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GNRO-2011/00084

November 15, 2011

U. S. Nuclear Regulatory Commission
Attn.: Document Control Desk
Washington, DC 20555-0001

SUBJECT: Grand Gulf Nuclear Station – Request for Relief GG-ISI-014, GG-ISI-015 and GG-ISI-016
Requests for Relief from ASME Code Section XI Inservice Inspection Requirements for Pressure Retaining Welds in Control Rod Housings, Pressure Retaining Welds in Pumps and Valves and Supports
Grand Gulf Nuclear Station, Unit 1
Docket No. 50-416
License No. NPF-29

REFERENCES: 1. 2nd 10 year ISI Inspection Interval, Request for Alternative of Limited Examinations (ADAMS Accession Number ML091490755)
2. NRC SER for Second ISI Interval (ADAMS Accession Number ML101410002)
3. NRC SER for First ISI Interval (TAC No. M95433)

Dear Sir or Madam:

Pursuant to 10 CFR 50.55a, "Codes and Standards," paragraph (g)(5)(iii), Entergy requests relief from certain American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (BPV), Section XI, Sub Article IWB-2500 Inservice Inspection (ISI) requirements for Examination Category B-O, Pressure Retaining Welds in Control Rod Housings, ASME Section XI 1992 Edition, 1993 Addenda, Table IWC-2500-1 Inservice Inspection (ISI) requirements for Examination Category C-G, Pressure Retaining Welds in Pumps and Valves – Inspection Program B and ASME Section XI 1992 Edition, 1993 Addenda, Table IWF-2500-1 Valves and Examination Category F-A, Supports – Inspection Program B. This relief is requested for the second 10-year interval of the Inservice Inspection Program for the Grand Gulf Nuclear Station (GGNS).

Relief is requested in accordance with 10 CFR 50.55a(g)(6)(i) where full compliance with the ASME Code, Section XI requirements is not practical. The specific details of the requested relief are enclosed in Attachment 1, Attachment 2 and Attachment 3.

These requests for relief are being submitted beyond the 12 month timeframe following the second 120 month interval as specified under 10 CFR 50.55a(g)(5)(iv) due to them being inadvertently left off the relief request listed as Reference 1. This condition has been addressed in Entergy's Corrective Action Process.

The NRC previously granted the relief for examinations listed in attachment 1 and 2 in the Safety Evaluation listed as Reference 3.

This letter contains no new regulatory commitments.

If you have any questions concerning this letter, please contact Mr. Ernest Rufus at (601) 437-6582.

Sincerely,

 Acting for C. Perrino.

CLP/JAS

- Attachments:
1. Grand Gulf Nuclear Station – Unit 1 second 10 year interval inservice inspection program relief request GG-ISI-014
 2. Grand Gulf Nuclear Station – Unit 1 second 10 year interval inservice inspection program relief request GG-ISI-015
 3. Grand Gulf Nuclear Station – Unit 1 second 10 year interval inservice inspection program relief request GG-ISI-016

cc: Mr. Elmo Collins Jr.
Regional Administrator, Region IV
U. S. Nuclear Regulatory Commission
612 E. Lamar Blvd., Suite 400
Arlington, TX 76011-4125

NRC Senior Resident Inspector
Grand Gulf Nuclear Station
Port Gibson, MS 39150

U. S. Nuclear Regulatory Commission
ATTN: Mr. A. B. Wang, NRR/DORL (w/2)
Mail Stop OWFN/8 B1
Washington, DC 20555-0001

ATTACHMENT 1 TO
GNRO 2011/00084
GRAND GULF NUCLEAR STATION – UNIT 1
SECOND 10 YEAR INTERVAL INSERVICE INSPECTION PROGRAM
RELIEF REQUEST
GG-ISI-014

**GRAND GULF NUCLEAR STATION – UNIT 1
SECOND 10 YEAR INTERVAL INSERVICE INSPECTION PROGRAM
RELIEF REQUEST
GG-ISI-014**

Component(s) Affected:	See Table 1 below
Code Class:	ASME Code Class 1
References:	ASME Section XI 1992 Edition, 1993 Addenda, Table IWB-2500-1 Inspection Program B
Examination Category:	B-O, Pressure Retaining Welds in Control Rod Housings
Item Number(s):	B14.10, Welds in CRD Housing
Unit / Inspection Interval Applicability:	Grand Gulf Nuclear Station (GGNS), Second (2nd) 10-year Interval June 1, 1997 to May 31, 2008 (thru 10/22/2008 for Risk Informed Examinations)

I. Applicable Code Requirement(s)

ASME Code, Section XI, 1992 Edition, 1993 Addenda, Table IWB-2500-1, Examination Category B-O, Pressure Retaining Welds in Control Rod Housings, Item B14.10 requires volumetric or surface examination of 10% of peripheral Control Rod Drive (CRD) housing welds.

II. Impracticality of Compliance

The Code required inspection for the Peripheral CRD Housing welds was not performed for the Second 10 Year ISI Interval. Relief is requested from performing the volumetric or surface examinations on the peripheral CRD housing welds based on the proposed alternative. The as-installed configuration of the CRD housings makes performance of the required examinations impractical for the following reasons. The housings are in close proximity to the reactor vessel support pedestal, which limits access to the welds on the outer circumference of the housings. Next, the subject welds are below the lower reactor insulation support structure where the housings pass through a series of closely-spaced CRD housing support beams and associated hanger rods, which further limit access to the welds in the upper portion of the housings. Access to both the upper and lower welds from below is further limited by a series of CRD housing support bars, grid plates and grid clamps. Access to the lower welds from the housing ID requires removal of the CRD mechanisms and sleeves. Refer to Table 1 for a list of all the Peripheral CRD Housing welds. Refer to Diagrams 1 and 2.

III. Proposed Alternative and Basis for Use

The circumstances and basis for the previous NRC approval have not changed.

The subject welds have received VT-2 examinations with the Reactor Coolant Pressure Boundary leakage test after each refueling outage. The Leak Detection System that is monitored continuously from the Control Room would detect a leak if one occurred while the plant was in operation. The "Shoot Out" steel and Grid support steel would prevent complete ejection of the CRD and will minimize the leak rate for the Makeup System.

For the Third 10 Year ISI Inspection Interval, Grand Gulf will access the CRD Housing weld area to inspect these welds to the extent possible during Refuel Outage 18.

IV. Duration of Requested Relief

Relief is requested for the Second 10 Year ISI Interval from June 1, 1997 to May 31, 2008.

V. Precedents

Relief from the subject examinations was granted by the NRC for the first ISI Interval as documented in NRC SER (TAC No. M95433) dated October 18, 1996, Request for Relief I-00008 Rev 3.

**GRAND GULF NUCLEAR STATION – UNIT 1
SECOND 10 YEAR INTERVAL INSERVICE INSPECTION PROGRAM
REQUEST FOR RELIEF
GG-ISI-014**

TABLE 1 – PERIPHERAL CRD HOUSING WELDS

COMPONENT NO	CATEGORY	ITEM NUMBER	DESCRIPTION
B13D009-03/18-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-03/18-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-03/22-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-03/22-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-03/26-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-03/26-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-03/30-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-03/30-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-03/34-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-03/34-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-03/38-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-03/38-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-03/42-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-03/42-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-07/10-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-07/10-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-07/50-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-07/50-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-11/06-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-11/06-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-11/54-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-11/54-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-19/02-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-19/02-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-19/58-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-19/58-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-23/02-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-23/02-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-23/58-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-23/58-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-27/02-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-27/02-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-27/58-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-27/58-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-31/02-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-31/02-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-31/58-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-31/58-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-35/02-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-35/02-WELD-2	B-O	B14.10	Welds in CRD Housing

**GRAND GULF NUCLEAR STATION – UNIT 1
SECOND 10 YEAR INTERVAL INSERVICE INSPECTION PROGRAM
REQUEST FOR RELIEF
GG-ISI-014**

TABLE 1 – PERIPHERAL CRD HOUSING WELDS

COMPONENT NO	CATEGORY	ITEM NUMBER	DESCRIPTION
B13D009-35/58-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-35/58-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-39/02-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-39/02-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-39/58-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-39/58-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-43/02-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-43/02-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-43/58-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-43/58-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-51/06-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-51/06-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-51/54-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-51/54-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-55/10-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-55/10-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-55/50-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-55/50-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-59/18-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-59/18-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-59/22-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-59/22-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D091-59/26-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-59/26-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-59/30-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-59/30-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-59/34-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-59/34-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-59/38-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-59/38-WELD-2	B-O	B14.10	Welds in CRD Housing
B13D009-59/42-WELD-1	B-O	B14.10	Welds in CRD Housing
B13D009-59/42-WELD-2	B-O	B14.10	Welds in CRD Housing

DIAGRAM 1
Elevation View

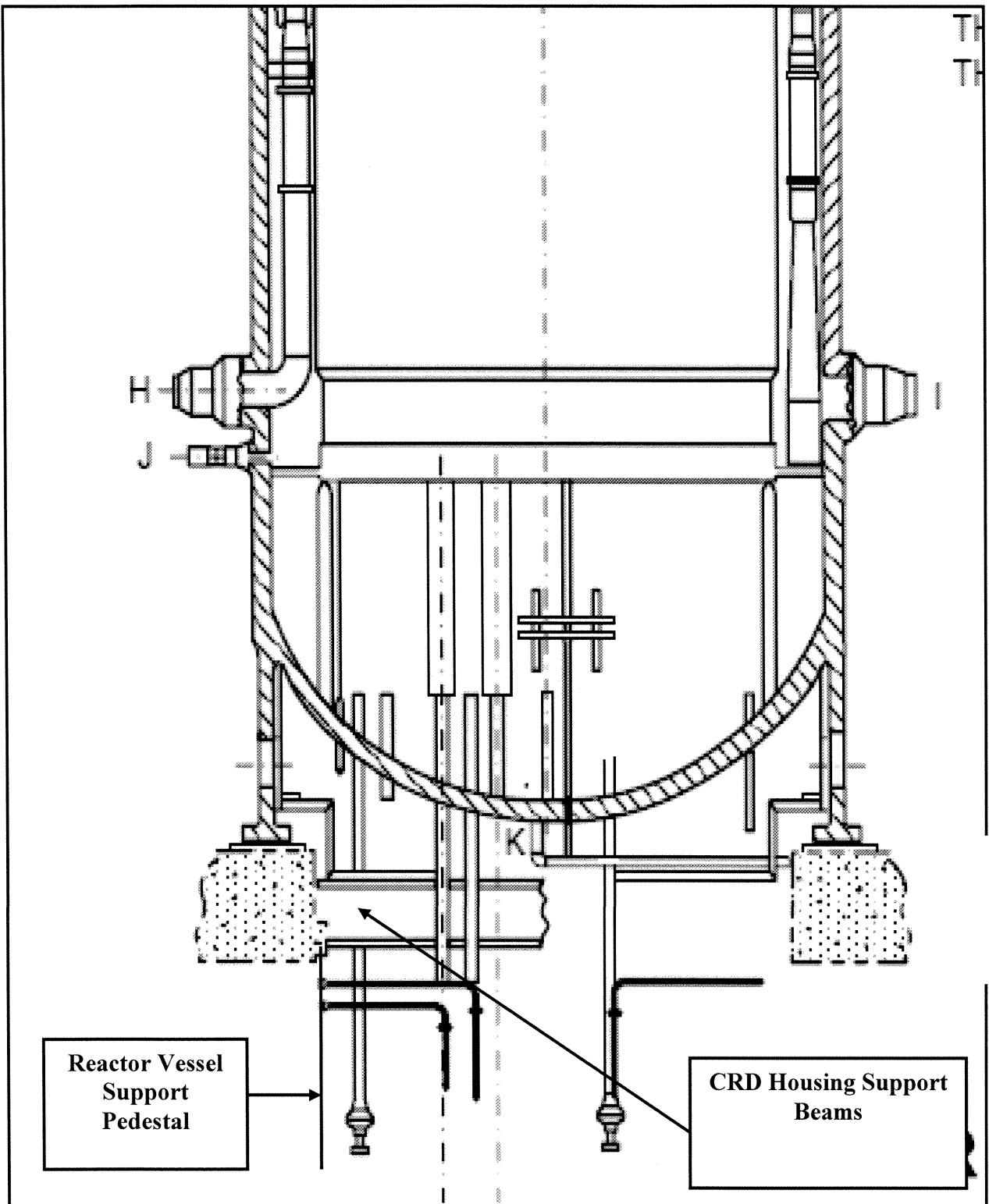
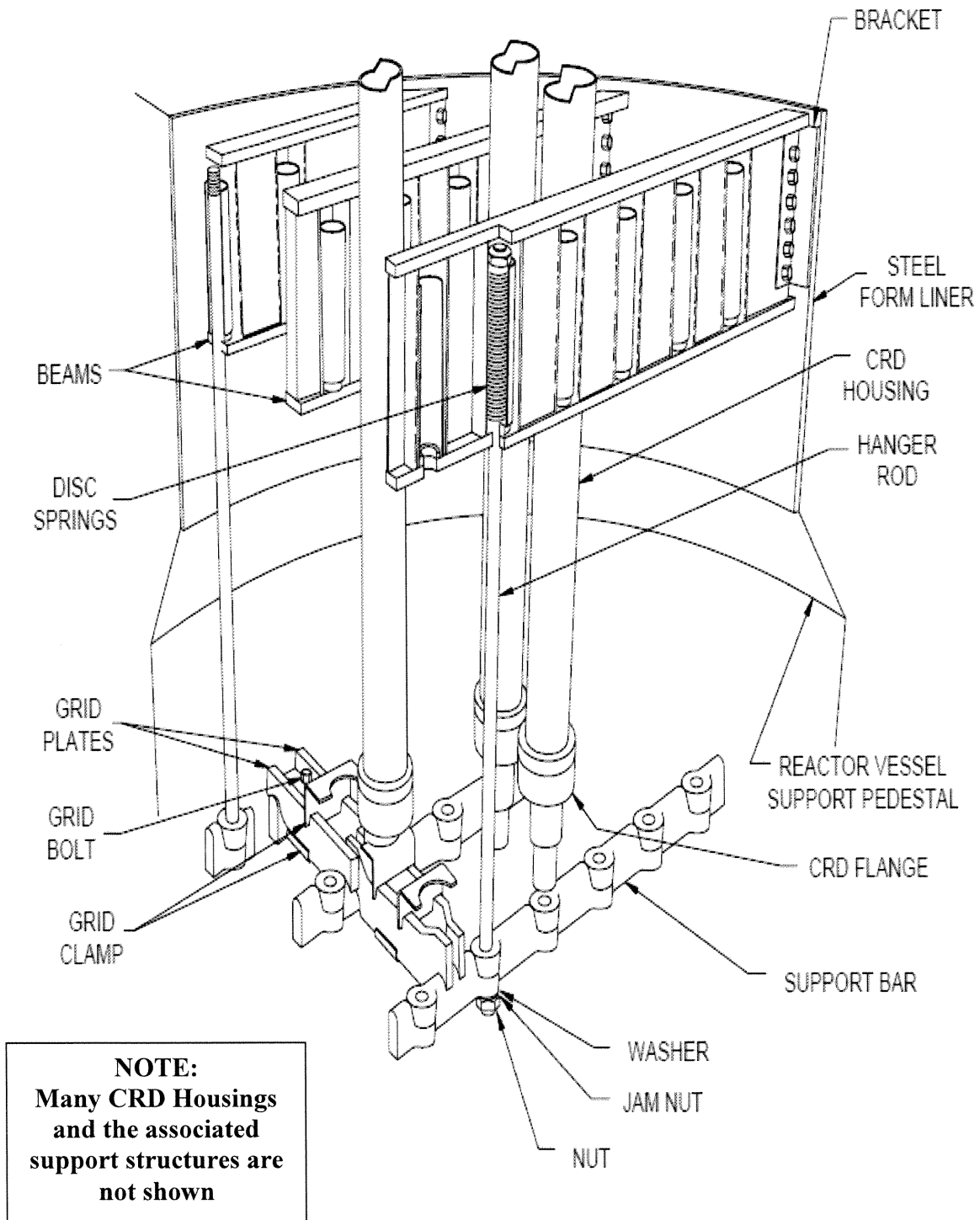


DIAGRAM 2
CRD Housing Support Structures



CONTROL ROD DRIVING HOUSING SUPPORT STRUCTURES

ATTACHMENT 2 TO
GNRO 2011/00084
GRAND GULF NUCLEAR STATION – UNIT 1
SECOND 10 YEAR INTERVAL INSERVICE INSPECTION PROGRAM
RELIEF REQUEST
GG-ISI-015

**GRAND GULF NUCLEAR STATION – UNIT 1
SECOND 10 YEAR INTERVAL INSERVICE INSPECTION PROGRAM
RELIEF REQUEST
GG-ISI-015**

Component(s) Affected:	See Table 1 below
Code Class:	ASME Code Class 2
References:	ASME Section XI 1992 Edition, 1993 Addenda, Table IWC-2500-1 Inspection Program B
Examination Category:	C-G, Pressure Retaining Welds in Pumps and Valves
Item Number(s):	C6.10, Pump Casing Welds
Unit / Inspection Interval Applicability:	Grand Gulf Nuclear Station (GGNS), Second (2nd) 10-year Interval June 1, 1997 to May 31, 2008 (thru 10/22/2008 for Risk Informed Examinations)

I. Applicable Code Requirement(s)

ASME Code, Section XI, 1992 Edition, 1993 Addenda, Table IWC-2500-1, Examination Category C-G, Pressure Retaining Welds in Pumps and Valves – Inspection Program B. Item C6.10 requires surface examination of 100% of welds in all components in each piping run examined under Examination Category C-F each inspection interval. For extent of examination, Note 1 applies, where in the case of multiple pumps and valves of similar design, size, function and service in a system, the examination of only one pump and one valve among each group of multiple pumps and valves is required.

II. Impracticality of Compliance

Relief is requested from performing the surface examination of the SB welds as depicted in Diagrams 1-3 for the pumps listed in Table 1 – Affected Components. There are 3 Residual Heat Removal Pumps (Q1E12) with Q1E12C002B selected, 1 Low Pressure Core Spray Pump (Q1E21) and 1 High Pressure Core Spray (Q1E22) Pump. All remaining pressure retaining weld examinations for the subject pumps was performed.

III. Basis for Use and Proposed Alternative

Basis for Use

Insufficient access exists to perform the required examination of the subject welds due to the pump casings being encased in concrete where only partial or no access is available.

Proposed Alternative

The required examinations will be performed if the subject pumps are disassembled for maintenance to the point where the subject welds are accessible.

IV. Duration of Requested Relief

Relief is requested for the Second 10 Year ISI Interval from June 1, 1997 to May 31, 2008.

V. Precedents

Relief from the subject examinations was granted by the NRC for the first ISI Interval as documented in NRC SER (TAC No. M95433).

10CFR50.55a(g)(6)(i) states:

The Commission will evaluate determinations under paragraph (g)(5) of this section that the code requirements are impractical. The Commission may grant such relief and may impose such alternative requirements as it determines is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest giving due consideration to the burden upon the licensee that could result if the requirements were imposed on the facility.

Entergy believes that it is impractical to obtain greater examination coverage on this component. The examination performed on the subject component would detect generic degradation, if it existed, therefore demonstrating an acceptable level of integrity. Therefore, we request the proposed relief be authorized pursuant to 10CFR50.55a(g)(6)(i).

**GRAND GULF NUCLEAR STATION – UNIT 1
SECOND 10 YEAR INTERVAL INSERVICE INSPECTION PROGRAM
RELIEF REQUEST
GG-ISI-015**

TABLE 1 – AFFECTED COMPONENTS

Group	Category	Item #	Component ID	% Coverage	Description	Indications
RHR-B	C-G	C6.10	Q1E12C002B-SB-1	0%	Pump Casing Weld	None
RHR-B	C-G	C6.10	Q1E12C002B-SB-2	20%	Pump Casing Weld	None
LPCS	C-G	C6.10	Q1E21C001-SB-1	0%	Pump Casing Weld	None
LPCS	C-G	C6.10	Q1E21C001-SB-2	0%	Pump Casing Weld	None
HPCS	C-G	C6.10	Q1E22C001-SB-1	0%	Pump Casing Weld	None
HPCS	C-G	C6.10	Q1E22C001-SB-2	0%	Pump Casing Weld	None
HPCS	C-G	C6.10	Q1E22C001-SB-3	0%	Pump Casing Weld	None

Diagram 1
Pump Q1E12C002B

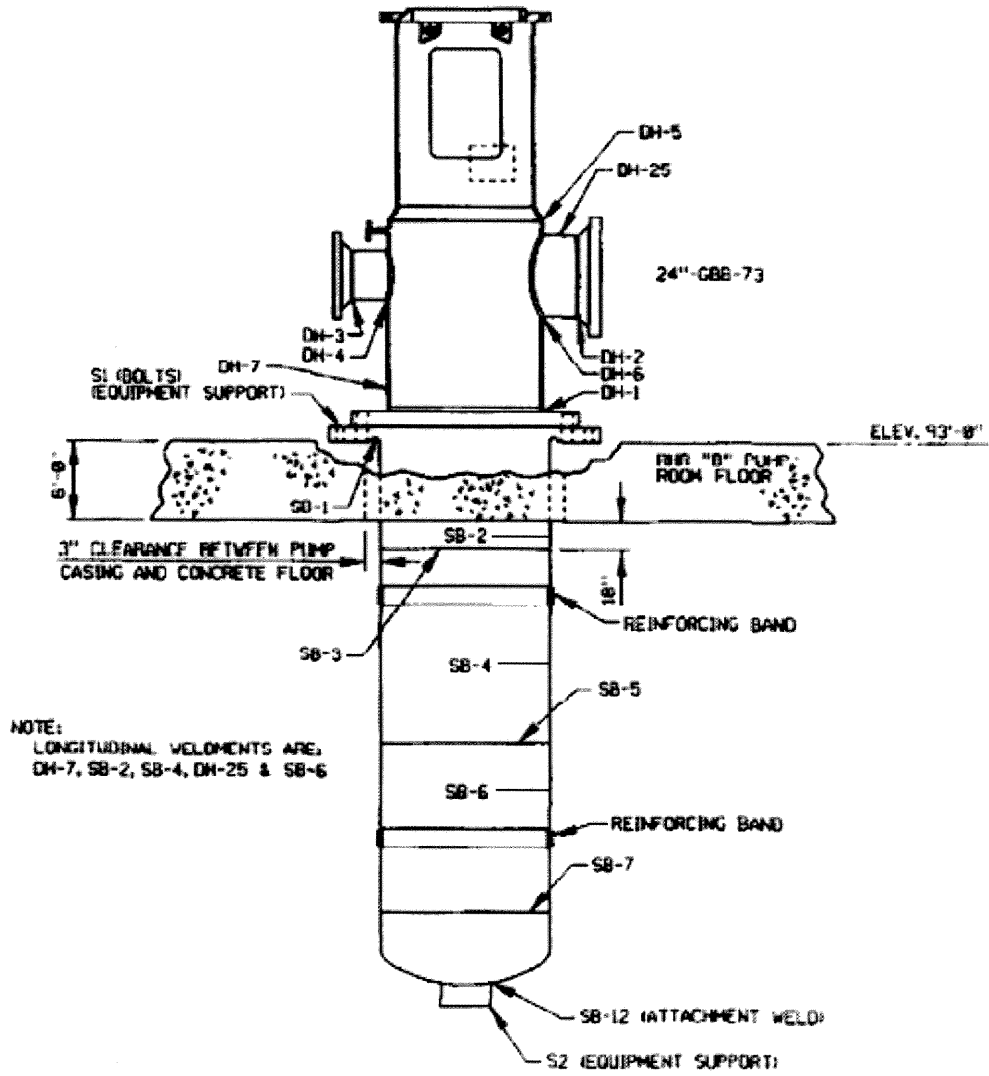


Diagram 2
Pump Q1E21C001

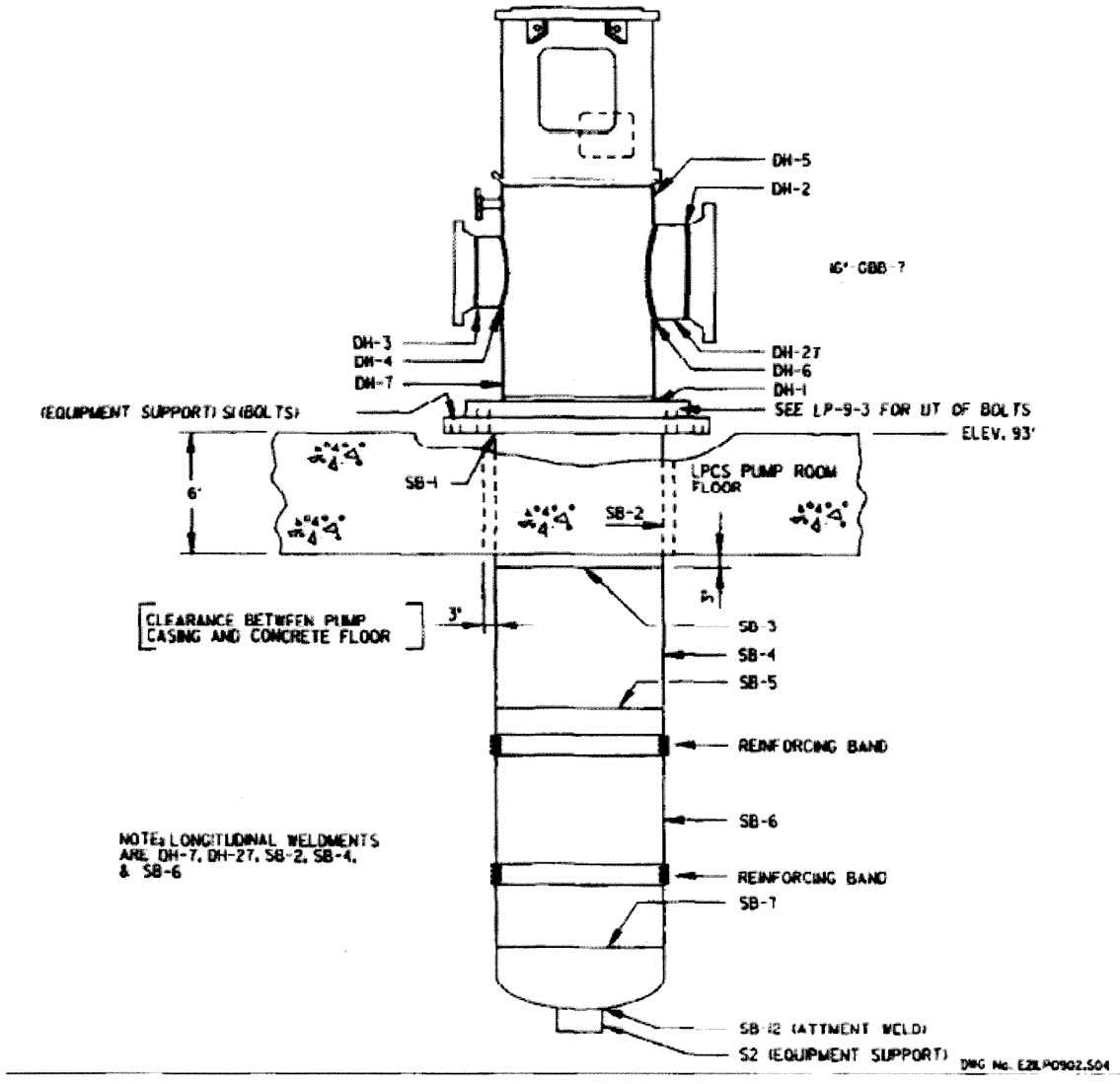
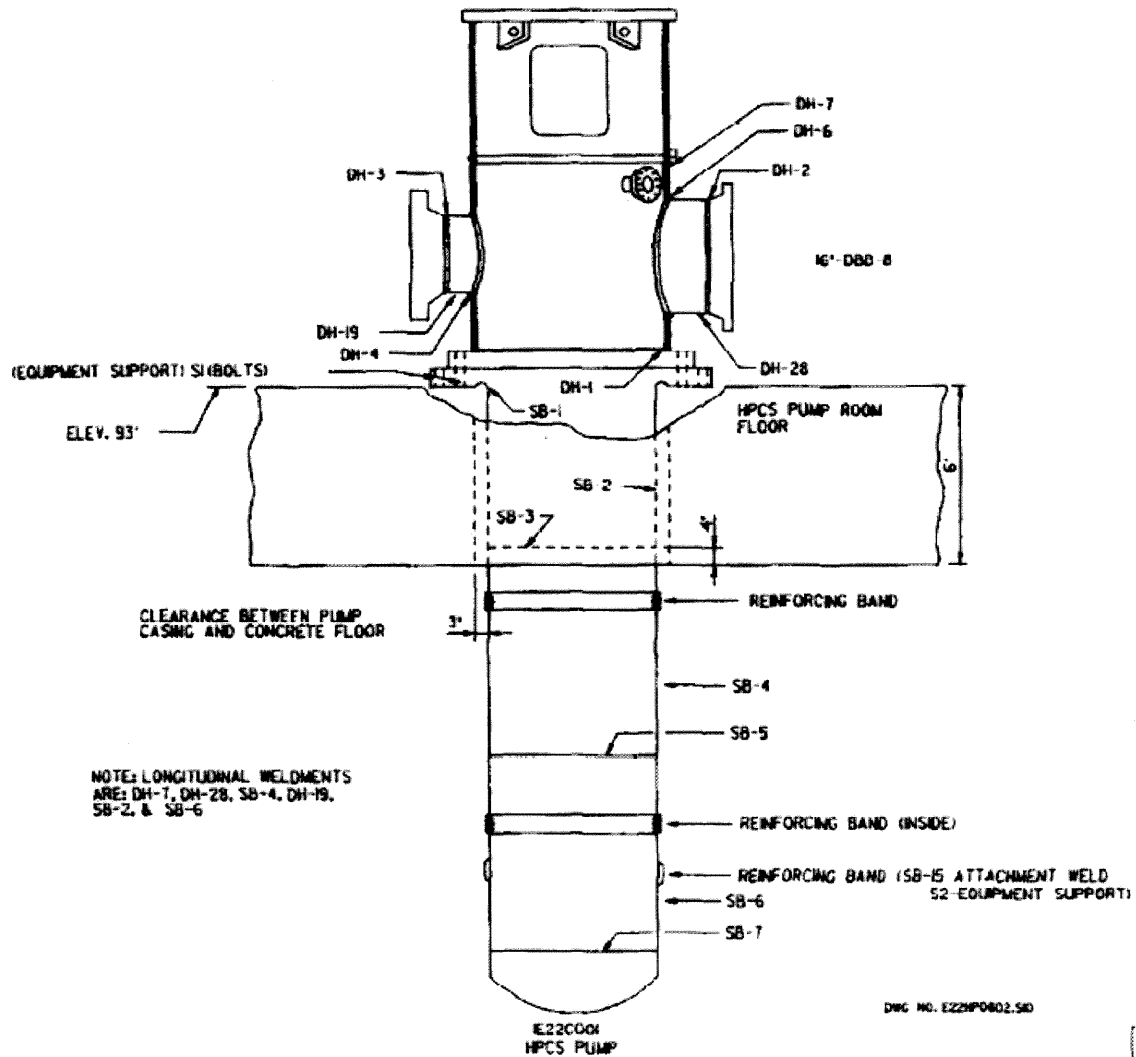


Diagram 3
Pump Q1E22C001



ATTACHMENT 3 TO
GNRO 2011/00084
GRAND GULF NUCLEAR STATION – UNIT 1
SECOND 10 YEAR INTERVAL INSERVICE INSPECTION PROGRAM
RELIEF REQUEST
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**GRAND GULF NUCLEAR STATION – UNIT 1
SECOND 10 YEAR INTERVAL INSERVICE INSPECTION PROGRAM
RELIEF REQUEST
GG-ISI-016**

Component(s) Affected:	See Table 1 below
Code Class:	ASME Code Class 2
References:	ASME Section XI 1992 Edition, 1993 Addenda, Table IWF-2500-1 Inspection Program B
Examination Category:	F-A, Supports
Item Number(s):	F1.40, Supports other than Piping Supports
Unit / Inspection Interval Applicability:	Grand Gulf Nuclear Station (GGNS), Second (2nd) 10-year Interval June 1, 1997 to May 31, 2008 (thru 10/22/2008 for Risk Informed Examinations)

I. Applicable Code Requirement(s)

ASME Code, Section XI, 1992 Edition, 1993 Addenda, Table IWF-2500-1, Examination Category F-A, Supports – Inspection Program B. Item F1.40 requires visual examination of 100% of supports other than piping supports in each inspection interval.

II. Impracticality of Compliance

Due to limited access, being encased in concrete, certain code examination volumes, as depicted in ASME Section XI, cannot be examined to the extent of obtaining full code coverage. Pursuant to 10CFR50.55a(g)(5)(iii), Entergy Operations Inc. (GGNS) requests permission to perform a Visual Examination (VT-3) within the limitations described in Table 1 of this Request. Refer to Diagrams 1 and 2 for location of Pump Support component.

III. Basis for Use and Proposed Alternative

Basis for Use

Insufficient access exists to perform the required examination of the subject support due to the pump support being encased in concrete where only partial access is available.

Proposed Alternative

No alternative testing is proposed at this time. Entergy has examined this support weld to the extent available.

IV. Duration of Requested Relief

Relief is requested for the Second 10 Year ISI Interval from June 1, 1997 to May 31, 2008.

V. Conclusion

10CFR50.55a(g)(6)(i) states:

The Commission will evaluate determinations under paragraph (g)(5) of this section that the code requirements are impractical. The Commission may grant such relief and may impose such alternative requirements as it determines is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest giving due consideration to the burden upon the licensee that could result if the requirements were imposed on the facility.

Entergy believes that it is impractical to obtain greater examination coverage on this component. The examination performed on the subject component would detect generic degradation, if it existed, therefore demonstrating an acceptable level of integrity. Therefore, we request the proposed relief be authorized pursuant to 10CFR50.55a(g)(6)(i).

Table 1, limited F-A Examinations

Item #	Component ID	Description	% Coverage	Reason for Limitation	Indications
F1.40	Q1E12C002B-S2	Pump Support	50%	Partially encased in concrete	None

Diagram 1
Pump Q1E12C002B

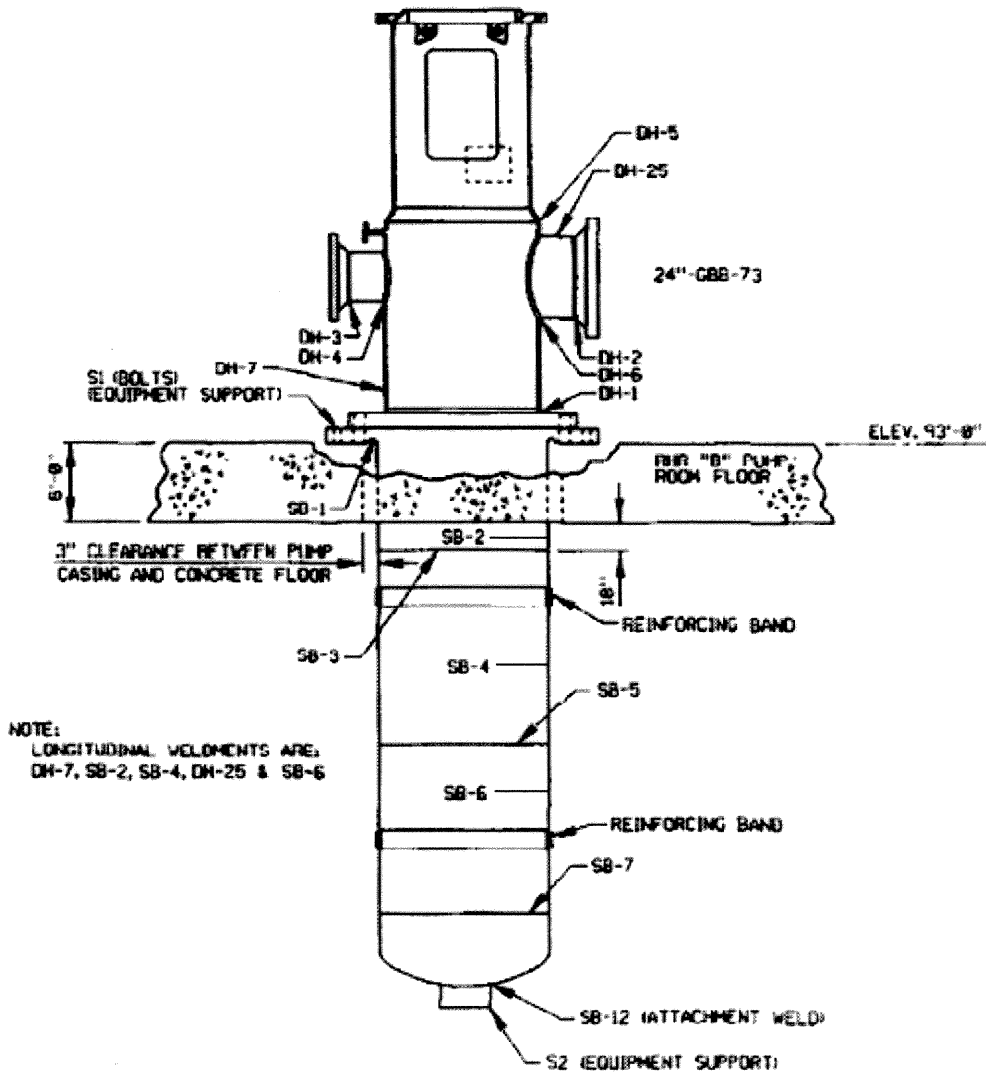
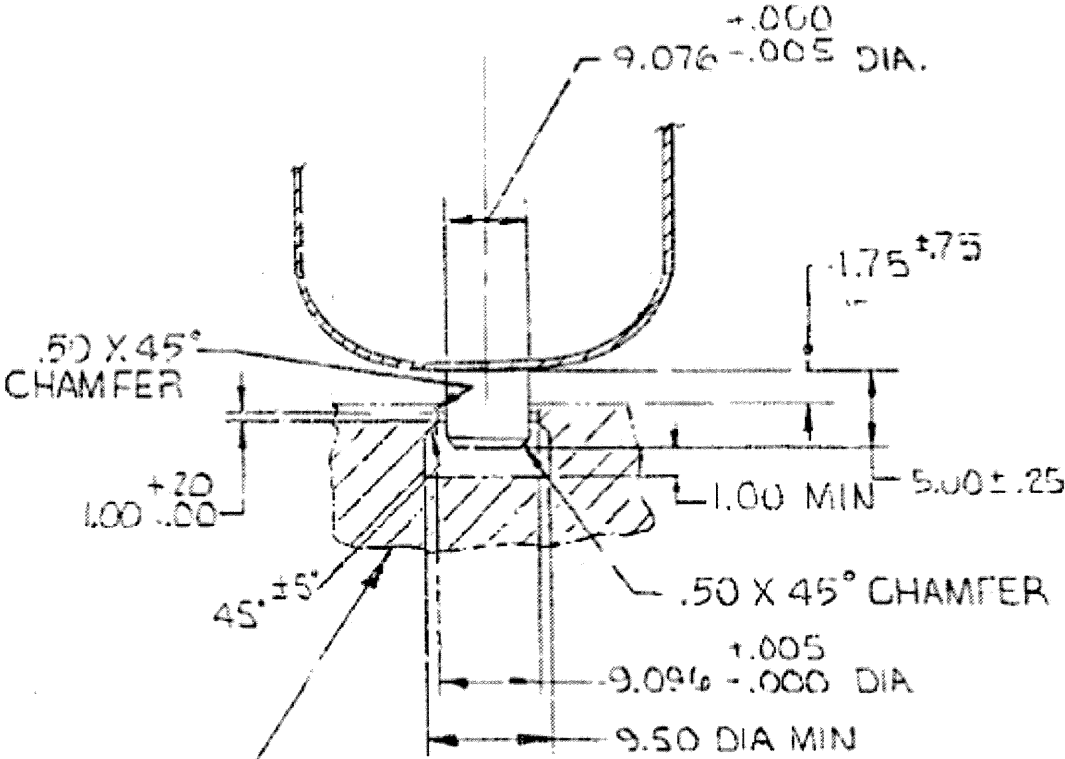


Diagram 2
Pump Q1E12C002B
Detail of S2 Support



A.E. TO DESIGN THE SHELL PIN INTERFACE TO WITHSTAND A SIDELOAD OF 17,000LB'S (ESE)