NEXTera ENERGY POINT BEACH

September 5, 2013

NRC 2013-0084
10 CFR 55.a

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

Point Beach Nuclear Plant, Units 1 and 2
Dockets 50-266 and 50-301
Renewed License Nos. DPR-24 and DPR-27

10 CFR 50.55a Request, Relief Request RR-4L1
Inservice Inspection Impracticality
Examination Limitations Due to Configuration
Fourth Ten-Year Inservice Inspection Program Interval
Response to Request for Additional Information

References: (1) NextEra Energy Point Beach, LLC letter to NRC, dated March 19, 2013, 10 CFR 50.55a Request, Relief Request RR-4L1 Inservice Inspection Impracticality Examination Limitations Due to Configuration Fourth Ten-Year Inservice Inspection Program Interval (ML13079A092)

(2) NRC electronic mail to NextEra Energy Point Beach, LLC, dated August 2, 2013, Point Beach Nuclear Plant Units 1 and 2 – Draft Requests for Additional Information Regarding Relief Request RR-4L1 (TAC Nos. MF1148 and MF1149)

NextEra Energy Point Beach, LLC (NextEra) requested in Reference (1) that the Nuclear Regulatory Commission (NRC) grant relief from the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (B&PV Code), Section XI, 1998 Edition through 2000 Addenda requirement for 100 percent coverage of the subject weld(s) due to geometric or design configuration, which limited the examination coverage that could be obtained. Relief was requested on the basis that alternative methods will provide an acceptable level of quality and safety.

Via Reference (2), the NRC determined additional information was required to enable the staff's continued review of the Relief Request RR-4L1. The Enclosure to this letter contains the response to the request for additional information in Reference (2).

This letter contains no new commitments and no changes to existing commitments.

Very truly yours,

NextEra Energy Point Beach, LLC

Eric McCarthy for L. Meyer

Larry Meyer
Site Vice President

Enclosure

cc: Administrator, Region III, USNRC
Project Manager, Point Beach Nuclear Plant, USNRC
Resident Inspector, Point Beach Nuclear Plant, USNRC
Mr. Mike Verhagan, Department of Commerce, State of Wisconsin

**ENCLOSURE**

**NEXTERA ENERGY POINT BEACH, LLC**
**POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2**

**10 CFR 50.55a REQUEST, RELIEF REQUEST RR-4L1**
**INSERVICE INSPECTION IMPRACTICALITY**
**EXAMINATION LIMITATIONS DUE TO CONFIGURATION**
**FOURTH TEN-YEAR INSERVICE INSPECTION PROGRAM INTERVAL**
**RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION**

The NRC staff determined that additional information was required (Reference 1) to enable the continued review of the Relief Request RR-4L3 (Reference 2). The following information is provided by NextEra Energy Point Beach, LLC (NextEra) in response to the NRC staff's request.

*By letter dated March 19, 2013, (Agencywide Documents Access and Management System (ADAMS) Accession No. ML13079A142), NextEra Energy Point Beach, LLC (NextEra, the licensee) submitted Request for Relief (RR) 4L1 from the requirements of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, Rules for Inservice Inspection of Nuclear Power Plant Components, for the Point Beach Nuclear Plant, Units 1 and 2 (PBNP 1 and 2). The request for relief applies to the fourth 10-year inservice inspection (ISI) interval which began on July 1, 2002, and ended on July 31, 2012, in which the licensee adopted the 1998 Edition through the 2000 Addenda of ASME Code Section XI as the code of record.*

*In accordance with Title 10 of the Code of Federal Regulations (10 CFR) 50.55a(g)(5)(iii), the licensee has submitted the subject requests for relief for limited examinations in multiple ASME Code Examination Categories. The ASME Code, Section XI, requires that 100 percent of the examination volumes, or surface areas, described in ASME Code, Section XI, Tables IWB-2500 and IWC-2500 be performed during each interval. The licensee stated that 100 percent of the ASME Code-required volumes, or surface areas, are impractical to obtain at PBNP 1 and 2.*

*10 CFR 50.55a(g)(5)(iii) states that when licensees determine that conformance with ASME Code requirements is impractical at their facility; they shall submit information to support this determination. The Nuclear Regulatory Commission (NRC) will evaluate such requests based on impracticality, and may impose alternatives, giving due consideration to public safety and the burden imposed on the licensee.*

*The staff requires additional information to continue its review of its licensee's request for relief. For clarity, the licensee's requests have been evaluated according to ASME Code Examination Category and the corresponding requests for relief are labeled in parts alphabetically.*

## 2.0 REQUESTS FOR ADDITIONAL INFORMATION

### 2.1 Request for Relief RR-4L1, Part A, ASME Code, Section XI, Examination Category B-A, Item B1.11, Pressure Retaining Welds in Reactor Vessel, PBNP 1 and 2

**2.1.1** *Please submit detailed and specific information, including photographs or sketches, as necessary, to augment the descriptions of limitations to examinations, and to support the bases for volumetric coverage obtained for ASME Code, Section XI, Examination Category B-A components, and therefore, demonstrate impracticality.*

a) *As applicable, describe nondestructive examination (NDE) equipment (ultrasonic scanning apparatus), details of the listed obstructions (size, shape, proximity to the weld, etc.) to demonstrate accessibility limitations.*

b) *Discuss whether alternative methods or advanced technologies could be employed to maximize ASME Code volumetric coverage.*

c) *Confirm that examinations of components listed in Examination Category B-A, were conducted in accordance with the performance demonstration requirements described in ASME Code, Section XI, Appendix VIII.*

d) *Fully clarify the wave modality and insonification angles used for all ultrasonic examinations.*

e) *Show cross-sectional coverage plots to describe ASME Code volumes examined.*

f) *State whether any indications were discovered as a result of ASME Code-required examinations, and how these indications have been dispositioned.*

**Response to RAI 2.1.1**

**Response a)**
Automated scanning equipment was utilized to access the welds in question via a center-mast device with telescoping "arms" to place the end-effector containing the search units on the scanning surface.

In the case of the reactor pressure vessel (RPV) Lower shell-to-lower head-ring welds (RPV-17-683), the core barrel anti-rotation lugs are mounted in such a manner that they partially obstruct accessing the weld at the four cardinal positions (0°, 90°, 180°, 270°) within the reactor vessel. These lugs are approximately 8.3 inches "tall" (measured from bottom to top of lug) and approximately 7.13 inches "long" (measured around the vessel). Each lug is attached to the RPV with welds on all four sides, which increases the distance that the scanning equipment has to be away from the lug by approximately an additional inch in each direction. See drawings "4" and "5" in Attachment "A" for a depiction of the interferences.

In the case of the RPV outlet nozzle-to-shell (RPV-02-686-A and RPV-02-686-C) and safety injection nozzle-to-shell (RVP-687-01-A and RPV-688-01-B) welds, the nozzle integral extension, which mates to the RPV core barrel, limits the ability of the automated scanning equipment to scan close enough to the weld to obtain "essentially 100%" coverage. See Drawings "6" through "8" in attachment "A" for a depiction of the interferences.

**Response b)**
All automated ultrasonic examinations were performed utilizing equipment and personnel qualified in accordance with ASME Section XI, Appendix VIII (Performance Demonstration), as required by 10 CFR 50.55a and ASME Section XI. No other alternative methods or advanced technologies are currently available to examine the applicable reactor vessel welds 4 orthogonal directions as required by ASME Section XI.

**Response c)**
All automated ultrasonic examinations were performed utilizing equipment and personnel qualified in accordance with ASME Section XI, Appendix VIII (Performance Demonstration), as required by 10 CFR 50.55a and ASME Section XI.

**Response d)**
For all RPV shell welds, the welds were examined utilizing 0° longitudinal wave, and 45° and 55° refracted shear wave search units and SLIC40™ refracted longitudinal search units. The RPV nozzle-to-shell welds were examined with 0° longitudinal wave, and 45° and 55° refracted shear wave and SLIC40™ refracted longitudinal search units from the RPV wall; and phased array UT (5°-40° refracted longitudinal for inlet/outlet nozzles and 0°-30° refracted longitudinal for safety injection nozzles; and 35°- 45° refracted shear for all nozzles).

**Response e)**
See drawings "1" through "4" in Attachment "A" for cross-sectional drawings of the various examination areas.

**Response f)**
The tables in Attachment "B" describe the indication(s) recorded in each RPV shell weld examined and the subsequent disposition.

***2.1.2*** *It has been noted that for the fourth inspection interval, ASME Code volumetric coverage(s) for the Reactor Pressure Vessel (RPV) lower shell-to-lower head ring Welds RPV-17-683, at PBNP 1, and RPV-17-683, at PBNP 2, have decreased by approximately 4 and 10 percent, respectively, as compared to examinations performed in the third inspection interval (information found in previous SER- ADAMS Accession Number ML003677847).*

*Please clarify why there was a decrease in calculated coverage.*

**Response to RAI 2.1.2**

The difference in examination coverage can be attributed to the differences in personnel operating the remote UT examination equipment. The actual scanning of the weld is computer-controlled; however, the equipment operator has complete control of how the equipment is initially placed at the examination location. This placement is based upon the operators view through remote cameras on a monitor. Each equipment operator has a "comfort level" as far as how close to permanent obstructions they will place their end-effector to either start or stop an examination scan row. Once that individual sets the scan limits, the computer records those end points and that information is used to generate the limitations report. The differences in the reported limitations are due to differences in examination personnel, as the scanning equipment and end-effectors with search units were identical for RPV shell welds in question, as both the 3rd and 4th Interval RPV examinations were performed by the same vendor with the same Appendix VIII-qualified procedure.

***2.1.3*** *In third inspection interval (information found in previous SER - ADAMS Accession No. ML003677847), the ASME Code Category and Item number for lower shell-to-lower head ring Welds RPV-17-683, for PBNP 1, and RPV-17-683, for PBNP 2, were listed as ASME Code, Section XI, Category B-A, Item B1.21. In the current request for relief, the ASME Code, Section XI, Item number is listed as B1.11.*

*Please clarify this discrepancy and state the correct ASME Code, Section XI, Category B-A, Item number for the subject lower shell-to-lower head ring welds.*

*If the correct Item number is ASME Code, Section XI, B1.21, for the RPV circumferential head welds, please state the* ***accessible length*** *for each of the lower shell-to-lower head ring Welds RPV-17-683, for PBNP 1, and RPV-17-683, for PBNP 2, then please clarify whether the volumetric coverage percentages obtained are applicable to the accessible length, as opposed to the entire length of the weld.*

**Response to RAI 2.1.3**

The correct examination category is Item Number B1.11. The 3rd Interval Relief Request had incorrectly identified this weld as a B1.21 weld.

***2.2*** *Request for Relief RR-4L1, Part B, ASME Code, Section XI, Examination Category B-D, Items B3.90 and B3.110, Full Penetration Welded Nozzles in Vessels, PBNP 1 and 2*

***2.2.1*** *Please submit detailed and specific information, including photographs or sketches, as necessary, to augment the descriptions of limitations to examinations, and to support the bases for volumetric coverage obtained for ASME Code, Section XI, Examination Category B-D components, and therefore, demonstrate impracticality.*

*a) As applicable, describe NDE equipment (ultrasonic scanning apparatus), details of the listed obstructions (size, shape, proximity to the weld, etc.) to demonstrate accessibility limitations.*

*b) Discuss whether alternative methods or advanced technologies could be employed to maximize ASME Code volumetric coverage.*

*c) Confirm that the examinations listed in ASME Code, Section XI, Examination Category B-D, Item B3.90, were conducted in accordance with the performance demonstration requirements described in ASME Code, Section XI, Appendix VIII. If not, please state the ASME Code requirements used for the ultrasonic examinations of these welds.*

*d) Fully clarify the wave modality and insonification angles used for all ultrasonic examinations.*

*e) Show cross-sectional coverage plots to describe ASME Code volumes examined.*

*f) State whether any indications were discovered as a result of ASME Code-required examinations, and how these indications have been dispositioned.*

**Response to RAI 2.2.1**

**Response a)**
The NDE equipment utilized to perform the subject examinations were standard UT instruments and specialized wedges designed to insonify the inner corner region of the applicable nozzle. The examinations were performed manually (i.e. – no automated scanning or recording was used). See the original request for relief, Reference 2, for the general layout of the nozzles on the pressurizer and physical scanning limitations.

**Response b)**
Based upon the physical limitations, it is PBNP's opinion that with currently available technologies, no additional coverage could be obtained. However, PBNP will continue to monitor advancements in technology and apply them to the applicable nozzle inner corner region examinations if they become available during the 5$^{th}$ 10-Year Interval.

**Response c)**
In accordance with the 1998 Edition, 2000 Addenda of ASME Section XI, the rules of Appendix VIII do not apply to non-reactor vessels (reference Appendix I, I-2120). Accordingly, the examination requirements of Article 4 of Section V, as Supplemented by Table I-2000-1 were used to perform these examinations.

**Response d)**
For the one spray and two safety nozzles, a 58° refracted shear wave was utilized to insonify the inner corner region of the nozzles.

**Response e)**
See drawing "10" in Attachment "A" for the required examination volume.

**Response f)**
For the one spray and two safety nozzles on each unit, there were no recordable indications.

***2.2.2*** *The volumetric examination coverage provided for PZR-SPRAYNOZ-IRS, PBNP, Unit 1 and 2, are 73.3 percent and 88 percent, respectively. The limitation provided by the licensee for each of the welds states "Examination limited due to permanent insulation straps (14.7 percent) and raised lettering (cast-in) on head (12 percent)." According to the percentages provided in the limitation description, the examination coverage for PZR-SPRAYNOZ-IRS, for both PBNP 1 and 2, should be 73.3 percent.*

*Please explain how the volumetric examination coverage was calculated for each of the subject welds and why they are different for PBNP, Unit 1 and Unit 2.*

**Response to RAI 2.2.2**

This was a typographical error. The two units had identical limitations (73.3%).

**2.3** *Request for Relief RR-4L1, Part C, ASME Code, Section XI, Examination Category B-K, Item B10.10, Integral Attachments for Class 1 Vessels, Piping, Pumps, and Valves, PBNP, Units 1 and 2*

**2.3.1** *Please discuss any additional NDE techniques that could be used to verify structural integrity of the welds. For example, discuss whether a visual VT-1 examination could have been performed to augment the limited surface examinations.*

**Response to RAI 2.3.1**

A non-documented "general visual" examination is performed prior to any surface examination to ensure that the condition of the examination area is conducive to performance of the surface examination. A documented VT-1 examination could theoretically be performed, but this would not meet the requirements of Table IWB-2500-1, Item B10.10.

**2.3.2** *Please state whether any indications were discovered as a result of the examinations performed, and how these indications were dispositioned.*

**Response to RAI 2.3.2**

No recordable indications were found during the subject examinations.

**2.3.3** *Please state the materials of construction for the regenerative heat exchanger.*

**Response to RAI 2.3.3**

The regenerative heat exchanger shells in both PBNP Unit 1 and Unit 2 are made of SA213-304 stainless steel. The heads are made of SA351-CF8 stainless steel.

**2.4** *Request for Relief RR-4L1, Part D, ASME Code, Section XI, Examination Category C-B, Item C2.21, Pressure Retaining Nozzle Welds in Vessels, PBNP 1*

*The licensee has provided only general, and somewhat vague, information regarding the impracticality of obtaining ASME Code-required volumetric examinations. For example, the licensee's statement "limitation due to configuration," does not provide a detailed basis and reason for not obtaining the ASME Code-required examination volumes.*

*Please provide a detailed basis of the impracticality to obtain the ASME Code-required examination as noted below:*

**2.4.1** *Submit detailed and specific information, including photographs or sketches, as necessary, to augment the descriptions of limitations to examinations, and to support the bases for volumetric coverage obtained for ASME Code, Section XI, Examination Category C-B components, and therefore, demonstrate impracticality.*

a) *As applicable, describe NDE equipment (ultrasonic scanning apparatus), details of the listed obstructions (size, shape, proximity to the weld, etc.) to demonstrate accessibility limitations.*

b) *Discuss whether alternative methods or advanced technologies could be employed to maximize ASME Code volumetric coverage.*

c) *Fully clarify the wave modality and insonification angles used for all ultrasonic examinations.*

d) *State whether any indications were discovered as a result of Code-required volumetric examinations, and how these indications have been dispositioned.*

e) *Confirm that the required surface examinations (liquid penetrant or magnetic particle) were performed for the subject welds, whether these surface examinations were full ASME Code examinations (>90% coverage), and describe any indications that were detected.*

**Response to RAI 2.4.1**

**Response a)**
The NDE equipment utilized to perform the subject examinations were standard UT instruments and transducers qualified in accordance with Section XI, Appendix VIII, Supplements 4 and 6 (1998 Edition through 2000 Addenda) and demonstrated to the Authorized Inspection Agency in accordance with IWA-2240. See attachment "A" Drawing 9 for a typical drawing of a main steam nozzle to shell weld.

**Response b)**
At the time the examinations were performed during the 4$^{th}$ 10-Year Interval, the Appendix VIII procedure used (PBNP procedure NDE-163, PDI-UT-6) had a limitation placed on it for scanning of nozzle-to-shell welds. The procedure still does not allow for credit to be taken for the inner 15% thickness when scanning parallel to the weld axis. The subject weld was scanned in three orthogonal directions by an individual qualified in single-sided Appendix VIII, Supplement 4 and 6 flaw detection. Even though ASME Code credit was not taken for a single-sided 100% coverage examination, it is PBNP's opinion that any flaws contained within the subject examination volume would have been detected.

**Response c)**
The procedure utilized for the performance of the subject examination used a 60° refracted longitudinal wave, dual element search unit, qualified in accordance with Section XI, Appendix VIII, Supplements 4 and 6 (1998 Edition through 2000 Addenda) as the primary detection search unit.

**Response d)**
No recordable indications were found during the subject examinations.

**Response e)**
All examinations required by ASME Section XI, Table IWC-2500-1, Category C-B, Item C2.21 were performed and 100% of the required examination area was covered with the surface examination technique. No recordable indications were found during the subject examinations.

***2.4.2*** *Please state the materials of construction and the wall thicknesses for the configuration of the PBNP, Unit 1 steam generator shell-to-main steam nozzle weld.*

**Response to RAI 2.4.2**

The PBNP Unit 1 steam generator upper shell is made of ASME SA-302 Grade B. The wall thickness in the region of the nozzle-to-shell weld is approximately 3.5 inches thick.

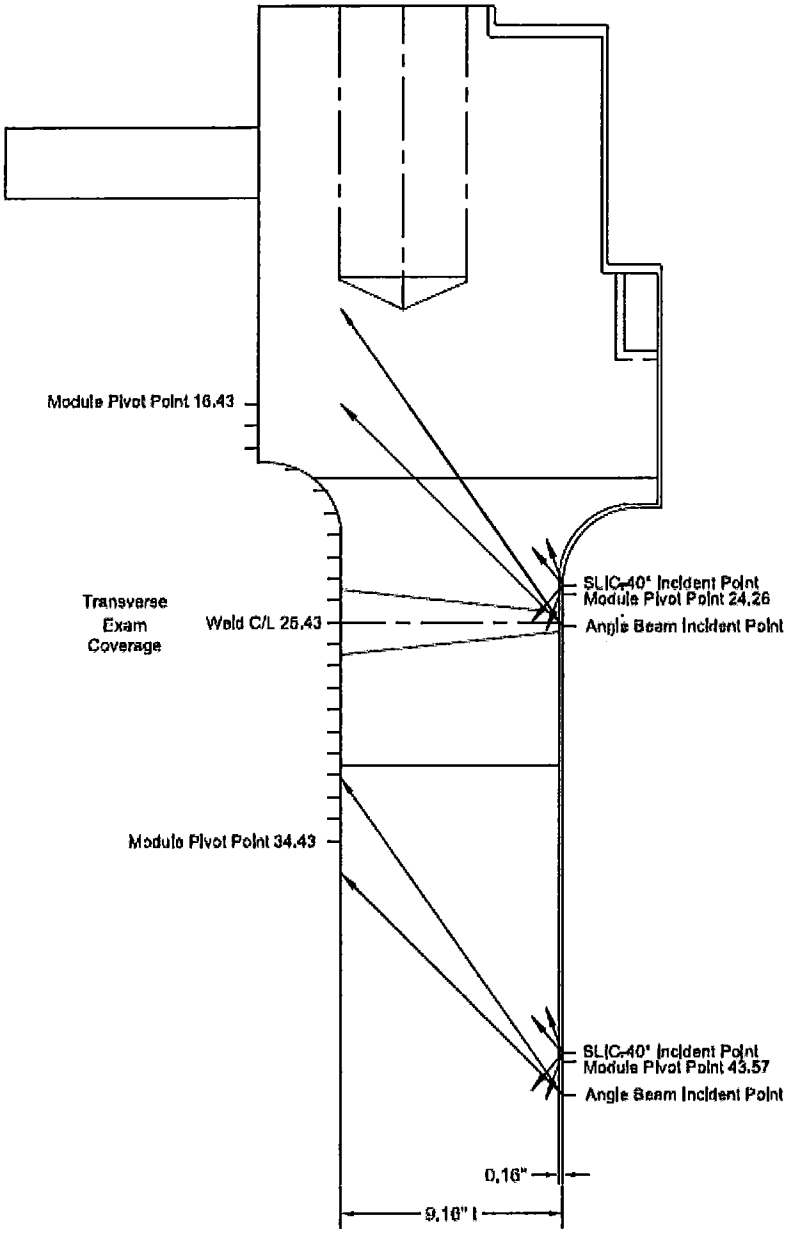
**References**


(1) NRC electronic mail to NextEra Energy Point Beach, LLC, dated August 2, 2013, Point Beach Nuclear Plant Units 1 and 2 – Draft Requests for Additional Information Regarding Relief Request RR-4L1 (TAC Nos. MF1148 and MF1149)

(2) NextEra Energy Point Beach, LLC letter to NRC, dated March 19, 2013, 10 CFR 50.55a Request, Relief Request RR-4L3 Inservice Inspection Impracticality Examination Limitations Due to Configuration Fourth Ten-Year Inservice Inspection Program Interval (ML13079A092)

Attachment A

Drawing 1
Upper Shell to Flange (Typical both Units)

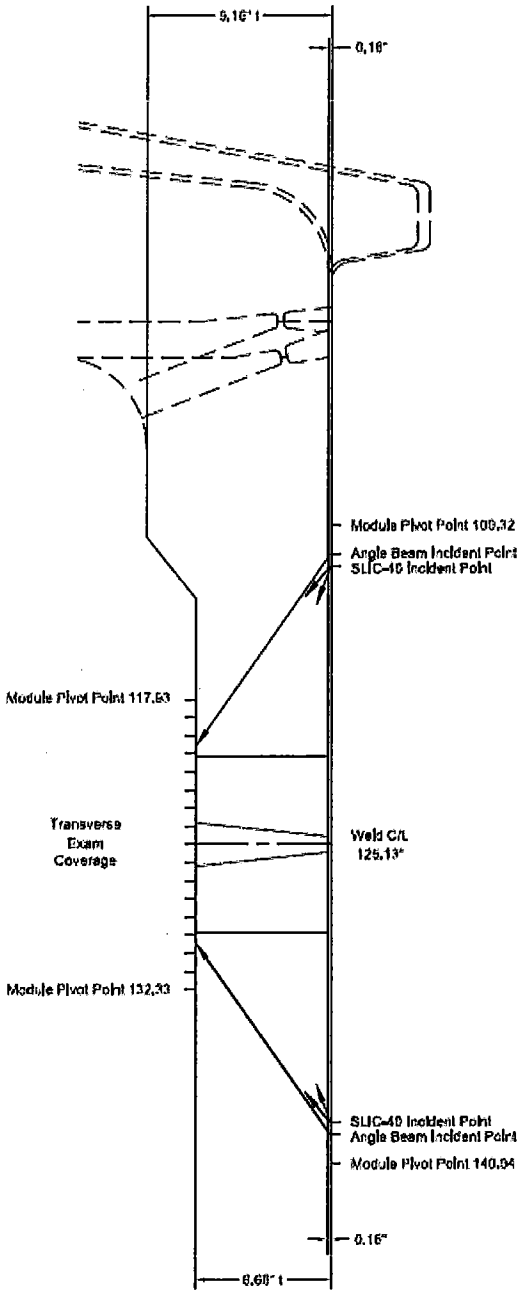


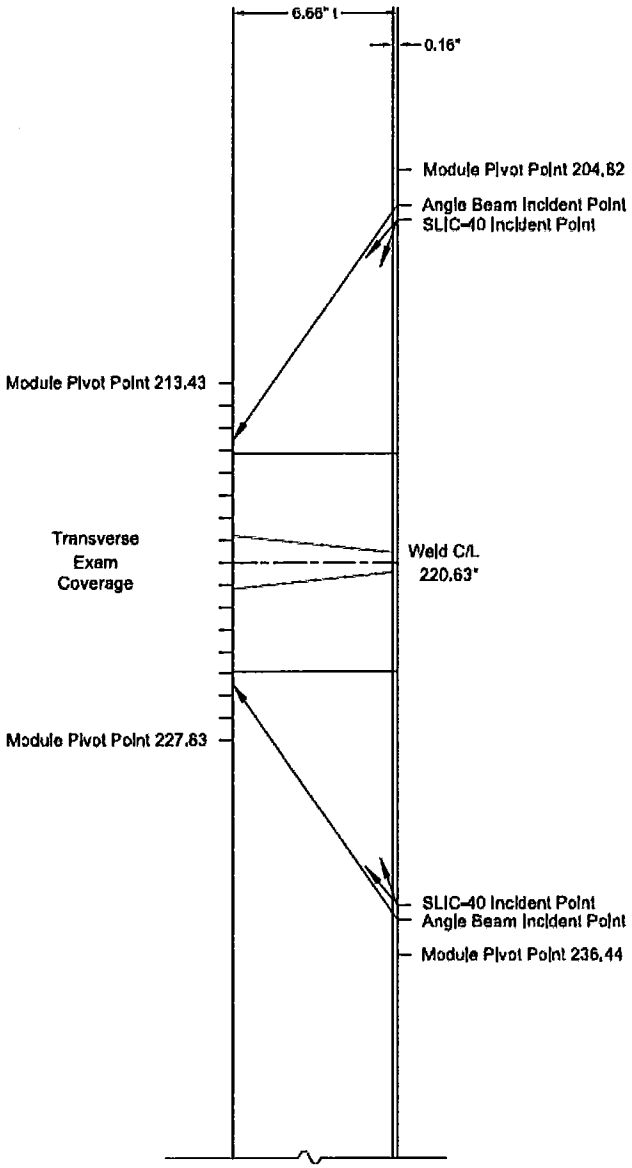
Drawing 2

Upper Shell to Middle Shell

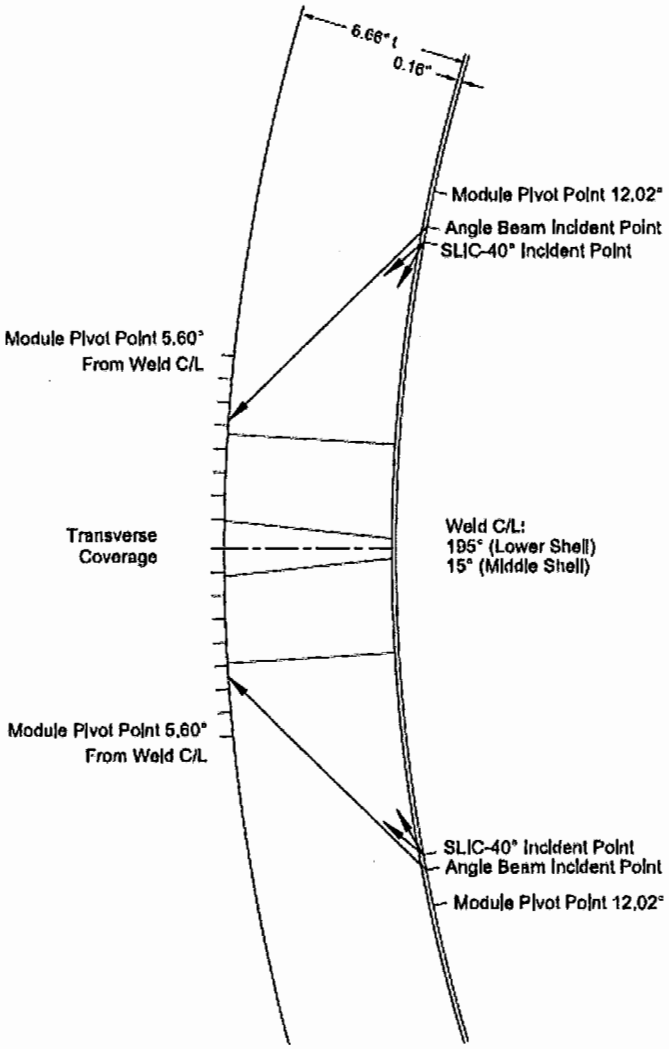
Middle Shell to Lower Shell

(Typical Both Units)



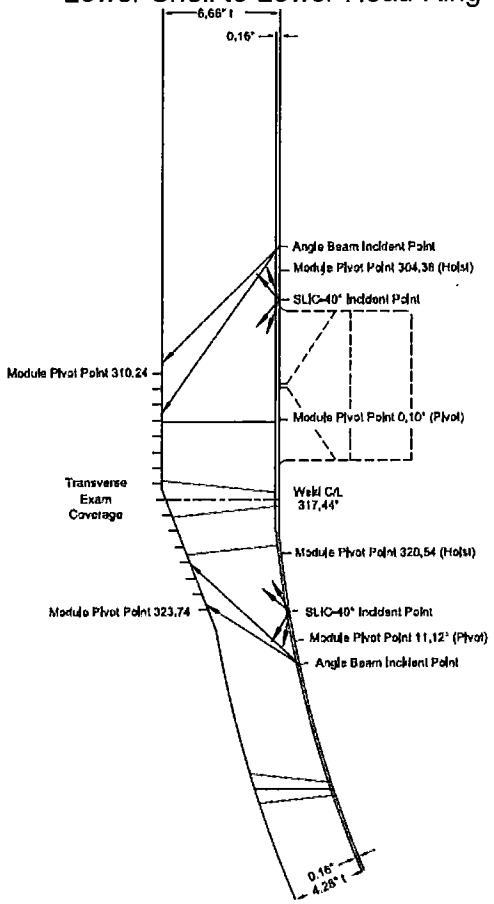



Drawing 3
Lower Shell and Middle Shell Longitudinal Welds
(Unit 1 Only)

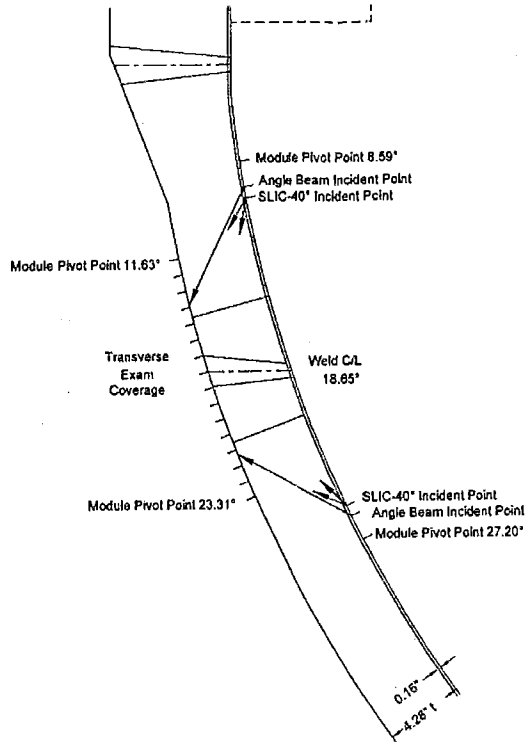


Drawing 4
Typical Both Units

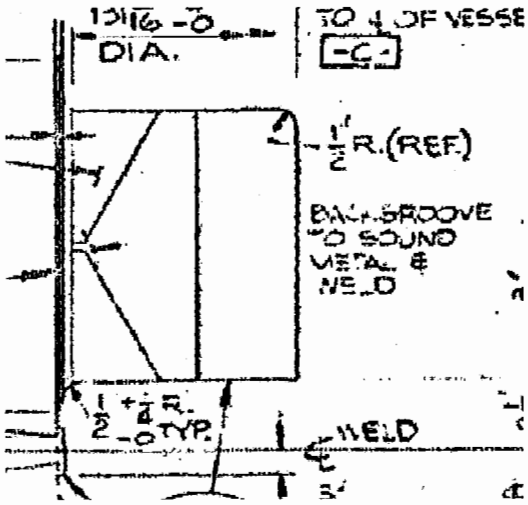
Lower Shell to Lower Head Ring



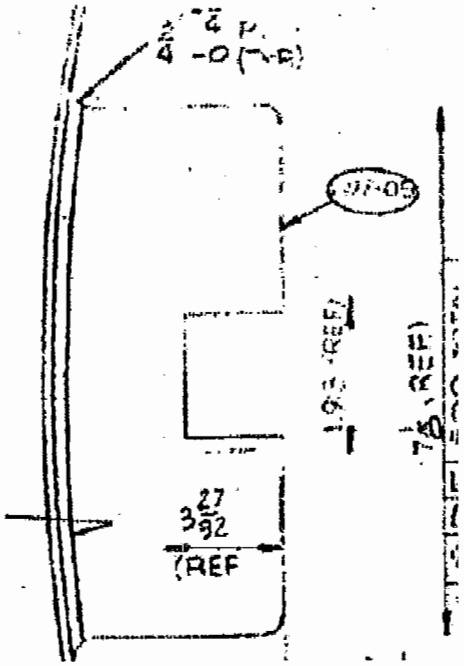

Lower Head Ring to Lower Head



Drawing 5
Typical Both Units
RPV Anti-Rotation Lug Layout

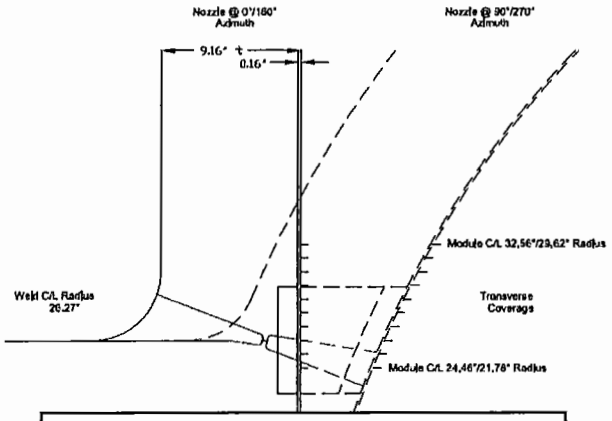



Vertical Size of Lug

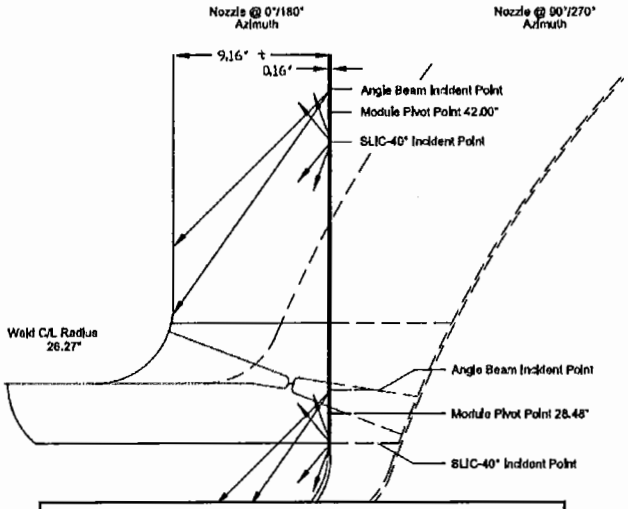



Horizontal (Circumferential) Size of Lug

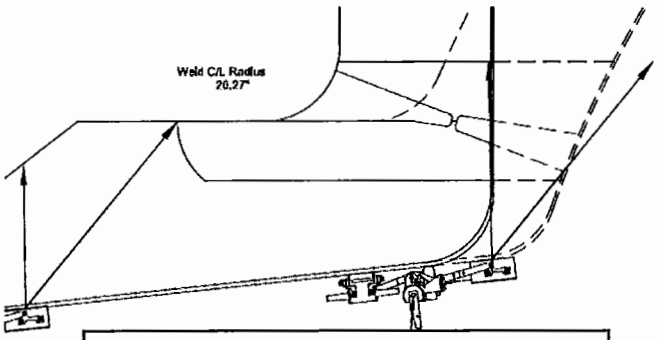
Drawing 6
Inlet Nozzle to Shell Coverage (Typical both Units)




Transverse Coverage From Wall



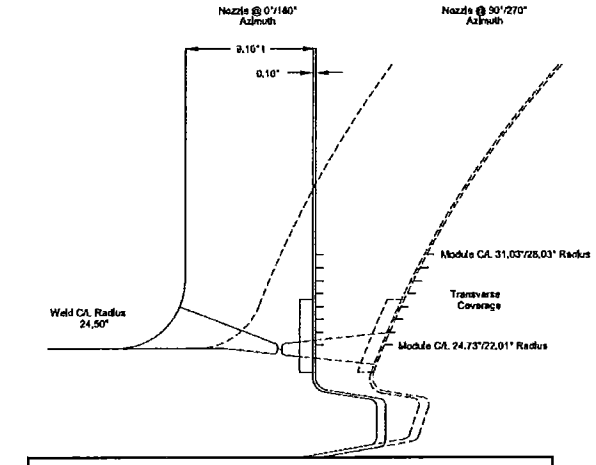

Circumferential Coverage From Wall




Circumferential Coverage From Bore

Drawing 7

Outlet Nozzle to Shell Coverage (Typical Both Units)

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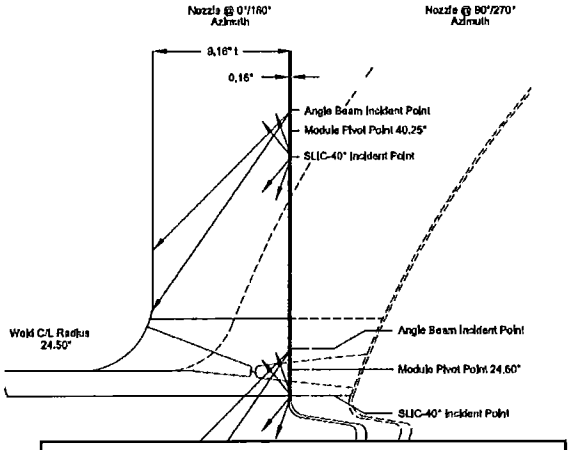


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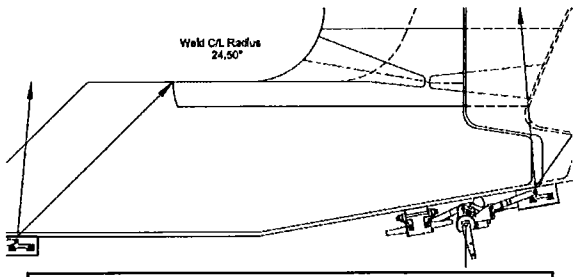
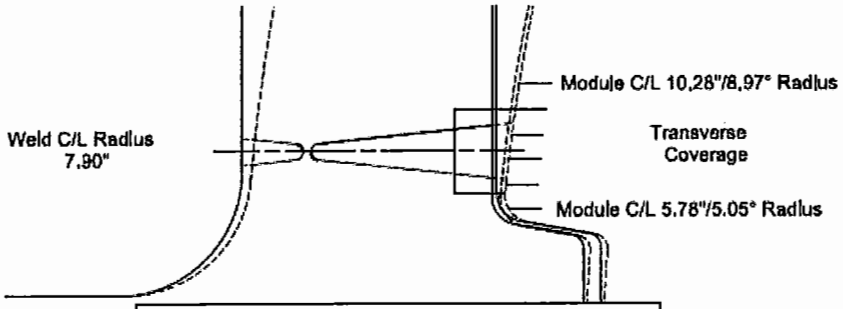



Circumferential Coverage From Bore

Drawing 8
Safety Injection Nozzle to Shell Coverage (Typical Both Units)

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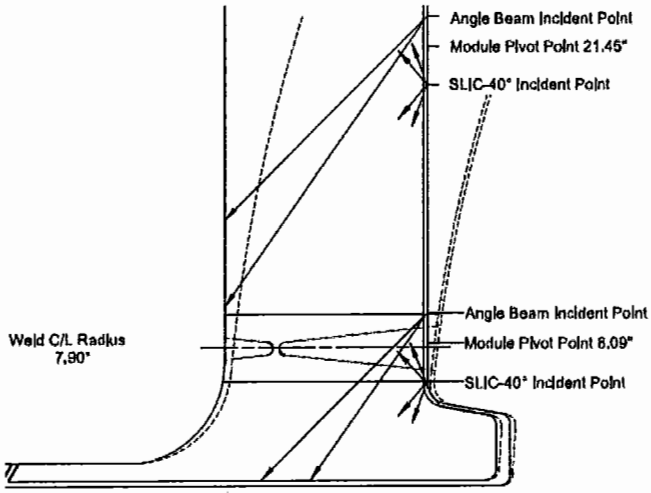


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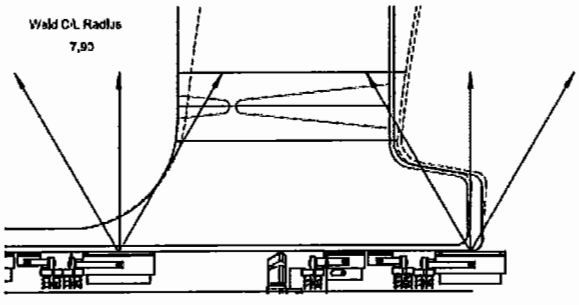
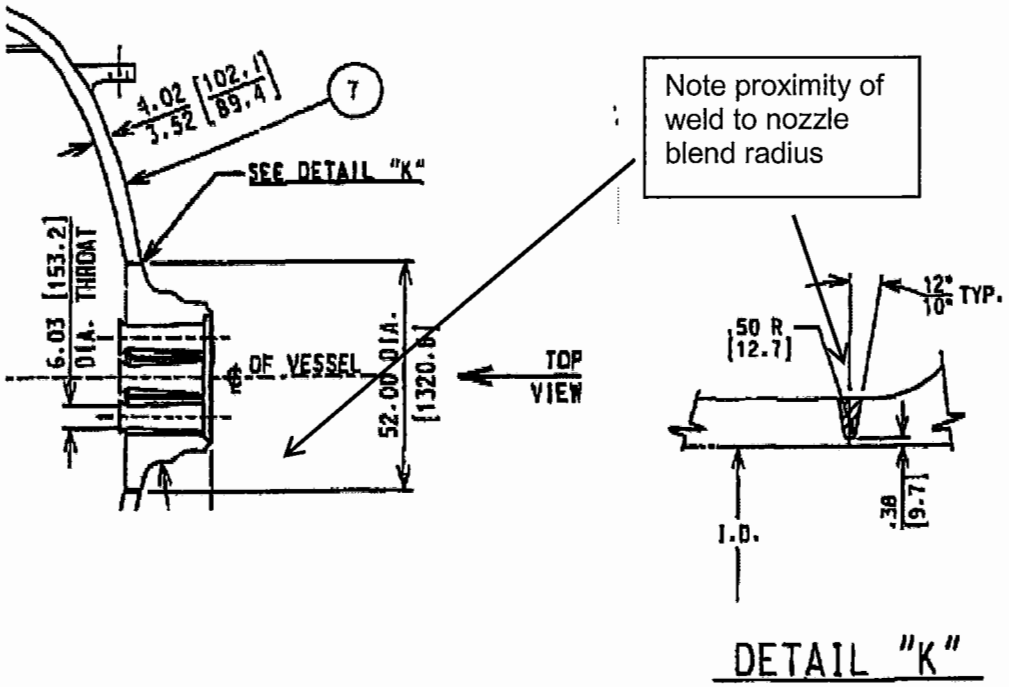
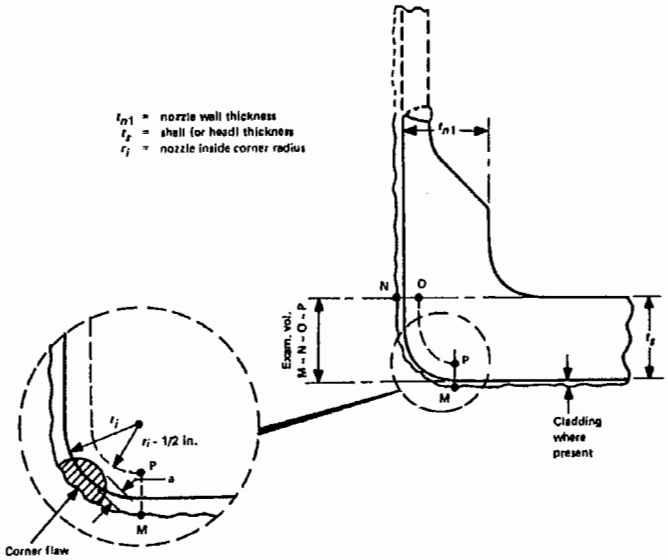



Circumferential Coverage From Bore

Drawing 9
Unit 1 Main Steam Nozzle To Shell Configuration




Drawing 10
Pressurizer Spray and Safety Nozzle Required Examination Region (Typical Both Units)




| EXAMINATION REGION (Note (1)) | EXAMINATION VOLUME (Note (2)) |
|---|---|
| Nozzle inside corner region | M-N-O-P |

NOTES:
(1) Examination regions are identified for the purpose of differentiating the acceptance standards in IWB-3512.
(2) Examination volumes may be determined either by direct measurements on the component or by measurements based on design drawings.

FIG. IWB-2500-7(d) NOZZLE IN SHELL OR HEAD
(Examination Zone in Nozzles Integrally Cast or Formed in Shell or Head)

Attachment B

Table 1
Unit 1 Examination Results

| Weld Number | Description | Examination Results | Disposition |
|---|---|---|---|
| RPV-14-683 | Upper Shell to Flange | No Recordable Indications | N/A |
| RPV-15-683 | Upper to Middle Shell | No Recordable Indications | N/A |
| RPV-16-683 | Middle Shell to Lower Shell | Three (3) Recordable Indications | Sized and found to be allowable in accordance with ASME Section XI, 1998 Edition with 2000 Addenda |
| RPV-17-683 | Lower Shell to Lower Head Ring | Five (5) Recordable Indications | Sized and found to be allowable in accordance with ASME Section XI, 1998 Edition with 2000 Addenda |
| RPV-18-683 | Upper Shell to Flange | No Recordable Indications | N/A |
| RPV-MK-2 | Middle Shell Longitudinal Weld @ 15° | No Recordable Indications | N/A |
| RPV-MK-3 | Middle Shell Longitudinal Weld @ 195° | No Recordable Indications | N/A |
| RPV-02-686-A | Outlet Nozzle to Shell @ 28.5° | No Recordable Indications | N/A |
| RPV-02-686-B | Inlet Nozzle to Shell @ 148.5° | No Recordable Indications | N/A |
| RPV-02-686-C | Outlet Nozzle to Shell @ 208.5° | Three (3) Recordable Indications | Sized and found to be allowable in accordance with ASME Section XI, 1998 Edition with 2000 Addenda |
| RPV-02-686-D | Inlet Nozzle to Shell @ 328.5° | No Recordable Indications | N/A |
| RPV-687-01-A | Safety Injection Nozzle to Shell @ 288.5° | Fourteen (14) recordable indications | Sized and found to be allowable in accordance with ASME Section XI, 1998 Edition with 2000 Addenda |
| RPV-687-01-B | Safety Injection Nozzle to Shell @ 108.5° | Ten (10) recordable indications | Sized and found to be allowable in accordance with ASME Section XI, 1998 Edition with 2000 Addenda |

Table 2
Unit 2 Examination Results

| Weld Number | Description | Examination Results | Disposition |
|---|---|---|---|
| RPV-14-683 | Upper Shell to Flange | No Recordable Indications | N/A |
| RPV-15-683 | Upper to Middle Shell | No Recordable Indications | N/A |
| RPV-16-683 | Middle Shell to Lower Shell | No Recordable Indications | N/A |
| RPV-17-683 | Lower Shell to Lower Head Ring | No Recordable Indications | N/A |
| RPV-18-683 | Upper Shell to Flange | No Recordable Indications | N/A |
| RPV-02-686-A | Outlet Nozzle to Shell @ 28.5° | No Recordable Indications | N/A |
| RPV-02-686-B | Inlet Nozzle to Shell @ 148.5° | No Recordable Indications | N/A |
| RPV-02-686-C | Outlet Nozzle to Shell @ 208.5° | No Recordable Indications | N/A |
| RPV-02-686-D | Inlet Nozzle to Shell @ 328.5° | One Recordable Indication | Sized and found to be allowable in accordance with ASME Section XI, 1998 Edition with 2000 Addenda |
| RPV-687-01-A | Safety Injection Nozzle to Shell @ 288.5° | No Recordable Indications | N/A |
| RPV-687-01-B | Safety Injection Nozzle to Shell @ 108.5° | Sixteen (16) recordable indications | Sized and found to be allowable in accordance with ASME Section XI, 1998 Edition with 2000 Addenda |