Luminant

Rafael Flores
Senior Vice President
& Chief Nuclear Officer
Rafael.Flores@Luminant.com

Luminant Power
P O Box 1002
6322 North FM 56
Glen Rose, TX 76043

T 254 897 5590
C 817 559 0403
F 254 897 6652

CP-201500778
TXX-15118

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 B-11 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 B-11 (see attachments) 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 reactor coolant piping to the valve makes the Code required examination coverage requirements impractical. Ultrasonic Testing (UT) of the subject welds 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
Fred W. Madden
Director, External Affairs

Attachment – Relief Request B-11 for Unit 2 Second Ten Year ISI Interval from 10CFR50.55a Inspection Requirements due to Physical Interferences

Attachment 2 – Examination Data Sheets and Sketch (3 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 B-11 for Unit 2 Second 10 Year ISI Interval
From 10CFR50.55a 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 1 Risk-Informed Inservice Inspection (RI-ISI) piping weld as shown:

RI-ISI Piping Weld (formerly Code Category B-1)

Code Cat / Item No. (Note)	Description	Weld No.
R-A, R1.11	3" pipe to valve	TCX-1-4504-11

Note: As the methodology in EPRI TR-112657 Rev. B-A does not provide item numbers; the format in ASME Code Case N-578-1 is used for the assignment of this number.

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, "Rule for Inservice Inspection of Nuclear Power Plant Components," 1998 Edition, through 2000 Addenda. In addition, as required by 10CFR50.55a, ASME Section XI, 1995 Edition, 1996 Addenda is used for Appendix VIII, Performance Demonstration for Ultrasonic Examination System.

3. **Applicable Code Requirement:**

ASME Section XI, Figure IWB - 2500-8(c) 1998 Edition through 2000 Addenda requires volumetric examination of a minimum volume of the inner 1/3 t (one third of the thickness) extending into the piping base metal for a distance of 1/4" past the edge of the weld crown for NPS 4" and larger.

In a letter (NRR 10580) dated October 5, 2006, from the NRC to Comanche Peak Steam Electric Station, Unit No. 2, the NRC approved in relief request A-1 the extension of risk-informed inspection (RI-ISI) program for ASME Code Class 1 and 2 piping for the second interval. The methodology in EPRI TR-112657 Rev. B-A is used as the examination method as well as the selection of welds to be examined. The RI-ISI program requires volumetric examination of the subject weld and extends the Code required volume of the inner 1/3 t to 1/2" past the edge of the weld crown if no counterbore is present or a distance of 1/4" on either side of the weld counterbore.

The Comanche Peak Nuclear Power Plant (CPNPP) second ten-year interval Inservice 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 10CFR50.55a(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

COMANCHE PEAK NUCLEAR POWER PLANT UNIT 2
Relief Request Number B-11 for Unit 2 Second 10 Year ISI Interval
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"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 geometry of the subject component limits the examination to one side, due to the valve welded to the pipe. Volumetric examinations were performed with shear wave search units with nominal angles of 45, 60 and 70 degrees. Contour could not be taken at 0 degrees due to clamp obstruction. 70 degrees was used because of single size access. Only 50% examination coverage was achieved due to valve/pipe configuration (see Attachment 2). The examinations were conducted in accordance with procedure TX-ISI-302, "Ultrasonic Examination of Austenitic Piping Welds."

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.

2. Pressure test VT-2 visual examinations were performed, as required by Code Category B-P, 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:**

None

WESDYNE INTERNATIONAL
A Westinghouse Electric Company

Calibration Data Sheet

Plant / Unit	COMANCHE PEAK UNIT 2
Company	WesDyne International
Comp / System	RC PRESSURIZER RELIEF
Procedure No.	TX-ISI-302
Rev / Chng. No.	3 / N/A
Cal. Block No.	PDI - 03
Cal. Block Temp.	86 °F
Thermometer S/N:	TU - 2363
Size 3" Sch.	160 / .438" "T"

Data Sheet # 12 UT-037A
Page 1 of 3

[ ] Ferritic [X] Austenitic
Each Major CRT Div. = .1240" / .1650"
Cal. Direction: [X] Axial [ ] Circ. [ ] Both
Scan Area: | to Weld [X]
= to Weld [X]
Calibration Reference Check:
Rompas Block: # 104884 Ref. Reflector: SDH

Cal. Checks	Time
Initial Calib.	1358
Initial Calib. Date	04/14/11
Intermediate	1545
Intermediate	1555
Final Calib.	1646
Final Calib. Date	04/14/11

Couplant
Type: ULTRAGEL II
Batch: 06225

Examination Area / Weld	Access	Recordable Indications Yes	No	Geom	Exam Sens.
TCX-1-4504 11	DWNSTR		X		45°-34 dB 60°-36 dB

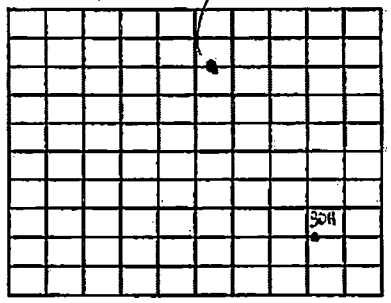
Remarks / Reason for Incomplete Scan(s) COMPONENT TEMP: 82 °F
60° EXAM PERFORMED TO MAXIMIZE COVERAGE OF THE REQUIRED VOLUME
50% EXAMINATION COVERAGE ACHIEVED DUE TO VALVE/PIPE CONFIGURATION.

Examiners: DANIEL SANCHEZ Level II Date 04/14/11
N/A Level N/A Date N/A

Reviewers: Further Evaluation Required? [ ] Yes [X] No

REVIEWER / DATE 4-16-11

.5" NOTCH

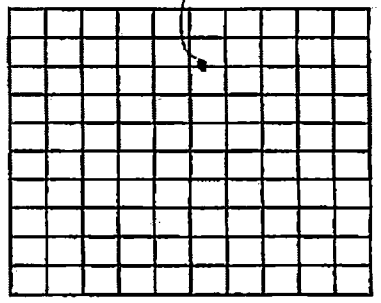


Search Unit #1
Manufacture: KRAUTKRAMER
Serial No.: SB0599
No. of Elements: 1
Size: .25 " Shape: ROUND
Freq. 2.25 MHz Style: COMP G
Exam Angle: 45 ° Mode: SHEAR
Measured Angle: 45 °
Wedge Style: NON INTEGRAL

Search Unit Cable
Type: RG 174
Length: 6' No. of Con.: 0

Instrument Settings
Make / Model: KRAUTKRAMER USN 60SW
Serial No.: 105205
Probe Delay: 4.6112 Range: 1.240
M'tl Cal / Vel: .1235 Pulser: SQUARE
Damping: 500 Ω Reject: 0%
PRF: AUTOHIGH Freq: 2.25 MHz
Filter: FIXED Mode: P/E
Rectify: FULLWAVE Voltage: 450
Pulse Width: 220ns
Reference Sensitivity (Sens.)
Axial: 22 dB Circ: N/A
SDH Sensitivity: 22 dB
CRT Div./SDH 8.2

.5" NOTCH



Search Unit #2
Manufacture: KRAUTKRAMER
Serial No.: SB0756
No. of Elements: 1
Size: .25 " Shape ROUND
Freq. 2.25 MHz Style: COMP G
Exam Angle: 60 ° Mode: SHEAR
Measured Angle: 58 °
Wedge Style: NON INTEGRAL

Search Unit Cable
Type: RG 174
Length: 6' No. of Con.: 0

Instrument Settings
Make / Model: KRAUTKRAMER USN 60SW
Serial No.: 105205
Probe Delay: 5.3097 Range: 1.650
M'tl Cal / Vel: .1235 Pulser: SQUARE
Damping: 500 Ω Reject: 0%
PRF: AUTOHIGH Freq: 2.25 MHz
Filter: FIXED Mode: P/E
Rectify: FULLWAVE Voltage: 450
Pulse Width: 220ns
Reference Sensitivity (Sens.)
Axial: 36 dB Circ: N/A
SDH Sensitivity: 36 dB
CRT Div./SDH 8.9

REVIEWER / DATE Paul M Pandeya 4/20/11

Attachment 2 to TXX-15118

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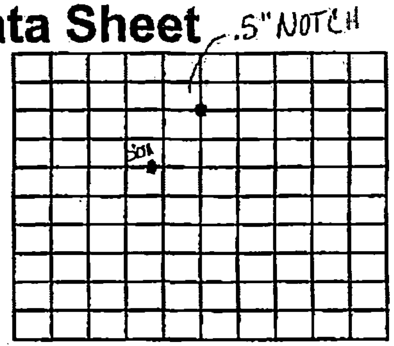
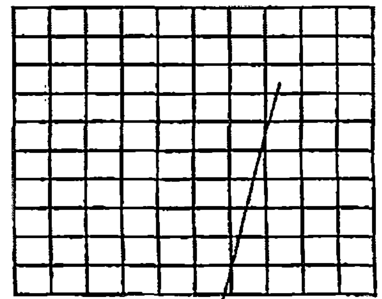
Calibration Data Sheet





Plant / Unit	COMANCHE PEAK UNIT 2	Data Sheet #	12 UT-037B
Company	WesDyne International	Page	2 of 3
Comp / System	RC PRESSURIZER RELIEF		
Procedure No.	TX-ISI-302		
Rev / Chng. No.	3 / N/A		
Cal. Block No.	PDI - 03		
Cal. Block Temp.	86 °F		
Thermometer S/N:	TU - 2363		
Size	3" Sch. 160 / .438" "T"		

☐ Ferritic ☒ Austenitic

Each Major CRT Div. = .2640"

Cal. Direction: ☒ Axial ☐ Circ. ☐ Both

Scan Area: ⊥ to Weld ☒ ‖ to Weld ☐

Calibration Reference Check:

Rompas Block: # 104884 Ref. Reflector: SDH

Cal. Checks	Time
Initial Calib.	1405
Initial Calib. Date	04/14/11
Intermediate	1604
Intermediate	N/A
Final Calib.	1647
Final Calib. Date	04/14/11

Couplant

Type: ULTRAGEL II
Batch: 06225

Examination Area / Weld	Access	Recordable Indications			Exam Sens.
		Yes	No	Geom	
TCX-1-4504 11	DWNSTR		X		50 dB

Remarks / Reason for Incomplete Scan(s) COMPONENT TEMP: 82 °F
70° DUE TO SINGLE SIDE ACCESS.
50% EXAMINATION COVERAGE ACHIEVED DUE TO VALVE/PIPE CONFIGURATION

Examiners: DANIEL SANCHEZ [signature] Level II Date 04/14/11
N/A Level N/A Date N/A

Reviewers: Further Evaluation Required? ☐ Yes ☒ No

REVIEWER / DATE [signature] 4-16-11

Search Unit #1		Search Unit #2	
Manufacture:	KRAUTKRAMER	Manufacture:	
Serial No.:	00YHV0	Serial No.:	
No. of Elements:	1	No. of Elements:	
Size:	.25 " Shape: ROUND	Size:	Shape
Freq.	2.25 MHz Style: COMP G	Freq.	Style:
Exam Angle:	70 ° Mode: SHEAR	Exam Angle:	Mode:
Measured Angle:	70 °	Measured Angle:	
Wedge Style:	NON INTEGRAL	Wedge Style:	

Search Unit Cable		Search Unit Cable	
Type:	RG 174	Type:	N/A
Length:	6' No. of Con.: 0	Length:	No. of Con.:

Instrument Settings		Instrument Settings	
Make / Model:	KRAUTKRAMER USN 60SW	Make / Model:	
Serial No.:	105205	Serial No.:	
Probe Delay:	6.3847 Range: 2.640	Probe Delay:	Range:
M'tl Cal / Vel:	.1235 Pulser: SQUARE	M'tl Cal / Vel:	Pulser:
Damping:	500 Ω Reject: 0%	Damping:	Ω Reject:
PRF:	AUTOHIGH Freq: 2.25 MHz	PRF:	Freq:
Filter:	FIXED Mode: P/E	Filter:	Mode:
Rectify:	FULLWAVE Voltage: 450	Rectify:	Voltage:
Pulse Width:	220ns	Pulse Width:	
Reference Sensitivity (Sens.)		Reference Sensitivity (Sens.)	
Axial:	50 dB Circ: N/A	Axial:	Circ:
SDH Sensitivity:	42.7 dB	SDH Sensitivity:	
CRT Div./SDH	3.8	CRT Div./SDH	

REVIEWER / DATE [signature] 4/20/11

WESDYNE INTERNATIONAL
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page 3 of 3

WALL THICKNESS PROFILE SHEET

SYSTEM RC PRESSURIZER RELIEF WELD NO 11

UT EXAMINATION DATA SHEET NO. 12 UT-037

Position	0°	90°	180°	270°
1		N/A		
2		N/A		
3		N/A		
4		N/A		
5		N/A		
6		0.453		
7		0.444		
8		0.443		
9		0.447		

TOE
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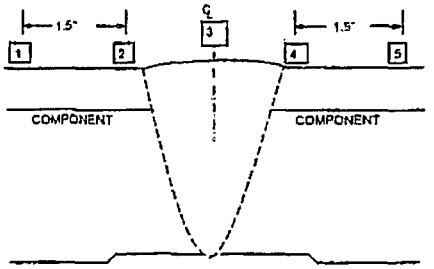


CROWN HEIGHT: .05"

CROWN WIDTH .50"

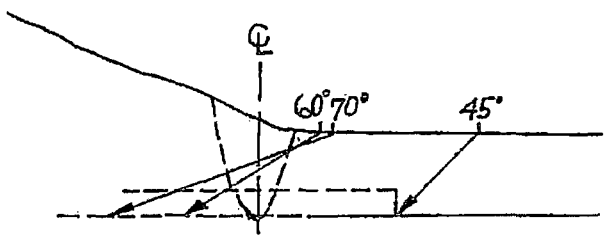
LONGSEAM: N/A

DIAMETER 3"

WELD LENGTH 9 7/8"

PROFILE AREA

VALVE PIPE



REMARK. CONTOUR CAN NOT BE TAKEN AT 0° DUE TO CLAMP OBSTRUCTION.

EXAMINER : JERNEJ JERMAN LEVEL II DATE 4/14/11

EXAMINER : DANIEL SANCHEZ LEVEL II DATE 04/14/11