Hatch unit
B6.230	B-G-1	Valves	Nuts, Bushings, and Washers	Visual, VT-1	Not applicable to either Hatch unit

TABLE 1
ISI PROGRAM FOR ASME CLASS 1 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

Item No.	Examination Category	System or Component Description	Area(s) to Be Examined	Method Examination	Alternative Examinations
B7.10	B-G-2	Reactor Pressure Vessel	Bolts, Studs, and Nuts	Visual, VT-1	Not applicable to either Hatch unit
B7.20	B-G-2	Pressurizer	Bolts, Studs, and Nuts	Visual, VT-1	Not applicable to either Hatch unit
B7.30	B-G-2	Steam Generators	Bolts, Studs, and Nuts	Visual, VT-1	Not applicable to either Hatch unit
B7.40	B-G-2	Heat Exchangers	Bolts, Studs, and Nuts	Visual, VT-1	Not applicable to either Hatch unit
B7.50	B-G-2	Piping	Bolts, Studs, and Nuts	Visual, VT-1	No
B7.60	B-G-2	Pumps	Bolts, Studs, and Nuts	Visual, VT-1	Not applicable to either Hatch unit
B7.70	B-G-2	Valves	Bolts, Studs, and Nuts	Visual, VT-1	No
B7.80	B-G-2	CRD Housings	Bolts, Studs, and Nuts (When Disassembled)	Visual, VT-1	No
B8.10	B-H	Reactor Pressure Vessel	Integrally Welded Attachments	Volumetric or Surface as Applicable	No
B8.20	B-H	Pressurizer	Integrally Welded Attachments	Volumetric or Surface, as Applicable	Not applicable to either Hatch unit
B8.30	B-H	Steam Generators	Integrally Welded Attachments	Volumetric or Surface, as Applicable	Not applicable to either Hatch unit

TABLE 1
ISI PROGRAM FOR ASME CLASS 1 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

Item No.	Examination Category	System or Component Description	Area(s) to Be Examined	Method Examination	Alternative Examinations
B8.40	B-H	Heat Exchangers	Integrally Welded Attachments	Volumetric or Surface, as Applicable	Not applicable to either Hatch unit
B9.11	B-J	Piping	Circumferential Welds (Nominal Pipe Size ≥4 in.)	Surface and Volumetric	Yes, N-461
B9.12	B-J	Piping	Longitudinal Welds (Nominal Pipe Size ≥4 in.)	Surface and Volumetric	Yes, RR-7
B9.21	B-J	Piping	Circumferential Welds (Nominal Pipe Size <4 in.)	Surface	No
B9.22	B-J	Piping	Longitudinal Welds (Nominal Pipe Size <4 in.)	Surface	Not applicable to either Hatch unit
B9.31	B-J	Piping	Branch Pipe Connection Welds (Nominal Pipe size ≥ 4 in.)	Surface and Volumetric	No
B9.32	B-J	Piping	Branch Pipe Connection Welds (Nominal Pipe Size <4 in.)	Surface	No
B9.40	B-J	Piping	Socket Welds	Surface	Not applicable to either Hatch unit

TABLE 1
ISI PROGRAM FOR ASME CLASS 1 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

Item No.	Examination Category	System or Component Description	Area(s) to Be Examined	Method Examination	Alternative Examinations
B10.10	B-K-I	Piping	Integrally Welded Attachments	Volumetric or Surface, as Applicable	Yes, RR-4
B10.20	B-K-1	Pumps	Integrally Welded Attachments	Volumetric or Surface, as Applicable	Yes, RR-4
B10.30	B-K-1	Valves	Integrally Welded Attachments	Volumetric or Surface, as Applicable	Not applicable to either Hatch unit
B12.10	B-L-1	Pumps	Pump Casing Welds	Volumetric	Not applicable to either Hatch unit
B12.20	B-L-2	Pumps	Pump Casing	Visual, VT-3	No
B12.30	B-M-1	Valves	Valve Body Welds (Nominal Pipe Size <4 in.)	Surface	Not applicable to either Hatch unit
B12.40	B-M-1	Valves	Valve Body Welds (Nominal Pipe Size ≥4 in.)	Volumetric	Not applicable to either Hatch unit

TABLE 1
ISI PROGRAM FOR ASME CLASS 1 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

Item No.	Examination Category	System or Component Description	Area(s) to Be Examined	Method Examination	Alternative Examinations
B12.50	B-M-2	Valves	Valve Body (Nominal Pipe Size >4 in.)	Visual, VT-3	No
B13.10	B-N-1	Reactor Pressure Vessel	Vessel Interior	Visual, VT-3	No
B13.20	B-N-2	Reactor Pressure Vessel (BWR)	Interior Attachments Within Beltline Region	Visual, VT-1	No
B13.30	B-N-2	Reactor Pressure Vessel (BWR)	Interior Attachments Beyond Beltline Region	Visual, VT-3	No
B13.40	B-N-2	Reactor Pressure Vessel (BWR)	Core Support Structure	Visual, VT-3	No
B13.50	B-N-2	Reactor Pressure Vessel (PWR)	Interior Attachments Within Beltline Region	Visual, VT-1	Not applicable to either Hatch unit
B13.60	B-N-2	Reactor Pressure Vessel (PWR)	Interior Attachments Beyond Beltline Region	Visual, VT-3	Not applicable to either Hatch unit
B13.70	B-N-3	Reactor Pressure Vessel (PWR)	Core Support Structure (Removed)	Visual, VT-3	Not applicable to either Hatch unit
B14.10	B-O	Reactor Pressure Vessel	Welds in Control Rod Drive Housing	Volumetric or Surface	No

TABLE 1
ISI PROGRAM FOR ASME CLASS 1 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

Item No.	Examination Category	System or Component Description	Area(s) to Be Examined	Method Examination	Alternative Examinations
B15.10	B-P	Reactor Pressure Vessel	Pressure Retaining Boundary	System Leakage Test; Visual, VT-2	No
B15.11	B-P	Reactor Pressure Vessel	Pressure Retaining Boundary	System Hydro-Test; Visual, VT-2	Yes, RR-2
B15.20	B-P	Pressurizer	Pressure Retaining Boundary	System Leakage Test; Visual, VT-2	Not applicable to either Hatch unit
B15.21	B-P	Pressurizer	Pressure Retaining Boundary	System Hydro-Test; Visual, VT-2	Not applicable to either Hatch unit
B15.30	B-P	Steam Generators	Pressure Retaining Boundary	System Leak-age Test; Visual, VT-2	Not applicable to either Hatch unit
B15.31	B-P	Steam Generators	Pressure Retaining Boundary	System Hydro-test; Visual, VT-2	Not applicable to either Hatch unit

TABLE 1
ISI PROGRAM FOR ASME CLASS 1 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

Item No.	Examination Category	System or Component Description	Area(s) to Be Examined	Method Examination	Alternative Examinations
B15.40	B-P	Heat Exchangers	Pressure Retaining Boundary	System Leakage Test; Visual, VT-2	Not applicable to either Hatch unit
B15.41	B-P	Heat Exchangers	Pressure Retaining Boundary	System Hydrotest; Visual, VT-2	Not applicable to either Hatch unit
B15.50	B-P	Piping	Pressure Retaining Boundary	System Leakage Test; Visual, VT-2	No
B15.51	B-P	Piping	Pressure Retaining Boundary	System Hydrotest; Visual, VT-2	Yes, RR-2
B15.60	B-P	Pumps	Pressure Retaining Boundary	System Leakage Test; Visual, VT-2	No
B15.61	B-P	Pumps	Pressure Retaining Boundary	System Hydrotest; Visual, VT-2	Yes, RR-2

TABLE 1
ISI PROGRAM FOR ASME CLASS 1 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

Item No.	Examination Category	System or Component Description	Area(s) to Be Examined	Method Examination	Alternative Examinations
B15.70	B-P	Valves	Pressure Retaining Boundary	System Leakage Test; Visual, VT-2	No
B15.71	B-P	Valves	Pressure Retaining Boundary	System Hydrotest; Visual, VT-2	Yes, RR-2
B16.10	B-Q	Steam Generator Tubing	Straight Tube Design	Volumetric	Not applicable to either Hatch unit
B16.20	B-Q	Steam Generator Tubing	U-Tube Design	Volumetric	Not applicable to either Hatch unit

TABLE 2
ISI PROGRAM FOR ASME CLASS 2 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

Item No.	Examination Category	System or Component Description	Area(s) to Be Examined	Method of Examination	Alternative Examinations
C1.10	C-A	Pressure Vessels	Shell Circumferential Welds	Volumetric	No
C1.20	C-A	Pressure Vessels	Head Circumferential Welds	Volumetric	Yes, RR-5
C1.30	C-A	Pressure Vessels	Tubesheet-to-Shell Weld	Volumetric	No
C2.11	C-B	Pressure Vessels	Nozzles-to-Shell (or Head) Weld Where Vessel Nominal Thickness $\leq$ 1/2 inch	Surface	Not applicable to either Hatch unit
C2.21	C-B	Pressure Vessels	Nozzle-to-Shell (or Head) Weld for Vessels Without Reinforcing Plates Where Vessel Nominal Thickness >1/2 inch	Surface and Volumetric	No
C2.22	C-B	Pressure Vessels	Nozzle Inside Radius Section for Vessels without Reinforcing Plates Where Vessel Nominal Thickness >1/2 inch	Volumetric	Not applicable to either Hatch unit
C2.31	C-B	Pressure Vessels	Reinforcing Plate Welds to Nozzle and Vessel Where Vessel Nominal Thickness >1/2 inch	Surface	Not applicable to either Hatch unit

TABLE 2
ISI PROGRAM FOR ASME CLASS 2 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

Item No.	Examination Category	System or Component Description	Area(s) to Be Examined	Method of Examination	Alternative Examinations
C2.32	C-B	Pressure Vessels	Nozzle-to-Shell (or Head) Welds for Vessels With Re-enforcing Plates When Inside of Vessel is Accessible and Vessel Nominal Thickness >1/2 inch	Volumetric	Not applicable to either Hatch unit
C2.33	C-B	Pressure Vessels	Nozzle-to-Shell (or Head) Weld for Vessel With Reinforcing Plates When Inside of Vessel in Inaccessible and Vessel Nominal Thickness > 1/2 inch.	Visual, VT-2	Not applicable to either Hatch unit
C3.10	C-C	Pressure Vessels	Integrally Welded Attachments	Surface	Yes, RR-4
C3.20	C-C	Piping	Integrally Welded Attachments	Surface	Yes, RR-4
C3.30	C-C	Pumps	Integrally Welded Attachments	Surface	Not applicable to either Hatch unit
C3.40	C-C	Valves	Integrally Welded Attachments	Surface	Not applicable to either Hatch unit
C4.10	C-D	Pressure Vessels	Bolts and Studs	Volumetric	Not applicable to either Hatch unit
C4.20	C-D	Piping	Bolts and Studs	Volumetric	Not applicable to either Hatch unit

TABLE 2
ISI PROGRAM FOR ASME CLASS 2 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

Item No.	Examination Category	System or Component Description	Area(s) to Be Examined	Method of Examination	Alternative Examinations
C4.30	C-D	Pumps	Bolts and Studs	Volumetric	Not applicable to either Hatch unit
C4.40	C-D	Valves	Bolts and Studs	Volumetric	Not applicable to either Hatch unit
C5.11	C-F-1	SS Piping	Circumferential Welds ≥ 3/8 inch Nominal Wall Thickness for Piping > NPS 4	Surface and Volumetric	Not applicable to either Hatch unit
C5.12	C-F-1	SS Piping	Longitudinal Welds ≥ 3/8 inch Nominal Wall Thickness for Piping > NPS 4	Surface and Volumetric	Not applicable to either Hatch unit
C5.21	C-F-1	SS Piping	Circumferential Welds > 1/5 inch Nominal Wall Thickness for Piping ≥ NPS 2 and ≤ NPS 4	Surface and Volumetric	Not applicable to either Hatch unit
C5.22	C-F-1	SS Piping	Longitudinal Welds > 1/5 inch Nominal Wall Thickness for Piping ≥ NPS 2 and ≤ NPS 4	Surface and Volumetric	Not applicable to either Hatch unit
C5.30	C-F-1	SS Piping	Socket Welds	Surface	Not applicable to either Hatch unit.

TABLE 2
ISI PROGRAM FOR ASME CLASS 2 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

Item No.	Examination Category	System or Component Description	Area(s) to Be Examined	Method of Examination	Alternative Examinations
C5.41	C-F-1	SS Piping	Circumferential Welds Pipe Branch Connections (Nominal Pipe Size ≥ 2)	Surface	Not applicable to either Hatch unit
C5.42	C-F-1	SS Piping	Longitudinal Welds Pipe Branch Connections (Nominal Pipe Size ≥ 2)	Surface	Not applicable to either Hatch unit
C5.51	C-F-2	CS Piping	Circumferential Welds ≥ 3/8 inch Nominal Wall Thickness for Piping > NPS 4	Surface and Volumetric	Yes, N-461
C5.52	C-F-2	CS Piping	Longitudinal Welds ≥ 3/8 inch Nominal Wall Thickness for Piping > NPS 4	Surface and Volumetric	Yes, RR-7
C5.61	C-F-2	CS Piping	Circumferential Welds > 1/5 inch Nominal Wall for Piping ≥ NPS 2 and ≤ NPS 4	Surface and Volumetric	Not applicable to either Hatch unit
C5.62	C-F-2	CS Piping	Longitudinal Welds > 1/5 inch Nominal Wall Thickness for Piping ≥ NPS 2 and ≤ NPS 4	Surface and Volumetric	Not applicable to either Hatch unit
C5.70	C-F-2	CS Piping	Socket Welds	Surface	Not applicable to either Hatch unit

TABLE 2
ISI PROGRAM FOR ASME CLASS 2 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

Item No.	Examination Category	System or Component Description	Area(s) to Be Examined	Method of Examination	Alternative Examinations
C5.81	C-F-2	CS Piping	Circumferential Welds Pipe Branch Connections (Nominal Pipe Size ≥ 2)	Surface	No
C5.82	C-F-2	CS Piping	Longitudinal Welds Pipe Branch Connections (Nominal Pipe Size ≥ 2)	Surface	Yes, RR-7
C6.10	C-G	Pumps	Pump Casing Welds	Surface	Not applicable to either Hatch unit
C6.20	C-G	Valves	Valve Body Welds	Surface	Not applicable to either Hatch unit
C7.10	C-H	Pressure Vessels	Pressure Retaining Components	System Pressure Test; Visual, VT-2	Not applicable to either Hatch unit
C7.20	C-H	Pressure Vessels	Pressure Retaining Components	System Hydrostatic Test; Visual, VT-2	Yes, RR-2
C7.30	C-H	Piping	Pressure Retaining Components	System Pressure Test; Visual, VT-2	Not applicable to either Hatch unit
C7.40	C-H	Piping	Pressure Retaining Components	System Hydrostatic Test; Visual, VT-2	Yes, RR-2
C7.50	C-H	Pumps	Pressure Retaining Components	System Pressure Test; Visual, VT-2	No

TABLE 2
ISI PROGRAM FOR ASME CLASS 2 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

Item No.	Examination Category	System or Component Description	Area(s) to Be Examined	Method of Examination	Alternative Examinations
C7.60	C-H	Pumps	Pressure Retaining Components	System Hydrostatic test; Visual, VT-2	Yes, RR-2
C7.70	C-H	Valves	Pressure Retaining Components	System Pressure Test; Visual, VT-2	No
C7.80	C-H	Valves	Pressure Retaining Components	System Hydrostatic Test; Visual, VT-2	Yes, RR-2

TABLE 3
ISI PROGRAM FOR ASME CLASS 3 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

Item No.	Examination Category	System or Component Description	Area(s) to Be Examined	Method of Examination	Alternative Examinations
D1.10	D-A	Systems in Support of Reactor Shutdown Function	Pressure Retaining Components	Visual, VT-2	Yes, RR-2
D1.20	D-A	Systems in Support of Reactor Shutdown Function	Integral Attachment - Component Supports and Restraints	Visual, VT-3	Yes, RR-4
D1.30	D-A	Systems in Support of Reactor Shutdown Function	Integral Attachment - Mechanical and Hydraulic Snubbers	Visual, VT-3	Yes, RR-4
D1.40	D-A	Systems in Support of Reactor Shutdown Function	Integral Attachment - Spring Type Supports	Visual, VT-3	Yes, RR-4
D1.50	D-A	Systems in Support of Reactor Shutdown Function	Integral Attachment - Constant Load Type Supports	Visual, VT-3	Yes, RR-4
D1.60	D-A	Systems in Support of Reactor Shutdown Function	Integral Attachment - Shock Absorbers	Visual, VT-3	Yes, RR-4

TABLE 3
ISI PROGRAM FOR ASME CLASS 3 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

Item No.	Examination Category	System or Component Description	Area(s) to Be Examined	Method of Examination	Alternative Examinations
D2.10	D-B	Systems in Support of ECC, CHR, Atmosphere Cleanup, and Reactor RHR	Pressure Retaining Components	Visual, VT-2	Yes, RR-2
D2.20	D-B	Systems in Support of ECC, CHR, Atmosphere Cleanup, and Reactor RHR	Integral Attachment - Component Supports and Restraints	Visual, VT-3	Yes, RR-4
D2.30	D-B	Systems in Support of ECC, CHR, Atmosphere Cleanup, and Reactor RHR	Integral Attachment - Mechanical and Hydraulic Snubbers	Visual, VT-3	Yes, RR-4
D2.40	D-B	Systems in Support of ECC, CHR, Atmosphere Cleanup, and Reactor RHR	Integral Attachment - Spring Type Supports	Visual, VT-3	Yes, RR-4
D2.50	D-B	Systems in Support of ECC, CHR, Atmosphere Cleanup, and Reactor RHR	Integral Attachment- Constant Load Type Supports	Visual, VT-3	Yes, RR-4
D2.60	D-B	Systems in Support of ECC, CHR, Atmosphere Cleanup, and Reactor RHR	Integral Attachment - Shock Absorbers	Visual, VT-3	Yes, RR-4

TABLE 3
ISI PROGRAM FOR ASME CLASS 3 COMPONENTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

Item No.	Examination Category	System or Component Description	Area(s) to Be Examined	Method of Examination	Alternative Examinations
D3.10	D-C	Systems in Support of RHR from Spent Fuel Storage Pool	Pressure Retaining Components	Visual, VT-2	Yes, RR-2
D3.20	D-C	Systems in Support of RHR from Spent Fuel Storage Pool	Integral Attachment - Component Supports and Restraints	Visual, VT-3	Yes, RR-4
D3.30	D-C	Systems in Support of RHR from Spent Fuel Storage Pool	Integral Attachment - Mechanical and Hydraulic Snubbers	Visual, VT-3	Yes, RR-4
D3.40	D-C	Systems in Support of RHR from Spent Fuel Storage Pool	Integral Attachment - Spring Type Supports	Visual, VT-3	Yes, RR-4
D3.50	D-C	Systems in Support of RHR from Spent Fuel Storage Pool	Integral Attachment - Constant Load Type Supports	Visual, VT-3	Yes, RR-4
D3.60	D-C	Systems in Support of RHR from Spent Fuel Storage Pool	Integral Attachment - Shock Absorbers	Visual, VT-3	Yes, RR-4

TABLE 4
ISI PROGRAM FOR ASME CLASS 1, 2, AND 3 COMPONENT SUPPORTS
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2

Item No.	Examination Category	System or Component Description	Area(s) to Be Examined	Method of Examination	Alternative Examinations
F1.10	F-A	Supports	Mechanical Connections to Pressure Retaining Components and Building Structure	Visual, VT-3	Yes, N-491, RR-11
F1.20	F-A	Supports	Weld Connections to Building Structure	Visual, VT-3	Yes, N-491, RR-11
F1.30	F-A	Supports	Weld and Mechanical Connections at Intermediate Joints in Multiconnected Integral and Nonintegral Supports	Visual, VT-3	Yes, N-491, RR-11
F1.40	F-A	Supports	Clearances of Guides and Stops, Alignment of Supports, Assembly of Support Items	Visual, VT-3	Yes, N-491
F1.50	F-A	Supports	Spring Supports and Constant Load Supports	Visual, VT-3	Yes, N-491
F1.60	F-A	Supports	Sliding Surfaces	Visual, VT-3	Yes, N-491
F1.70	F-A	Supports	Hot or Cold Position of Spring Supports and Constant Load Supports	Visual, VT-3	Yes, N-491

Technical Basis Discussion

The following discussion is presented based on each NUREG category as a topic. A description of the category definition and a brief summary of the Hatch experience within each category is presented. Inspection results along with new inspection frequencies and scope expansion criteria are provided. Also, the proposed reclassification of welds is identified where appropriate.

Category A

These are welds with no known cracks, that have a low probability of incurring IGSCC problems, because they are made entirely of IGSCC resistant materials or have been solution heat treated after welding. Corrosion resistant clad is considered to be IGSCC resistant, and welds joining cast pump and valve bodies to resistant piping are considered to be resistant weldments.

The majority of Category A welds are longitudinal seam welds in the B31 Recirculation (RC), E11 Residual Heat Removal (RHR), and G31 Reactor Water Cleanup (RWCU) systems. The welds were solution annealed and are therefore, by NUREG-0313 criteria, considered resistant to IGSCC. These have been inspected using a 25% sample criteria during the previous ten-year interval.

In the future these long seam welds will not be inspected. Instead Code Case N-524 logic will be used. This code case effectively eliminates the inspection of longitudinal seam welds except for the portion that is included in the inspection boundary of the intersecting circumferential pipe weld. This should be the limiting location for long seam welds due to the proximity within the HAZ (heat affected zone). This was deemed technically acceptable by the ASME Code committees based on the extensive industry history of operation without a long seam failure. This case has been approved by ASME and on plant specific basis by NRC, but is not yet endorsed by the NRC in Reg. Guide 1.147.

Scope expansion for this type weld is not anticipated. This is based on industry experience used to support the Code Case N-524. If indications are found in the long seam area that are separate from the intersecting circumferential weld, Section XI scope expansion criteria for circumferential welds will be utilized.

The remainder of the Category A welds are circumferential welds in the RWCU system, made of conforming material. The population is comprised of 19 circumferential welds (excluding 1G31-1RWCU-6-D-15B and -15C which are inaccessible due to piping design) and one weld (1G31-1RWCUM-6-D-9) that has an overlay. The overlay was applied during 1988 when the Class 1 RWCU pipe was replaced. It was added to serve as a stress improvement process to mitigate the

Category A (continued)

effects of ID grinding. The weld overlay will be reclassified as Category E' (refer to details of Category E' elsewhere in this document) and as such, will be inspected during the next ten-year interval using the inspection and scope expansion criteria for that new category.

In 1993, the 19 circumferential welds received MSIP treatment as an additional measure to protect against crack initiation in conforming material. All 19 welds were inspected during the 1993 outage to verify there were no detrimental effects associated with the MSIP process. Post-MSIP baseline examinations revealed no indications. This also, for the 19 circumferential welds, satisfies the GL 88-01 requirement of inspecting stress improved welds within two refueling cycles after the performance of stress improvement. Coincident with the beginning of this 10-year ISI interval, the 19 circumferential welds will be inspected at a sample rate of 25% (5 welds) over the 10-year interval. This is consistent with the current ASME Section XI sampling technique and guidance of GL 88-01. The scope expansion rules of ASME Section XI for Class 1 piping will be used in the event indications warrant. This is consistent with the GL and is technically valid based on the material considerations.

Recommended Inspections (Third Ten-Year Interval) for Category A:

- Circumferential welds - Examine 25% of the Category A welds over the ten-year interval with the examinations being spread equally over the ten years. This is consistent with ASME Section XI and GL 88-01.
- Longitudinal Seam Welds - Examine these welds in accordance with Code Case N-524. This effectively will eliminate the inspection of the long seams. The code case requires the inspection of the portion of the long seam that is contained within the boundaries of the intersecting circumferential weld. This will eliminate the need to examine 12 inches of long seam either side of the circumferential welds.
- ASME Section XI scope expansion criteria will be utilized.

Previous Inspection Schedule (Second Ten-Year Interval) for Category A:

- Examine 25% of the welds every ten years (at least 12% in six years per NUREG-0313).
- Scope expansion consists of an additional sample of welds, approximately equal in number and similar in distribution (according to pipe size, system, and location) to the original sample, unless there is a technical reason to select a different sample.

Category B

None currently in service.

Category C

These welds are those which join non-resistant materials, contain no evidence of flaws and were subjected to stress improvement (SI) treatment after more than two years of operation. GL 88-01 required ultrasonic inspection during the outage the SI occurred, once within two outages of the SI and then again within ten years.

When the initial GPC commitment to GL 88-01 was made, the examinations required to be completed within 10 years were compressed to a schedule of approximately eight years after SI. This was to coincide with the end of the current ten-year interval. This schedule has been altered several times due to outage constraints and IGSCC indications in some Category C welds. Since the initial commitment was made, scope expansion examinations combined with the regularly scheduled examinations have resulted in a significantly larger number of examinations than anticipated. In fact, all but a small number of Category C welds have been inspected beyond the original commitment. A large number of welds received Induction Heat Stress Improvement (IHSI) treatment during the 1986 outage. Since that time, the only 12" welds that received weld overlays were two safe-end to nozzle welds and welds that were previously classified as category F (known cracking). This indicates that the SI treatment was effective for the 12" pipe.

The 28" inch pipe had twelve welds overlayed due to IGSCC indications during the 1990 outage (1B31-1RC-28A-2, -4, -6, -7, -8, -14 and 1B31-1RC-28B-8, -9, -10, -13, -14, -15) and one additional weld (1B31-1RC-28B-2) was overlayed in 1991. The occurrence of indications has decreased to the point that no reportable indications were noted during the 1993 outage. This is likely the result of hydrogen water chemistry (HWC).

Additional welds were added to the Category C group following the 1993 MSIP of Category D welds. These welds had no evidence of cracking following the MSIP.

The total number of Category C welds is 78. GPC will continue the inspection of the Category C welds consistent with the guidance of GL 88-01, i.e. once per each ten-year interval. The welds reclassified as C' (refer to details of Category C' elsewhere in this document) will be examined at a frequency of every other outage.

Scope expansion will be developed by GPC each outage based on the indications that occur. It will be based on system, size and any other appropriate parameters. GPC will determine the sample expansion without NRC advance approval, but will provide the sample expansion to the NRC for concurrence at the beginning of the inspections. (This logic is similar to that used by GPC in previous

Category C (continued)

outages (1988-1995). In each case the sample expansion proposed by GPC was approved by the NRC).

Recommended Inspections (Third Ten-Year Interval) for Category C:

- Examine all Category C welds during the ten-year interval with the examinations being spread approximately equally (frequency = 1/3 of category total every other outage) over the ten years.
- Scope expansion will be determined on a case-by-case basis as a function of size, system, etc.

Previous Inspection Schedule (Second Ten-Year Interval) for Category C:

- Examine all welds within the next two refueling cycles, then all every ten years (at least 50% in six years).
- Scope expansion consists of an additional sample of welds, approximately equal in number and similar in distribution (according to pipe size, system, and location) to the original sample, unless there is a technical reason to select a different sample.

Category C' (GPC/SNC designation)

There are 12 welds, previously Category C, that have stresses exceeding 1.0 S_m. Eight of these welds are "# 1" welds (header to riser pipe welds) that historically have not been an industry problem. The other four welds consist of one riser-to-safe-end weld (#4) and three safe-end-to-nozzle welds. These four welds (1B31-1RC-12AR-H-5, -J-4, -J-5, and 1B31-1RC-12BR-D-5) will be classified as Category C'.

Recommended Inspections (Third Ten-Year Interval) for Category C':

- Examine each weld every other outage.
- Scope expansion will involve Category C welds and should be determined on a case-by-case basis as a function of size, system, etc.

Previous Inspection Schedule (Second Ten-Year Interval) for Category C':

- None. This is a new GPC/SNC designation for the Third Ten-Year Interval.

Category D

These are welds made with materials not resistant to IGSCC and that have not been given an SI treatment, but have been inspected by qualified examiners using qualified procedures and been found to be free of cracks. Category D welds will be inspected at least once every two refueling cycles. Approximately half of the Category D welds in the plant will be inspected each refueling outage.

All circumferential welds previously classified as Category D received MSIP treatment during the 1993 outage and are now classified as Category C. One additional weld previously classified D by GPC/SNC, is a dissimilar pipe weld that has an overlay. It will be reclassified as E'. The ten RINTSA (Recirculation Inlet Nozzle Thermal Sleeve Attachment) welds will be reclassified as Category R (see details elsewhere in this document).

The dissimilar metal weld with the overlay (1G31-1RWCUM-6-D-1) is the joint formed by the intersection of RWCU and RHR systems. The overlay was applied at the same time the RWCU pipe was replaced during the 1988 outage. The overlay was added to provide additional mitigation of IGSCC in this dissimilar joint. There were no UT indications reported in the baseline examination or the subsequent examination in 1991. The weld overlay of the dissimilar metal weld was examined during the 1994 outage, was free of indications penetrating the effective overlay, and will be reclassified as Category E'.

With these reclassifications, there are no longer any Category D welds.

Recommended Inspections (Third Ten-Year Interval) for Category D:

- Examine all Category D welds during the ten-year interval with the examinations being spread approximately equally (frequency = 1/3 of category total every other outage) over the ten years.
- Scope expansion criteria will be as described in GL 88-01, Supplement 1 for Category D welds.

Previous Inspection Schedule (Second Ten-Year Interval) for Category D:

- Examine all welds every two refueling cycles.
- Scope expansion criteria as described in GL 88-01, Supplement 1 for Category D welds.

Category R (GPC/SNC designation)

The ten RINTSA welds were originally in the Category D classification at GPC's option, but are outside the scope of NUREG-0313. They were included due to the crevice that occurs where the thermal sleeve is attached to the nozzle. The current examination of this area will not detect flaws in the attachment weld. Instead, the exam is such that it will find flaws that might propagate from the attachment weld into the low alloy steel nozzle. The examinations performed to date have revealed no changes from the baseline examinations. Calculations have been performed estimating crack growth into the low alloy steel nozzle from a crack initiating in the crevice area. Based on those calculations, approximately 1/3 of the RINTSA welds will be examined every other outage. Should indications be detected, the scope expansion of GL 88-01, Supplement 1, for Category D welds will be used for RINTSA welds. The ten RINTSA welds will be reclassified as Category R.

Recommended Inspections (Third Ten-Year Interval) for Category R:

- Examine all Category R welds during the ten-year interval with the examinations being spread approximately equally (frequency = 1/3 of category total every other outage) over the ten years.
- Scope expansion criteria will be as described in GL 88-01, Supplement 1 for Category D welds.

Previous Inspection Schedule (Second Ten-Year Interval) for Category R:

- None. This is a new GPC/SNC designation for the Third Ten-Year Interval.

Category E

These are welds with known flaws that have been reinforced by an acceptable weld overlay or have been mitigated by an SI treatment with subsequent qualified examination to verify the extent of cracking. GL 88-01 specifies that Category E welds should be inspected at least once every two refueling cycles after repair. Approximately half of them should be inspected during the first refueling outage after repair. The inspection method should provide positive assurance that the cracks have not progressed into the overlay. It is also desirable that the inspection procedure be capable of detecting cracks that originally were deeper than 75% of the original wall thickness, or that have grown to be deeper than 75% of the original wall thickness. An UT procedure qualified for overlay examinations must be used by examiners qualified to examine weld overlays. All Hatch welds classified as Category E or E' (refer to details of Category E' elsewhere in this document) have an overlay.

There are 52 Category E weld overlays (not counting the two 6" RWCU welds overlayed, but not due to any indication) at Plant Hatch, Unit 1. Of these overlays, 48 are made with 308L and four are made with inconel weld metal. All overlays applied in 1982 and 1984 were resurfaced or built-up during the 1986 outage. All overlays are standard overlay design, intended for indefinite service. One overlay on the RHR system (1E11-1RHR-20B-D-5) was added to ensure an adjacent overlay could be properly inspected, and has been reclassified as Category E'. The two 6" RWCU welds, 1G31-1RWCUM-6-D-1 and 1G31-1RWCUM-6-D-9, have also been reclassified as Category E' for ease of tracking overlayed welds.

An overlay inspection history summary follows:

- Of the 23 overlays applied and inspected in 1982 and 1984, 21 were inspected in 1986. Nine new overlays were added and inspected in 1986.
- Of the 32 overlays in place in 1986, 23 were inspected in 1987. This included seven of the nine overlays applied in 1986 and 16 old overlays being examined for at least the second consecutive outage. No new overlays were applied during 1987.
- All 32 existing overlays were inspected in 1988 as were two new overlays for a total of 34 overlay examinations.
- All 34 existing overlays plus 12 new overlays were inspected in 1990 for a total of 46 overlay examinations.
- All 46 existing overlays plus six new overlays were inspected in 1991 for a total of 52 overlay examinations.
- Of the 52 existing overlays in place in 1993, 26 were inspected. This included three of the six overlays applied in 1991. No new overlays were applied during the 1993 outage.

Category E (continued)

- Of the 52 existing overlays in place in 1994 (including 1E11-1RHR-20B-D-5, now classified as E') , all 52 were inspected. Not included in this count are reclassified E' welds 1G31-1RWCUM-6-D-1 examined in 1994 and 1G31-1RWCUM-6-D-9, last examined in 1991. No new overlays were applied during the 1994 outage.

It is noteworthy that in all the examinations performed to date on the welds overlays, there have been no problems encountered. Considering the length of time some overlays have been in place and the stresses, some indication growth under the overlays could reasonably be expected. However, while there have been some minor changes in a few of the indications under the overlays, only one overlay (1B31-1RC-12AR-F-2) has an indication that now appears to be at the pipe-to-overlay interface; but, it has not penetrated the effective overlay. (NOTE: The effective overlay is that portion of the overlay for which full credit is taken. It does not include the dilution zone or initial weld layer unless that layer has been determined to meet appropriate acceptance criteria.)

The Hatch inspection experience alone warrants a change in the inspection and scope expansion criteria for the weld overlays. When the inherent resistance to IGSCC of the overlay material is considered, the issue is not whether the inspection frequency should be changed, but by how much should the inspection frequency be changed. This is especially true for the overlays made of 308L. This material has been shown to be more resistant than 316NG pipe base metal that is considered resistant material and is sample inspected using Category A criteria.

Based on the performance of the overlays and their resistant nature, the inspection criteria should be revised. Coincident with this ten-year ISI interval, the inspection frequency for the Category E and E' overlay welds will be once per ten-year interval. The examinations will be scheduled such that approximately 1/3 of the overlays will be inspected every second outage.

The scope of overlays to be examined in any one outage will be expanded for the following conditions:

- An indication extends into the effective overlay material, or
- An indication found that appears to be growing in a manner that would indicate a flaw could reasonably be expected to propagate axially beyond the overlay. Based on guidance from Section 4.2 of NUREG-0313, Rev. 2, it can be argued that axial growth is unlikely. The argument is presented there that axial flaws will grow through-wall in marginally resistant material, but crack length will not extend beyond 1.5 times the pipe thickness (1.5t). In addition to the NUREG information it can be shown that although a new heat affected zone is created by

Category E (continued)

application of the overlay, the stresses are low enough and the distance is great enough that crack propagation in the axial direction is not an immediate issue.

For either of the cases described above, a reexamination of that overlay will be conducted for three consecutive periods.

Recommended Inspections (Third Ten-Year Interval) for Category E:

- See Category E' description.

Previous Inspection Schedule (Second Ten-Year Interval) for Category E:

- See Category E' description.

Category E' (GPC/SNC designation)

This is an arbitrary designation used by GPC. The E portion of the designation signifies that it is a weld with a standard Category E overlay. The "prime" indicates it is not a true Category E in that the weld was not flawed when the overlay was applied. The welds are: 1G31-1RWCUM-6-D-1; 1G31-1RWCUM-6-D-9; and 1E11-1RHR-20B-D-5. The inspection and scope expansion for Category E' will be the same as the new criteria used for Category E.

Recommended Inspections (Third Ten-Year Interval) for Categor[illegible] and E' (GPC/SNC designation):

- Examine all Category E and E' welds during the ten-year interval with the examinations being spread approximately equally (frequency = 1/3 of total population for both categories every other outage) over the ten years. Weld 1B31-1RC-12AR-F-2 will be examined during each of the first two outages in which inspections are conducted to verify significant indication growth has not occurred.
- There will be no scope expansion unless an indication extends into the effective overlay or the indication is such that axial propagation out from underneath the overlay is anticipated. If these conditions occur, scope expansion will be based on size, system, age of the overlay, etc. with the sample size dictated by the situation based on the particulars of the flaw.

Previous Inspection Schedule (Second Ten-Year Interval) for Category E:

- Examine 50% of the welds at the next refueling cycle (either 1987 or 1988), then all every two refueling cycles.

Previous Inspection Schedule (Second Ten-Year Interval) for Category E (continued):

- Scope expansion will be required for significant crack growth, or additional cracks found during the inspection of one or more Category E welds. All other Category E welds should be examined. See GL 88-01 for definition of significant crack growth.

Previous Inspection Schedule (Second Ten-Year Interval) for Category E':

- None. This is a new designation for the Third Ten-Year Interval.

Category P (GPC/SNC designation)

This category was arbitrarily defined by GPC to identify those longitudinal seam welds which have been covered by weld overlays. In this condition the long seams are not inspectable and in reality have no need to be inspected. Classification as Category P allows historical information to be maintained without impacting the inspection tables. No inspections will be performed. This is now supported by Code Case N-524 also. Verification of weld integrity is accomplished by overlay examinations.

Recommended Inspections (Third Ten-Year Interval) for Category P (GPC/SNC designation):

- No examinations required. Covered by Category E and E' inspections.

Previous Inspection Schedule (Second Ten-Year Interval) for Category P:

- None. This is a new GPC/SNC designation for the Third Ten-Year Interval.

Category S (GPC/SNC designation)

The Category S classification was arbitrarily defined by GPC to designate those non-safety RWCU welds that are augmented by GL 88-01. Approximately 30% of these welds have been examined four times as of 1994 with no reportable indications. GPC has now decided to select approximately 10% of the population for repetitive examination each outage. This provides a better assessment of change occurring within the system while reducing the amount of weld preparation time and therefore personnel radiation dose.

The current inspection program will continue until NRC agrees with the GPC position that the RWCU isolation valves (F001 and F004) meet the criteria of GL 89-10. At that time, the inspection of these welds may be discontinued at the discretion of GPC, based on guidance in Supplement 1 to GL 88-01.

There are no generic NRC guidelines in place specifying scope expansion in the event reportable indications are identified. The current agreement between NRC and GPC is that GPC will contact NRC in the event of reportable indications and a scope expansion will be developed. However, this is the agreement reached several years prior to the GPC initiated sampling plan being endorsed via Supplement 1 to GL 88-01. Therefore, for the Third Ten-Year Interval, criteria similar to ASME Section XI will be used for determining additional examinations. This will require that an additional sample equal in size to the initial sample inspected be examined. If reportable indications are found in the second sample, GPC will then contact NRC to develop a mutually acceptable course of action.

Recommended Inspections (Third Ten-Year Interval) for Category S (GPC/SNC designation):

- Examine 10% of the Category S welds per outage. This sample will come from the welds already examined to continue assessing change from one examination to the next.
- A scope expansion sample will consist of an additional sample of equal size to that used for the outage. If additional indications are detected, the NRC will be contacted and a mutually agreeable course of action will be developed.

Previous Inspection Schedule (Second Ten-Year Interval) for Category S (GPC/SNC designation):

- None. This is a new GPC/SNC designation for the Third Ten-Year Interval.

Category L (GPC/SNC designation)

This category was arbitrarily defined by GPC to identify welded attachments (lugs). There are no special requirements. ASME Section XI requirements will be used.

Recommended Inspections (Third Ten-Year Interval) for Category L (GPC/SNC designation):

- ASME Section XI requirements will be used.

Previous Inspection Schedule (Second Ten-Year Interval) for Category L (GPC/SNC designation):

- ASME Section XI requirements used.

Hatch Unit 2 NUREG-0313 Summary

This is a supplement to describe Unit 2. Refer to the discussion provided in the Hatch Unit 1 NUREG-0313 Summary for specific details common to both Units 1 and 2.

General

A portion of the original stainless steel piping in Hatch 2 was made of conforming (IGSCC resistant) materials. Actions taken by Georgia Power Company to mitigate IGSCC in non-conforming materials consist of the Recirculation System (2B31) pipe replacement (except for the safe-ends) with construction designed for a minimum number of welds, IHSI (Induction Heat Stress Improvement), and the implementation of an inservice inspection program. A Hydrogen Water Treatment system was also put in place.

Category A

A total of 222 (including 84 longitudinal seams) welds are in this category.

Recommended Inspections (Third Ten-Year Interval) for Category A:

- Circumferential welds - Examine 25% of the Category A welds over the ten-year interval with the examinations being spread equally over the ten years. This is consistent with ASME Section XI and GL 88-01.
- Longitudinal Seam Welds - Examine these welds in accordance with Code Case N-524. This effectively will eliminate the inspection of the long seams. The code case requires the inspection of the portion of the long seam that is contained within the boundaries of the intersecting circumferential weld. This will eliminate the need to examine 12 inches of long seam either side of the circumferential welds.
- ASME Section XI scope expansion criteria will be utilized.

Previous Inspection Schedule (Second Ten-Year Interval) for Category A:

- Examine 25% of the welds every ten years (at least 12% in six years per NUREG-0313).
- Scope expansion consists of an additional sample of welds, approximately equal in number and similar in distribution (according to pipe size, system, and location) to the original sample, unless there is a technical reason to select a different sample.

Category B

None currently in service.

Category C
A total of 50 welds are in this category.

Ten Recirculation System inlet safe-ends and two outlet safe-ends were treated with the IHSI process in 1986. Post-IHSI baseline examinations revealed no indications.

The safe-ends for the four Feedwater nozzles (total of 11 welds); the two Jet Pump instrumentation assemblies; the two Core Spray nozzle safe-ends; and the Control Rod Drive nozzle cap had MSIP treatment in 1994. Post-MSIP baseline examinations revealed no indications. These welds will need an examination within two refueling cycles, after the stress improvement.

Recommended Inspections (Third Ten-Year Interval) for Category C:

- Examine all Category C welds during the ten-year interval with the examinations being spread approximately equally (frequency = 1/3 of category total every other outage) over the ten years.
- Scope expansion will be determined on a case-by-case basis as a function size, system, etc.

Previous Inspection Schedule (Second Ten-Year Interval) for Category C:

- Examine all welds within the next two refueling cycles, then all every ten years (at least 50% in six years).
- Scope expansion consists of an additional sample of welds, approximately equal in number and similar in distribution (according to pipe size, system, and location) to the original sample, unless there is a technical reason to select a different sample.

Category D/Category R (GPC/SNC designation)

A total of ten RINTSA (Recirculation Inlet Nozzle Thermal Sleeve Attachment) welds, previously in Category D at GPC's option, have been reclassified as Category R. These welds, strictly speaking, are outside the scope of 0313 (see Hatch Unit 1 NUREG-1313 Summary).

Recommended Inspections (Third Ten-Year Interval) for Category R:

- Examine all Category R welds during the ten-year interval with the examinations being spread approximately equally (frequency = 1/3 of category total every other outage) over the ten years.
- Scope expansion criteria will be as described in GL 88-01, Supplement 1 for Category D welds.

Previous Inspection Schedule (Second Ten-Year Interval) for Category R:

- None. This is a new GPC/SNC designation for the Third Ten-Year Interval.

Previous Inspection Schedule (Second Ten-Year Interval) for Category D:

- Examine all welds every two refueling cycles.
- Scope expansion criteria as described in GL 88-01, Supplement 1 for Category D welds.

Category E

One weld is in this category to be examined every 10 years.

One Feedwater nozzle safe-end weld (2B21-1FW-12AA-9) was overlayed in 1991 due to a linear indication. Subsequent exams in 1992 and 1994 showed no growth into the overlay.

Recommended Inspections (Third Ten-Year Interval) for Category E:

- Examine all Category E welds during the ten-year interval.

Previous Inspection Schedule (Second Ten-Year Interval) for Category E:

- Examine 50% of the welds at the next refueling cycle (either 1987 or 1988), then all every two refueling cycles.
- Scope expansion will be required for significant crack growth, or additional cracks found during the inspection of one or more Category E welds. All other Category E welds should be examined. See GL 88-01 for definition of significant crack growth.

Category F and Category G

None currently in service.