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CP-201500780
TXX-15120

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

August 3, 2015

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

SUBJECT: COMANCHE PEAK NUCLEAR POWER PLANT
DOCKET NO. 50-446
RELIEF REQUEST C-2 FOR UNIT 2 SECOND TEN YEAR INSERVICE INSPECTION INTERVAL FROM 10CFR50.55a INSPECTION REQUIREMENTS DUE TO PHYSICAL INTERFERENCES
(1998 EDITION OF ASME CODE, SECTION XI, 2000 ADDENDA
SECOND INTERVAL START DATE: AUGUST 3, 2004
SECOND INTERVAL END DATE: AUGUST 2, 2014)

Dear Sir or Madam:

Pursuant to 10 CFR 50.55a(g)(5)(iii)), Luminant Generation Company, LLC (Luminant Power) is submitting Relief Request C-2 (see attachment) for Comanche Peak Unit 2 for the second ten year inservice inspection interval. Luminant Power has determined that certain inspection requirements of ASME Section XI are impractical due to physical interferences.

The geometry of the containment spray heat exchanger makes the Code required examination coverage requirements impractical. Ultrasonic Testing (UT) of the subject weld was performed during the second interval to the maximum extent practical based on design configuration restrictions. Pressure test VT-2 visual examinations were also performed with no evidence of leakage identified for the subject component. No undue risk to the public health and safety is presented by this request.

This communication contains no new licensing basis commitments regarding Comanche Peak Unit 2.

A047
NRR

Should you have any questions, please contact Mr. Jack Hicks at (254) 897-6725.

Sincerely,

Luminant Generation Company LLC

Rafael Flores

By: Fred W. Madden
Director, External Affairs

Attachment 1– Relief Request C-2 for Unit 2 Second Ten Year ISI Interval from 10CFR50.55a Inspection Requirements due to Physical Interferences

Attachment 2 – Examination Data Sheets and Sketch (2 pages)

c - Marc L. Dapas, Region IV
Balwant K. Singal, NRR
Resident Inspectors, Comanche Peak
Rob D. Troutt, TDLR
Jack Ballard, ANII, Comanche Peak

COMANCHE PEAK NUCLEAR POWER PLANT UNIT 2
Relief Request Number C-2 for Unit 2 Second 10 Year ISI Interval
From 10CFR50.551 Inspection Requirements due to Physical Interferences
(Second 10-Year ISI Interval Start Date: August 3, 2004; End Date: August 2, 2014)

1. **ASME Code Component Affected:**

Class 2 Containment Spray Heat Exchanger (CP1 -CTAHCS-02) Shell Circumferential Weld:

Code Cat/Item No.	Description	Weld No.
C-A / C1.16	CT HX 1-02 Shell to Flange Weld	TCX-2-1180-1-2

2. **Applicable Code Edition and Addenda:**

The applicable ASME Boiler and Pressure Vessel Code (hereafter referred to as the "Code") edition and addenda is ASME Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," 1998 Edition through 2000 Addenda.

3. **Applicable Code Requirement:**

ASME Section XI, Figure IWC-2500-1 (a) 1998 Edition through 2000 Addenda, requires a minimum volumetric examination of the weld volume extending into the base metal on the vessel and flange sides for the circumferential weld (Code Item C 1.10).

The Comanche Peak Nuclear Power Plant (CPNPP) second ten-year interval Inspection Program Plan also implements Code Case N-460, which is endorsed by the NRC in revision 17 of Regulatory Guide 1.147, "Inservice Inspection Code Case Acceptability ASME Section XI, Division 1." Code Case N-460 states, in part, when the entire examination volume or area cannot be examined due to interference by another component or part geometry, a reduction in examination coverage on any Class 1 or Class 2 weld may be accepted, provided the reduction coverage for that weld is less than 10 percent.

NRC Information Notice (IN) 98-42, "Implementation of 10 CFR 50.55a (g) Inservice Inspection Requirements," termed a reduction in coverage of less than 10 percent to be "essentially 100 percent." IN 98-42 states, in part, "The NRC has adopted and further refined the definition of "essentially 100 percent" to mean "greater than 90 percent" ... has been applied to all examinations of welds or other areas required by ASME Section XI."

4. **Impracticality of Compliance:**

The examination of the subject component weld is limited by the configuration of the flange design and the proximity of two welded support plates on the shell side of the heat exchanger. As shown on the Attachment 2, the proximity of the welded supports and the flange configuration limit the parallel scans (circumferential). Perpendicular (axial) scans are limited mainly by the welded supports on the shell side of the weld. This yields a composite coverage of 86% of the required examination volume (see Attachment 2). The examinations were conducted in accordance with procedure TX-ISI-214, "Ultrasonic Examination Procedure for Welds in Piping Systems and Vessels."

COMANCHE PEAK NUCLEAR POWER PLANT UNIT 2
Relief Request Number C-2 for Unit 2 Second 10 Year ISI Interval
From 10CFR50.551 Inspection Requirements due to Physical Interferences
(Second 10-Year ISI Interval Start Date: August 3, 2004; End Date: August 2, 2014)

5. **Burden caused by Compliance:**

The design configuration restrictions of the subject components make the Code required examination coverage requirements for the weld volume impractical. Plant modifications or replacement of components designed to allow for complete coverage would be needed to meet the Code requirements. This would cause considerable burden to CPNPP.

6. **Proposed Alternative and Basis for Use:**

Proposed Alternative:

The following alternatives are proposed in lieu of the required examination coverage of essentially 100 percent:

1. Ultrasonic testing (UT) of the subject component weld was performed to the maximum extent practical during the second ten-year interval. No recordable indications were noted.

2. Pressure test VT-2 visual examinations were performed, as required by Code Category C-H, during the second ten-year interval. No evidence of leakage was identified for this component.

Basis for use:

The basis for use of this alternative is that it provides the best examination coverage practical within the limitations of the current configuration. Based on the percentage of the examination volume completed and the lack of any indications identified, there is a high level of confidence in the continued structural integrity of the weld. CPNPP believes that there is no undue risk to the public health and safety presented by this request.

7. **Duration of Proposed Alternative:**

The second ten-year ISI interval for Unit 2 began on August 3, 2004 and ended on August 2, 2014.

8. **Precedents:**

Relief Request C-9 was submitted in letter TXX-98170 from CPNPP to USNRC in July 22, 1998 for the first ten-year interval for Unit 1.

Relief Request C-7 was submitted in letter TXX-10092 from CPNPP to USNRC in December 15, 2010 for the second ten-year interval for Unit 1.

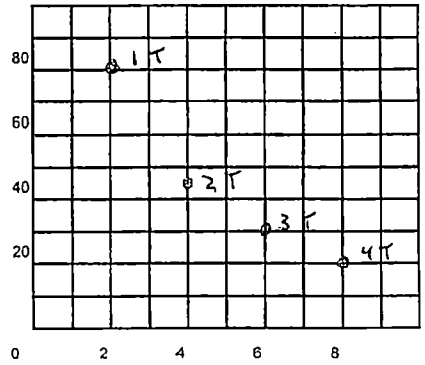
PDI

Calibration Data Sheet

Plant / Unit: COMANCHE PEAK UNIT 2
Company: WESDYNE
Comp / System: HX/CONTAINMENT SPR
Procedure No.: TX-ISI-214
Rev / Chng. No.: 4 / N/A
Cal. Block No.: TBX-31 / PDI-03
Cal. Block Temp: 78° Comp. Temp: 80°
Therm S/N: TU-2361
Size: 16" Sch. N/A .625" "T"
☐ Ferritic ☒ Austenitic

Data Sheet #: 11 UT-06
Page: 1 of 2

Cal. Checks	Time
Initial Calib.	1300
Initial Calib. Date	9/18/09
Intermediate	N/A
Intermediate	N/A
Final Calib.	1640
Final Calib. Date	9/18/09



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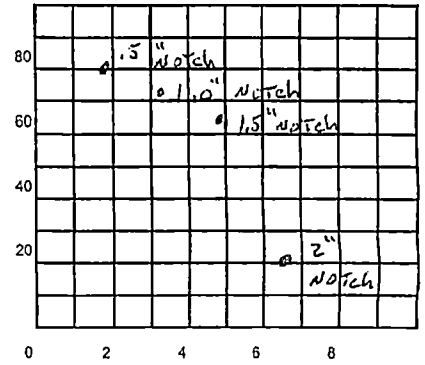

1 CRT Div. = .4424"

Cal. Direction: Axial Circ. Both X **Couplant**

Scan Area: ⊥ to Weld
|| to Weld

Type: ULTRA GEL II
Batch: 06225

Examination Area / Weld		Access	Recordable Indications Yes	No	Geom	Exam Sens.
TCX-2-1180	1-2	2-SIDED		X		34.5 dB
TCX-2-1180	1-3	2-SIDED		X		34.5 dB
TCX-2-1180	1-4	2-SIDED		X		34.5 dB

Remarks / Reason for Incomplete Scan(s) PWP 10/19/09

86% EXAMINATION VOLUME ACHIEVED (Weld 1-2)

WELDS 1-3 & 1-4 100% EXAMINATION VOLUME ACHIEVED

Search Unit #1
Manufacturer: KBA
Serial No.: 00YHTT Freq.: 2.25 MHz
Size: .25" Shape: ROUND
Exam Angle: 45° Model: COMP G
Measured Angle: 45°
Wedge Style: MSWQC

Search Unit Cable
Type: RG-174
Length: 12' No. of Connectors: 0

Instrument Settings
Make / Model: KBA / USN 60 SW
Serial No.: SAP 105211
Dis.Delay: 0.000 µs Range: 4.424"
Prb.Delay: 4.8550 µs Pwidth: 220
M'tl Cal/Vel: .1258 µs Pulser: SQUARE
Damping: 500 Ω Reject: 0%
Rep. Rate: AUTOHIGH Freq.: 2.25 MHz
Filter: FIXED Mode: P/E
Voltage: 450 Rectify: FULLWAVE
Reference Sensitivity (Sens.)
Axial: 24.5 dB Circ: 24.5 dB
SDH Sensitivity:
Further Evaluation Required? ☐ Yes ☒ No

Search Unit #2
Manufacturer: KBA
Serial No.: 00YHTT Freq.: 2.25 MHz
Size: .25" Shape: ROUND
Exam Angle: 45° Model: COMP G
Measured Angle: 45°
Wedge Style: MSWQC

Search Unit Cable
Type: RG-174
Length: 12' No. of Connectors: 0

Instrument Settings
Make / Model: KBA / USN 60 SW
Serial No.: SAP 105211
Dis.Delay: 0.000 µs Range: 4.424"
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Voltage: 450 Rectify: FULLWAVE
Reference Sensitivity (Sens.)
Axial: 24.5 dB Circ: 24.5 dB
SDH Sensitivity:

Examiner: CAREY LASOYA Level II Date 9/18/09
Examiner: Carey L. Lasoya N/A Level N/A Date N/A

Reviewer / Date [signature] 9/25/09

Reviewer / Date [signature] 10/19/09 HSBCT ANII [signature] 10-20-09

SBS 9/25/09 11-UT-06

Attachment 2 to TXX-15120

WESTINGHOUSE NUCLEAR SERVICES DIVISION

REPORT NO. 02 OF ~~UT-99-002~~

PAGE 2 OF 2

LIMITATION TO EXAMINATION

PLANT	Comanche Peak	UNIT	2	SKETCH	TCX-2-1180 Rev. 2
SYST/COMP	CONTAINMENT SPRAY			PROCEDURE	TX-ISI-214 Rev. 2 FC N/A
EXAMINER	Delbusso, James	LEVEL	III	DATE	3/14/99
EXAMINER	N/A	LEVEL	N/A	DATE	

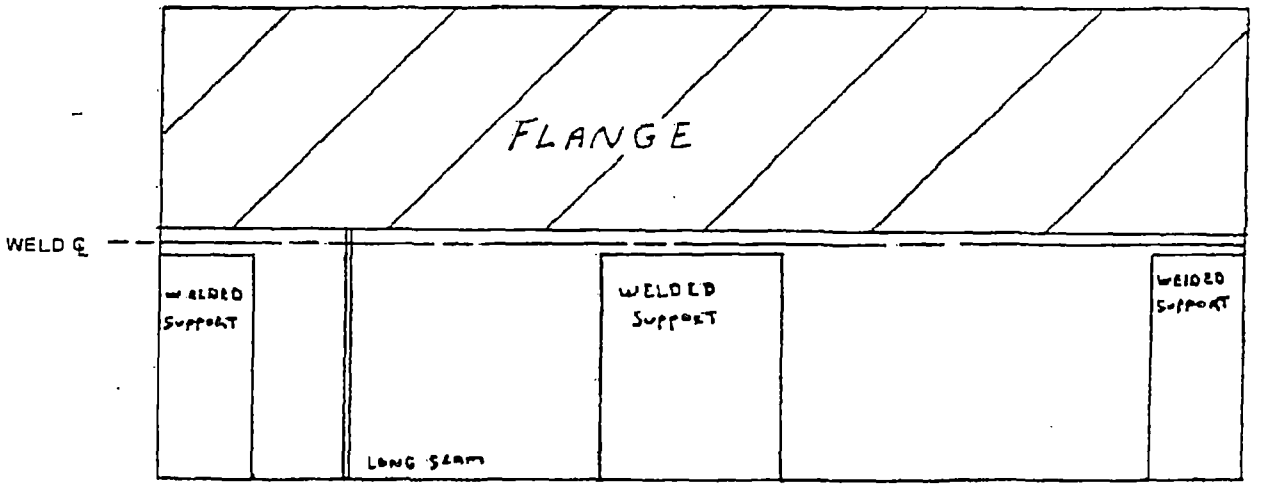
COMPONENT ID TCX-2-1180-1-2

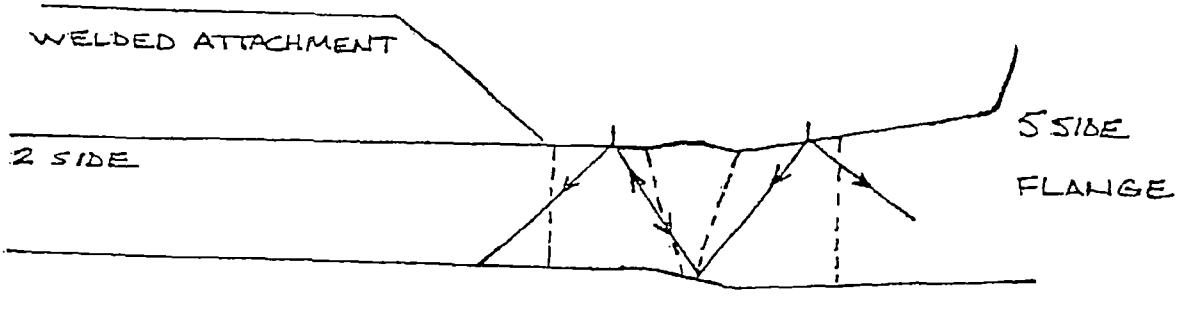
RELATED TO ○ MT ○ PT ◉ UT ○ VT

PROVIDE SUFFICIENT INFORMATION TO DESCRIBE SIZE, LOCATION AND TYPE OF LIMITATION.

COMMENTS/SKETCH/DETAILS

14% NOT EXAMINED DUE TO WELDED SUPPORTS.





TU ELECTRIC REVIEW / DATE	TU ELECTRIC LEVEL III REVIEW / DATE	ANII REVIEW / DATE
DeBonis, John 4/12/99	Ragan, James 4/19/99	Hair, Joe C. 4/12/99