



**TXU Energy**  
Comanche Peak Steam  
Electric Station  
P.O. Box 1002 (E01)  
Glen Rose, TX 76043  
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**C. Lance Terry**  
Senior Vice President &  
Principal Nuclear Officer

Ref: 10 CFR 50.55a(a)(g)(4)(iv)

CPSES-2003001431  
Log # TXX-03120

July 10, 2003

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

**SUBJECT:** COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)  
DOCKET NO. 50-445  
RELIEF REQUEST B-2 TO THE UNIT 1 INSERVICE INSPECTION  
(ISI) FROM 1986 EDITION OF ASME CODE, SECTION XI, NO  
ADDENDA (INTERVAL START DATE: AUGUST 14, 2000, SECOND  
INTERVAL)

**REF:** TXU Energy Letter logged TXX-03009 dated February 14, 2003 from  
C. Lance Terry to the NRC

Based on discussion with your staff, TXU Generation Company LP (hereafter TXU Energy) is revising its relief request submitted via the above referenced letter.

TXU Energy has determined that certain inspection requirements of ASME Section XI are impractical, and is requesting relief pursuant to 10 CFR 50.55a(g)(5)(iii) (See Attachment). The revision eliminates the reference to 10CFR50.55a in Section II and addresses the risk informed in-service inspection which eliminates the surface examinations. Additionally, TXU Energy committed to perform one-sided volumetric examination and liquid penetrant examination for the subject Category B-J welds.

This communication contains the following new commitment, which will be completed as noted:

<u>Commitment Number</u>	<u>Commitment Description</u>
27288	TXU Energy will perform a surface examination along with the volumetric examination where feasible as specified by the ASME Section XI for these welds during the next upcoming outage (or within this second interval for CPSES Unit 1).

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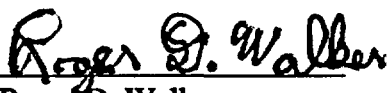
If you have any questions regarding this request, please contact Jack C. Hicks at  
(254) 897-6725.

Sincerely,

TXU Generation Company LP

By: TXU Generation Management Company LLC,  
Its General Partner

C. L. Terry  
Senior Vice President and Principal Nuclear Officer

By:   
Roger D. Walker  
Regulatory Affairs Manager

JCH/jh  
Attachment

c - T. P. Gwynn, Region IV  
W. D. Johnson, Region IV  
D. H. Jaffe, NRR  
Resident Inspectors, CPSES  
Terry Parks, Chief Inspector, TDLR  
J.C. Hair ANII, CPSES

**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.

This relief request will modify the former RI-ISI relief request to perform surface examinations and volumetric examinations where feasible on the Category B-J welds listed in Section I.

**III. Impracticality of Compliance:**

The Final Rule to 10 CFR 50.55a (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

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qualification and the subsequent weld examination is based on application of the best available technology.

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 the RI-ISI Program.

**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, and this is the first time these welds were examined via the UT methodology. Additionally, these welds have been previously examined via the liquid penetrant examination method and no matters of concerns had been identified (e.g., no flaws were noted).

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 where feasible 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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-INSERVICE INSPECTION IMPRACTICALITY-

PDI		Calibration Data Sheet	
Plant/Unit	COMANCHE PEAK UNIT 1	Data Sheet #	18UT-39
Company	WESDYNE	Page	1 of 3
Comp/System	PRESSURIZER RELIEF		
Procedure No.	TX-ISL-302		
Rev/Chg. No.	1 / N/A		
Cal. Block No.	PDI-03		
Cal. Block Temp.	74° Comp. Temp. 42°		
Therm SN	TU-2309		
Size	3.0" Sch. 160 / 435" T		
	<input type="checkbox"/> Ferritic <input checked="" type="checkbox"/> Austenitic		
Each Major CRT Div.	= 200" / 1.50"		
Cal. Direction:	Axial Circ. Both X		
Scan Area:	I to Weld X II to Weld X		
Cal. Checks			
Initial Calib.	0650		
Initial Calib. Date	10/08/02		
Intermediate	N/A		
Intermediate Date	N/A		
Final Calib.	1140		
Final Calib. Date	10/08/02		
Search Unit #1		Search Unit #2	
Manufacturer:	KBA	Manufacturer:	KBA
Serial No.:	28050 / 2.25 MHz	Serial No.:	COMKCF / 5.0 MHz
Size:	25" Shape: ROUND	Size:	25" Shape: ROUND
Exam Angle:	70°S Model: MSWOC	Exam Angle:	45°S Model: MSWOC
Measured Angle:	88°S	Measured Angle:	44°S
Wedge Style:	MSW	Wedge Style:	MSW
Search Unit Cable		Search Unit Cable	
Type:	RG-174	Type:	RG-174
Length:	5' No. 0	Length:	5' No. 0
Instrument Settings		Instrument Settings	
Make/Model:	KBA / USN52R	Make/Model:	KBA / USN52R
Serial No.:	SAP 101941	Serial No.:	SAP 101941
Delay:	6.72" Range: 2.00	Delay:	3.730" Range: 1.50
Mt. Cal/Vet:	12417/ys Pulsar: SINGLE	Mt. Cal/Vet:	12317/ys Pulsar: SINGLE
Damping:	1000 Ω Rejected: OFF	Damping:	1000 Ω Rejected: OFF
Rep. Rate:	HIGH Freq.: 2-3 MHz	Rep. Rate:	HIGH Freq.: 2-3 MHz
Filter:	N/A Mode: FULLWAVE	Filter:	N/A Mode: FULLWAVE
Reference Sensitivity (Sens.)	Axial: 57.0 dB C/c. N/A	Reference Sensitivity (Sens.)	Axial: 32.0 dB C/c. 32.0 dB
SDH Sensitivity:	80% @ 4.5	SDH Sensitivity:	20% @ 2.0
Further Evaluation Required?	Yes (N)		
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. Butler	Date	10/08/02
Level	Level	Date	
Reviewer:		Date	
TXU Electric Level III Signature / Date		ANII Review / Date	
Paul M. Butler 10-16-02		W. J. Butler 10/23/02	



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<b>PROFILE OF THE EXAMINATION</b>											
REPORT NO.	18UT-39	STATION	COMANCHE PEAK	UNIT	1	PAGE	3	OF	3		
SYSTEM	PRZR RELIEF	COMPONENT	PIPE TO VALVE	DRAWING NO.	TDX-1-4502					IDENT NO.	28
<b>PROFILE SECTION</b>											
DIAMETER	3.0"	WELD LENGTH	12.0"	CROWN WIDTH	.70"	CROWN HEIGHT	.05"	LONG SEAM LOCATION(S)	N/A		
CENTRAL LINE WELD											
<small>MEASUREMENTS START AT CL OF THE WELD, THEN TOE OF WELD AND THEN UP FROM TOE + 1" AND + 1" ON BOTH SIDE OF WELD AS APPLICABLE</small>											
<b>PROFILE EXAM COMMENTS</b>											
PROFILE TAKEN AT TDC											
SECTION XI	X	COVERAGE ACHIEVED	RISK INFORMED	X	AUGMENTED	N/A	PREVIOUS DATA REVIEWED	N/A	TYPE	N/A	
EXAMINER	James M. Bullen	DATE	10/09/02	EXAMINER	N/A						
REVIEWER	Pulsarman	DATE	10-12-02	REVIEWER	J. Bagan						
ANII REVIEW	J. C. Hain	DATE	10/23/02	DATE	10/19/02						



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