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L. T. Gucwa
Manager Nuclear Safety and
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SL-315
1037t

February 7, 1986

Director of Nuclear Reactor Regulation
Attention: Mr. D. Muller, Project Director
BWR Project Directorate No. 2
Division of Boiling Water Reactor Licensing
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

NRC DOCKETS 50-321, 50-366
OPERATING LICENSES DPR-57, NPF-5
EDWIN I. HATCH NUCLEAR PLANT UNITS 1, 2
RESPONSE TO NRC REQUEST FOR ADDITIONAL
INFORMATION - INSERVICE INSPECTION PROGRAM

Gentlemen:

Enclosed herein as Attachment 1 is Georgia Power Company's (GPC) response to the NRC letter of December 23, 1985 which requested additional information concerning the Inservice Inspection (ISI) Program for the second ten-year interval of operation of Hatch Units 1 and 2. The subject ISI program update was submitted by GPC letter NED-85-483 dated June 25, 1985.

Should you have any questions in this regard, please contact this office.

Sincerely yours,

L.T. Gucwa /Dr

L. T. Gucwa

JAE/mb

Attachment

xc: Mr. J. T. Beckham, Jr.
Mr. H. C. Nix, Jr.
Dr. J. N. Grace (NRC-Region II)
Senior Resident Inspector

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ATTACHMENT 1

RESPONSE TO NRC REQUEST OF DECEMBER 23, 1985
FOR ADDITIONAL INFORMATION ON HATCH
UNITS 1 AND 2 INSERVICE INSPECTION PROGRAM UPDATE

Georgia Power Company
NRC Dockets 50-321, 50-366
Operating Licenses DPR-57, NPF-5

NRC Question 1

You have requested relief (ISI Plan Section 2.1.1) from the requirements of performing a 100% volumetric examination of reactor pressure vessel and closure head welds, item numbers B1.11, B1.12, B1.21, and B1.22 of Table IWB-2500-1. The contents of your relief request indicate that you may be attempting to examine the accessible portions of all vessel and head welds.

The 1980 Edition with Addenda through Winter 1981 requires that only one weld from each of the Code Item Numbers listed above be volumetrically examined during the second inspection interval.

Please provide the following information:

(a) Identify one weld for each code item number to be examined; also specify the percentage of the weld accessible for examination. Give a complete description of the reason why 100% of the weld length cannot be examined (i.e., describe physical limitations).

(b) For welds listed in (a) above that will not receive a 100% examination, define additional welds of the same code item number (B1.11 and B1.12 must be beltline welds) that can be examined as an alternative to the code requirement. Choose enough welds such that the total weld length examined, to the extent of available welds, equals the length of the weld defined in (a) above.

(c) If enough welds are not available for a given Code item, identify additional similar welds (i.e., shell welds outside of beltline region, or closure head welds in place of bottom head welds) that can be examined to the extent that (1) either the length of examined welds equals the length of the weld requiring examination or (2) there are no more accessible portions of similar welds available.

Response

Item B1.11 - Hatch Unit 1 - There are two circumferential welds (C-3 and C-4) in the beltline region of the RPV as shown in Figure 1. Weld C-4 has three access doors through the concrete shield, and removable RPV insulation in these areas was provided during the design. These three access ports allow the manual examination of approximately 15% of the weld. Weld C-3 has two usable access doors allowing approximately 10% coverage; therefore, a total of only 25% of the beltline area welds can be examined during the second 10-year interval.

During the second 10-year interval portions of welds C-2 and C-5 will also be examined in order that the total equivalent length being examined equals the length of one beltline circumferential weld. Examinations will be scheduled to allow partial coverage of the total scope each 40-month period pursuant to code philosophy.

Item B1.11 - Hatch Unit 2 - There are two circumferential welds (2C-3 and 2C-4) in the beltline region of the RPV as shown in Figure 2. These welds have permanent tracks which were installed during construction prior to the preservice examinations. Preservice/inservice data indicates that approximately 121 inches (17%) of each weld can be examined using a mechanized system. Therefore, a total of approximately 34% of the circumferential beltline area welds can be examined during the second 10-year interval.

During the second 10-year interval portions of welds 2C-2 and 2C-5 will also be examined in order that the total equivalent length being examined equals the length of one beltline circumferential weld. Examinations will be scheduled to allow partial coverage of the total scope each 40-month period pursuant to Code philosophy. In addition, the required examinations for the third 40-month period of the first 10-year interval will be completed.

Item B1.12 - Hatch Unit 1 - Using the same access doors as described above, approximately 20 to 30% of C-3-A, 20 to 30% of C-3-B, and 10 to 15% of weld C-3-C can be manually examined. Therefore, a total of 50 to 75% of the beltline longitudinal welds can be examined during the second 10-year interval. Also, during the second 10-year interval, sufficient weld lengths will be selected from welds C-2-A, C-2-B, C-2-C and/or C-4-A, C-4-B, and C-4-C to ensure that the equivalent length of one beltline longitudinal weld is examined. Examinations will be scheduled to allow partial coverage of the total scope each 40-month period.

Item B1.12 - Hatch Unit 2 - From the preservice data it is apparent that longitudinal welds 2C-3-A, 2C-3-B, and 2C-3-C can be 100% examined using a mechanized system with pole tracks installed during construction. One of these three welds will be 100% examined during the second 10-year interval. In addition, the required examinations for the third 40-month period of the first 10-year interval will be completed.

Item B1.21 - Hatch Unit 1 - Circumferential bottom head weld C-7 (Figure 1) will be 100% examined to the extent practical during the second 10-year interval. If it is found during examinations that 100% coverage cannot be obtained, specific relief will be requested at that time. One circumferential closure head weld will also be 100% examined during the interval.

Item B1.21 - Hatch Unit 2 - Circumferential bottom head weld 2C-7 (Figure 2) had 73% of its weld length examined during preservice. This weld will be 100% examined to the extent practical during the second 10-year interval. If it is found during examinations that 100% coverage cannot be obtained, specific relief will be requested at that time. One circumferential closure head weld will also be 100% examined during the interval. In addition, the required examinations for the third 40-month period of the first 10-year interval will be completed.

Item B1.22 - Hatch Unit 1 - One of the bottom head meridional welds extending from circumferential weld C-5 to C-7 (Figure 1) will be 100% examined to the extent practical during the interval. If it is found during examinations that 100% coverage cannot be obtained, specific relief will be requested at that time. One meridional closure head weld will also be 100% examined during the interval.

Item B1.22 - Hatch Unit 2 - One of the bottom head meridional welds extending from circumferential weld 2C-5 to 2C-7 (Figure 2) will be 100% examined to the extent practical during the interval. If it is found during examinations that 100% coverage cannot be obtained, specific relief will be requested at that time. One meridional closure head weld will also be 100% examined during the interval. In addition, the required examinations for the third 40-month period of the first 10-year interval will be completed.

NRC Question 2

You have requested relief (ISI Plan Section 2.1.2) from the requirement of performing an ultrasonic examination using a straight-beam transducer on the reactor pressure vessel and closure head welds. Subparagraph T-441.4.3 of Article 4 of ASME Section V requires that, prior to the angle beam examination, the base material through which the angle beam will travel shall be scanned with a straight-beam transducer to detect laminar reflectors which might affect the angle beam results. Your justification that the size of the laminar reflectors will not change from preservice examination and that the scans will result in additional radiation exposure requires clarification. Please supply the following information:

(a) Provide analysis or studies of the laminar indications, which justify (sic) your statement that the laminar reflectors will not change.

(b) Confirm that the laminar reflectors were scanned and recorded during preservice inspection in accordance with the procedure consistent with that required by the 1980 Edition with Addenda through Winter 1981.

(c) Provide an estimate of the personnel radiation exposure for the straight beam scan. Also provide an estimate of the radiation exposure for the 45- and 60-degree scans.

Response

After further review it is the decision of Georgia Power Company to withdraw Relief Request 2.1.2.

NRC Question 3

You have requested relief (ISI Plan Section 2.1.3) from the requirement of performing a 100% volumetric examination of certain nozzle-to-vessel welds and nozzle inside radius sections. Please provide the following information:

(a) For each nozzle weld or inside radius section requiring relief, give the estimated percentage of the volume that will be examined.

(b) Provide sketches of the nozzles for which relief is requested, with enough dimensional detail, including ultrasonic transducer dimensions, to enable verification of the interference causing the examination difficulty.

(c) Address scan heads and alternative scan angles to enable a more complete examination.

Response

Examination limitations exist for the nozzle examinations at Hatch Units 1 & 2 due to a combination of permanent physical obstructions. At Hatch Unit 1 an insulation support ring (Figure 1) is welded just above the N2A through K Recirculation System Inlet Nozzles and the N1A and B Recirculation System Outlet Nozzles. Welded thermocouples are near nozzles N4B and N4D which partially limit coverage. These limitations exist regardless of transducer size. Hatch Unit 2 has limitations for the examination of the 2N4A and C Feedwater Nozzles due to interference from adjacent nozzles (Figure 2) and the transition area of the nozzles where they are welded to the shell. As before, transducer size has very little impact on the coverage of these feedwater nozzle welds. Showing the Nozzle-to-Vessel weld as N to V and the Nozzle Inside Radius Section as IRS, the table below shows the affected nozzle, minimum coverage, and reason for limitation.

Hatch Unit 1

Nozzle	Limited Examinations	Minimum Coverage	Reason
N2A	N to V; IRS	85%	Ins. Support Ring
N2B	N to V; IRS	85%	Ins. Support Ring
N2C	N to V; IRS	85%	Ins. Support Ring
N2D	N to V; IRS	85%	Ins. Support Ring
N2E	N to V; IRS	85%	Ins. Support Ring
N2F	N to V; IRS	85%	Ins. Support Ring
N2G	N to V; IRS	85%	Ins. Support Ring
N2H	N to V; IRS	85%	Ins. Support Ring
N2J	N to V; IRS	85%	Ins. Support Ring
N2K	N to V; IRS	85%	Ins. Support Ring
N1A	N to V; IRS	85%	Ins. Support Ring
N1B	N to V; IRS	85%	Ins. Support Ring
N4B	N to V; IRS	95%	Thermocouples
N4D	N to V; IRS	95%	Thermocouples

Hatch Unit 2

Nozzle	Limited Examinations	Minimum Coverage	Reason
2N4A	N to V; IRS	85%	Adjacent Nozzle
2N4C	N to V; IRS	85%	Adjacent Nozzle

NRC Question 4

You have requested relief (ISI Plan Section 2.1.5) from performing a surface examination on the inside surface of the reactor vessel support skirt weld. Your relief justification, physical access restricted by high radiation and CRD housing obstructions, requires clarification.

(a) Provide an estimate of the total radiation exposure for the examination for which relief is requested.

(b) Provide sketches that show the physical obstructions preventing the surface examination of the weld. Include enough dimensional detail to enable a complete evaluation of the interference.

Response

Hatch Unit 1 has no access through the support skirt; therefore, the inside surface of the reactor vessel support skirt is totally inaccessible. As shown in Figure 5 for Hatch Unit 2 the support skirt near the skirt-to-vessel weld is very limited. Health Physics indicates that the dose rate in this area during the last Hatch Unit 2 outage was approximately 180 mr/hr; however, it is very difficult to quantify the total exposure for an examination. Magnetic particle techniques cannot be used due to the space restrictions. The use of dye penetrant would require a very thorough cleaning of the weld and adjacent base material to remove rust and scale. The preparation of the weld would potentially have to be performed using techniques such as wire brushes since power tools may not fit into the limited area.

As an alternate, both units will have a surface examination performed on the OD of 100% of the weld during the second 10-year interval. Also, a limited ultrasonic examination will be performed to the extent practical to provide as much coverage as possible of the weld.

NRC Question 5

You have requested relief (ISI Plan Section 2.1.6) from performing the required surface examination of certain reactor pressure vessel (RPV) nozzle-to-safe end welds. In order for us to evaluate the relief request, please provide a description, sketches where applicable, of the interference affecting their examination. This information is not needed for the 2-in. RPV bottom head drain nozzle-to-safe end weld since it is exempted from examination.

Response

These 2" instrument nozzles 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 weld cannot be physically reached. As an alternate, the weld will be examined using remote visual means (e.g., fiber optics, boroscope, etc.).

NRC Question 6

You have requested relief (ISI Plan Section 2.1.8) from performing visual examination of the internal pressure boundary of Class 1 pumps and valves. Your basis for relief states that "during routine maintenance, the valve body and the pump casing internal surfaces are usually examined. Many of the valves, particularly the containment isolation valves are disassembled for maintenance of leak-tightness." Please provide the following information:

(a) Identify the Class 1 pumps and valves that do not have routine maintenance.

(b) Of the other pumps and valves, identify which do have routine maintenance and at what frequency.

(c) Does the routine maintenance of any of the above valves require off-loading the core and draining the RPV prior to disassembly? Enumerate these.

(d) Provide an estimate of the number of man-rems required to perform routine maintenance or required inspections on various types of pumps and valves.

Response

A preliminary review of the Hatch Unit 1 records show that the following valves have been disassembled at least one time during the first 10-year interval:

1B21-F010A,B	18" Check-Feedwater
1B21-F032A	18" Check-Feedwater
1E11-F015B	24" MO Gate-RHR
1E11-F017A	24" MO Globe-RHR
1E11-F030B	24" Check-RHR
1E21-F006A	10" Check-Core Spray
1E41-F002	10" MO Gate-HPCI
1E41-F003	10" MO Gate-HPCI
1-MSIV	28" AO Globe-Main Steam

The Class 1 valves greater than 4" diameter (that were not examined on at least one loop) are:

1B31-F023A,B	28" MO Gate-Recirculation
1B31-F031A,B	28" MO Gate-Recirculation
1E21-F003A,B	10" MO Gate-Core Spray
1G31-F001	6" MO Gate-RWCU
1G31-F004	6" MO Gate-RWCU
1E11-F008	20" MO Gate-RHR
1E11-F009	20" MO Gate-RHR
1E41-F006	14" MO Gate-HPCI
1E21-F007A,B	10" Manual-Core Spray
1G31-F027	6" Manual - RWCU
1B21-F011A,B	18" Manual-Feedwater
1E11-F060A,B	24" Manual - RHR
1E11-F067	20" Manual-RHR

As a precautionary feature the core would normally be off-loaded if valves 1B31-F023A,B or 1B31-F031A,B were to be disassembled. Also, if the Recirculation Pumps were disassembled it would be desirable to off-load the core for safety reasons. (Note: The Recirculation Pumps are the only Class 1 pumps). The actual exposure involved to disassemble a valve, examine it, and return it to service cannot be easily quantified. However, since so many valves are normally disassembled during the required 10-year interval, it is not justifiable to increase the exposure.

NRC Question 7

You have requested relief (ISI Plan Section 2.1.9) from performing the required volumetric or surface examination of the pressure-retaining welds in 10% of the peripheral control rod drive housings. For us to evaluate the possibility of these welds meeting the Code exemption criteria of IWB-1220(a), please provide the following information for both Hatch units:

(a) The maximum leakage rate under normal plant operating conditions resulting from a CRD housing failure.

(b) The total capacity of makeup systems which are operable from on-site emergency power.

Response

Figure 4.2-8 of the Hatch Unit 2 FSAR shows that there are 28 peripheral CRD housings. Each housing has an attachment weld to the reactor vessel and a weld joining the housing to the flange. Section 4.2 of the FSAR shows that the failure of a CRD housing weld will produce a maximum leakage rate of 840 gal/min. The available makeup systems are RCIC-400 gal. min., CRD-160 gal/min., and the transfer system to feedwater-1000 gal/min. Therefore, the reactor can be shutdown and cooled down in an orderly manner using makeup systems supplied by on-site power, as required by IWB-1220. Since loss of coolant would occur during normal operation it is our interpretation that the service transformer is the source of on-site power. (Note: Hatch Unit 1 should have essentially the same leakage rates and makeup capabilities).

NRC Question 8

You have requested relief (ISI Plan Section 3.1.1) from the requirements of performing a 100% volumetric examination of the residual heat removal (RHR) heat exchanger Class 2 vessel shell, head, and tubesheet-to-shell circumferential welds. Please provide the following information:

(a) Define the percentage of the volumetric examination for each weld that will receive a partial volumetric examination.

(b) Sketches showing the vessel supports interfering with the RHR shell and head circumferential weld examination. Provide all appropriate dimensions and include enough information about the examination equipment to enable verification of the interference with the examination equipment.

(c) Sketches showing the design configuration that prohibits examination of the head circumferential weld and the tubesheet-to-shell weld. Provide all appropriate dimensions, including the ultrasonic transducer, to enable verification of the interference.

Response

Hatch Unit 1

There are three Category C-A circumferential welds in each of the two RHR heat exchangers. These welds and their UT limitations are given below. (See attached Figure 4).

1E11 - 2Hx-A(B)-1 Shell Head to Upper Shell Ring - These welds cannot be examined from the shell head side due to the curvature of the head. Only about 65" of a total circumference of 179" (approximately 36%) can be examined from the Upper Shell Ring side due to support interference.

1E11 - 2Hx-A(B)-2 Upper Shell Ring to Lower Shell Ring - Complete coverage is obtained from the Upper Shell Ring side and 0% coverage from the Lower Shell Ring side due to support interference.

1E11 - 2Hx-A(B)-3 Lower Shell Ring to Flange - Complete coverage is obtained from the Lower Shell Ring side. Examination from the flange side cannot be performed due to the geometry.

Hatch Unit 2

There are three Category C-A circumferential welds in each of the two RHR heat exchangers. These welds and their UT limitations are given below. (See attached Figure 3).

2E11 - 2Hx-A(B)-1 Shell Head to Upper Shell Ring - These welds cannot be examined from the shell head side due to the curvature of the head. Only about 65" of a total circumference of 179" (approximately 36%) can be examined from the Upper Shell Ring side due to support interference.

2E11 - 2Hx-A(B)-2 Upper Shell Ring to Lower Shell Ring - Complete coverage is obtained from the Upper Shell Ring side and approximately 36% coverage from the Lower Shell Ring side due to support interference.

2E11 - 2Hx-A(B)-3 Lower Shell Ring to Flange - Complete coverage is obtained from the Lower Shell Ring side. Examination from the flange side cannot be performed due to the geometry.

NRC Question 9

You have requested relief (ISI Plan Section 3.1.2) from the requirements of a surface examination of integrally welded attachments on RHR, Core Spray, HPCI, and RCIC suction lines from the Torus. You stated that the welds requiring examination are covered by reinforcement plates and that they will be examined by visual examination. Please provide the following information concerning the reinforcement plates:

(a) Are the reinforcement plates welded to both the Torus and piping?

(b) Can the welds attaching the reinforcement plates be surface examined?

(c) Provide sketches showing attachment of reinforcement plate to Torus and to pipe. Indicate extent of welds to be examined.

Response

Hatch Unit 1

As shown in Figure 7, the suction piping is surrounded by reinforcing ribs which may limit access on one or more sides of the pipe, in particular, when using magnetic particle techniques. This method is preferred since the torus has a heavy coating of paint, and removing the paint and cleaning the surface to perform penetrant examinations would be extremely difficult with the space limitations. As shown in Figure 7 approximately 80-100% of the RCIC (1E51) and HPCI (1E41) welds can be examined, approximately 50-75% of the Core Spray (1E21) welds, and approximately 25% or less of the RHR (1E11) welds.

Hatch Unit 2

As shown in Figure 8 the welds are totally inaccessible to perform surface examinations; therefore, a visual examination will need to be performed in lieu of the Code requirements.

NRC Question 10

You have requested relief (ISI Plan Section 3.1.3) from the requirement of a surface examination of Class 2 pump casing welds. You justified your relief request based on the exposure to radiation from the disassembly of these pumps to perform the surface examination.

(a) The Code allows surface examinations of Class 2 pump casing welds to be performed from the inside or outside surface of the pump. Is there a reason why the examination can not (sic) be performed from the outside surface?

(b) If the examination cannot be performed from the outside, you should provide an estimate of the total radiation exposure received in performing the required examination from the inside surface of the pump.

Response

This relief request applies to the Core Spray Pumps and RHR Pumps on Hatch Unit 2 only. The Hatch Unit 1 pumps have a different design and do not contain pressure retaining welds (Item No. C6.10). As shown in Figure 5, the pressure retaining welds 2E11-2RHR-PLP-A-1 thru 6 are completely encased in the suction casing and can be accessed only when the pump is completely disassembled. These welds are not the welds considered to be pressure retaining pump casing welds; therefore, it is impractical to disassemble just to examine these welds. (Note: At least one of the six pumps has been disassembled for maintenance and the welds examined).

NRC Question 11

You have requested relief (ISI Plan Section 4.1.2) from the requirements of performing pressure testing on Class 3 buried piping. You justified this relief request because the service water systems were designed without including provisions for testing buried piping as required by Paragraph IWA-5244 of the Code. Please provide the following information:

(a) Define which service water systems require relief, including their Table IWD-2500-1 examination category.

(b) Provide a system description of each system from (a) above, with enough detail (include P&IDs) to evaluate your relief request.

(c) Paragraph IWA-5244 allows testing methods for three different configurations of buried piping, i.e., (a) non-redundant-isolable, (b) redundant-nonisolable (sic), and (c) non-redundant non-isolable. State the configuration for each system for which relief is requested.

(d) Address any alternatives other than system functional testing that would enable testing of buried components.

Response

Review of the Service Water System indicates that the provisions of IWA-5244 "Buried Components" may be met by using several flow instruments throughout the system to determine if there is a large loss of inventory. Further investigation is necessary to determine if this method is viable. Relief will be requested later if deemed necessary.

NRC Question 12

You have requested relief (ISI Plan Section 4.1.3) from the requirement of performing a hydrostatic test of portions of the plant service water system that require isolation using 10 in. or larger butterfly valves. Please provide the following information:

(a) Provide a marked P&ID of the plant service water system showing the portions of the system for which relief is requested.

(b) Address any alternate test that would allow testing of the service water system at greater than normal operating pressure.

Response

A marked-up copy of D-11001 has been provided for your review. The marked-up lines shows the portions of the system for which relief is requested. There are no viable alternate means to test the system at a higher pressure.

NRC Question 13

You have requested relief (ISI Plan Section 5.1.1) from the requirement of subparagraph IWF-3410(a)(5), that spring supports and snubbers operate only with proper hot or cold positions. Your relief justification, that there are not exact design positions on the scales of the spring and snubber supports, needs further clarification. It is recognized that component standard spring and snubber supports will not have exact hot or cold design positions marked for your particular application. However, these design positions should be available from the piping stress analysis reports. Where the hot or cold positions are not available, please provide the reason why they are not.

Response

GPC will verify that the spring support is in the operable range plus acceptable tolerances, i.e., within analyzed hot and cold load settings. The support may not exactly show the precise hot or cold setting because the analysis may have used a conservative temperature, i.e., the plant may not see the temperature analyzed of that specific system on the specific day when the inservice inspection was performed. The intent of the inspection is to verify that the spring can is not outside the range specified in the analysis and that the can is not bottomed out.

NRC Question 14

You have requested relief (ISI Plan Section 8.1.2) to move up the start date of the second 10-year interval for Hatch 2 to January 1, 1986. Your relief request states that the Hatch 2 second inspection period (80 months) ends January 5, 1986. You stated that this will nearly coincide with the start date of the second 10-year interval for Hatch 1. Please address the following concerning Hatch 1 and 2 interval dates:

(a) By letter dated November 10, 1981,[2] you requested an extension for the inservice inspection interval for Unit 1. Approval of this request was given by the NRC on November 23, 1981,[3] resulting in the Unit 1 interval extending to May 5, 1986. If there has been subsequent NRC-GP correspondence concerning the Hatch-1 interval reverting back to January 1, 1986, please provide references.

(b) Your letter dated June 25, 1985,[1] transmitting Hatch Units 1 and 2 second interval ISI plans, states that the first 10-year interval for Hatch 2 will end in September 1989. This interval end date would result in a second inservice inspection period (80 months (sic) end date of May 1986, rather than January 1986, as stated in the plan relief request. Please address the difference in interval dates for Hatch Unit 2 as given in the Reference 1 letter and the plan relief request.

Response

There has not been any subsequent NRC-GPC correspondence concerning the Hatch Unit 1 inspection interval reverting back to January 1, 1986. Inspections required to meet the first 10-year inspection requirements are to be completed during the current maintenance/refueling outage. As a result, GPC is of the opinion that reverting back to January 1, 1986 from May 5, 1986 for the start of the second 10-year inspection interval is reasonable. Examinations at Hatch Unit 1 (subsequent to the completion of the first 10-year inspection requirements during the current outage) will be performed to the code addressed by the Reference 1 letter (i.e., 1980 Edition of ASME Section XI with Winter 1981 Addenda, where practical).

GPC acknowledges that the end of the second 40-month inspection period at Hatch Unit 2 would be May 5, 1986. The Reference 1 letter should have indicated that nearly eighty months vice only eighty months of the Hatch Unit 2 10-year inspection interval will have elapsed by January 1, 1986. The ISI program document which was transmitted by Reference 1 incorrectly indicated that the second 40-month inspection period at Hatch Unit 2 would end on January 5, 1986 and that the date virtually coincided with the second 10-year inspection interval start date for Hatch Unit 1. The relief request should have indicated (as acknowledged above) that the end of the Hatch Unit 2 second 40-month inspection period was May 5, 1986 and not January 5, 1986.

NRC Question 15

Under the terms of subparagraph 10 CFR 50.55a(g)(5)(iv), where an examination or test is determined to be impractical by the licensee but has not been previously included in the ISI program, the basis for such determinations shall be demonstrated to the satisfaction of the NRC not later than 12 months after the expiration of the interval. Please review your first-interval submittals (including Reference 4) with this requirement in mind and submit relief requests as necessary.

Response

Should any additional relief requests be identified for Hatch Unit 1 for its first 10-year inspection interval, they will be submitted to NRC under separate cover.

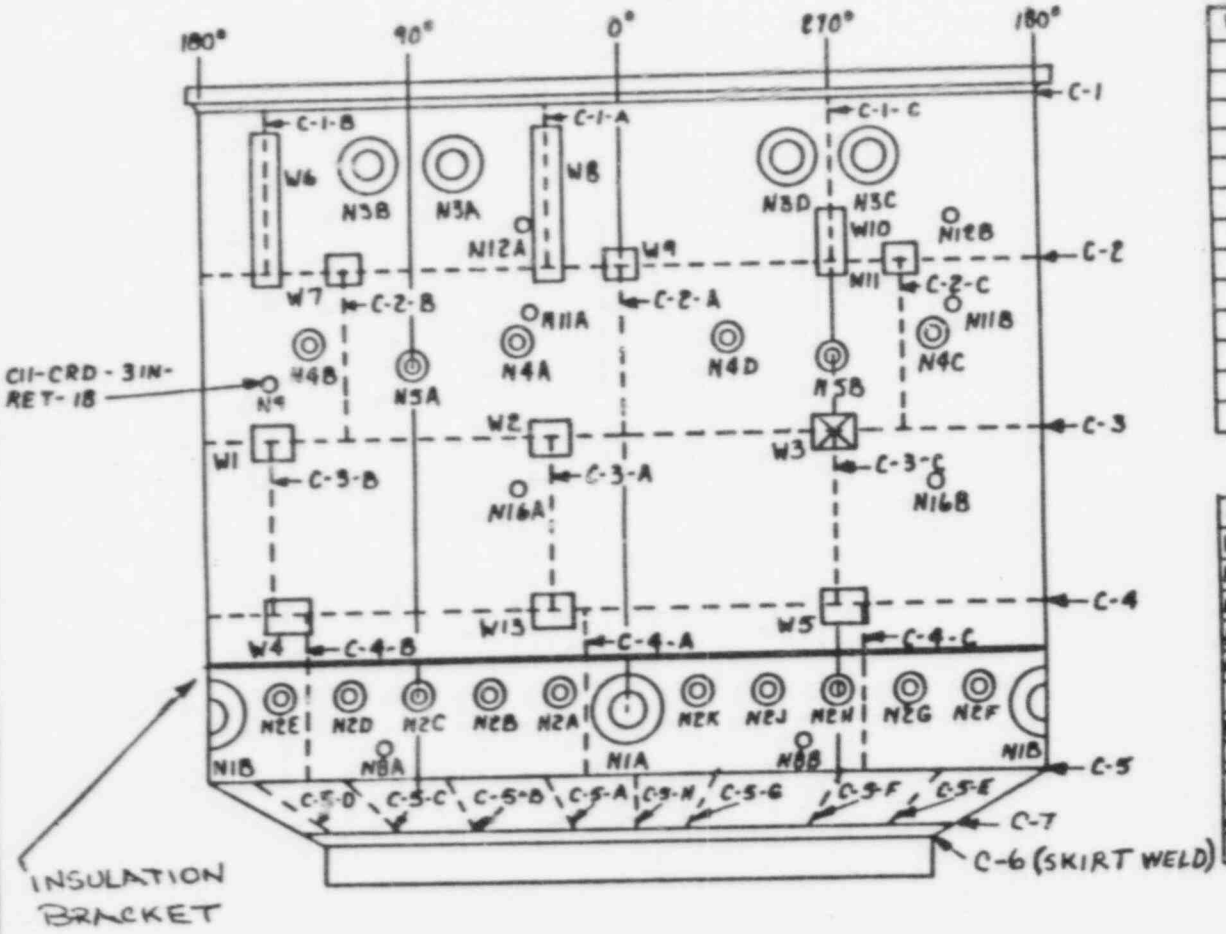
References

1. L. T. Gucwa (GPC) to J. F. Stolz (NRC); Submittal of Second ISI Interval for Hatch Units 1 and 2, June 25, 1985.

2. J. T. Beckham (GPC) to Director NRR (NRC); ISI Period Extension Request, Hatch Nuclear Station, Unit 1, November 10, 1981.

3. J. F. Stolz (NRC) to J. T. Beckham (GPC); Approval of ISI Extension Request, Hatch Nuclear Station, Unit 1, November 23, 1981.

4. L. T. Gucwa (GPC) to J. F. Stolz (NRC), Hatch Unit 1 Inservice Inspection Relief Requests, NED-85-508, July 18, 1985.



REACTOR VESSEL WELD INSULATION REMOVAL CHART

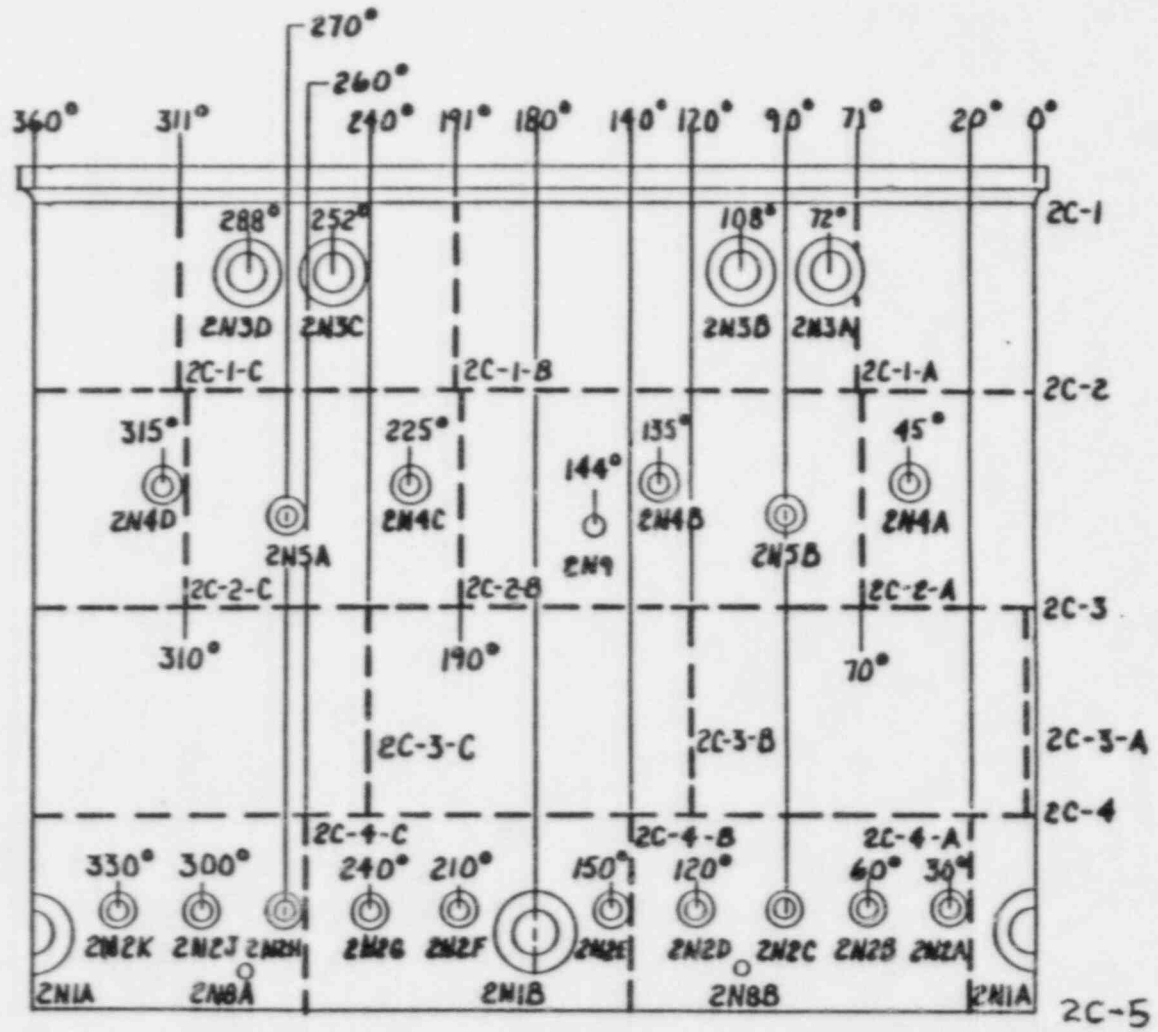
WELD NO	QUAN	FUNCTION	INSUL. OPENING
W1	1	CIRC./LONG WELD	3'-1" x 2'-3"
W2	1	" " "	3'-1" x 2'-5"
W3	1	" " "	3'-1" x 2'-5"
W4	1	" " "	4'-0" x 2'-5"
W5	1	" " "	4'-0" x 2'-8"
W6	1	" " "	2'-4" x 11'-4"
W7	1	" " "	3'-1" x 2'-5"
W8	1	" " "	2'-4" x 11'-4"
W9	1	" " "	3'-1" x 2'-5"
W10	1	" " "	2'-4" x 4'-10"
W11	1	CIRC./LONG WELD	3'-1" x 2'-5"
W12	8	CIRC./RADIAL HD WELD	3'-9" x 4'-5" 7'-2"
W13	1	CIRC./LONG WELD	4'-0" x 2'-5"

NOZZLE CHART

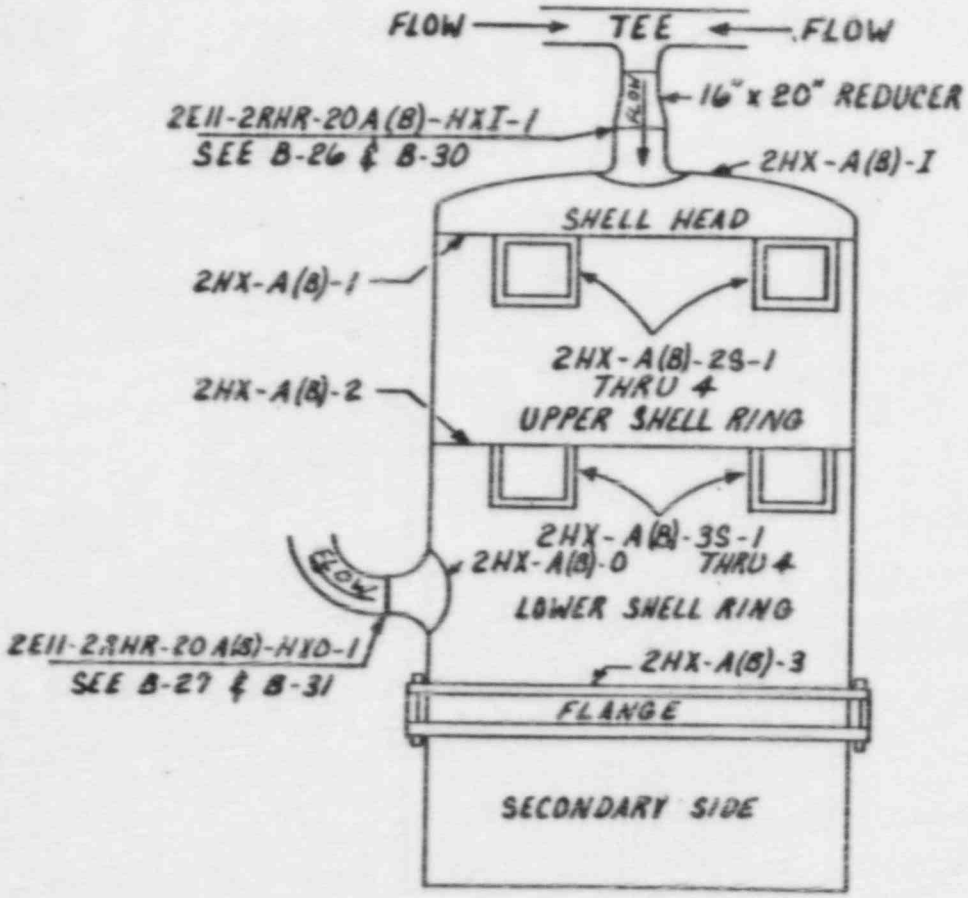
NOZZLE NO.	QUAN	SIZE	FUNCTION
N1A, N1B	2	28"	RECIRCULATION OUTLET
N2A THRU N2E	5	12"	RECIRCULATION INLET
N2F THRU N2K	5	12"	RECIRCULATION INLET
N5A THRU N5D	4	24"	STEAM OUTLET
N4A THRU N4D	4	12"	FEEDWATER
N5A, N5B	2	10"	CORE SPRAY
N8A, N8B	2	4"	JET PUMP INSTRUMENT
N9	1	3"	CONT. ROD DRIVE HYD. SYS RETURN
N11A, N11B	2	2"	INSTRUMENTATION
N12A, N12B	2	2"	INSTRUMENTATION
N16A, N16B	2	2"	INSTRUMENTATION

RPV LONGITUDINAL, CIRCUMFERENTIAL, & NOZZLE-TO-SHELL WELDS

FIGURE 1



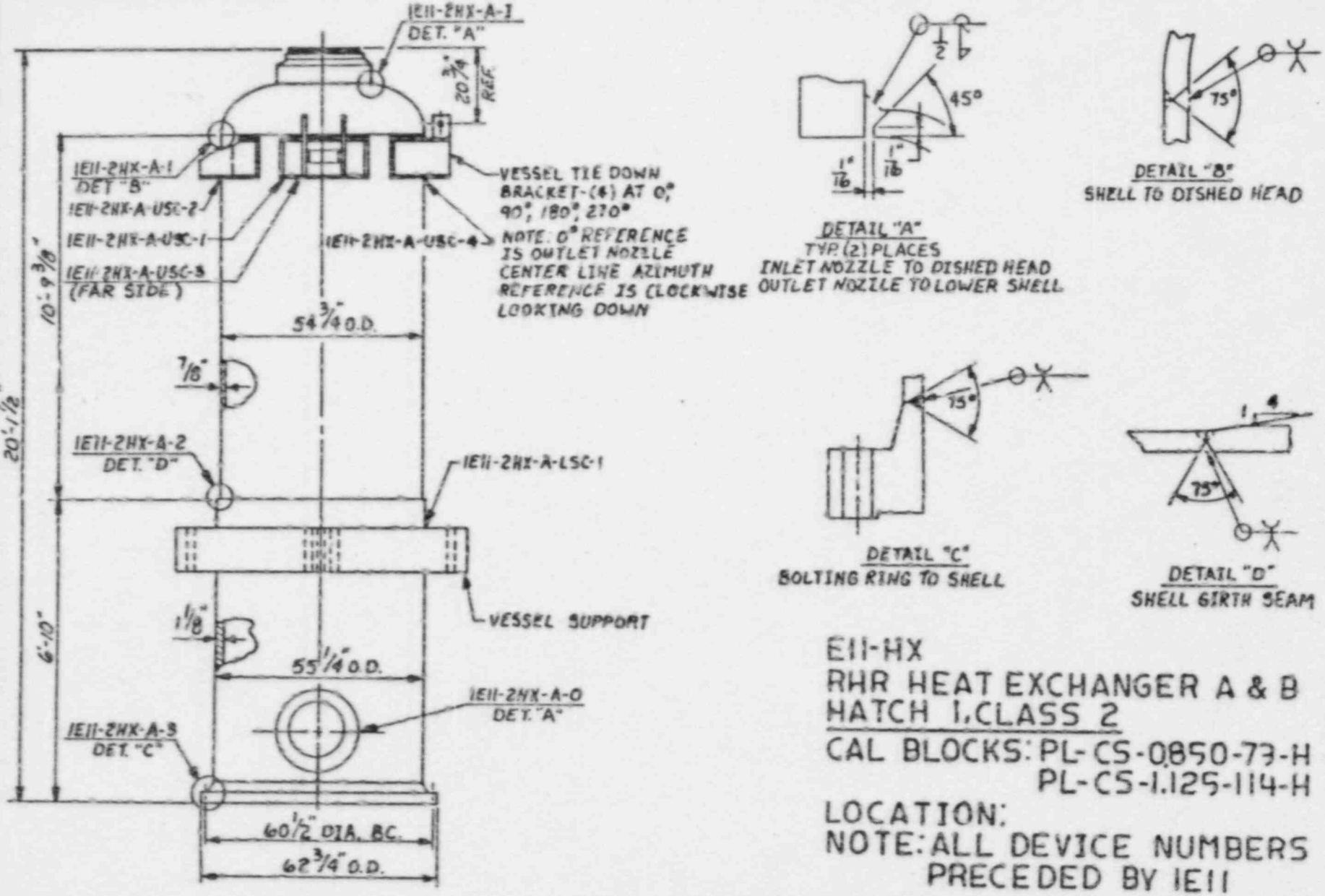
EDWIN I. HATCH UNIT-2 RPV LONGITUDINAL CIRCUMFERENTIAL AND NOZZLE TO VESSEL WELDS
FIGURE 2



THE ZERO REFERENCE LOCATION (L.o) FOR THE CIRCUMFERENCIAL SHELL WELDS IS THE CENTERLINE OF THE OUTLET NOZZLE 2HX-A(B)-0

RESIDUAL HEAT REMOVAL HEAT EXCHANGERS
HATCH 2, CLASS 2
CAL. BLOCKS : PL-CS-1.250-72-H
PL-CS-0.850-73-H
LOCATION : NORTHEAST AND SOUTH-EAST DIAGONALS

FIGURE 3



DETAIL "A"
TYP. (2) PLACES
INLET NOZZLE TO DISHED HEAD
OUTLET NOZZLE TO LOWER SHELL

DETAIL "B"
SHELL TO DISHED HEAD

DETAIL "C"
BOLTING RING TO SHELL

DETAIL "D"
SHELL GIRTH SEAM

E11-HX
RHR HEAT EXCHANGER A & B
HATCH 1, CLASS 2

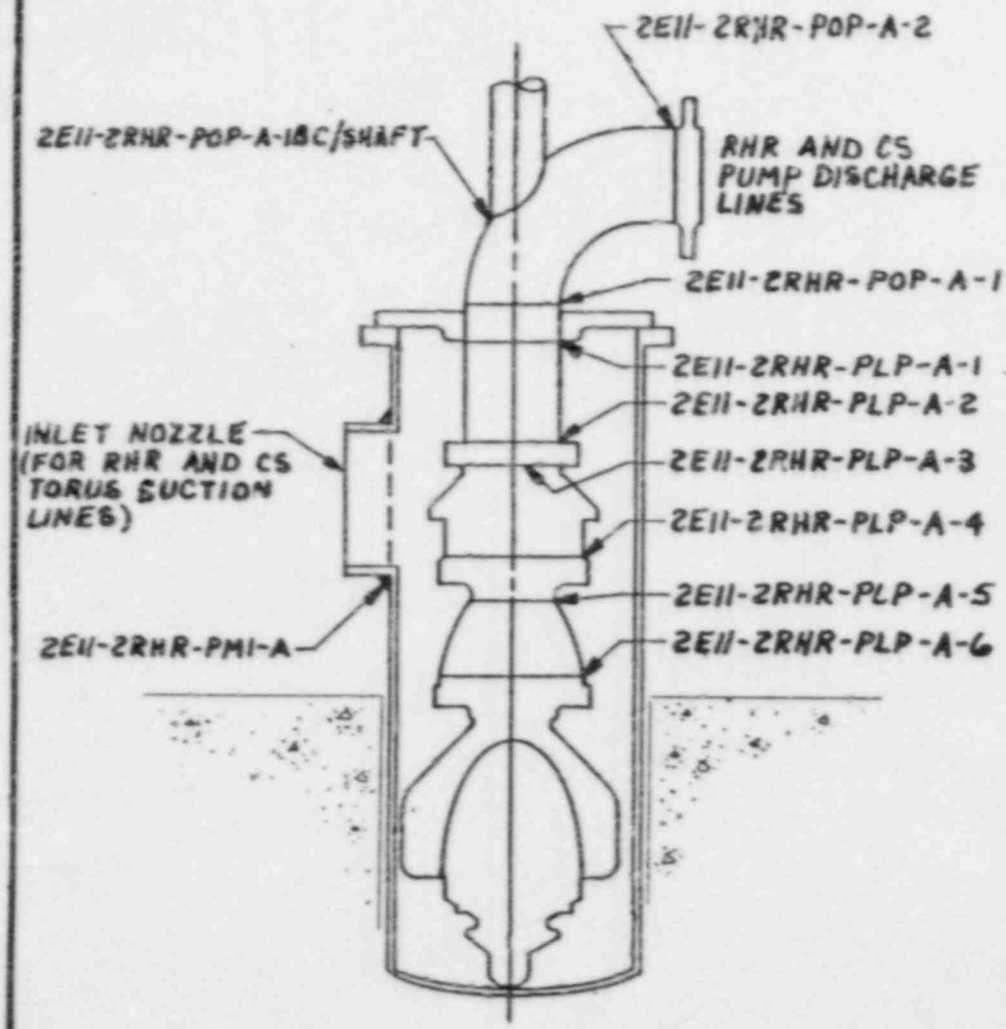
CAL BLOCKS: PL-CS-0.850-73-H
PL-CS-1.125-114-H

LOCATION:

NOTE: ALL DEVICE NUMBERS
PRECEDED BY 1E11

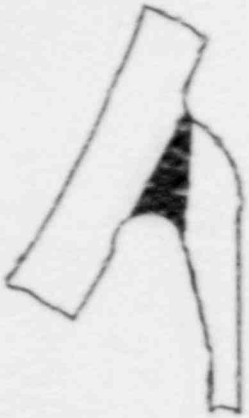
FIGURE 4

THIS FIGURE DEPICTS THE RHR PUMP A. CS PUMPS AND RHR PUMPS B,C, AND D ARE SIMILAR.



RESIDUAL HEAT REMOVAL AND CORE SPRAY PUMPS
HATCH 2, CLASS 2
CAL. BLOCKS: 12-CS-80-0.688-56-H;
16-CS-40-0.500-66-H
LOCATION: NE & SE DIAGONALS

FIGURE 5



DETAIL "A"

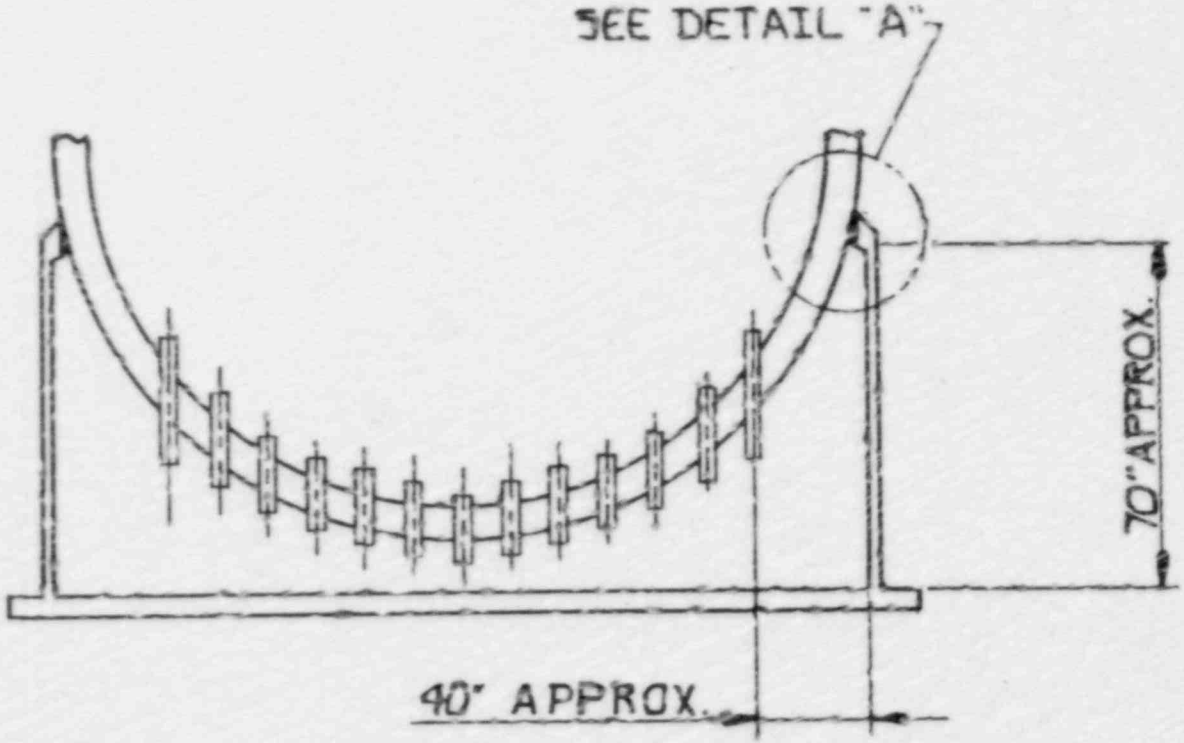
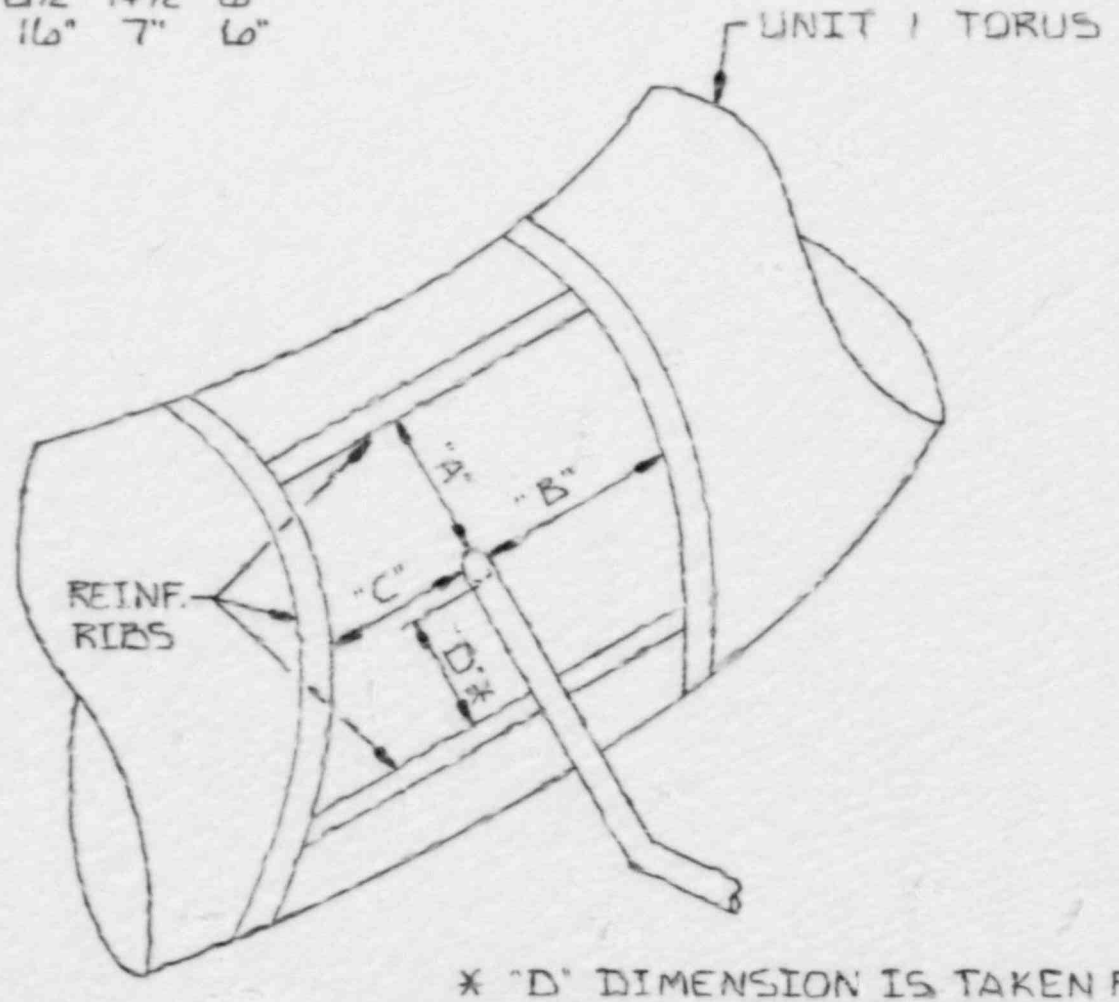


FIGURE 6

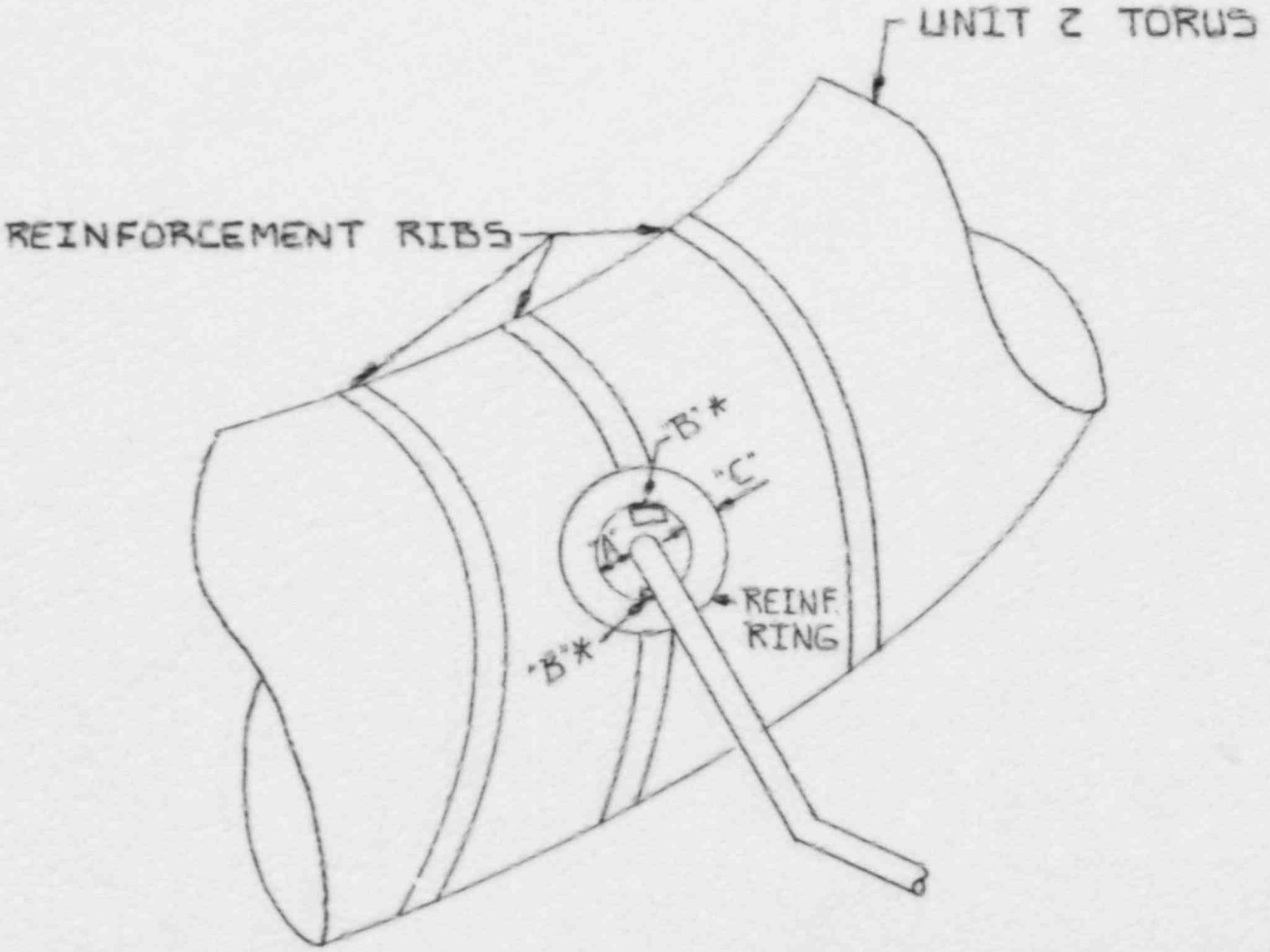
SYSTEM	"A"	"B"	"C"	"D"
1E51	8 1/2"	16"	18"	19"
1E41	14"	8 1/2"	12"	14 1/2"
1E21"A"	N/A	6"	8"	N/A
1E21"B"	13"	24 1/2"	7"	16"
1E11"A"	6"	6 1/2"	24"	6"
1E11"B"	7"	24"	6"	6"
1E11"C"	6"	8 1/2"	14 1/2"	6"
1E11"D"	7"	16"	7"	6"



* "D" DIMENSION IS TAKEN FROM BOTTOM EDGE OF WELD TO THE HORZ. REINFORCEMENT RIB.

FIGURE 7

SYSTEM	"A"	"B"	"C"	
2ES1	3½"	1½"	10"	INSULATION IN PLACE
2E41	3½"	1½"	10"-11"	
2E21	3½"	1½"	12"	BOTH LOOPS
2E11	3"	1½"	12"	ALL 4 LOOPS



* ITEM "B" IS THE EXTENSION OF THE VERT. REINF. RIB PAST THE LOCATION OF WHERE THE REINF. RING IS WELDED TO THE REINF. RIB TYP. AT THE TOP AND BOTTOM OF THE REINF. RING.

FIGURE 8

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