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Subject: Re: Code Relief - B-2
Creation Date: 7/7/03 7:18AM
From: <obaidb@txu.com>

Created By: obaidb@txu.com

Recipients

nrc.gov
owf4_po.OWFN_DO
DHJ (David Jaffe)

Post Office
owf4_po.OWFN_DO

Route
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Files	Size	Date & Time
MESSAGE	949	07/07/03 07:18AM
B-2 Rev 1.doc	2886656	
B-2 Rev 1.pdf	936130	
Mime.822	5234264	

Options

Expiration Date: None
Priority: Standard
Reply Requested: No
Return Notification: None

Concealed Subject: No
Security: Standard

From: <obaidb@txu.com>
To: "David Jaffe" <DHJ@nrc.gov>
Date: 7/7/03 7:21AM
Subject: Re: Code Relief - B-2

Ok here it is ...please send me an e-mail that you got it..... Thanks It is not formatted I was going to let the Reg Affairs folks to that.

(See attached file: B-2 Rev 1.doc)(See attached file: B-2 Rev 1.pdf)

Obaid Bhatti
obaidb@txu.com
(254) 897-5839

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**TXU GENERATION COMPANY LP
COMANCHE PEAK STEAM ELECTRIC STATION UNIT 1
FIRST TEN-YEAR INTERVAL ISI RELIEF REQUEST NO. B-2**

**PROPOSED ALTERNATIVE IN ACCORDANCE WITH 10 CFR 50.55a(g)(5)(iii)
-INSERVICE INSPECTION IMPRACTICALITY-**

I. System/Component for Which Relief is Requested:

Relief is requested for the following Class 1 piping welds in the Reactor Coolant System (Pressurizer Relief), Category B-J, Item B9.21, 1986 Edition with no Addenda of ASME Section XI:

Weld No. TBX-1-4502-12

Weld No. TBX-1-4502-28

II. Code Requirement from Which Relief is Requested:

1986 Edition with no Addenda of ASME Section XI for Category B-J, Item B9.21 requires that these category BJ welds which are less than 4 NPS be examined as depicted in Figure IWB-2500-8, via the surface examination method.

However, on February 15, 2001, TXU Energy had requested and was granted an approval for application of an alternative risk-informed inservice inspection (RI-ISI) program for ASME B&PVC Class 1 and 2 piping (refer to TAC NOS. MB1201 and MB1202). Via the aforementioned request TXU Energy informed the NRC staff that for Category B-J welds it will perform volumetric examination (UT) rather than the Code required surface examination.

III. Impracticality of Compliance:

The Final Rule (67FR60520) requires that if access is available, the weld shall be scanned in each of the four directions (parallel and perpendicular to the weld) where required. Coverage credit may be taken for single side exams for ferritic piping. However, for austenitic piping, a procedure must be qualified with flaws on the inaccessible side of the weld. There are currently no qualified single side examination procedures that demonstrate equivalency to two-sided examination procedures on austenitic piping welds.

Current technology is not capable of reliably detecting or sizing flaws on the far side of an austenitic weld for configurations common to US nuclear applications.

The Performance Demonstrative Initiative (PDI) Program conforms to the Final Rule regarding single side access for piping. PDI Performance Demonstration Qualification Summary (PDQS) certificates for austenitic piping list the limitation that single side examination is performed on a best effort basis. The best effort qualification is provided in place of a complete single side qualification to demonstrate that the examiners qualification and the subsequent weld examination is based on application of the best available technology.

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When the examination area is limited to one side of an austenitic weld, examination coverage does not comply with 10 CFR 50.55a(b)(2)(xv)(A) and proficiency demonstrations do not comply with 10 CFR 50.55a(b)(2)(xv)(B) and full coverage credit may not be claimed.

Pursuant to the requirements of 10 CFR 50.55a(g)(5)(iii), relief is requested from performing the required examination as required by 10 CFR 50.55a(b)(2)(xv)(A).

IV. Burden Caused by Compliance:

Imposition of the Code Requirements would require significant system redesign, modifications, and an increase in personnel radiation exposure.

V. Proposed Alternative and Basis for Use:

The best available techniques, as qualified through the Performance Demonstrative Initiative for Supplement 2 (67FR60520) with demonstrated best effort for single side examination, were used from the accessible side of the weld.

These two welds were the only welds identified in the line segments per the RI-ISI Program which met the considerations for system design, the risk analysis, previous examinations, and NDE accessibility.

Therefore, TXU Energy believes that the examination performed provides adequate confidence that there are no matters of concern regarding the structural integrity of the subject welds. No changes are expected in the overall level of plant safety. TXU Energy will perform a surface examination along with the volumetric examination as specified by the ASME Section XI for these welds during the next upcoming outage (or within this second interval for CPSES Unit 1).

Granting of this relief request will not have an impact on plant quality or safety and will not adversely impact the health and safety of the public.

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VI. Duration of Proposed Alternative:

This relief is requested for the Comanche Peak Steam Electric Station Unit 1 second interval.

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Calibration Data Sheet

PDI

Plant/Unit: COMANCHE PEAK UNIT 1 Data Sheet # 19UT-39
Company: WEDDYNE Page 1 of 3
Compu/System: PRESSURIZER RELIEF
Procedure No.: TX-18-302
Revi/Chng. No.: 1 / N/A
Cal. Brock No.: PDI-03
Cal. Brock Temp.: 74° Comp. Temp.: 82°
Therm. SN: TU-2309
Size: 3.0" Sch. 160 / .435" T
 Ferritic Austenitic
Each Major CRT Dv. # 2007 / 1.50"
Cal. Direction: Aust. Circ. Both X
Scan Area: I to Weld X II to Weld X

Cal. Checks	Time
Initial Calib.	0950
Initial Calib. Date	10/26/02
Intermediate	N/A
Final Calib.	1140
Final Calib. Date	10/09/02

Compliant: ULTRAGER R
Type: 01225

Search Unit #1

Search Unit #2

Manufacturer: KBA
Serial No.: 28050 / 2.25 MHz
Size: .25" Shape: ROUND
Exam Angle: 70° S. Model: MSWOC
Measured Angle: 45° S. Model: MSWOC
Wedge Style: MSW
Wedge Style: MSW
Search Unit Cable: MSW
Type: RG-174
Length: 0' No. 0

Manufacturer: KBA
Serial No.: 00MKCF / 5.0 MHz
Size: .25" Shape: ROUND
Exam Angle: 45° S. Model: MSWOC
Measured Angle: 44° S
Wedge Style: MSW
Wedge Style: MSW
Search Unit Cable: MSW
Type: RG-174
Length: 0' No. 0

Access	Recordable Indications		Exam Sens.
	Yes	No	
UPST	X		57.0/44.0 dB
UPST	X		57.0/44.0 dB

Make/Model: KBA / USNCR
Serial No.: SAP 101941
Delay: 6.72" Range: 2.00
Mfg Cal/Vol: 12417/ja Pulser: SINGLE
Damping: 1000 Ω Reject: OFF
Rep. Rate: HIGH Freq.: 2.8 MHz
Filter: N/A Mode: FULLWAVE
Reference Sensitivity (Sens.): 57.0 dB Circ. N/A
SDH Sensitivity: 60% @ 4.5
Further Evaluation Required? Yes No

Remarks/Reasons for incomplete Scan(s):
70° Exam Sens. 57.0 dB
45° Exam Sens. 44.0 dB
Weld #12 pipe to valve 50% not examined
Weld #28 pipe to valve 50% not examined
See weld profile

Examiners: James M. Patten *[Signature]* Level II Date 10/09/02
Reviewer: *[Signature]* Level _____ Date 10/28/02

TXU Electric Services / Date: *[Signature]* 10-18-02
ASPI Electric / Date: *[Signature]* 10/23/02

Attachment 1 to TXX-03XXX

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**TXU GENERATION COMPANY LP
COMANCHE PEAK STEAM ELECTRIC STATION UNIT 1
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PROFILE OF THE EXAMINATION									
REPORT NO. <u>19UT-99</u>	STATION <u>COMANCHE PEAK</u>	UNIT <u>1</u>	PAGE <u>2</u> OF <u>3</u>						
SYSTEM <u>PRZR RELIEF</u>	COMPONENT <u>PIPE TO VALVE</u>	DRAWING NO. <u>TRX-1-4922</u>	IDENT NO. <u>12</u>						
DIAMETER <u>3.0"</u>	WELD LENGTH <u>12.0"</u>	CROWN WIDTH <u>.70"</u>	CROWN HEIGHT <u>.06"</u>	LONG SEAM LOCATION(S) <u>N/A</u>					
<p>PROFILE SECTION</p> <p align="center">PIPE _____ VALVE _____</p>									
<u>.40"</u> <u>5.112"</u>	<u>.40"</u> <u>5.112"</u>	<u>.40"</u> <u>5.112"</u>	<u>.07"</u> <u>CL</u>	<u>.08"</u> <u>TCE</u>	<u>N/A</u> <u>1.112"</u>	<u>N/A</u> <u>1.112"</u>	<u>N/A</u> <u>2.112"</u>	<small>MEASUREMENTS TAKEN AT CL OF THE WELD, THEN TOP OF WELD AND THEN UP FROM TOP. 1" PAPER. 1" FOR BOTH SIDE OF WELD AS APPLICABLE</small>	
PROFILE EXAM COMMENTS									
PROFILE TAKEN AT TDC SECTION XI <input checked="" type="checkbox"/> COVERAGE ACHIEVED <input checked="" type="checkbox"/> AUGMENTED <u>N/A</u> PREVIOUS DATA REVIEWED <u>N/A</u> TYPE <u>N/A</u> EXAMINER <u>James M. Buiton</u> DATE <u>10/09/02</u> EXAMINER <u>N/A</u> DATE _____ REVIEWER <u>R. B. ...</u> DATE <u>10-18-02</u> REVIEWER <u>J. B. ...</u> DATE <u>10/19/02</u> ANI REVIEW <u>J. C. ...</u> DATE <u>10/23/02</u>									

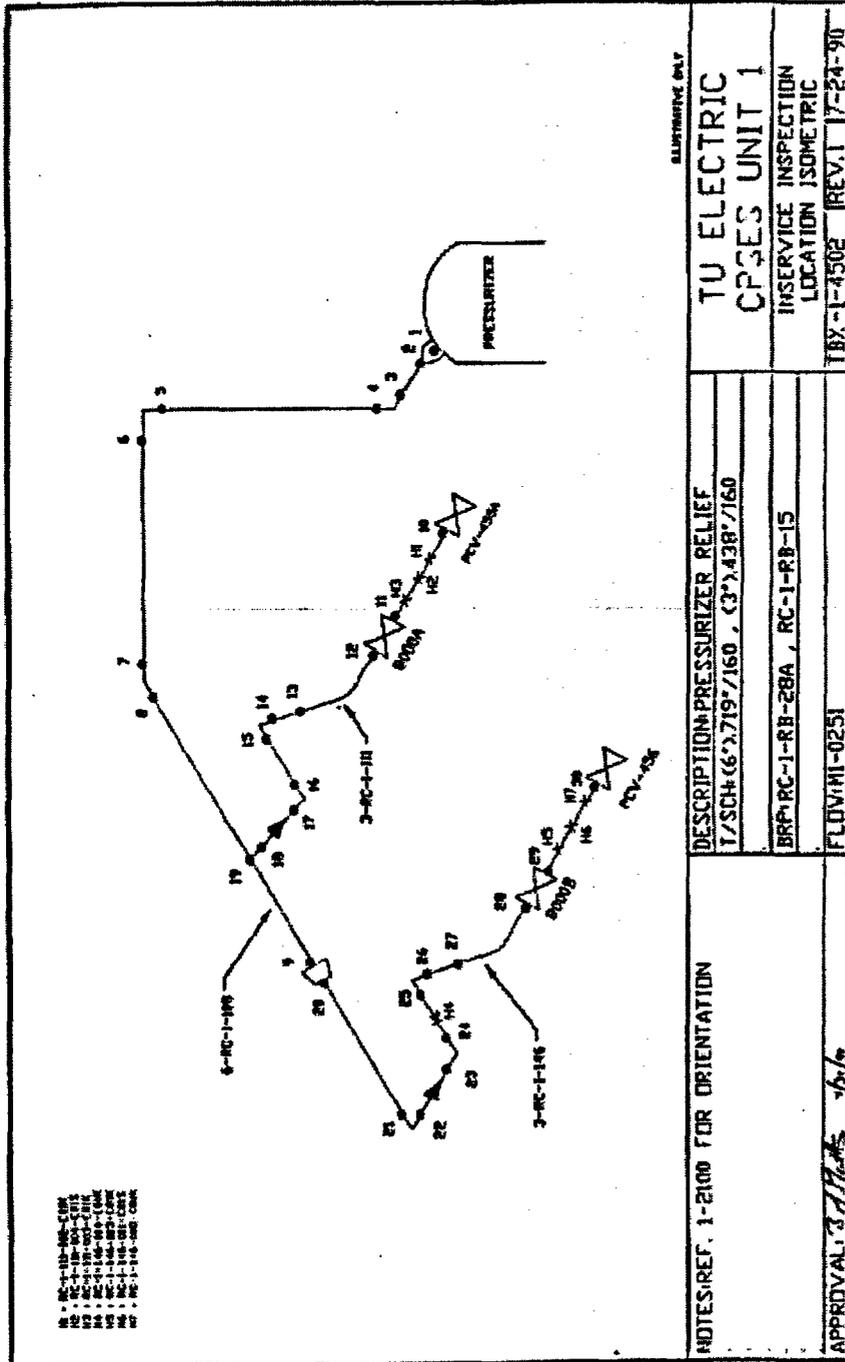
**TXU GENERATION COMPANY LP
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PROFILE OF THE EXAMINATION									
REPORT NO. <u>19UT-39</u>	STATION <u>COMANCHE PEAK</u>	UNIT <u>1</u>	PAGE <u>3</u> OF <u>3</u>						
SYSTEM <u>PRZR RELIEF</u>	COMPONENT <u>PIPE TO VALVE</u>	DRAWING NO. <u>TBX-1-4902</u>	IDENT NO. <u>28</u>						
PROFILE SECTION									
DIAMETER <u>3.0"</u>	WELD LENGTH <u>12.0"</u>	CROWN WIDTH <u>.70"</u>	CROWN HEIGHT <u>.05"</u>	LONG SEAM LOCATION(S) <u>N/A</u>					
$\frac{.40}{-.112}$	$\frac{.40}{+.12}$	$\frac{.45}{+.12}$	$\frac{.40}{.08}$	$\frac{.01}{.02}$	$\frac{N/A}{+.12}$	$\frac{N/A}{+.112}$			
<small>MEASUREMENTS START AT CL OF THE WELD, THEN TOE OF WELD AND THEN TO FURTHEST .1" AND .1" OF BOTH SIDES OF WELD AS APPLICABLE.</small>									
PROFILE EXAM COMMENTS									
PROFILE TAKEN AT TOC									
SECTION XI <u>X</u>	COVERAGE ACHIEVED <u>X</u>	RISK INFORMED <u>X</u>	AUGMENTED <u>N/A</u>	PREVIOUS DATA REVIEWED <u>N/A</u>	TYPE <u>N/A</u>				
EXAMINER <u>James M. Buffen</u>	DATE <u>10/29/02</u>	EXAMINER <u>J. Buffen</u>							
REVIEWER <u>Paula...</u>	DATE <u>11-11-02</u>	REVIEWER <u>J. Buffen</u>	DATE <u>10/19/02</u>						
ANN REVIEW <u>Jan C. Hain</u>	DATE <u>11/23/02</u>								

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 -INSERVICE INSPECTION IMPRACTICALITY-**



ALTERNATIVE ONLY

**TU ELECTRIC
 CP3ES UNIT 1**

**INSERVICE INSPECTION
 LOCATION ISOMETRIC**

TBX-1-4502 REV. 1 7-24-90

NOTES: REF. 1-2100 FOR ORIENTATION

DESCRIPTION: PRESSURIZER RELIEF

T/SCH 6677197/160, (3)X4387/160

BRP: RC-1-RB-28A, RC-1-RB-15

FLOVINI-0251

APPROVAL: *[Signature]* 5/2/90