

10CFR50.55a(g)(5)(iii)

DEC 1 4 2007

LR-N07-0312

United States Nuclear Regulatory Commission Document Control Desk Washington, DC 20555

> SALEM GENERATING STATION – UNIT 2 FACILITY OPERATING LICENSE NO. DPR-75 NRC DOCKET NO. 50-311

Subject:

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION, INSERVICE INSPECTION PROGRAM RELIEF REQUESTS S2-I2-RR-B01 AND S2-I2-RR-C01

References: (1) Letter from PSEG to NRC: "Re-submittal of Inservice Inspection Program Relief Requests S2-I2-RR-B01 and S2-I2-RR-C01, Salem Nuclear Generating Station - Unit 2, Facility Operating License DPR-75, Docket No. 50-311," dated June 27, 2007

> (2) Letter from NRC to PSEG: "Salem Nuclear Generating Station, Unit No. 2 – Request for Additional Information Related to Relief Requests S2-I2-RR-B01 and S2-I2-RR-C01 (TAC NOS. MD5977 and MD5978)," dated November 2, 2007.

In Reference 1, PSEG Nuclear LLC (PSEG) re-submitted inspection relief requests S2-I2-RR-B01 and S2-I2-RR-C01 associated with the Second Ten Year Inservice Inspection (ISI) Interval for Salem Unit 2.

In Reference 2, the NRC provided PSEG a Request for Additional Information (RAI) on the Reference 1 submittal. PSEG and the NRC had discussed the RAI in draft form in a conference call on October 25, 2007. The response to the RAI is provided in the attachment and the enclosure to this letter.

NM

Document Control Desk Page 2 LR-N07-0312

If you have any questions or require additional information, please do not hesitate to contact Mr. Jeff Keenan at (856) 339-5429.

Sincerely,

Jella for RCB 12/14/07 51

Robert C. Braun Site Vice President Salem Generating Station

Attachments: 1

Enclosures: 1 (10 Sketches)

Mr. S. Collins, Administrator - Region I
U. S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Mr. R. Ennis, Licensing Project Manager - Salem U. S. Nuclear Regulatory Commission Mail Stop 08B1 Washington, DC 20555

USNRC Senior Resident Inspector – (Salem)

Mr. P. Mulligan Bureau of Nuclear Engineering P. O. Box 415 Trenton, NJ 08625

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION REQUESTS FOR RELIEF REGARDING EXAMINATION COVERAGE SECOND TEN-YEAR INSERVICE INSPECTION INTERVAL SALEM NUCLEAR GENERATING STATION, UNIT NO. 2 DOCKET NO. 50-311

•

1...

On June 27, 2007, PSEG Nuclear LLC (PSEG), the licensee for the Salem Nuclear Generating Station (Salem), Unit No. 2, requested relief from certain requirements of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (Code), Section XI, for the inservice inspection (ISI) of Class 1 and Class 2 components (PSEG Letter LR-N07-0150).

By letter dated November 2, 2007, the Nuclear Regulatory Commission (NRC) provided PSEG a Request for Additional Information (RAI); specifically five questions prefaced by a "General" discussion. The responses to the five questions are provided below.

In addition to the specific RAI responses, it should be noted that one weld identified as 14-RH-2224-1 in Table 2-1 attached to LR-N07-0150 has been corrected to 14-SJ-2224-1 in Table 2-1, Revision 1 attached to this response. The revision was necessary, as a result of a correction identified and made during a prior review of welds in the ISI Program for Salem, Unit 2. Relief <u>is</u> being requested for this weld within this submittal (TAC MD5978).

Request For Additional Information Responses

General

In both Tables 1-1 and 2-1, notes to data in the column labeled "Relief Previously Granted" indicate that several of the welds have previously been granted relief based on one of the following stated references:

- (a) Evaluation of the Second Ten-Year Interval Inspection Program Plan and Associated Requests for Relief for Salem Generating Station, Unit 2 (TAC No. M83316), dated October 23, 1995
- (b) Inservice Inspection Long Term Plan, Final Relief Requests First Interval, Salem Generating Station, Unit No. 2, Docket No. 50-311, dated September 28, 1992
- It is unclear which of the stated references are applicable to which of the welds shown in these table columns. Clearly state which reference applies to each specific weld. Also, state why the final relief requests for the first interval in reference (b) above are relevant to the second ten-year interval.

Response 1:

Tables 1-1 and 2-1 have been revised clarifying the applicability of the two references. The first interval final relief request references are not directly relevant to the Second interval, but were provided as general information, to support review of the current requests to show precedence for relief during the previous interval. See response to Question 2 below for additional clarification.

2. Clearly state which welds are intended to be a part of current relief requests S2-I2-RR-B01 and S2-I2-RR-C01. Explain why additional relief is needed for those welds, which have previously been evaluated for the second ten-year ISI interval (reference (a) above).

Response 2:

Tables 1-1 and 2-1 have been revised to replace the column identified as "Relief Previously Granted" with 2 columns to clearly indicate when the prior relief was granted. These columns are titled "1st Interval Relief Granted under TAC M84658"; and "2nd Interval Relief Granted under TAC M83316."

Additionally, a third column was added to Table 1-1 to clearly indicate whether relief was being requested under the current submittal. This column is titled "Relief requested under this submittal (TAC MD5977)."

Similarly, a third column was added to Table 2-1 to clearly indicate whether relief was being requested under the current submittal. This column is titled "Relief requested under this submittal (TAC MD5978)."

Additional relief is <u>not</u> required for any of the welds where relief has been previously granted under TAC M83316.

Table 1-1, Revision 1 and Table 2-1, Revision 1 are in included in this Attachment 1 and replace the previous tables submitted in LR-N07-0150.

Relief Request S2-I2-RR-B01

3. For reactor pressure vessel (RPV) welds 2-RPV-1443 A, C, and D; 2-RPV-1446 A through F; and, 2-RPV-3442 A through C, the sketches submitted by PSEG are not sufficient to demonstrate impracticality and do not support the written description of the limitations. Please submit information in the form of drawings, sketches and/or descriptions to support the determination that the inspection of these welds are limited and impractical.

An example that supports the claim for impracticality is provided by the licensee for weld 2-PZR-CIRC DUH. The sketches provided show the portion of the weld and base material that could not be examined, and indicate the outside geometry which limits scanning. It would also be helpful to describe the size of the inspection tool for the RPV, relative to the space available for inspection.

Response 3:

Relief has previously been granted for the Second Inspection Interval under TAC M83316 for welds identified as 2-RPV-1443C, 2-RPV-1443D, 2-RPVCH-1446A, 2-RPVCH-1446B, 2-RPVCH-1446C, 2-RPVCH-1446D, 2-RPVCH-1446E, and 2-RPVCH-1446F. The revised Table 1-1, (see response to Question 2 above), reflects this status. Therefore, relief is <u>not</u> being requested for these eight welds under the current submittal (TAC MD5978).

Relief <u>is</u> however required for four (4) welds identified as 2-RPV-3442A, 2-RPV-3442B, 2-RPV-3442C, and 2-RPV-1443C. A detailed explanation of the examination limitations for each of these welds is provided below.

Weld 2-RPV-3442A is a longitudinal weld located at 60° azimuth on the lower shell course of the RPV, which was examined from the vessel interior. The transducer package used has external dimensions of 9.51" by 5.38" fixed to the examination tool by a center point mount (Reference Enclosure 3-1). The examination was limited at the lower end by core barrel lugs measuring 18.1" by 16.81" as depicted on the Vessel Rollout sketch included within the WesDyne International Examination Program Plan, Sheet 1 (Reference Enclosure 3-2). The extent of coverage was determined as depicted on the lower long seam (longitudinal weld) sketch included within the WesDyne International Examination Program Plan, Sheet 18 (Reference Enclosure 3-3); which clearly depicts the limitation caused by the core barrel lug. The weld coverage estimate was calculated to be 80.5%, as detailed on the WesDvne International R.V. Coverage Estimate Breakdowns calculation (Reference Enclosure 3-4). As is shown in Table 1-1, the actual coverage achieved was 81%, which closely matches the pre-examination estimate. Additional examination data for these welds was previously provided as Photo/Sketch Nos. 215, 215A, 215B, 216, 217, and 218 within Enclosure 1 to our June 27, 2007 letter (LR-N07-0150). PSEG believes that this explanation, supported by the enclosed four (4) additional sketches provides the necessary detail to support the request for relief for the limited coverage attained during examination of this weld.

Weld 2-RPV-3442B is a longitudinal weld located at 180° azimuth on the lower shell course of the RPV. The transducer package used has external

dimensions of 9.51" by 5.38" fixed to the examination tool by a center point mount (Reference Enclosure 3-1). The examination was limited at the lower end by core barrel lugs measuring 18.1" by 16.81" as depicted on the Vessel Rollout sketch included within the WesDyne International Examination Program Plan, Sheet 1 (Reference Enclosure 3-2). The extent of coverage was determined as depicted on the lower long seam (longitudinal weld) sketch included within the WesDyne International Examination Program Plan, Sheet 18 (Reference Enclosure 3-3) which clearly depicts the limitation caused by the core barrel lug. The weld coverage estimate was calculated to be 80.5%, as detailed on the WesDyne International R.V. Coverage Estimate Breakdowns calculation (Reference Enclosure 3-5). As is shown in Table 1-1, the actual coverage achieved was 81%, which closely matches the pre-examination estimate. Additional examination data for these welds was previously provided as Photo/Sketch Nos. 215A, 215B, 219, 220, 221, and 222 within Enclosure 1 to our June 27, 2007 letter (LR-N07-0150). PSEG believes that this explanation, supported by the enclosed four (4) additional sketches provides the necessary detail to support the request for relief for the limited coverage attained during examination of this weld.

Weld 2-RPV-3442C is a longitudinal weld located at 300° azimuth on the lower shell course of the RPV. The transducer package used has external dimensions of 9.51" by 5.38" fixed to the examination tool by a center point mount (Reference Enclosure 3-1). The examination was limited at the lower end by core barrel lugs measuring 18.1" by 16.81" as depicted on the Vessel Rollout sketch included within the WesDyne International Examination Program Plan, Sheet 1 (Reference Enclosure 3-2). The extent of coverage was determined as depicted on the lower long seam (longitudinal weld) sketch included within the WesDyne International Examination Program Plan, Sheet 18 (Reference Enclosure 3-3) which clearly depicts the limitation caused by the core barrel lug. The weld coverage estimate was calculated to be 80.5%, as detailed on the WesDyne International R.V. Coverage Estimate Breakdowns calculation (Reference Enclosure 3-6). As is shown in Table 1-1, the actual coverage achieved was 81%, which closely matches the pre-examination estimate. Additional examination data for these welds was previously provided as Photo/Sketch Nos. 215A, 215B, 223, 224, 225, and 226 within Enclosure 1 to our June 27, 2007 letter (LR-N07-0150). PSEG believes that this explanation, supported by the enclosed four (4) additional sketches provides the necessary detail to support the request for relief for the limited coverage attained during examination of this weld.

Weld 2-RPV-1443C is a meridional weld located at 30° azimuth on the bottom head of the RPV. The transducer package used has external dimensions of 9.51" by 5.38" fixed to the examination tool by a center point mount (Reference Enclosure 3-1). This examination was limited by

instrumentation tubes as depicted on the Bottom Head Dollar/Penetrations Sketch included within the WesDyne International Examination Program Plan, Sheet 1 (Reference Enclosure 3-7). The instrument tube that caused the examination limitation, has been identified by a circle (with the number 32) located at azimuth 30.96° on this sketch. The extent of coverage was determined as depicted on the lower head meridional sketch included within the WesDyne International Examination Program Plan, Sheet 21 (Reference Enclosure 3-8). The weld coverage estimate was calculated to be 88.18%, as detailed on the WesDyne International R.V. Coverage Estimate Breakdowns calculation (Reference Enclosure 3-9). As is shown in Table 1-1, the actual coverage achieved was 88%, which closely matches the pre-examination estimate. Additional examination data for these welds was previously provided as Photo/Sketch Nos. 232, 233, 234, 235, and 236 within Enclosure 1 to our June 27, 2007 letter (LR-N07-0150). PSEG believes that this explanation, supported by the enclosed four (4) additional sketches provides the necessary detail to support the request for relief for the limited coverage attained during examination of this weld.

Relief Request S2-I2-RR-C01

4. For weld 12-RH-2252-2, the actual nondestructive examination (NDE) data sheet indicates that there was no limitation for the subject surface examination. However, Table 2-1 indicates that only 71% of the subject ASME surface area could be examined. Please explain this discrepancy and re-state the actual surface coverage obtained.

Response 4:

Weld 12-RH-2252-2 was not included within Table 2-1 submitted under LR-N07-0150. According to our records, this weld is a 12" Class 2 tee-topipe weld, which was identified as a Category C-F-1, Item C5.11 weld, and was not selected for examination during the second inspection interval. The weld is currently included within the RI-ISI scope, and is classified as a Category R-A, Item 1.20, Risk Category 4 weld, and is not selected for examination. Accordingly, relief is not being requested for this weld under the current submittal (TAC MD5978).

Welded attachments identified as 12-RH-2252-38PS-1&2 and 12-RH-2252-38PS-3 were examined during the Second Inspection Interval, achieved 71% of the required ASME surface area, and had been included within Table 2-1 submitted under LR-N07-0150 and the datasheets in the LR-N07-0150 enclosure do show examination limitations of 71% as well. As may be seen by reference to the revised Table 2-1 included within this response to the RAI, relief has previously been granted for both of these welded attachments for the Second Inspection Interval under TAC M83316. Therefore, relief is <u>not</u> being requested for these welds under the current submittal (TAC MD5978).

5. For weld 8-CS-2227-5, the actual NDE data sheet indicates that the coverage obtained was 39.8%. However, Table 2-1 indicates that only 31% of the subject ASME Code required volume could be examined. Please explain this discrepancy and re-state the actual coverage obtained.

Response 5:

The actual coverage attained for weld 8-CS-2227-5 during the Second Inspection Interval was 39.8%. Upon review of all the available documentation, PSEG believes that a typographical error was made when compiling the voluminous information associated with this relief request. Relief <u>is</u> being requested for this weld under the current submittal (TAC MD5978).

The revised Table 2-1 included within this response to the RAI, has been corrected to reflect the actual coverage of 39.8%. Additionally, the supporting documentation identified as Photo/Sketch No. 338 of Enclosure 1 included within LR-N07-0150 has been corrected, and is included within this RAI response (Reference Enclosure 5-1).

| Sum# | Component ID | Description | 2 ^{tid} Interval ASME Cat | | | System | Limited NDE Exam | Code Coverage Achieved | Exam Date | Photo/ Sketch No.* | Required Examination Volume | 1 st Interval Relief Granted under TAC M84658 | 2 nd Interval Relief Granted under TAC M83316 | Relief requested under this submittal (TAC MD5977) | UT Exam Type and Limitation Description |
|--------|-------------------|----------------------------------|---|-------|---|--------|------------------------|------------------------------|--------------|---|-----------------------------------|--|--|--|--|
| 000400 | 2-RPV- 3442A | LOWER SHELL AT 60 DEG. | B-A | B1.12 | t | RC | UT | 81% | 4/18/02 | 215, 215A, 215B, 216, 217, 218 | IWB-2500-1 | No | No | Yes | UT exam was conducted using 45-degree shear and refracted longitudinal wave transducers. The exams completed were limited to approximately 81% code required coverage due to the core barrel support lugs attached to the reactor vessel shell. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |
| 000500 | 2-RPV- 3442B | LOWÈR SHELL AT 180 DEG. | B-A | B1.12 | 1 | RC | UT | 81% | 4/18/02 | 215A, 215B, 219, 220, 221, 222 | IWB-2500-1 | No | No | Yes | UT exam was conducted using 45-degree shear and refracted longitudinal wave transducers. The exams completed were limited to approximately 81% code required coverage due to the core barrel support lugs attached to the reactor vessel shell. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |
| 000600 | | LOWER SHELL AT 300 DEG. | B-A | B1.12 | 1 | RĊ | UT | ⁻ 81% | 4/18/02 | 215A, 215B, 223, 224, 225, 226 | IWB-2500-1 | No | No | Yes | UT exam was conducted using 45-degree shear and refracted longitudinal wave transducers. The exams completed were limited to approximately 81% code required coverage due to the core barrel support lugs attached to the reactor vessel shell. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |
| 002600 | 2-RPVCH- 6446B | DOLLAR PLATE | B-A | B1.21 | 1 | RC | UT | 67% | 10/28/94 | 45, 46, 47, 266A, 266B | IWB-2500-3 | No | Yes RR-B1 Part 2 | No | UT exam was conducted using 0-, 45- and, 60-degree shear wave transducers. The exam completed was limited to 67% code required coverage due to CRD Penetrations interferences interfering with scanning. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |
| 002000 | 2-RPVCH- | MERIDIONAL WELD AT 300 DEG | B-A | B1.22 | 1 | RC | UŤ | 31% | 10/28/94 | 33, 34, 266A, 266B | IWB-2500-3 | No | Yes RR-B1 Part 2 | No | UT exam was conducted using 0-, 45- and, 60-degree shear and longitudinal wave transducers. The exam completed was limited to 31% code required coverage due to CRD Penetrations and Shroud Support Ring interferences interfering with scanning. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |
| 002100 | 2-RPVCH- 1446B | MERIDIONAL WELD AT 0 DEG. | B-A | B1.22 | 1 | RC | Ů | 26% | 10/28/94 | 35, 36, 266A, 266B | IWB-2500-3 | No | Yes RR-B1 Part 2 | No | UT exam was conducted using 0-, 45- and, 60-degree shear and longitudinal wave transducers. The exam completed was limited to 26% code required coverage due to CRD Penetrations and Shroud Support Ring and Lifting Lug interferences interfering with scanning. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |

| Sum# | Component ID | Description | 2 nd Interval ASME Cat | 2 nd Interval ASME Item # | | System | | Code Coverage Achieved | Date | Photo/ Sketch No.* | Required Examination Volume | 1 st Interval Relief Granted under TAC M84658 | 2 nd Interval Relief Granted under TAC M83316 | Relief requested under this submittal (TAC MD5977) | |
|--------|-------------------|----------------------------------|--|---|---|--------|----|------------------------------|----------|--|-----------------------------------|--|--|--|---|
| 002200 | 2-RPVCH- 1446C | MERIDIONAL WELD AT 60 DEG. | B-A | B1.22 | 1 | RC | UT | 35% | 10/28/94 | 37, 38, 266A, 266B | IWB-2500-3 | No | Yes RR-B1 Part 2 | No | UT exam was conducted using 0-, 45- and, 60-degree shear and longitudinal wave transducers. The exam completed was limited to 35% code required coverage due to CRD Penetrations and Shroud Support Ring interferences interfering with scanning. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |
| 002300 | 2-RPVCH- 1446D | MERIDIONAL WELD AT 120 DEG | B-A | B1.22 | 1 | RC | UT | 35% | 10/28/94 | 39, 40, 266A, 266B | IWB-2500-3 | No | Yes RR-B1 Part 2 | | UT exam was conducted using 0-, 45- and, 60-degree shear and longitudinal wave transducers. The exam completed was limited to 35% code required coverage due to CRD Penetrations and Shroud Support Ring and Lifting Lug interferences interfering with scanning. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |
| 002400 | 2-RPVCH- 1446E | MERIDIONAL Weld at 180 Deg | B-A | B1.22 | 1 | RC | UT | 36% | 10/28/94 | 41, 42, 266A, 266B | IWB-2500-3 | . No | Yes RR-B1 Part 2 | No | UT exam was conducted using 0-, 45- and, 60-degree shear and longitudinal wave transducers. The exam completed was limited to 36% code required coverage due to CRD Penetrations and Shroud Support Ring interferences interfering with scanning. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |
| 002500 | 2-RPVCH- | MERIDIONAL WELD AT 240 DEG | B-A | B1.22 | 1 | RC | UT | 54% | 10/28/94 | 43, 44, 266A, 266B | IWB-2500-3 | No · | Yes RR-B1 Part 2 | | UT exam was conducted using 0-, 45- and, 60-degree shear and longitudinal wave transducers. The exam completed, was limited to 54% code required coverage due to CRD Penetrations and Shroud Support Ring and Lifting Lug interferences interfering with scanning. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |
| 001300 | 2-RPV- | MERIDIONAL WELD AT 270 DEG | B-A | B1.22 | 1 | RC | UT | 88% | 4/18/02 | 227, 227A, 227B, 227C, 228, 229, 230, 231 | IWB-2500-3 | No | No | | UT exam was conducted using 45-degree shear and longitudinal wave transducers. The exam completed was limited to 88% code required coverage due to instrumentation tubes interfering with scanning. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |
| 001500 | 2-RPV- | MERIDIONAL WELD AT 30 DEG. | B-A | B1:22 | 1 | RC | UT | 88% | 4/18/02 | 232, 233, 234, 235, 236 | 1WB-2500-3 | No | Yes RR-B1 Part 2 | | UT exam was conducted using 45-degree shear and longitudinal wave transducers. The exam completed was limited to 88% code required coverage due to instrumentation tubes interfering with scanning. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |

| Sum# | Component ID | Description | 2 ^{ñd} Interval ASME Cat | 2 nd Interval ASME Item # | ASME Class | System | | Code Coverage Achieved | Exam Date | Photo/ Sketch No.* | Required Examination Volume | 1 st Interval Relief Granted under TAC M84658 | Relief Granted under TAC | Relief requested under this submittal (TAC MD5977) | UT Exam Type and Limitation Description |
|--------|-----------------|----------------------------------|--|---|---------------|--------|----|------------------------------|--------------|---|-----------------------------------|--|-----------------------------------|--|--|
| 001600 | 2-RPV- 1443D | MERIDIONAL WELD AT 90 DEG. | B-A | B1.22 | 1 | RC | UT | 72% | 4/18/02 | 227A, 227B, 227C, 237, 238, 239 | IWB-2500-3 | No | Yes RR-B1 Part 2 | No | UT exam was conducted using 45-degree shear and longitudinal wave transducers. The exam completed was limited to 72% code required coverage due to instrumentation tubes interfering with scanning. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |
| 002700 | 2-RPV-7442 | VESSEL TO FLANGE | B-A | B1.30 | 1 | RC | UT | 82% | 4/18/02 | 240, 240A, 241, 242, 243, 244, 255, 256, 257, 258, 259, 260, 261, 262, 262A, 262A, 263, 264, 265 | IWB-2500-4 | Yes RR-1 Part A1 | Yes RR-B1 Part 3 | No | UT exam was conducted using 45-degree shear and longitudinal wave transducers. The exam completed was limited to 82% code required coverage due to OD configuration associated with the taper of the reactor vessel flange. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |
| 002800 | | HEAD TO FLANGE | B-A | B1.40 | 1 | RC | UT | 79% | 4/17/02 | 266, 266A, 266B, 267, 268, 269, 270, 270A, 270B, 270C, 270D, 270C, | IWB-2500-5 | No | No | Yes | UT exam was conducted using 45- and 60-degree shear wave transducers. The exam completed was limited to 79% code required coverage due to OD configuration associated with the reactor vessel closure head and flange. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. Closure head was replaced 2R14 with monoblock design (Spring 2005). |

| Sum# | Component ID | Description | 2 nd Interval ASME Cat | | | Systêm | Limited NDE Exam | Code Coverage Achieved | Exam Date | Photo/ Sketch No.* | Required Examination Volume | under TAC | 2 nd Interval Relief Granted under TAC M83316 | Relief requested under this submittal (TAC MD5977) | UT Exam Type and Limitation Description |
|--------|--------------------|------------------------------|--|--------|------|--------|------------------------|------------------------------|--------------|--|-----------------------------------|------------------------|--|--|---|
| 010900 | 2-PZR-CIRC DUH | SHELL D ŤO UPPER HEAD | B-B | B2.11 | 1 | RC | UT | 37% | 4/11/02 | 283, 284, 285, 286, 286A, 286B, 286C | IWB-2500-1 | No | No | Yes | UT exam was conducted using 45- and 60-degree shear wave transducers. The exam completed was limited to 37% code required coverage due to due to support ring clamped to the upper head of the pressurizer head. A total of 140° of the total circumference was accessible for examination. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |
| 010400 | 2-PZR- LONG D | LONGITUDINAL WELD SHELL D | B-B | B2.12 | Para | RC | UT | 74% | 9/7/96 | 84A, 84B, 85, 86, 87, 88 | IWB-2500-2 | No | No | Yes | UT exam was conducted using 45- and 60-degree shear wave transducers. The exam completed was limited to 74% code required coverage. The UT exams conducted were limited due to a permanently installed insulation support bracket. The exam was limited between 0" to 9" with 9" to 13" being restricted due to permanently installed insulation brackets. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |
| 011100 | 4-PSN-1231- IRS | SAFETY NOZZLE | B-D | B3.120 | 1 | RC | UT | 50% | 9/7/96 | 89, 89A, 89B, 90, 91, 92, 93 | IWB-2500- 7(b) | No | No | Yes | UT exam was conducted using a 53-degree shear wave transducer. The exam completed was limited to 50% code required coverage. The UT exam conducted was limited due to due to the permanent raised manufacturer ID $\#$ s casted to the lower head. No exam could be performed from the vessel side between 0° and 180° due to the raised manufacturer ID $\#$ s casted to the head. The exam was performed from 180° to 360°. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |
| 020800 | | OUTLET NOZZLE IRS | B-D | B3.140 | 1 | RC | UT | . 80% | 10/24/94 | 311, 312, 313, 313P, 313Q, 313R | IWB-2500- 7(d) | Yes RR-1 Part A2 | Yes RR-B1 Part 6 | No | UT exam was conducted using 28- and 38-degree refracted longitudinal wave transducers. The exam completed was limited to 80% code required coverage due to an installed insulation support ring. The exam surface is approximately 153.9" with the length of the limitation being 30". No exam could be performed between 15" ccw to 15" cw from datum zero. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |

| . [| Sum# | Component ID | Description | 2 nd Interval ASME Cat | 2 nd Interval ASME Item # | ASME Class | System | Limited NDE Exam | Code Coverage Achieved | Exam Date | Photo/ Sketch No.* | Required Examination Volume | 1 st Interval Relief Granted under TAC M84658 | 2 nd Interval Relief Granted under TAC M83316 | Relief requested under this submittal (TAC MD5977) | UT Exam Type and Limitation Description |
|-----|-------|---------------------|----------------------|--|---|---------------|--------|------------------------|------------------------------|--------------|--|-----------------------------------|--|--|--|--|
| . 0 | 21200 | 29-STG- 1220-IRS | INLET NOZZLE IRS | B-D | B3.140 | 1 | RC | UT | 73% | 10/24/94 | 311, 312, 313, 313D, 313E, 313F | IWB-2500- 7(d) | Yes RR-1 Part A2 | Yes RR-B1 Part 6 | No | UT exam was conducted using 28- and 38-degree refracted longitudinal wave transducers. The exam completed was limited to 73% code required coverage due to an installed insulation support ring. The exam surface is approximately 154" with the length of the limitation being 73". No exam was able to be performed between 24" ccw to 15" cw from datum zero on insulation support lug located 77"cw to 79"cw with 2"W measurement. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |
| 0 | 20700 | | OUTLET NOZZLE IRS | B-D | B3.140 | 1 | RC | UT | 81% | 5/12/99 | 311, 312, 313, 3138, 3137, 313U | IWB-2500- 7(d) | Yes RR-1 Part A2 | Yes RR-B1 Part 6 | No | UT exam was conducted using 28- and 38-degree refracted longitudinal wave transducers. The exam completed was limited to 81% code required coverage due to an installed insulation support brackets connected to the cast head that restricted scanning. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |
| 0 | 21100 | | INLET NOZZLE IRS | B-D | B3.140 | 1 | RC | UT | 75% | 5/12/99 | 311, 312, 313, 313G, 313H, 313-I | IWB-2500- 7(d) | Yes RR-1 Part A2 | Yes RR-B1 Part 6 | No | UT exam was conducted using 28- and 38-degree refracted longitudinal wave transducers. The exam completed was limited to 75% code required coverage due to an installed insulation support brackets connected to the cast head that restricted scanning. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |
| 0 | 20600 | | OUTLET NOZZLE IRS | ₿-D | B3.140 | 1 | RC | UT | 85% | 4/23/02 | 311, 312, 313, 313V, 313V, 313W, 313X | IWB-2500- 7(d) | Yes RR-1 Part A2 | Yes RR-B1 Part 6 | No | UT exam was conducted using 28- and 38-degree longitudinal wave transducers. The exams completed was limited to 85% code required coverage due to due to the insulation support brackets attached to the steam generators lower head that interfered with scanning. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |
| 0 | 20900 | | OUTLET NOZZLE IRS | B-D | B3.140 | 1 | RC | UT | 79% | 4/23/02 | 311, 312, 313, 313M, 313N, 313N, 313-O | IWB-2500- 7(d) | Yes RR-1 Part A2 | Yes RR-B1 Part 6 | No | UT exam was conducted using 28- and 38-degree longitudinal wave transducers. The exams completed was limited to 79% code required coverage due to due to the insulation support brackets attached to the steam generators lower head that interfered with scanning. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |

| Sum# | Component ID | Description | 2 nd Interval ASME Cat | 2 nd Interval ASME Item # | ASME Class | System | Limited NDE Exam | Code Coverage Achieved | Exam Date | Photo/ Sketch No.* | Required Examination Volume | 1 st Interval Relief Granted under TAC M84658 | Relief Granted under TAC | Relief requested under this submittal (TAC MD5977) | UT Exam Type and Limitation Description |
|--------|---------------------|---------------------------------|--|---|---------------|--------|------------------------|------------------------------|--------------|---|-----------------------------------|--|-----------------------------------|--|---|
| 021000 | 29-STG- 1240-IRS | INLET NOZZLE IRS | B-D | B3.140 | 1 | RC | UT | 86% | 4/23/02 | . 311, 312, 313, 313J, 313K, 313K, 313L | IWB-2500- 7(d) | Yes RR-1 Part A2 | Yes RR-B1 Part 6 | No | UT exam was conducted using 28- and 38-degree longitudinal wave transducers. The exams completed was limited to 86% code required coverage due to due to the insulation support brackets attached to the steam generators lower head that interfered with scanning. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |
| 021300 | 29-STG- 1210-IRS | INLET NOZZLE IRS | B-D | B3.140 | 1 | RC | UT | 82% | 4/23/02 | 311, 312, 313, 313A, 313B, 313C | IWB-2500- 7(a) | Yes RR-1 Part A2 | Yes RR-B1 Part 6 | | UT exam was conducted using 28- and 38-degree longitudinal wave transducers. The exams completed was limited to 82% code required coverage due to due to the insulation support brackets attached to the steam generators lower head that interfered with scanning. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |
| 003600 | 29-RCN- 1210 | OUTLET NOZZLE AT 338 DEG. | B-D | B3.90 | 1 | RC | M-UT | 72% | 12/19/02 | 271, 271A, 271B, 280, 281 | ГWB-2500- 7(b) | Yes RR-3 | Yes RR-B1 Part 4 | No | UT exam was conducted using 45-degree shear and refracted longitudinal wave transducers. The ultrasonic examination completed was partially limited to 72% of the code required converge being achieved due to the OD configuration of the nozzle protrusion (boss) that interfered with scanning. There were no unacceptable indications observed. A system pressure test was also completed with no unacceptable indications observed. |
| 002900 | 29-RGN- | OUTLET NOZZLE AT 22 DEG. | B-D | B3.90 | 1 | RĊ | UT | 72% | 12/19/02 | 271, 271A, 271B, 272, 272, 273 | IWB-2500- 7(b) | Yes RR-3 | Yes RR-B1 Part 4 | No | UT exam was conducted using 45-degree shear refracted longitudinal wave transducers. The ultrasonic examination completed was partially limited to 72% of the code- required coverage being achieved due to the OD configuration of the nozzle protrusion (boss) that interfered with scanning. There were no unacceptable indications observed. A system pressure test was also completed with no unacceptable indications observed. |
| 003300 | 29-RCN- 1220 | OUTLET NOZZLE AT 203 DEG. | B-D | B3.90 | 1 | RC | UT | 72% | 12/19/02 | 271A, 271B, 277, 278, 279 | İWB-2700- 7(a) | Yes RR-3 | Yes RR-B1 Part 4 | No | UT exam was conducted using 45-degree shear and longitudinal wave transducers. The exam completed was limited to 72% code required coverage due to the OD configuration of the nozzle protrusion (boss). No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |

| Sum# | Component ID | Description | 2 nd Interval ASME Cat | 2 nd Interval ASME Item # | | System | Limited NDE Exam | Code Coverage Achieved | Ēxam Date | Photo/ Sketch No.* | Required Examination Volume | 1 st Interval Relief Granted under TAC M84658 | 2 nd Interval Relief Granted under TAC M83316 | Relief requested under this submittal (TAC MD5977) | UT Exam Type and Limitation Description |
|--------|-----------------|---------------------------------|--|---|---|--------|------------------------|------------------------------|--------------|---|-----------------------------------|--|--|--|--|
| 003200 | 29-RCN- 1240 | OUTLET NOZZLE AT 158 DEG. | B-D | B3.90 | 1 | ŔĊ | UT | 72% | 12/19/02 | 271A, 271B, 274, 275, 276 | IWB-2700- 7(a) | Yes RR-3 | Yes RR-B1 Part 4 | No | UT exam was conducted using 45-degree shear and longitudinal wave transducers. The exam completed was limited to 72% code required coverage due to the OD configuration of the nozzle protrusion (boss). No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |
| 011800 | 6-PR-1205-1 | NOZZLE TO SAFE-END | B-F | B5.40 | 1 | RC | UT | 38% | 10/14/00 | 298, 298A, 298B, 298C, 298D, 299, 300 | IWB-2500- 7(b) | Yes RR-1 Part A3 | Yes RR-B1 Part 5 | No | UT exam was conducted using 30-degree refracted longitudinal wave transducer. The ultrasonic examination completed was partially limited to 38% of the code required converge being achieved due to the OD configuration of the nozzle to safe-end that did not lend itself to achieving full coverage from the upstream side when scanning was performed. There were no unacceptable indications observed. UT exam performed was best effort. This weld configuration does not contain Alloy 600, 82/182 weld material. A liquid penetrant examination and system pressure test were also completed with no recordable indications observed. |
| 011820 | 6-PR-1203-1 | NOZZLE TO SAFE-END | B-F | B5.40 | 1 | RC | UT | 86% | 4/21/99 | 300, 301, 302, 302A, 302B, 302C | IWB-2500-8 | Yes RR-1 Part A3 | No | Yes | UT exam was conducted using 45-, and 25-degree shear and refracted longitudinal wave transducer. The exam completed was limited to 86% code required coverage due to the exam being limited by the OD configuration of the nozzle and safe-end. This weld configuration does not contain Alloy 600, 82/182 weld material. No unacceptable indications were noted. A liquid penetrant test and system pressure test were also completed with no unacceptable indications observed. |
| 011830 | 4-PR-1200-1 | NOZZLE TO SAFE-END | B-F | B5.40 | 1 | RC | UŤ | 84% | 4/21/99 | 300, 303, 304, 304A, 304B, 304C, 304D | IWB-2500-8 | No | Yes RR-B1 Part 5 | No | UT exam was conducted using 45-degree shear wave transducer. The exam completed was limited to 84% code required coverage due to the exam being limited by the OD configuration of the nozzle and safe-end. This weld configuration does not contain Alloy 600, 82/182 weld material. No unacceptable indications were noted. A liquid penetrant test and system pressure test were also completed with no unacceptable indications observed. |

| Sum# | Component ID | Description | 2 nd Interval ASME Cat | | | System | | Code Coverage Achieved | Exam Date | Photo/ Sketch No.* | Required Examination Volume | 1 st Interval Relief Granted under TAC M84658 | Relief Granted | Relief requested under this submittal (TAC MD5977) | UT Exam Type and Limitation Description |
|--------|--------------------|--------------------|--|-------|---|--------|----|------------------------------|--------------|---|-----------------------------------|--|------------------------|--|---|
| 083300 | 29-RC-1210- 5 | ELBOW TO NOZZLE | B-F | B5.70 | 1 | RC | UT | 67% | 10/28/94 | 305, 306, 306A, 306B, 312, 313, 315 | IWB-2500-8 | Yes RR-1 Part A3 | Yes RR-B1 Part 7 | No | UT exam was conducted using 45-degree shear wave transducer. The exam completed was limited to 67% code required coverage due to no UT axial scan exam was performed from the upstream or the downstream side of the weld due to the elbow being fabricated from ASTM351-65 CF8M cast stainless steel whose acoustic properties is not conducive for ultrasonic examination and the OD configuration of the nozzle. A clockwise and counterclockwise exam was performed of the weld crown. No unacceptable indications were noted. A liquid penetrant exam and system pressure test were also completed with no unacceptable indications observed. |
| 070000 | 31-RC-1240- ∴ 1 | NOZZLE TO ÈLBOW | B-F | B5.70 | - | ŔĊ | UŤ | 5 0% | 10/28/94 | 312, 313, 315, 315B, 316H, 316H, 316J | iWB-2500-8 | Yes RR-1 Part A3 | Yes ŘR-B1 Part 7 | No | UT exam was conducted using 45-degree shear wave transducer. The exam completed was limited to 50% code required coverage due to no UT axial scan exam was performed from either the upstream or the downstream side of the weld due to the elbow being fabricated from ASTM351-65 CF8M cast stainless steel whose acoustic properties is not conducive for ultrasonic examination and the OD configuration of the nozzle. A clockwise and counterclockwise exam was performed of the weld crown. No unacceptable indications were noted. A liquid penetrant exam and system pressure test were also completed with no unacceptable indications observed. |
| 072300 | 31-RC-1230- 1 | NOZZLE TO ELBOW | B-F | B5.70 | 1 | RC | UT | 50% | 4/24/99 | 312, 313, 315, 315A, 316E, 316F, 316G, 317 | IWB-2500-8 | Yes RR-1 Part A3 | Yes RR-B1 Part 7 | No | UT exam was conducted using 45-degree refracted longitudinal wave transducer. The exam completed was limited to 50% code required coverage due to no UT axial scan exam was performed from either the upstream or the downstream side of the weld due to the elbow being fabricated from ASTM351-65 CF8M cast stainless steel whose acoustic properties is not conducive for ultrasonic examination and the OD configuration of the nozzle. A clockwise and counterclockwise exam was performed of the weld crown. No unacceptable indications were noted. A liquid penetrant exam and system pressure test were also completed with no unacceptable indications observed. |

.

| Suīm# | Component ID | Description | 2 nd Interval ASME Cat | 2 nd Interval ASME Item # | | System | Limited NDE Exam | Code Coverage Achieved | Exam Date | Photo/ Sketch No.* | Required Examination Volume | 1 st Interval Relief Granted under TAC M84658 | 2 nd Interval Relief Granted under TAC M83316 | Relief requested under this submittal (TAC MD5977) | UT Exam Type and Limitation Description |
|--------|------------------|--------------------|--|---|---|--------|------------------------|------------------------------|--------------|---|-----------------------------------|--|--|--|---|
| 074600 | 31-RC-1220- 1 | NÖZZLE TO ELBOW | B-F | B5.70 | 1 | RC | UT | 50% | 4/24/99 | 312, 313, 315, 316A, 316B, 316C, 316D | IWB-2500-8 | Yes RR-1 Part A3 | Yes RR-B1 Part 7 | | UT exam was conducted using 45-degree refracted longitudinal wave transducer. The exam completed was limited to 50% code required coverage due to no UT axial scan exam was performed from either the upstream or the downstream side of the weld due to the elbow being fabricated from ASTM351-65 CF8M cast stainless steel whose acoustic properties is not conducive for ultrasonic examination and the OD configuration of the nozzle. A clockwise and counterclockwise exam was performed of the weld crown. No unacceptable indications were noted. A liquid penetrant exam and system pressure test were also completed with no unacceptable indications observed. |
| 076800 | 31-RC-1210- 1 | NOZZLE TO ELBOW | B-F | B5.70 | 1 | RC | UT | 50% | 4/24/99 | 315, 315B, 317, 317A, 317B | IWB-2500-8 | Yes RR-1 Part A3 | Yes RR-B1 Part 7 | No | UT exam was conducted using 45-degree refracted longitudinal wave transducer. The exam completed was limited to 50% code required coverage due to no UT axial scan exam was performed from either the upstream or the downstream side of the weld due to the elbow being fabricated from ASTM351-65 CF8M cast stainless steel whose acoustic properties is not conducive for ultrasonic examination and the OD configuration of the nozzle. A clockwise and counterclockwise exam was performed of the weld crown. No unacceptable indications were noted. A liquid penetrant exam and system pressure test were also completed with no unacceptable indications observed. |
| 080300 | 29-RC-1230- 3 | PIPE TO PIPE | B-J | B9.11 | 1 | RC | UT | 90% | 4/6/93 | 1, 2 | IWB-2500-8 | No | No | Yes, greater than 90% required | UT exam was conducted using 45-degree shear wave transducer. The ultrasonic examination completed was partially limited to 90% of the code-required coverage being achieved due to branch connections between 37 3/4" to 41" and 104 1/2" to 1 1/2" that did not lend itself to achieving full coverage from the downstream side when scanning was performed. Scanning was performed across the weld to maximize achieved Code coverage. There were no unacceptable indications observed. No unacceptable indications were noted. This weld configuration does not contain Alloy 600, 82/182-weld material. A liquid penetrant examination and system pressure test was also completed with no recordable indications observed. |

| Sum# | Component ID | Description | 2 nd Interval ASME Cat | 2 nd Interval ASME Item # | | System | Limited NDE Exam | Code Coverage Achieved | Exam Date | Photo/ Sketch No.* | Required Examination Volume | 1 st Interval Relief Granted under TAC M84658 | 2 nd Interval Relief Granted under TAC M83316 | Relief requested under this submittal (TAC MD5977) | UT Exam Type and Limitation Description |
|--------|-------------------|------------------------|--|---|---|--------|------------------------|------------------------------|--------------|--------------------------|-----------------------------------|--|--|--|--|
| 164000 | 10-SJ-1221- 21 | ELBOW TO PIPE | B-J | B9.11 | 1 | SJ | UT | 83% | 4/12/93 | 3, 3A, 3B, 3C | IWB-2500-8 | No | No | Yes | UT exam was conducted using 45-degree shear wave transducer. The ultrasonic examination completed was partially limited to 83% of the achieved code required coverage being limited from 13" to 21" on upstream side due to the curvature of the shortened inner radius of the elbow. Scanning was also performed across the weld to maximize achieved code coverage. No unacceptable indications were observed. A liquid penetrant examination and system pressure test was also completed with no recordable indications observed. |
| 166000 | 8-SJ-1262-10 | PIPE TO PIPE | B-J | B9.11 | 1 | SJ | UT | 82% | 3/27/93 | 4, 4A, 4B, 4C, 4D | IWB-2500-8 | No | No | Yes | UT exam was conducted using 45-degree shear wave transducer. The ultrasonic examination completed was partially limited to 82% of the achieved code required coverage being limited due to a permanently installed pipe support (9PS) that restricted scanning to approximately 1 3/4" of the upstream side of the weld. No unacceptable indications were observed. A liquid penetrant examination and system pressure test was also completed with no recordable indications observed. |
| 169450 | 8-SJ-1245-1 | TEE TO VALVE 24RH27 | B-J | B9.11 | 1 | SJ | UT | 36% | 4/14/93 | 5, 6, 6A, 6B, 6C | IWB-2500-8 | No | Yes RR-B1 Part 8 | No | UT exam was conducted using 45-degree shear wave transducer. The ultrasonic examination completed was partially limited to 36% of the achieved code required coverage being limited due to the tee to valve configuration and the shortened radius of the tee between 9" to 18" and 23" TO 4". The exam was limited on the downstream side due to the OD configuration of the valve and the upstream side of the tee. No unacceptable indications were observed. A liquid penetrant examination and system pressure test was also completed with no recordable indications observed. |
| 172500 | 6-SJ-1241-18 | ELBOW TO PIPE | B-J | B9.11 | 1 | SJ | UT | 90% | 4/3/93 | 7, 7A, 7B, 7C | IWB-2500-8 | No | No | Yes, greater than 90% required by N-460. | UT exam was conducted using 45-degree shear wave transducer. The ultrasonic examination completed was partially limited to 90% of the achieved code required coverage being limited due to close proximity of the adjacent weld # 19 located downstream. No unacceptable indications were observed. A liquid penetrant examination and system pressure test were also completed with no recordable indications observed. |

| Sum# | Component ID | Description | 2 nd Iñterval ASME Cat | | | System | | Code Coverage Achieved | Exam Date | Photo/ Sketch No.* | Required Examination Volume | 1 st Interval Relief Granted under TAC M84658 | 2 nd Interval Relief Granted under TAC M83316 | Relief requested under this submittat (TAC MD5977) | UT Exam Type and Limitation Description |
|--------|------------------|------------------------|--|-------|---|--------|------|------------------------------|----------------------|---|-----------------------------------|--|--|--|--|
| 076000 | 31-RC-1220- 4 | ELBOW TO PIPE | B-J | B9.11 | 1 | RC | UT | 84% | 10/27/94 | 48, 49, 50, 50A, 50B, 50C | IWB-2500-8 | No | Yes RR-B1 Part 8 | No | UT exam was performed using 45-degree shear wave transducer from the pipe side with no exam able to be conducted from the elbow side due to the elbow being fabricated from ASTM351-65 CF8M cast stainless steel whose acoustic properties is not conducive for ultrasonic examination. The exam completed was limited to 84% code required coverage. No unacceptable indications were noted. The downstream exam was limited between 55" to 62" due to a branch connection that interfered with scanning. A liquid penetrant examination and system pressure test were also completed with no unacceptable indications observed. |
| 054400 | 4-PR-1200-7 | PIPE TO TEE | B-J | B9.11 | 1 | RC | UŤ | 59% | 5/3/99 | 124, 125, 126 | IWB-2500-8 | No | No | Yes | UT exam was conducted using 45-degree shear and refracted longitudinal wave transducers. The exam completed was limited to 59% code required coverage due to no UT exam being able to be performed from the downstream side due to the tee to valve configuration. In addition, the exam conducted from the upstream side was limited due to the radius of the tee. Scanned across weld to maximize achieved Code coverage. No unacceptable indications were noted. A liquid penetrant test and system pressure test was also completed with no unacceptable indications observed. |
| 063000 | | VALVE 2PS28 TO PIPE | B-J | B9.11 | 1 | RC | UT . | 59% | 5/17/99 [.] | 129, 130, 131, 131A, 131B, 131B, 131C | IWB-2500-8 | No | No | | UT exam was conducted using 45-degree shear and refracted longitudinal wave transducer. The exam completed was limited to 59% code required coverage due to the UT exam being limited due to the upstream side valve's OD configuration that restricted scanning. UT scans were performed on and across the welds in both directions. No unacceptable indications were noted. A liquid penetrant test and system pressure test was also completed with no unacceptable indications observed. |
| 063100 | | PIPE TO VALVE 2PS3 | B-J | B9.11 | 1 | RC | UT | 55% | 5/17/99 | 132, 133, 134 | IWB-2500-8 | No | No | Yes | UT exam was conducted using 45-degree shear and refracted longitudinal wave transducer. The exam completed was limited to 55% code required coverage due to the UT exam being limited due to the upstream side valve's OD configuration that restricted scanning. UT scans were performed on and across the welds in both directions. No unacceptable indications were noted. A liquid penetrant test and system pressure test was also completed with no unacceptable indications observed. |

| Sum# | Coinponent ID | Description | 2 nd Interval ASME Cat | 2 nd Interval ASME Item # | ASME Class | System | | Code Coverage Achieved | Exam Date | Photo/ Sketch No.* | Required Examination Volume | 1 st Interval Relief Granted under TAC M84658 | Relief Granted under TAC | Relief requested under this submittal (TAC MD5977) | UT Exam Type and Limitation Description |
|--------|------------------|--------------------------|--|---|---------------|--------|----|------------------------------|--------------|--------------------------|-----------------------------------|--|-----------------------------------|--|--|
| 168200 | 8-SJ-1252-9 | PIPE TO PIPE | B-J | B9.11 | 1 | SJ | UT | 86% | 5/8/99 | 135, 136 | IWB-2500-8 | No | No | Yes | UT exam was conducted using 45-degree shear and refracted longitudinal wave transducer. The exam completed was limited to 86% code required coverage due to the UT exam being limited UT exam performed due two permanently welded pipe supports located on the downstream side of the weld that restricted scanning. The two pipe supports exist at 90° and 270° around the pipe for a total of 12". UT scans were performed on and across the welds in both directions. No unacceptable indications were noted. A liquid penetrant test and system pressure test was also completed with no unacceptable indications observed. |
| 170850 | 6-SJ-1242-2 | ELBOW TO VALVE 24SJ43 | B-J | B9.11 | 1 | SJ | UŤ | 62% | 5/3/99 | 137, 138, 139 | IWB-2500-8 | No | No | Yes | UT exam was conducted using 45-degree shear and refracted longitudinal wave transducer. The exam completed was limited to 62% code required coverage due to the UT exam being limited due to the valve's OD configuration that restricted scanning. UT scans were performed on and across the welds in both directions. No unacceptable indications were noted. A liquid penetrant test and system pressure test was also completed with no unacceptable indications observed. |
| 173300 | 6-SJ-1232-12 | PIPE TO TEE | B-J | B9.11 | 1 | SJ | UT | 61% | 5/3/99 | 140, 141, 142 | IWB-2500-8 | No | No | Yes | UT exam was conducted using 45-degree shear and refracted longitudinal wave transducer. The exam completed was limited to 61% code required coverage due to the UT exam being limited due to the tee's OD configuration that restricted scanning. UT scans were performed on and across the welds in both directions. No unacceptable indications were noted. A liquid penetrant test and system pressure test was also completed with no unacceptable indications observed. |
| 175600 | 6-SJ-1212-2 | VALVE 21SJ43 TO PIPE | B-J | B9.11 | 1 | SJ | UŤ | 61% | 5/3/99 | 143, 144 | IWB-2500-8 | No | No | Yes | UT exam was conducted using 45-degree shear and refracted longitudinal wave transducer. The exam completed was limited to 61% code required coverage due to the UT exam being limited due to the valve's OD configuration that restricted scanning. UT scans were performed on and across the welds in both directions. No unacceptable indications were noted. A liquid penetrant test and system pressure test was also completed with no unacceptable indications observed. |

| Sum# | Component ID | Description | 2 nd Interval ASME Cat | 2 nd Interval ASME Item # | | Syštem | Limited NDE Exam | Code Coverage Achieved | Exam Date | Photo/ Sketch No.* | Required Examination Volume | 1 st Interval Relief Granted under TAC M84658 | 2 nd Interval Relief Granted under TAC M83316 | Relief requested under this submittal (TAC MD5977) | UT Exam Type and Limitation Description |
|--------|----------------------|---------------------------|--|---|-----|--------|------------------------|------------------------------|--------------|---|-----------------------------------|--|--|--|--|
| 084400 | 27.5-RC- 1230-1 | PUMP TO PIPE | B-J | B9.11 | 1 | RC | UT | 49% | 10/16/00 | 173, 174, 174A, 174B, 174C, 174D | IWB-2500-8 | No | No | Yes | UT exam was conducted using 45- and 60-degree shear wave transducer. The exam completed was limited to 49% code required coverage due to the UT exam being limited due to the OD configuration of the pump nozzle and the presence of a branch connection located downstream between 101" to 3" that restricted scanning. A liquid penetrant test and system pressure test was also completed with no unacceptable indications observed. |
| 174300 | 6-RH-1231- 16 | ËLBOW TO VALVE 23SJ156 | B-J | В́9.11 | 1 | RHR | ŬΤ | 50% | 10/18/00 | 175, 176, 176A | IWB-2500-8 | No | No | Yes | UT exam was conducted using 45-degree shear wave transducer. The exam completed was limited to 50% code required coverage due to the UT exam being limited due to the valve's OD configuration that restricted scanning. UT scans were performed on and across the welds in both directions. No unacceptable indications were noted. A liquid penetrant test and system pressure test was also completed with no unacceptable indications observed. |
| 075800 | 31-RC-1220- 4LU-I | LONGITUDINAL | B-J | B9.12 | - | RC . | UT | 0% | 10/28/94 | 315, 315C, 315D | IWB-2500-8 | No . | Yes RR-B1 Part 8 | No | No UT exam was able to be conducted from the elbow side due to the elbow being fabricated from ASTM351-65 CF8M cast stainless steel whose acoustic properties is not conducive for ultrasonic examination. A PT exam of the long seam was performed in lieu of the UT exam because of the elbow's acoustic properties of the casting. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |
| 075900 | 31-RC-1220- 4LU-O | LONGITUDINAL | B-J | B9.12 | 1 | RC | UT | 0% | 10/28/94 | 315, 315E, 315F | IWB-2500-8 | No | Yes RR-B1 Part 8 | No | No UT exam was able to be conducted from the elbow side due to the elbow being fabricated from ASTM351-65 CF8M cast stainless steel whose acoustic properties is not conducive for ultrasonic examination. A PT exam of the long seam was performed in lieu of the UT exam because of the elbow's acoustic properties of the casting. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |
| 034500 | | VALVE 2CV80 TO ELBOW | B-J | B9.21 | . 1 | CVC | UT | 75% | 9/22/98 | 168, 169 | IWB-2500-8 | No | No | Yes | UT exam was conducted using 45- and 70-degree shear wave transducers. The exam completed was limited to 75% code required coverage due the upstream side of the weld due to the valve's OD configuration that interfered with scanning. Component selected as an augmented 88-08 exam. No unacceptable indications were noted. A liquid penetrant and system pressure test was also completed with no unacceptable indications observed. |

. .

| Sum# | Component ID | Description | 2 nd Interval ASME Cat | 2 nd Interval ASME Item # | ASME Clàss | System | | Code Coverage Achieved | Exam Date | Photo/ Sketch No.* | Réquired Examination Volume | 1 st Interval Relief Granted under TAC M84658 | 2 nd Interval Relief Granted under TAC M83316 | Relief requested under this submittal (TAC MD5977) | UT Exam Type and Limitation Description |
|--------|-----------------|----------------------------------|--|---|---------------|--------|----|------------------------------|--------------|--------------------------------|-----------------------------------|--|--|--|---|
| 036000 | | PIPE TO VALVE 2CV274 | B-J | B9.21 | 1 | CVC | UT | 75% | 10/11/00 | 172, 172A, 172B, 172C | IWB-2500-8 | No | No | Yes | UT exam was conducted using 45-shear wave transducer. The exam completed was limited to 75% code required coverage due to the UT exam being limited due to the valve's OD configuration that restricted scanning. UT scans were performed on and across the welds in both directions. No unacceptable indications were noted. A liquid penetrant test and system pressure test was also completed with no unacceptable indications observed. |
| 034600 | 3-CV-1241- | ELBOW TO BRANCH CONNECTION | B-J | B9.21 | 1 | CVC | UT | 75% | 10/14/00 | 170, 171 | IWB-2500- 11 | No | No | | UT exam was conducted using 45- and 70-degree shear wave transducers. The exam completed was limited to 75% code required coverage due to the OD configuration of the branch connection that interfered with scanning. No unacceptable indications were noted. A liquid penetrant test and system pressure test was also completed with no unacceptable indications observed. |
| 085000 | | 4 ÍN. BRANCH CONNECTION | B-J | B9.31 | 1 | RC | UT | 55% | 11/7/94 | 51, 52, 53, 54 | IWB-2500-8 | No | Yes RR-B1 Part 9 | No | UT exam was conducted using 45- and 32-degree shear wave transducers. The exam completed was limited to 55% code required coverage due to the exam being limited by a branch connection configuration. The exam was limited 1 1/2" W measurement due to the branch connection's OD configuration that interfered with scanning. No unacceptable indications were noted. A liquid penetrant and system pressure test was also completed with no unacceptable indications observed. |
| 086800 | | 10 IN. BRANCH CONNECTION | B-J | B9.31 | 1 | RC | UT | 56% | 11/7/94 | 55, 56, 57, 58, 59 | IWB-2500-8 | No | Yes RR-B1 Part 9 | | UT exam was conducted using 45- and 39-degree shear wave transducers. The exam completed was limited to 56% code required coverage due to the exam being limited by a branch connection configuration. The exam was limited 1 1/2" W measurement due to the branch connection's OD configuration that interfered with scanning. No unacceptable indications were noted. A liquid penetrant and system pressure test was also completed with no unacceptable indications observed. |
| 086900 | | 4 IN. BRANCH CONNECTION | B-J | B9.31 | 1 | RC | UT | 53% | 11/7/94 | 60, 61, 62, 63 | IWB-2500-8 | No | Yes RR-B1 Part 9 | No | UT exam was conducted using 45- and 32-degree shear wave transducers. The exam completed was limited to 53% code required coverage due to the exam being limited by a branch connection configuration. The exam was limited 1 1/2" W measurement due to the branch connection's OD configuration that interfered with scanning. No unacceptable indications were noted. A liquid penetrant and system pressure test was also completed with no unacceptable indications observed. |

| Sum# | Component ID | Description | 2 nd Interval ASME Cat | | ASME Class | System | | Code Coverage Achieved | Exam Date | Photo/ Sketch No.* | Required Examination Volume | 1 st Interval Relief Granted under TAC M84658 | 2 nd Interval Relief Granted under TAC M83316 | Relief requested under this submittal (TAC MD5977) | UT Exam Type and Limitation Description |
|--------|--------------------------------|---------------------------------|--|--------|---------------|--------|----|------------------------------|--------------|--------------------------------|-----------------------------------|--|--|--|---|
| 040900 | | VALVE 2CV76 TO PIPE | B-J | B9-40 | 1 | cvc | UT | 50% | 10/14/00 | 314, 314A, 314B, 314C | IWB-2500-8 | No | No | Yes | UT exam was conducted using 45-degree shear wave transducer. The exam completed was limited to 50% code required coverage due to the exam limited to 3/8" W due to the close proximity of the downstream socket weld # 44 being too close that interfered with scanning. Component selected as an augmented 88-08 exam. No unacceptable indications were noted. A liquid penetrant and system pressure test was also completed with no unacceptable indications observed. |
| 041000 | 2-CV-1275- 44 | PIPE TO BRANCH CONNECTION | B-J | B9-40 | 1 | cvc | UT | 50% | 10/14/00 | 314A, 314D, 314E, 316 | IWB-2500-8 | No | No | Yes | UT exam was conducted using 45-degree shear wave transducer. The exam completed was limited to 50% code required coverage due to the UT exam being limited due to 3/8" W due to adjacent downstream socket weld # 43 being too close and interfering with the scan. Component selected as an augmented 88-01 exam. No unacceptable indications were noted. A liquid penetrant test and system pressure test was also completed with no unacceptable indications observed |
| 061700 | 4-PS-1231- 11PS-1 THRU 4 | PIPE SUPPORT | B-K-1 | B10.10 | 1 | RC | PT | 50% | 4/30/99 | 127, 128 | IWB-2500-8 | No | No | | PT exam was conducted of this component. The PT exam was limited to 50% because of a permanently installed component support that obstructed the exam. The bottom of the pipe support weld was inaccessible due to a permanent obstruction from the fixed pipe clamp. A system pressure test was also completed with no unacceptable indications observed. |
| 251200 | 22-PMP- LUGS 1,2,3 | PUMP LUGS | B-K-1 | B10.20 | 1 | RC | PT | 67% | 4/6/93 | 8, 9, 10, 11 | IWB-2500- 15 | No | Yes RR-B1 Part 10 | | PT exam was performed of this component. The liquid penetrant examination completed was partially limited to 67% of the achieved code required coverage being limited due to a portion of the lugs being hidden within the pump support structure. No unacceptable indications were observed. A system pressure test was also completed with no recordable indications observed. |
| 251300 | 21-PMP- LUGS 1,2,3 | PUMP LUGS | B-K-1 | B10.20 | 1 | RC | PT | 67% | 4/6/93 | 12, 13, 14, 15 | ÍWB-2500- 15 | No . | Yes RR-B1 Part 10 | No | PT exam was performed of this component. The liquid penetrant examination completed was partially limited to 67% of the achieved code required coverage being limited due to a portion of the lugs being hidden within the pump support structure. No unacceptable indications were observed. A system pressure test was also completed with no recordable indications observed. |

.

: _

| Suṁ# | Component ID | Description | 2 ND Interval ASME Cat | 2 nd Interval ASME Item # | ASME Class | System | Limited NDE Exam | Code Coverage Achieved | Exam Date | Photo/ Sketch-No.* | Required Examination Volume | 1 st Interval Relief Granted under TAC M84658 | 2 nd Interval Relief Granted under TAC M83316 | Relief requested under this submittal (TAC MD5978) | UT Exam Type and Limitation Description |
|--------|--------------|------------------------|--|---|---------------|--------|------------------------|------------------------------|-----------|-------------------------------------|-----------------------------------|--|--|---|--|
| 700000 | | VALVE 21CS2 TO PIPE | A-E | A-E<3/8 | 2 | CS | UT | 39.8% | 5/8/99 | 338, 339, 340, 341, 342, 343 | IWC-2500- 7(b) | No | No | Yes | UT exam was conducted using a 45- and 70-degree shear wave transducer. The ultrasonic exam completed was limited to 39.8% code required coverage due to the UT exam being limited due to the valve's OD configuration that restricted scanning. UT scans were performed on and across the welds in both directions. No unacceptable indications were noted. A liquid penetrant test and system pressure test was also completed with no unacceptable indications observed. |
| 275365 | | FLANGE TO SHELL | C-A | C1.10 | 2 | RHR | UT | 79% | 4/12/93 | 23, 24, 24A, 24B, 24C | IWC-2500-1 | No | Yes RR-C1 Part 1 | No | UT exam was conducted using 0- and 45-degree shear wave transducers. The ultrasonic examination completed was partially limited to 79% of the achieved code required coverage due to the inlet nozzle OD configuration between 110" to 6" and the configuration outlet nozzle OD configuration between 52" to 64". No unacceptable indications were observed. A magnetic particle (MT) and system pressure test was also completed with no recordable indications observed. |
| 275370 | | SHELL TO FLANGE | C-A | C1.10 | 2 | RHR | UT | 20% | 4/13/93 | 24B, 24C, 25, 25A, 26 | IWC-2500-1 | No | Yes RR-C1 Part 1 | No | UT exam was conducted using 0- and 45-degree shear wave transducers. The ultrasonic examination completed was partially limited to 20% of the achieved code required coverage due to the inlet nozzle OD configuration between 111" to 6" and the configuration outlet nozzle OD configuration between 53" to 65". No exam could also be performed between 12 1/2" to 47" and 70" to 105" due to the heat exchanger's support plate. No unacceptable indications were observed. A magnetic particle (MT) and system pressure test was also completed with no recordable indications observed. |
| 275240 | 2-RCF-2 | FLANGE TO SHELL | C-A | C1.10 | 2 | RC | UT | 61% | 4/12/99 | 145A, 150, 151, 152, 153, 154 | IWC-2500-1 | No | No | Yes | UT exam was conducted using 45- and 70-degree shear wave transducers. The exam completed was limited to 61% code required coverage due to the UT exam being limited due to a davit welded pad attachment connected to the reactor coolant filter that restricted scanning. UT scans were performed on and across the welds in both directions. The UT exam performed included 42.3" to 1.5, 13.4" to 16" and 27.75" to 30.75". No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |
| 275210 | | FLANGE TO SHELL | C-A | C1.10 | 2 | CVC | UT | 42% | 10/14/00 | 177, 178, 179, 180, | IWC-2500-1 | No | No | | UT exam was conducted using 45- and 60-degree shear and longitudinal wave transducers. The exam |

.

| Sum# | Component ID | Description | 2 ND Interval ASME Cat | 2 nd Interval ASME Item # | ASME Class | System | Limited NDE Exam | Code Coverage Achieved | Exam Date | Photo/ Sketch No.* | Required Examination Volume | 1 st Interval Relief Granted under TAC M84658 | under TAC | Relief requested under this submittal (TAC MD5978) | UT Exam Type and Limitation Description |
|--------|--------------------|--|--|---|---------------|--------|------------------------|------------------------------|-----------|--|-----------------------------------|--|------------------------|---|---|
| | | | | | | - | | | | 181 | | | | | completed was limited to 42% code required coverage due to the exam being limited due to proximity of the nozzle and flange welds. No unacceptable indications were noted. A liquid penetrant test and system pressure test was also completed with no unacceptable indications observed. UT exam limited due to the configuration of the flange and nozzle. |
| 734111 | 2CVE-18-SWIJ- 1 | #21 SEAL WATER INJECTION FILTER FLANGE TO SHELL | C-A | C1.10 | 2 | сус | UT | 61% | 10/29/03 | 324, 325, 326, 327, 328, 329, 330 | IWC-2500-1 | No | No | | UT exam was conducted using 70-degree refracted longitudinal wave, 0-degree longitudinal, and 45- and 60-degree shear wave transducers. The exam completed was limited to 61% code required coverage due to presence of permanently installed welded attachment and identification plate that interfere with scanning. Additionally the flange configuration on the upstream side of the weld prevented axial scanning on that side. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |
| 734112 | 2CVE-18-SWIJ- 2 | #21 SEAL WATER INJECTION FILTER SHELL TO LOWER HEAD | C-A | C1.20 | 2 | cvc | UŤ | 69% | 10/29/03 | 331, 332, 333, 334, 335, 336, 337 | IWC-2500-1 | No | No | Yes | UT exam was conducted using 0-degree longitudinal and 45- and 60-degree shear wave transducers. The exam completed was limited to 69% code required coverage due to presence of permanently installed welded attachments and an inlet nozzle that interfere with scanning. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |
| 275030 | 2-CVCT-2 | SHELL TO LOWER HEAD | C-A | Ċ1.20 | 2 | cvc | UT | 71% | 4/5/93 | 16, 17, 18, 18A | IWC-2500-1 | No | Yes RR-C1 Part 1 | No | UT exam was conducted using 45-degree shear wave transducer. The ultrasonic examination completed was partially limited to 71% of the achieved code required coverage due to four tank leg support plates welded to the vessel. No examination could be performed from 29 1/2" to 42 1/2", 99" to 112 1/2", 170" to 183" and 245 1/4" to 258 1/4". No unacceptable indications were observed. A system pressure test was also completed with no recordable indications observed. |
| 275230 | 2-RCF-1 | UPPER HEAD TO FLANGE | C-A | C1.20 | 2 | RC | UT | 68% | 4/14/99 | 145, 145A, 146, 147, 148, 149 | IWC-2500-1 | Yes RR-1 Part A5 | Yes RR-C1 Part 1 | | UT exam was conducted using 45- and 70-degree shear wave transducer. The exam completed was limited to 68% code required coverage due to the UT exam being limited due to the OD configuration of the reactor coolant filter flange and weld that restricted scanning. UT scans were performed on and across the welds in both directions. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |

| Sum# | Component ID | Description | 2 ND Interval ASME Cat | 2 nd Interval ASME Item # | ASME Class | System | Limited NDE Exam | Code Coverage Achieved | Exam Date | Photo/ Sketch No.* | Required Examination Volume | 1 st Interval Relief Granted under TAC M84658 | 2 nd Interval Relief Granted under TAC M83316 | Relief requested under this submittal (TAC MD5978) | UT Exam Type and Limitation Description |
|--------|--------------|--------------------------|--|---|---------------|--------|------------------------|------------------------------|-----------|--|-----------------------------------|--|--|---|---|
| 275250 | 2-RCF-3 | SHELL TO LOWER HEAD | C-A | C1.20 | 2 | RC | UT | 53% | 4/12/99 | 145A, 155, 156, 157, 158, 159 | IWC-2500-1 | No | No | Yes | UT exam was conducted using 45- and 70-degree shear wave transducer. The exam completed was limited to 53% code required coverage due to the UT exam being limited due to our tank leg support plates welded to the reactor coolant filter shell that restricted scanning. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |
| 715180 | 2-BIT-A | LOWER HEAD | C-A | C1.20 | 2 | SJ | UT | 85% | 4/19/02 | 294, 295, 296, 297, 167A | IWC-2500-1 | No | No | Yes | UT exam was conducted using 45- and 60-degree shear wave transducers. The exam completed was limited to 85% code required coverage due to the UT exam being limited due to the tank support legs attached to the vessel shell restricted scanning. UT scans were performed on and across the welds in both directions. No unacceptable indications were noted. A liquid penetrant test and system pressure test was also completed with no unacceptable indications observed. |
| 272900 | 21-STG-SDUH | SHÈLL D TO UPPER HEAD | C-A | C1.20 | 2 | RC | UT | 87% | 4/19/02 | 206A, 206B, 206C, 287, 288, 289, 290, 291, 292 | IWC-2500-1 | No | No | Yes | UT exam was conducted using 45- and 60-degree shear wave transducers. The exam completed was limited to 87% code required coverage due to the insulation support plates and welded pads attached to the head that interfered with scanning from 534" to 20", 165" to 205" and 350" to 390". No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |
| 275310 | · /_RHE_/ / | SHELL TO TUBE SHEET | C-A | C1.30 | 2 | RHR | UT | 44% | 10/10/00 | 182, 183, 184, 185 | IWC-2500-1 | No | No | Yes | UT exam was conducted using 45-degree shear wave transducer. The exam completed was limited to 44% code required coverage due to presence of permanently installed component support connected to the regenerative heat exchanger that interferes with scanning. UT scans were performed on and across the welds in both directions. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |
| 275320 | | SHELL TO TUBĖ SHEET | C-A | C1.30 | 2 | RHR | UT | 33% | 10/19/00 | 186, 187, 188, 189 | IWC-2500-1 | No | No | Yes | UT exam was conducted using 45-degree shear wave transducer. The exam completed was limited to 33% code required coverage due to presence of permanently installed component support plate connected to the regenerative heat exchanger that interferes with scanning. UT scans were performed on and across the welds in both directions. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |

| Sum# | Component ID | Description | 2 ND Interval ASME Cat | 2 nd Interval ASME Item # | ASME Class | System | Limited NDE Exam | Code Coverage Achieved | Exam Date | Photo/ Sketch No.* | Required Examination Volume | under TAC | Relief | Relief requested under this submittal (TAC MD5978) | UT Exam Type and Limitation Description |
|--------|--------------|--------------------------|--|---|---------------|--------|------------------------|------------------------------|-----------|---|-----------------------------------|--------------|------------------------|---|--|
| 715140 | 2-BIT-1 | NOZZLE TO LOWER HEAD | C-B | C2.21 | 2 | SJ | UT | 31% | 5/15/99 | 162, 163, 164, 165, 166, 167, 167A | IWC-2500-4(a) | No | No | Yes | UT exam was conducted using 0-, 45- and 60-degree shear and longitudinal wave transducers. The exam completed was limited to 31% code required coverage due to the OD configuration of the nozzle that interfered with scanning. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. |
| 715160 | 2-BIT-2 | NOZZLE TO UPPER HEAD | C-B | C2.21 | 2 | SJ | UT | 63% | 4/24/02 | 167A, 167B, 167C, 167D, 167E, 167F, 167G | IWC-2500- 4(b) | No | No | Yes | UT exam was conducted using 0-degree longitudinal and 45- and 60-degree shear wave transducers. The exam completed was limited to 63% code required coverage due to the nozzle to upper head weld configuration that interfered with scanning. No unacceptable indications were noted. An acceptable magnetic particle surface exam was also completed with no coverage limitations. A system pressure test was also completed with no unacceptable indications observed. |
| 275400 | | NOZZLE-TO- SHELL WELD | С-В | C2.21 | 2 | RHR | UT | 10% | 10/16/00 | 190, 191, 192, 193, 194, 195 | IWC-2500- 4(b) | No | Yes RR-C1 Part 2 | No | UT exam was conducted using 60-degree refracted longitudinal wave and 45- and 60-degree shear wave transducers. The exam completed was limited to 10% code required coverage due to presence of permanently installed component support plate connected to the regenerative heat exchanger that interferes with scanning. UT scans were performed on and across the welds in both directions. No unacceptable indications were noted. A system pressure test was also completed with no unacceptable indications observed. UT exam limited due to the nozzle configuration and flange and support welds that interfere with scanning. |
| 275410 | | NOZZLE-TO- SHELL WELD | C-B | C2.21 | 2 | RHR | UT | 25% | | 305, 306, 307, 308, 309, 310, 310A, 310B, 310C, 310D, 310E | IWC-2500- 4(b) | No | No | Yes | UT exam was conducted using 45- and 60-degree shear wave transducers. The exam completed was limited to 25% code required coverage due to the exam being limited due to proximity of adjacent support plates and flange welds. No unacceptable indications were noted. A liquid penetrant test and system pressure test was also completed with no unacceptable indications observed. |

| s | um# | Component ID | Description | 2 ND Interval ASME Cat | 2 nd Interval ASME Item # | ASME Class | System | Limited NDE Exam | Code Coverage Achiëved | Èxam Date | Photo/ Sketch No.* | Required Examination Volume | 1 st Interval Relief Granted under TAC M84658 | 2 nd Interval Relief Granted under TAC M83316 | Relief requested under this submittal (TAC MD5978) | UT Exam Type and Limitation Description |
|----|------|--------------------|--|--|---|---------------|--------|------------------------|------------------------------|-----------|-----------------------|-----------------------------------|--|--|---|---|
| 27 | 5040 | 2-CVCT-2VS- | VESSEL SUPPORT INTEGRAL ATTACHMENT | C-C | C3.10 | 2 | CVC | PT | 89% | 4/5/93 | 18, 18A, 19 | IWC-2500-5 | Yes RR-1 Part A6 | Yes RR-C1 Part 3 | No | PT exam was performed of this component. The liquid penetrant examination completed was partially limited to 89% of the achieved code required coverage being limited due to a permanently installed I beam support structure. The PT exam was unable to be performed for a 6" length due to support leg interferences. No unacceptable indications were observed. A system pressure test was also completed with no recordable indications observed. |
| 27 | 5050 | 2-CVCT-2VS- 3&4 | VESSEL SUPPORT | c-c | C3.10 | 2 | сус | PT | 89% | 4/5/93 | 18, 18A, 20 | IWC-2500-5 | No | Yes RR-C1 Part 3 | No | PT exam was performed of this component. The liquid penetrant examination completed was partially limited to 89% of the achieved code required coverage being limited due to a permanently installed I beam support structure. The PT exam was unable to be performed for a 6" length due to support leg interferences. No unacceptable indications were observed. A system pressure test was also completed with no recordable indications observed |
| 27 | 5060 | 2-CVCT-2VS- 5&6 | VESSEL SUPPORT | C-C | C3.10 | 2 | CVC | PT | 89% | 4/5/93 | 18, 18A, 21 | IWC-2500-5 | No | Yes RR-C1 Part 3 | No | PT exam was performed of this component. The liquid penetrant examination completed was partially limited to 89% of the achieved code required coverage being limited due to a permanently installed I beam support structure. The PT exam was unable to be performed for a 6" length due to support leg interferences. No unacceptable indications were observed. A system pressure test was also completed with no recordable indications observed. |
| 27 | 5070 | 2-CVCT-2VS- 7&8 | VESSEL SUPPORT | c-c | C3.10 | 2 | CVC | PT | 89% | 4/5/93 | 18, 18A, 22 | IWC-2500-5 | No | Yes RR-C1 Part 3 | No | PT exam was performed of this component. The liquid penetrant examination completed was partially limited to 89% of the achieved code required coverage being limited due to a permanently installed I beam support structure. The PT exam was unable to be performed for a 6" length due to support leg interferences. No unacceptable indications were observed. A system pressure test was also completed with no recordable indications observed. |
| 27 | 5358 | 2-RHE-1VS-1&2 | VESSEL SUPPORT | C-C | C3.10 | 2 | RHR | PT | 50% | 10/22/03 | 307, 308 | IWC-2500-5(a) | No | Yes RR-C1 Part 3 | No | PT exam was conducted of this component. The PT exam was limited to 50% because of weld #1 being partially inaccessible due to the permanently installed support's configuration. A system pressure test was also completed with no unacceptable indications observed. |

A-26

| Sum# | Component ID | Description | 2 ND Interval ASME Cat | 2 nd Interval ASME Item # | ASME Class | System | Limited NDE Exam | Code Coverage Achieved | Exam Date | Photo/ Sketch No.* | Required Examination Volume | 1 st Interval Relief Granted under TAC M84658 | 2 nd Interval Relief Granted under TAC M83316 | Relief requested under this submittal (TAC MD5978) | UT Exam Type and Limitation Description |
|--------|--|-----------------------|--|---|---------------|--------|------------------------|------------------------------|-----------|-----------------------------------|-----------------------------------|--|--|---|--|
| 331095 | 14-BF-2211- Trunnions 11PL-11 and 11Pl-12 | TRUNNIONS | C-C | C3.20 | 2 | BF | MŤ | 80% | 4/12/93 | 28, 29, 29A, 29B, 29C | IWC-2500-5(a) | No | No | Yes | MT exam was conducted. The exam completed was limited to 80% code required coverage being obtained due to 1 1/2" of the total 7 1/2" long weld not being able to be examined due to an adjacent permanent pipe support interference (11PS). No unacceptable indications were observed. A system pressure test was also completed with no recordable indications observed. |
| 330540 | | PIPE SUPPORT S- 22 | C-C | C3.20 | 2 | BF | MT | 50% | 10/31/94 | 64, 65, 65A, 65B, 65C, 65D | IWC-2500-5(a) | No | Yes RR-C1 Part 3 | No | MT exam was conducted of this component. The MT exam was limited to 50% because of pipe restraint in the area that prevented sufficient access to examine the weld in two directions. The MT exam of the lugs was unable to be examined from two directions due to a permanently installed restriction. A system pressure test was also completed with no unacceptable indications observed. MT exam limited due to close proximity of pipe restraint. |
| 330560 | 14-BF-2231- 18PS | PIPE SUPPORT | C-C | C3.20 | 2 | BF | MT | 50% | 10/31/94 | 66, 66A, 66B, 66C, 66D, 66E | IWC-2500-5(a) | No | Yes RR-C1 Part 3 | No | MT exam was conducted of this component. The MT exam was limited to 50% because of a permanently installed pipe collar in the area that prevented sufficient access to examine the weld in two directions. The MT exam of the lugs was unable to be examined from two directions due to a permanently installed restriction. A system pressure test was also completed with no unacceptable indications observed. |
| 381070 | 34-MS-2241- 242PL | PIPE LUG 242 | C-C | C3.20 | 2 | MS | MŤ | 71% | 11/11/94 | 70, 70A, 70B, 70C, 70D | IWC-2500-5(a) | No | Yes RR-C1 Part 3 | No | MT exam was conducted of this component. The MT exam was limited to 71% because of a permanently installed beam that obstructed access to lug number 2. No exam could be performed from 11 1/2" to 18 1/8" due to the beam's proximity. The total weld length is 23". A complete MT exam was performed on lug number 1. A system pressure test was also completed with no unacceptable indications observed. |
| 573383 | 12-RH-2252- 38PS-1&2 | PIPE SUPPORT | C-C | C3.20 | 2 | RHR | PT | 71% | 11/15/94 | 80, 80A, 80B, 80C, 80D, 80E | IWC-2500-5(a) | Yes RR-1 Part A7 | Yes RR-C1 Part 3 | No | PT exam was conducted of this component. The PT exam was limited to 71% because of a permanently installed component support that obstructed the exam. No exam could be performed from 20" to 28" due to the presence of the component support proximity. A system pressure test was also completed with no unacceptable indications observed. |

| Sum# | Component ID | Description | 2 ND Interval ASME Cat | 2 nd Interval ASME Item # | ASME Class | System | Limited NDE Exam | Code Coverage Achieved | Exam Date | Photo/ Sketch No.* | Required Examination Volume | under TAC | Relief | Relief requested under this submittal (TAC MD5978) | UT Exam Type and Limitation Description |
|-------------|-----------------------------|--|--|---|---------------|--------|------------------------|------------------------------|-----------|---|-----------------------------------|------------------------|------------------------|---|---|
| 573387 | 12-RH-2252- 38PS-3 | PIPE SUPPORT | C-C | C3.20 | 2 | RHR | PT | 71% | 11/15/94 | 81, 81A, 81B, 81C, 81D | IWC-2500-5(a) | Yes RR-1 Part A7 | Yes RR-C1 Part 3 | No | PT exam was conducted of this component. The PT exam was limited to 71% because of a permanently installed component support that obstructed the exam. No exam could be performed from 7 1/2" to 14" and 30" to 36 1/2" due to the presence of the adjacent piping interfering with the exam. A system pressure test was also completed with no unacceptable indications observed. |
| 381120 | 32-MS-2231- 1PS-2 | WELDED INTEGRAL PIPE SUPPORT ATTACHMENT | C-C | C3.20 | 2 | MS | MT | 50% | 1/17/96 | 102, 102A, 102B, 102C, 102D | IWC-2500-5(a) | No | No | Yes | MT exam was conducted of this component. The MT exam was limited to 50% because of the configuration of the lug that precluded examination of the lug in two directions. The MT exam was unable to be examined from two directions due to its configuration. There is no IWF support associated with this weld attachment. A system pressure test was also completed with no unacceptable indications observed. Component selected for MEB 3-1 Augmented Exam requirements: |
| 381220 | 32-MS-2221- 1PS-2 | WELDED INTEGRAL PIPE SUPPORT ATTACHMENT | C-C | C3.20 | 2 | MS | МТ | 50% | 1/19/96 | 110, 110A, 110B, 110C, 110D, 110E | IWC-2500-5(a) | No | No | Yes | MT exam was conducted of this component. The MT exam was limited to 50% because of the configuration of the lug that precluded examination of the lug in two directions. The MT exam was unable to be examined from two directions due to its configuration. There is no IWF support associated with this weld attachment. A system pressure test was also completed with no unacceptable indications observed. |
| - 381320 | 32-MS-2211- 1PS-2 | WELDED INTEGRAL PIPE SUPPORT ATTACHMENT | C-C | C3.20 | 2 | MS | MT | 50% | 1/19/96 | 114, 114A, 114B, 114C, 114D | IWC-2500-5(a) | No | No | Yes | MT exam was conducted of this component. The MT exam was limited to 50% because of the configuration of the lug that precluded examination of the lug in two directions. The MT exam was unable to be examined from two directions due to its configuration. There is no IWF support associated with this weld attachment. A system pressure test was also completed with no unacceptable indications observed. |
| 381350 | 32-MS-2211- 2PL-1 THRU 3 | PIPE LUG | C-C | C3.20 | 2 | MS | MŤ | 84% | 1/16/96 | 115, 116, 117, 117A, 117B | IWC-2500-5(a) | No | No | Yes | MT exam was conducted of this component. The MT exam was limited to 84% because of the configuration of the lug that precluded examination of the lug in two directions. The MT exam was unable to be examined from two directions due to its configuration. There is no IWF support associated with this weld attachment. A system pressure test was also completed with no unacceptable indications observed. |

| Sum# | Component ID | Description | 2 ND Interval ASME Cat | 2 nd Interval ASME Item # | ASME Class | System | Limited NDE Exam | Code Coverage Achieved | Exàm Date | Photo/ Sketch No.* | Required Examination Volume | 1 st Interval Relief Granted under TAC M84658 | 2 nd Interval Relief Granted under TAC M83316 | Relief requested under this submittal (TAC MD5978) | UT Exam Type and Limitation Description |
|--------|--|--------------------------|--|---|---------------|--------|------------------------|------------------------------|-----------|--|-----------------------------------|--|--|---|--|
| 573055 | 12-RH-2252- 5PL-1 THRU 6 | PIPE LUG | C-C | C3.20 | 2 | RHR | PT | 33% | 5/7/99 | 318, 319, 320, 321, 321A | IWC-2500-5(a) | No | Yes RR-C1 Part 3 | No | PT exam was conducted of this component. The PT exam was limited to 33% because the lugs 2, 3, 4, 5 due to inaccessibility. The inaccessible pipe lugs are located within a permanent piping penetration sleeve. A system pressure test was also completed with no unacceptable indications observed. |
| 330645 | 14-BF-2221- 3PL-1 THRU 8 | 2-FWG-22-17 | C-C | C3.20 | 2 | BF | МТ | 79% | 4/6/02 | 293, 293A, 293B, 293C, 293D, 293E, 293F, 293G | IWC-2500-5(a) | No | No | Yes | MT exam was conducted of this component. The MT exam was limited to 79% because of other components in the area of the welded attachments that prevented sufficient access to examine the weld in two directions. The MT exam of the lugs was unable to be examined from two directions due to permanently installed restrictions being present. A system pressure test was also completed with no unacceptable indications observed |
| 500010 | 12-PR-2201-1 | CAP TO PIPE | C-F-1 | C5.11 | 2 | RC . | UT | 78% | 4/7/93 | 31, 31A, 32, 32A, 32B | IWC-2500-7(a) | No | Yes RR-C1 Part 4 | No | UT exam was conducted using a 45-degree shear wave transducer. The exam completed was limited to 78% code required coverage. No UT exam from the downstream side or upstream side between 10 3/4" to 14 1/4" and 26 3/4" to 31 3/4" due to installed pipe support. The edge of the pipe support clamp is 3/4" from the weld toe. Scanned across weld from the upstream side and from the downstream side on weld crown only. No unacceptable indications were noted. A liquid penetrant test and system pressure test was also completed with no unacceptable indications observed. |
| 501800 | 14-RH-2212-1 | VALVE 2RH2 TO PIPE | C-F-1 | C5.11 | 2 | RHR | UŤ | 87% | 11/9/94 | 72, 73, 74, 74A, 74B, 74C | IWC-2500- 7(b) | No | Yes RR-C1 Part 4 | No | UT exam was conducted using a 45-degree shear wave transducer. The exam completed was limited to 87% code required coverage due to the UT exam being limited due to the upstream side valve's OD configuration that restricted scanning. UT scans were performed on and across the welds in both directions. No unacceptable indications were noted. A liquid penetrant test and system pressure test was also completed with no unacceptable indications observed. |
| 570010 | 14-RH 2224-1 (corrected to 14-SJ-2224-1) | VALVE 22SJ44 TO ELBOW | C-F-1 | C5.11 | 2 | RHR | UT | 75% | 11/14/94 | 75, 76, 77, 77A, 77B | IWC-2500- 7(b) | No | Yes RR-C1 Part 4 | No | UT exam was conducted using a 45-degree shear wave transducer. The exam completed was limited to 75% code required coverage due to the UT exam being limited due to the upstream side valve's OD configuration that restricted scanning. UT scans were performed on and across the welds in both directions. No unacceptable indications were noted. A liquid |

| Sum# | Component ID | Description | 2 ND Interval ASME Cat | 2 nd Interval ASME Item # | ASMË Class | System | Limited NDE Exam | Code Coveragë Achieved | Ēxam Date | Photo/ Sketch No.* | Required Examination Volume | 1 st Interval Relief Granted under TAC M84658 | Relief | Relief requested under this submittal (TAC MD5978) | UT Exam Type and Limitation Description |
|--------|---------------|---------------------------|--|---|---------------|--------|------------------------|------------------------------|-----------|--------------------------|-----------------------------------|--|------------------------|---|--|
| | | | | | | | | | | | | | | | penetrant test and system pressure test was also completed with no unacceptable indications observed. |
| 573380 | 12-RH-2252-38 | PIPE TO PIPE | C-F-1 | C5.11 | 2 | RHR | UT | 67% · | 11/15/94 | 78, 79, 79A, 79B, 79C | IWC-2500- 7(b) | No | Yes RR-C1 Part 4 | No | UT exam was conducted using a 45-degree shear wave transducer. The exam completed was limited to 67% code required coverage due to the UT exam being limited UT exam due to welded plug and close proximity of adjacent piping that impedes access to scan the examination area to achieve full coverage. No UT exam could be performed from 7 1/2" to 14" and 30" to 36 1/2" due to the proximity of adjacent piping. In addition, the downstream side scan was limited 1 3/8" W from 38 11/16" to 40 1/8" due to a welded plug. No unacceptable indications were noted. A liquid penetrant test and system pressure test was also completed with no unacceptable indications observed. |
| 503340 | 8-RH-2216-4R1 | FLANGE TO VALVE 21RH10 | C-F-1 | C5.11 | 2 | RHR | UT | 22% | 5/15/96 | 122, 123 | IWC-2500- 7(b) | Yes RR-1 Part A8 | No | | UT exam was conducted using a 45-degree shear wave transducer. The exam completed was limited to 22% code required coverage. No UT exam could be performed from either side of weld due to flange and valve OD configurations. No unacceptable indications were noted. A magnetic particle test and system pressure test was also completed with no unacceptable indications observed. |
| 502580 | 8-RH-2273-18 | VALVE 21RH12 TO TEE | C-F-1 | C5.11 | 2 | RHR | UT | 51% | 10/5/00 | 199, 200, 201 | IWC-2500- 7(b) | No | No | | UT exam was conducted using 45- and 70-degree shear wave transducers. The exam completed was limited to 51% code required coverage due to the UT exam being limited due to the tee and valve's OD configurations that restricted scanning. UT scans were performed on and across the welds in both directions. No unacceptable indications were noted. A liquid penetrant test and system pressure test was also completed with no unacceptable indications observed. |
| 707130 | 4-CV-2257-1 | FLANGE TO PIPE | C-F-1 | C5.21 | 2 | cvc | UT | 86% | 10/21/94 | 82, 83, 84 | IWC-2500- 7(b) | No | Yes RR-C1 Part 4 | No | UT exam was conducted using a 45-degree shear wave transducer. The exam completed was limited to 86% code required coverage due to the UT exam being limited to the pipe side only due to the OD configuration of the flange located on the upstream side. Scanning was conducted on the weld in all directions to increase code coverage. No unacceptable indications were noted. A liquid penetrant test and system pressure test was also completed with no unacceptable indications observed. |
| 707730 | 3-CV-2257-7 | VALVE 2CV82 TO | C-F-1 | C5.21 | 2 | CVC | UT | 80% | 10/21/94 | 322, 322A, | IWC-2500- | No | Yes | No | UT exam was conducted using a 45-degree shear way |

| Sum# | Component ID | Description | 2 ND Interval ASME Cat | 2 nd Interval ASME Item # | ASME Class | System | Limited NDE Exam | Code Coverage Achieved | Exam Date | Photo/ Sketch No.* | Required Examination Volume | 1 st Interval Relief Granted under TAC M84658 | 2 nd Interval Relief Granted under TAC M83316 | Relief requested under this submittal (TAC MD5978) | UT Exam Type and Limitation Description |
|--------|--------------|-------------------------|--|---|---------------|--------|------------------------|------------------------------|-----------|--------------------------------|-----------------------------------|--|--|---|--|
| | | PIPE | | | | | | | | 323 | -7(b) | | RR-C1 Part 4 | | transducer. The exam completed was limited to 80% code required coverage due to the UT exam being limited due to the upstream side valve's OD configuration that restricted scanning. UT scans were performed on and across the welds in both directions. No unacceptable indications were noted. A liquid penetrant test and system pressure test was also completed with no unacceptable indications observed. |
| 710140 | 3-CV-2255-9 | VALVE 2CV70 TO PIPE | C-F-1 | C5.21 | 2 | cvc | UT | 31% | 5/23/99 | 160, 161, 161A, 161B | IWC-2500- 7(b) | No | No | Yes | UT exam was conducted using 45-, 60- and 70-degree shear wave transducers. The exam completed was limited to 31% code required coverage due to the UT exam being limited due to the OD configuration of the nozzle that restricted scanning. UT scans were performed on and across the welds in both directions. No unacceptable indications were noted. A liquid penetrant test and system pressure test was also completed with no unacceptable indications observed. |
| 707320 | 4-CV-2257-16 | VALVE 2CV53 TO ELBOW | C-F-1 | C5.21 | 2 | cvc | UT | 38% | 10/20/00 | 205, 208 | IWC-2500- 7(b) | No | No | Yes | UT exam was conducted using a 45-degree shear and a 70-degree refracted longitudinal wave transducer. The exam completed was limited to 38% code required coverage due to the UT exam being limited due to the valve's OD configuration that restricted scanning. UT scans were performed on and across the welds in both directions. No unacceptable indications were noted. A liquid penetrant test and system pressure test was also completed with no unacceptable indications observed. |
| 707620 | | VALVE 2CV55 TO PIPE | C-F-1 | C5.21 | 2 | сус | UŤ | 39% | 10/5/00 | 202, 203, 204, 206 207 | IWC-2500- 7(b) | No | No | Yes | UT exam was conducted using 45- and 70-degree shear transducers. The exam completed was limited to 39% code required coverage due to the UT exam being limited due to the valve's OD configuration that restricted scanning. UT scans were performed on and across the welds in both directions. No unacceptable indications were noted. A liquid penetrant test and system pressure test was also completed with no unacceptable indications observed. |
| 709960 | 3-CV-2256-6 | PIPE TO VALVE 2CV73 | C-F-1 | C5.21 | 2 | сус | UT | 50% | 10/18/00 | 161B, 209, 210, 211, 212 | IWC-2500- 7(b) | No | No | Yes | UT exam was conducted using 45- and 70-degree shear transducers. The exam completed was limited to 50% code required coverage due to the UT exam being limited due to the valve's OD configuration that restricted scanning. UT scans were performed on and across the welds in both directions. No unacceptable indications were noted. A liquid penetrant test and system pressure test was also completed with no unacceptable indications observed. |

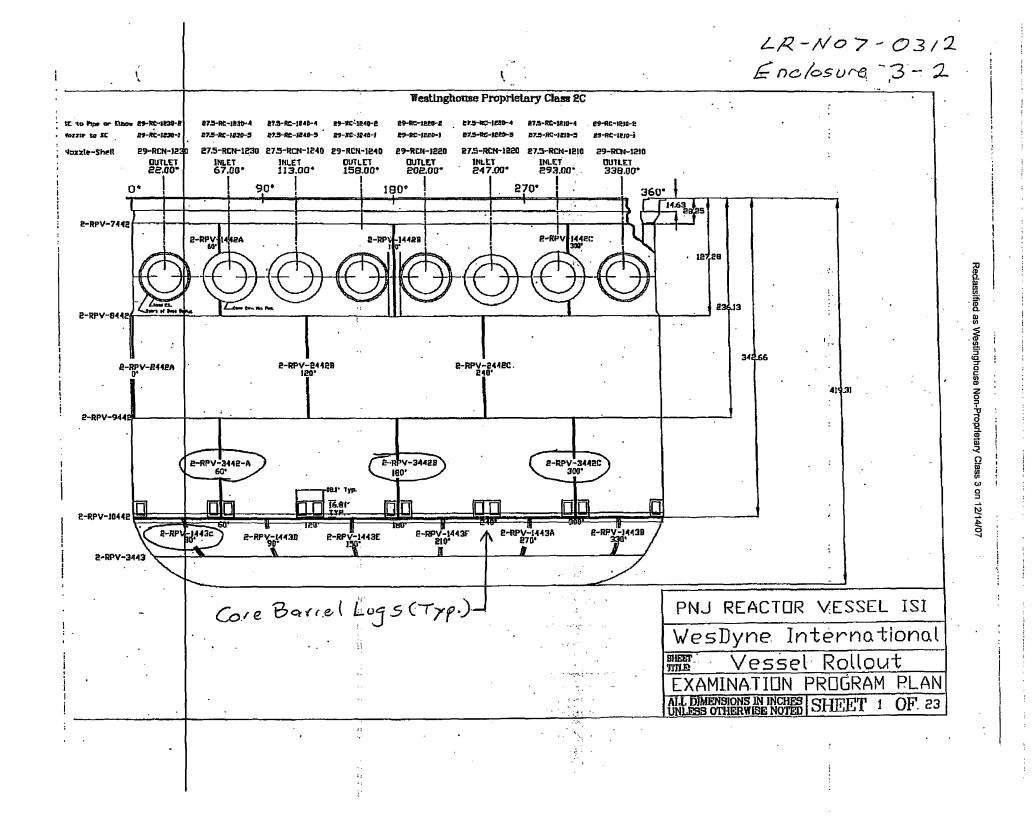
| Sum# | Component ID | Description | 2 ND Interval ASME Cat | 2 nd Interval ASME Item # | ASME Class | System | Limited NDE Exam | Code Coverage Achieved | Exam Date | Photo/ Sketch No.* | Required Examination Volume | Relief Granted under TAC | 2 nd Interval Relief Granted under TAC M83316 | Relief requested under this submittal (TAC MD5978) | UT Exam Type and Limitation Description |
|--------|--------------|--------------------------|--|---|---------------|--------|------------------------|------------------------------|-----------|--|-----------------------------------|-----------------------------------|--|---|--|
| 710190 | 3-CV-2255-12 | PIPE TO VALVĖ 2CV72 | C-F-1 | C5.21 | 2 | сvс | UT | 50% | 10/18/00 | 161B, 213, 214, 214A, 214B | IWC-2500- 7(b) | No | No | Yes | UT exam was conducted using 45- and 70-degree shear transducers. The exam completed was limited to 50% code required coverage due to the UT exam being limited due to the valve's OD configuration that restricted scanning. UT scans were performed on and across the welds in both directions. No unacceptable indications were noted. A liquid penetrant test and system pressure test was also completed with no unacceptable indications observed. |
| 330930 | 14-BF-2211-2 | PIPE TO ELBOW | C-F-2 | C5.51 | 2 | BF | UT. | 84% | 4/2/93 | 27, 27A, 27B, 27C, 27D, 27E, 27F | IWC-2500-7 | No | Yes RR-C1 Part 4 | No | UT exam was conducted using a 45-degree shear wave transducer. The ultrasonic examination completed was partially limited to 84% of the achieved code required coverage due to a permanently installed column support lug located immediately adjacent to the weld that interferes with scanning. No unacceptable indications were observed. A magnetic particle (MT) and system pressure test was also completed with no recordable indications observed. |
| 382140 | 30-MS-2211-9 | PIPE TO ELBOW | C-F-2 | C5.51 | 2 | MS | UT | 90% | 4/13/93 | 30, 30A, 30B, 30C | IWC-2500-7(a) | No | No | Yes | UT exam was conducted using a 45-degree shear wave transducer. The exam completed was limited to 90% code required coverage from the upstream side due to a branch connection being located between 9/16" to 3 7/8" that limited scanning to 3 1/4". No unacceptable indications were noted. A magnetic particle test and system pressure test was also completed with no unacceptable indications observed. |
| 380140 | 34-MS-2241-2 | PIPE TO VALVE 24MS167 | C-F-2 | C5.51 | 2 | MS | UT | 85% | 11/11/94 | 67, 67A, 68, 68A, 68B, 68C, 68D, 69 | IWC-2500- 7(b) | No | No | Yes | UT exam was conducted using 45- and 32-degree shear wave transducers. The exam completed was limited to 85% code required coverage due to the UT exam being limited to between 7 $1/2^n$ W from 5" to 16", 87 $1/2^n$ to 103" due to multiple branch connections located on the main steam header. No unacceptable indications were noted. A magnetic particle and system pressure test was also completed with no unacceptable indications observed. |

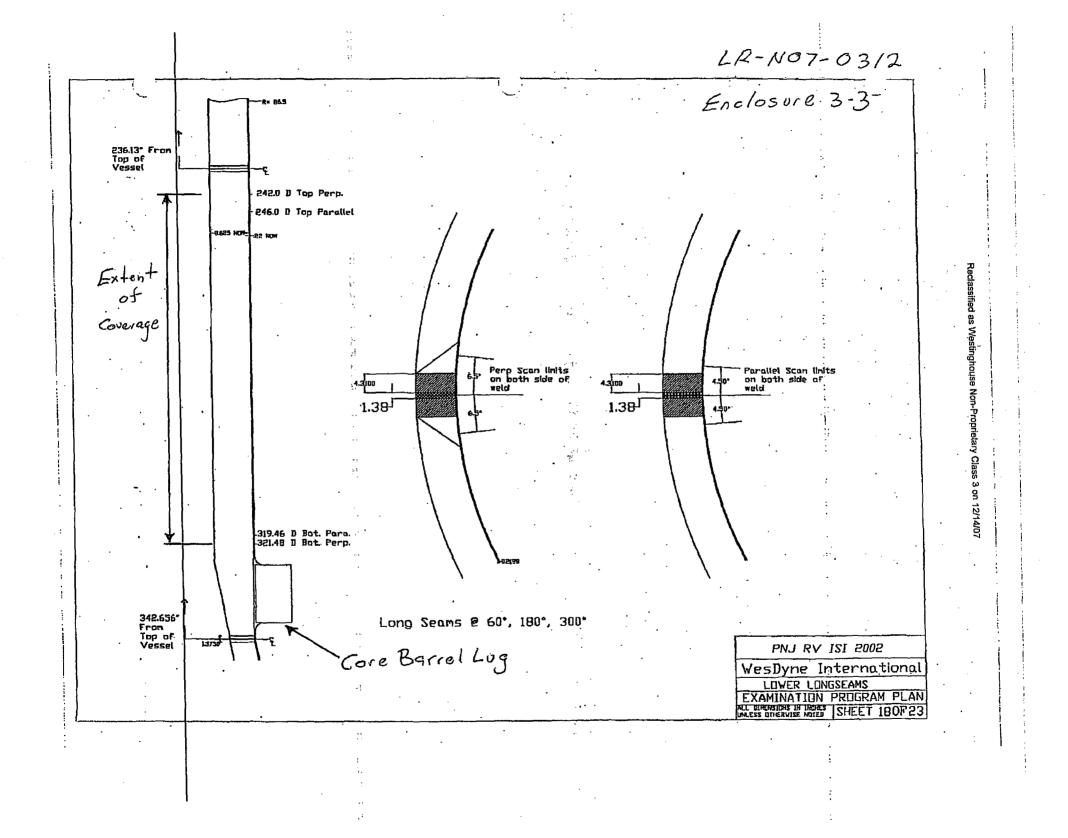
A-32

| Sum# | Component ID | Description | 2 ND Interval ASME Cat | 2 nd Interval ASME Item # | ASME Class | System | Limited NDE Exam | Code Coverage Achieved | Exam Date | Photo/ Sketch No.* | Required Examination Volume | Relief Granted under TAC | 2 nd Interval Relief Granted under TAC M83316 | Relief requested under this submittal (TAC MD5978) | UT Exam Type and Limitation Description |
|--------|--------------|---------------|--|---|---------------|--------|------------------------|------------------------------|-----------|------------------------|-----------------------------------|-----------------------------------|--|---|--|
| 385510 | 6-MS-2211-13 | TEE TO PIPE | Ċ-F-2 | C5.51 | 2 | MS | UT | 73% | 11/17/94 | 71, 71A, 71B, 71C | IWC-2500- 7(b) | No | No | Yes | UT exam was conducted using a 45-degree shear wave transducer. The exam completed was limited to 73% code required coverage due to the UT exam being limited between 8 1/2" to 14 1/2" and 20" to 3 1/2" due to the OD configuration of the tee fitting's blend radius areas located on the upstream side. UT scans were performed on and across the welds in both directions. No unacceptable indications were noted. A magnetic particle and system pressure test was also completed with no unacceptable indications observed. |
| 381055 | 32-MS-2241-3 | ELBOW TO PIPE | C-F-2 | C5.51 | 2 | MS | UT | 85% | 1/13/96 | 99, 100, 101 | IWB-2500- 7(b) | No | No | Yes | UT exam was conducted using a 45-degree shear wave transducer. The exam completed was limited to 85% code required coverage. The UT exam conducted was limited due to a permanently installed welded pipe support from 18" to 26". No unacceptable indications were noted. A liquid penetrant test and system pressure test was also completed with no unacceptable indications observed. Component selected for MEB 3-1 Augmented Exam requirements. |
| 381155 | 32-MS-2231-3 | ELBOW TO PIPE | C-F-2 | C5.51 | 2 | MS | UT | 87% | 1/18/96 | 103, 103A, 105, 106 | IWC-2500- 7(b) | No | No | Yes | UT exam was conducted using a 45-degree shear wave transducer. The exam completed was limited to 87% code required coverage. The UT exam conducted was limited due to a welded pipe support from 49.25" to 2.75" partially covering the upstream side of the weld. No unacceptable indications were noted. A magnetic particle test and system pressure test was also completed with no unacceptable indications observed. |
| 381175 | 34-MS-2231-1 | PIPE TO PIPE | C-F-2 | C5.51 | 2 | MS | UT | 40% | 1/24/96 | 107, 108, 109 | IWC-2500- 7(b) | No | No | Yes | UT exam was conducted using a 45- and 60-degree shear wave transducer. The exam completed was limited to 40% code required coverage. The UT exam conducted from the downstream side was limited due to a welded pipe support from 3" to 24". No unacceptable indications were noted. A magnetic particle test and system pressure test was also completed with no unacceptable indications observed. |

| Sum# | Component ID | Description | 2 ND Interval ASME Cat | 2 nd Interval ASME Item # | ASME Class | System | Limited NDE Exam | Code Coverage Achieved | Exam Date | Photo/ Sketch No.* | Required Examination Volume | 1 st Interval Relief Granted under TAC M84658 | 2 nd Interval Relief Granted under TAC M83316 | Relief requested under this submittal (TAC MD5978) | UT Exam Type and Limitation Description |
|--------|--------------|------------------------|--|---|---------------|--------|------------------------|------------------------------|-----------|-----------------------|-----------------------------------|--|--|---|---|
| 381260 | 32-MS-2221-3 | ELBOW TO PIPE | C-F-2 | C5.51 | 2 | MS | UT | 87% | 1/20/96 | 111, 112, 113 | IWC-2500- 7(b) | No | No | Yes | UT exam was conducted using 0-degree longitudinal wave and 45-degree shear wave transducers. The exam completed was limited to 87% code required coverage. The UT exam conducted from the downstream and upstream sides were limited due to pads and pipe support. No unacceptable indications were noted. A magnetic particle test and system pressure test was also completed with no unacceptable indications observed. |
| 381355 | 32-MS-2211-3 | ELBOW TO PIPE | C-F-2 | C5.51 | 2 | MS | UŤ | 82% | 3/13/97 | 118, 119 | IWC-2500- 7(b) | No | No | Yes | UT exam was conducted using a 45-degree shear wave transducer. The exam completed was limited to 82% code required coverage. No UT scan was performed from the downstream side from 62.5" to 80.5" due to a permanent restraint interfering with scanning. No scan could be performed from the upstream direction from 94.5" to 7.5" due to branch connection. Also no scan could be performed from 74.5" to 78.5" due to a branch connection. No unacceptable indications were noted. A magnetic particle test and system pressure test was also completed with no unacceptable indications observed. |
| 381370 | 34-MS-2211-1 | PIPE TO PIPE | C-F-2 | C5.51 | 2 | MS | UT | 51% | 1/24/96 | 120, 121 | IWC-2500- 7(b) | No | No | Yes | UT exam was conducted using a 45-degree shear wave transducer. The exam completed was limited to 51% code required coverage. The UT exam was performed from the upstream side and limited between 22 1/2" to 27 1/2", 79" to 81", 88" to 90" and 93 3/4" to 7 1/4" due to seven pipe restraint bars measuring 1.45" for a total of 10.15". The restraint support partially covers the weld 360°. No unacceptable indications were noted. A magnetic particle test and system pressure test was also completed with no unacceptable indications observed. |
| 384320 | 6-MS-2246-3 | PIPE TO VALVE 24MS9 | C-F-2 | C5.51 | 2 | MS | UT . | 79% | -10/17/00 | 196, 197, 198 | IWC-2500- 7(b) | No | No | Yes | UT exam was conducted using a 45-shear wave transducer. The exam completed was limited to 79% code required coverage due to the UT exam being limited due to the valve's OD configuration that restricted scanning. UT scans were performed on and across the welds in both directions. No unacceptable indications were noted. A magnetic particle test and system pressure test was also completed with no unacceptable indications observed. |

LR-NO7-0312 Exclosure 3-1 Reclassified as Westinghouse Non-Proprietary Class 3 on 12/14/07 Westinghouse Proprietary Class 2C 5.38 4.50 2 48 \bigcirc 5 TO TOP OF VESSEL 45'S 45°S For Both Upper & 4.75 Lower Sleds (US & LS) 3 1 45°L: 45L Dual 1.29 Positions 7 & 8 are 9.51 Θ SCAN FIXTURE for the Lower Sled 45°L Dual 45 L (4)(2)ʻonly. 3.72 : 2,42 11 3.46 45"5 45L' DUAL 61 (8) APPENDIX VIII SHELL EXAM CONFIGURATION WITH EXTRA COVERAGE DUCERS VIEW: FROM VESSEL CONTERLINE DIMENSIONS TYP. FOR BOTH SLEDS CW ROTATION, SHELL EXAMS Calen RVIST 2008 Wesdyne Inderrellenst 00 SHEET TITLE: Shell Stede ٦ EXAMINA EIDN FREURAM FEAN ALL DIMENSIONS IN INCHES

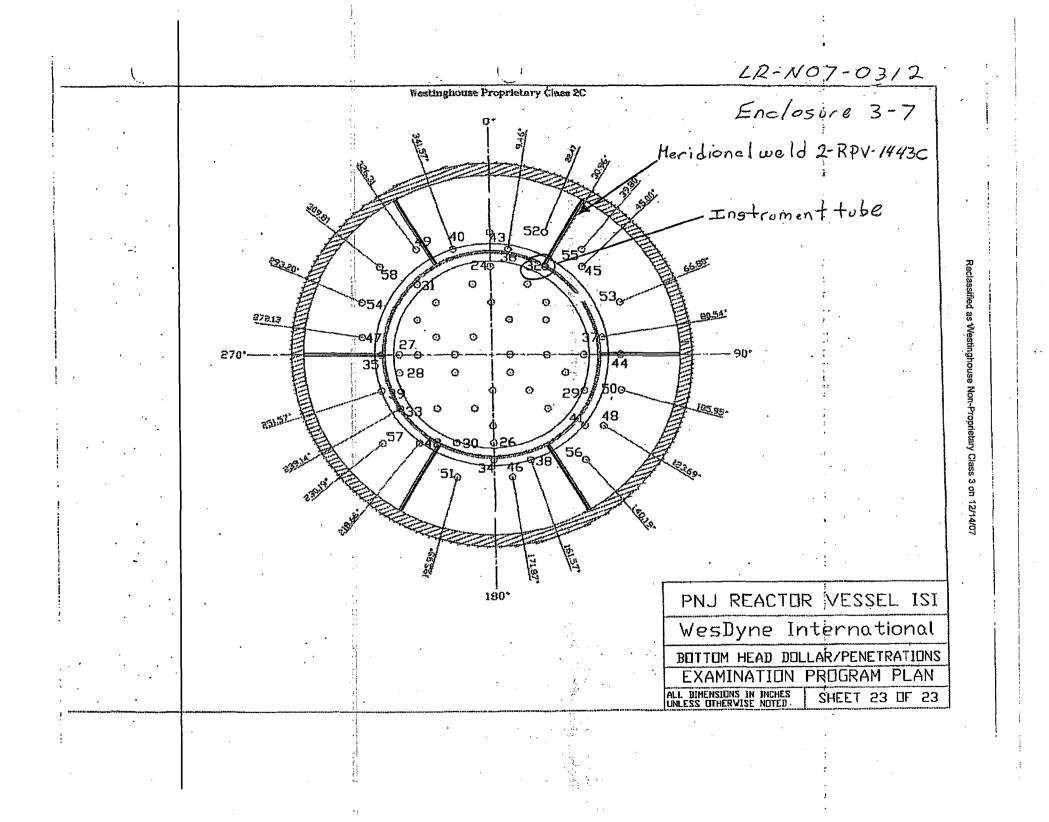


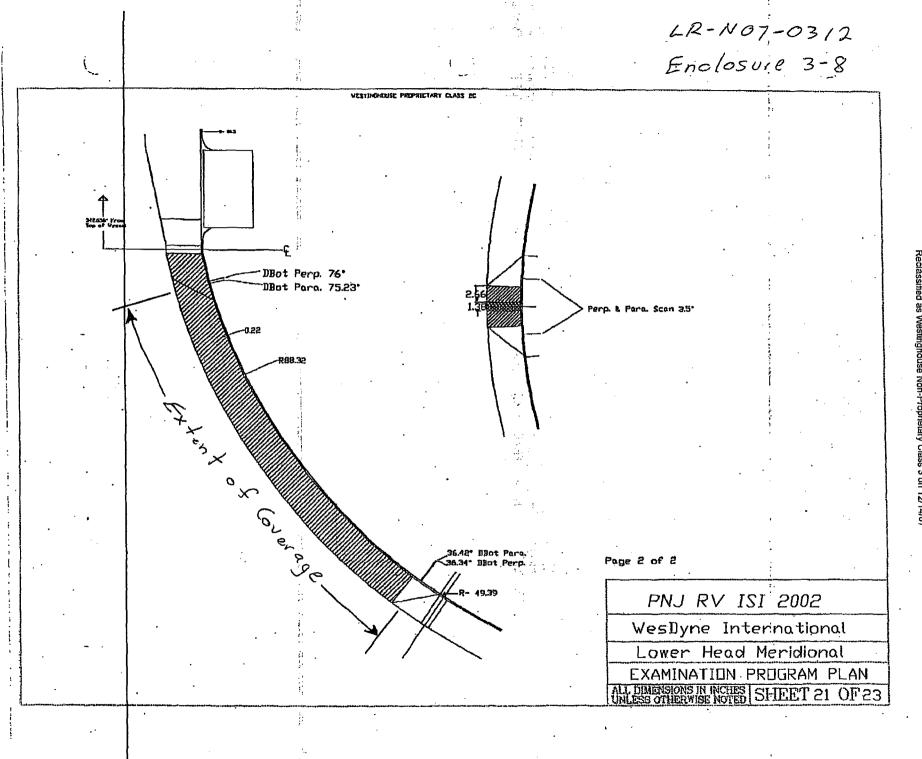


| PLANT | NAME | | Salen | n #2 | | | | • • • | ENCL | OSURE | 3-4 |
|-------|-------|------------|--------------|---------------------------------------|--------------|------------------|-------|----------------|---------|--------------------|----------|
| | | | | | <u> </u> | | We | sDy | ne | | |
| | | | | • • • | | · 花 | | | | - ^ - - - | |
| COMPC | NENT | LO | WER LC | NGSEAM | | | | | | | |
| | | | | • | | | nter | nati | ona | | |
| | | | | · · · | | | | | | - , | |
| WELD | NO | | 2-RPV-3 | 3442-A | , in | • | | | | • | |
| · | | | · | BEAM | ANGLE | BREAK | DOWN | | | | |
| | | | | · · · · · · · · · · · · · · · · · · · | | | | | | : | |
| | BEAM | DIRECTION | 45 S WELD | Shear VOLUME | 45 L WELD | Single VOLUME | | Dual VOLUME | WELD | VOLUME | |
| | | | | VOLONIL | | VOLUME | | VOLOMIL | | VOLONIE | |
| | Per | pindicular | 79.33 | 79.33 | 79.33 | 79.33 | 81.69 | 81.69 | | | - |
| | | Parallel | 80.74 | 80.81 | 81.13 | 81.20 | 80.66 | 80.73 | | | |
| | | | | | | | | | | | |
| | | (ERAGE | 80 | 0.05 | 8 |). <u>25</u> | 81 | .20 | [| | |
| Comm | ents: | | | e e e e e e e e e e e e e e e e e e e | | | | | | | |
| | | · | | | | | | | <u></u> | | |
| | | | | 4: | <u></u> | | . 1 | 1 | | abel | |
| С | OMBIN | ED AVERAGE | 8 | 0.50 | Analyst | 1 apr | wh | | Date | 4/18/0 | <u>}</u> |

| LANT | NAME | | Salen | n #2 | | | | | | NO7-C | |
|------|-------|------------|--------------|--|--------------|--|--------------|---------------------------------------|------|------------------|------------|
| | | | Jaleii | | <u> </u> | | We | esDy | ne | 1 - - - | |
| OMPO | ONENT | LO | WER LC | NGSEAM | | : | • | | | - - | |
| | | | | | ·. | | nter | nati | ona | 1 | |
| VELD | NO | | 2-RPV-3 | 8442-B | , | 51 12 12 12 12 12 12 12 12 12 12 12 12 12 | | | | | |
| | | | | BEAM | ANGLE | BREAK D | OOWN | | | | |
| | BEAM | DIRECTION | 45 S WELD | Shear VOLUME | 45 L WELD | Single VOLUME | 45 L WELD | Dual VOLUME | WELD | VOLUME | |
| | Per | pindicular | 79.33 | 79.33 | 79.33 | 79.33 | 81.69 | 81.69 | | , | |
| - | | Parallel | 80.74 | 80.81 | 81.13 | 81.20 | 80.66 | 80.73 | | | |
| | A | ERAGE | 80 | .05 | 80 | 0.25 | 81 | .20 | | · | |
| Comm | ents: | . | | | | | | | | <u> </u> | · |
| | | | | ······································ | | ` | ~ | · · · · · · · · · · · · · · · · · · · | | - / | |
| C | OMBIN | ED AVERAGE | 8(|).50 | Analyst | que | 12 | • | Date | 4/18 | <i>p</i> 2 |
| | | | | · · | | | •3 | | | | |
| | • | | | | | ri. F | | | | | |

| | | | | | | · · · · · · · · · · · · · · · · · · · | · · · · · · | · <u>.</u> | | 107-03 050RE 3 | |
|--------|----------|------------|--------|--|---------|---------------------------------------|-------------|--|---------------------------------------|-------------------|----------|
| | AL JINIT | · | Salem | 1 #2 | ` | | | | | 2: 2 | |
| | | | | | • • | | VVe | sDy | ne | 4 | |
| COMPO | NEN | LO | WER LO | NGSEAM | | | | | | | |
| | | | | | | | nter | nati | ona | | |
| NELD N | 10 | | 2-RPV- | 3442-C | | | | | | : | |
| | | | | BEAM | ANGLE | BREAK | DOWN | | <u>.</u> | | <u> </u> |
| | BEAN | DIRECTION | 45 S | ihear | | Single | | Dual | | | |
| - | | | WELD | VOLUME | WELD | VOLUME | WELD | VOLUME | WELD | VOLUME | |
| | Pe | pindicular | 79.33 | 79.33 | 79.33 | 79.33 | 81.69 | 81.69 | | | ł |
| | | Parallel | 80.74 | 80.81 | 81.13 | 81.20 | 80.66 | 80.73 | · | | |
| | | VERAGE | | .05 | 80 |).25 | 81 | .20 | | | |
| Comme | | | | ······································ | | · · · · · · · · · · · · · · · · · · · | | · · · · · · · · · · · · · · · · · · · | | | • |
| | | | | | | | | ······································ | · · · · · · · · · · · · · · · · · · · | | |
| C | OMBIN | ED AVERAGE | 80 |).50 | Analyst | 1 am | 4 2 | | Date | 4/18/0 | ₽ |





/ Class ω on 12/14/07

| · • • | | | | · . | | · · · · · | , | | | • • • | | | : |
|------------|---------|----------|---------|---|---------|-----------|--------|---------|------|---------------------------------------|----------|---|---|
| | | | | | | | | | LR- | -NO7 - 0 | 312 | | |
| | | | R.V. CO | OVERAG | E ESTI | MATE B | REAKD | OWNS | ENG | LOSURE | 3-9 | | |
| PLANT | NAME | | SALEM | UNIT 2 | • | • • | | | | .) . / . / | · · | | |
| | | | | South and the second | | | We | esDy | ne | | | | |
| СОМРС | | M | ERIDON | AL WELD | | | • • | | | | | | |
| | | | | \$. | | | nter | mati | ona | l | | | |
| WELD I | NO _ | | 2-RPV- | 1443C | | | · · | | | : | | | |
| | | | | BEAM | ANGLE | BREAK | DOWN | | | | | | |
| | BEAM DI | RECTION | | Shear | | Single | | Dual | | : | | | |
| | | | WELD | VOLUME | WELD | VOLUME | WELD | VOLUME | WELD | VOLUME | = | | |
| | Perpir | dicular | 91.00 | 85.50 | 91.00 | 89.06 | 91.00 | 85.25 | | | | | |
| н н н Ч | Par | allel | 88.20 | 86.30 | 88.20 | 87.20 | 88.20 | 87.20 | · | · · · · · · · · · · · · · · · · · · · | | | |
| | | RAGE | 87 | 7.75 | 88 | 3,87 | 87 | 7.91 | | | | | |
| Comme | · · · | | | | L | | | | | | _ | | |
| Comin | - | <u> </u> | | | <u></u> | - <u></u> | | <u></u> | | · · · · | | 1 | |
| с | | AVERAGE | 88 | 3.18 | Analyst | 1 and | u m | | Date | 4/12/0 | 2 | | |
| | | | | | | 7 | | | | | | | |
| | | } | | | | | | i | | | | | |

| | | • | | FNC | OSURE | = 5-1 |
|-----|---|---|---|---|-----------------|---|
| | | REQUEST FOR ADDITIONA | | | | |
| | · · · | REQUEST FOR RELIEF REGARDING | | | | |
| | • | SECOND TEN-YEAR IN-SERVICE I | | | i | |
| | • | | | l u. 2 | | <u> </u> |
| | | DOCKET NO. 50 | | | e. e prove of a | h i se produceren |
| | QUESTION | 2.1 (c) For certain piping welds, sufficient to demonstrate in the form of drawings, s evaluation for the followin identification numbers list | impracticality. Plea ketches and/or des g components, as | se submit further informati criptions to support this | ion | |
| | Summary # | 700000 | - | | | |
| | | | | • | | |
| | Component I.D. | 8-CS-2227-5 | • | | | • |
| | Description | Valve 21CS2 to Pipe | | | | |
| | | | - | | | |
| • | | | · | Comments | | |
| | 1 | Weld X-Section | i ta seconda de la companya de la co La companya de la comp | See Attached | | 1. 1 A A |
| | | | | | , | |
| | 2 | Material | | Stainless Steel | | · . |
| | 3 | Thickness / weld Crown | Thi | kness .14" / Weld Conto | ur | • |
| | 4 | Obstruction | 0 | Contour of valve 21CS2 | | |
| | 5 | Exam Area Highlighted on Drawing | _ | Yes X No | | |
| | E A | Transducer ray exit point | | N/A | | • • • |
| | | | | | | |
| | <u>_</u> | | | · | | |
| | | , 39.6 % | | | | - |
| Com | ments UT exam was perfor | ned of this component using 45 and 70 | degree wave trans | ducer. The ultrasonic | | - |
| Com | UT exam was perfor examination was limit | ned of this component using 45 and 70 ted to 31% of the code required covera | ge being limited du | e to upstream side valve | | - |
| Com | UT exam was perform examination was limit configuration that res | ned of this component using 45 and 70 ted to 31% of the code required covera tricted scanning. UT scans were perfor | ge being limited du med on and across | e to upstream side valve the weld in both direction | 19 | - 12, 2007 - 11 1, 12 1, 12 1, 12 1, 12 1, 12 1, 12 1, 12 1, 12 1, 12 1, 12 1, 12 1, 12 1, 12 1, 12 1, 12 1, 12 |
| Com | UT exam was perform examination was limit configuration that rest No unacceptable ind | ned of this component using 45 and 70 ted to 31% of the code required covera | ge being limited du med on and across ant examination and | e to upstream side valve the weld in both direction | 19 | - |
| Com | UT exam was perform examination was limit configuration that rest No unacceptable ind | ned of this component using 45 and 70 ted to 31% of the code required covera tricted scanning. UT scans were perfor cations were observed. A liquid penetra | ge being limited du med on and across ant examination and | e to upstream side valve the weld in both direction I system pressure test wa | 19 | . ಯಾರ್ಥಿಯ ಸಂಗ್ರಾಸ |
| Com | UT exam was perfor examination was limi configuration that res No unacceptable ind also completed with | ned of this component using 45 and 70 ted to 31% of the code required covera tricted scanning. UT scans were perfor cations were observed. A liquid penetra to recordable indications observed. | ge being limited du med on and across ant examination and | e to upstream side valve the weld in both direction i system pressure test wa | | - |
| Com | UT exam was perfor examination was limit configuration that res No unacceptable indi- also completed with | ned of this component using 45 and 70 ted to 31% of the code required covera tricted scanning. UT scans were perfor cations were observed. A liquid penetra | ge being limited du med on and across ant examination and | e to upstream side valve the weld in both direction I system pressure test wa | | א מספר ווא מעריים, בבר א |
| Com | UT exam was perfor examination was limit configuration that res No unacceptable indi- also completed with | ned of this component using 45 and 70 ted to 34% of the code required covera tricted scanning. UT scans were perfor cations were observed. A liquid penetra to recordable indications observed. | ge being limited du med on and across ant examination and | e to upstream side valve the weld in both direction I system pressure test wa | | - |
| Com | UT exam was perfor examination was limit configuration that res No unacceptable indi- also completed with | ned of this component using 45 and 70 ted to 34% of the code required covera tricted scanning. UT scans were perfor cations were observed. A liquid penetra to recordable indications observed. | ge being limited du med on and across ant examination and | e to upstream side valve the weld in both direction I system pressure test wa | | - |
| Com | UT exam was perfor examination was limit configuration that res No unacceptable indi- also completed with | ned of this component using 45 and 70 ted to 34% of the code required covera tricted scanning. UT scans were perfor cations were observed. A liquid penetra to recordable indications observed. | ge being limited du med on and across ant examination and | e to upstream side valve the weld in both direction I system pressure test wa | | |
| Com | UT exam was perfor examination was limit configuration that res No unacceptable indi- also completed with | ned of this component using 45 and 70 ted to 34% of the code required covera tricted scanning. UT scans were perfor cations were observed. A liquid penetra to recordable indications observed. | ge being limited du med on and across int examination and | e to upstream side valve the weld in both direction I system pressure test wa | | - |
| Com | UT exam was perfor examination was limit configuration that res No unacceptable indi- also completed with | ned of this component using 45 and 70 ted to 34% of the code required covera tricted scanning. UT scans were perfor cations were observed. A liquid penetra to recordable indications observed. | ge being limited du med on and across int examination and | e to upstream side valve the weld in both direction I system pressure test wa | | - A 112 . 2017 12 20 2000 . |
| Com | UT exam was perfor examination was limit configuration that res No unacceptable indi- also completed with | ned of this component using 45 and 70 ted to 34% of the code required covera tricted scanning. UT scans were perfor cations were observed. A liquid penetra to recordable indications observed. | ge being limited du med on and across ant examination and | e to upstream side valve the weld in both direction I system pressure test wa | | - |
| Com | UT exam was perfor examination was limit configuration that res No unacceptable indi- also completed with | ned of this component using 45 and 70 ted to 34% of the code required covera tricted scanning. UT scans were perfor cations were observed. A liquid penetra to recordable indications observed. | ge being limited du med on and across int examination and | e to upstream side valve the weld in both direction I system pressure test wa | | |
| Com | UT exam was perfor examination was limit configuration that res No unacceptable indi- also completed with | ned of this component using 45 and 70 ted to 34% of the code required covera tricted scanning. UT scans were perfor cations were observed. A liquid penetra to recordable indications observed. | ge being limited du med on and across ant examination and | e to upstream side valve the weld in both direction I system pressure test wa | | - |
| Com | UT exam was perfor examination was limit configuration that res No unacceptable indi- also completed with | ned of this component using 45 and 70 ted to 34% of the code required covera tricted scanning. UT scans were perfor cations were observed. A liquid penetra to recordable indications observed. | ge being limited du med on and across ant examination and | e to upstream side valve the weld in both direction I system pressure test wa | | - . 112. 22. 79. 201 1. 1. 19. 7 |
| Com | UT exam was perfor examination was limit configuration that res No unacceptable indi- also completed with | ned of this component using 45 and 70 ted to 34% of the code required covera tricted scanning. UT scans were perfor cations were observed. A liquid penetra to recordable indications observed. | ge being limited du med on and across ant examination and | e to upstream side valve the weld in both direction I system pressure test wa | | - |