



**TXU Energy**  
Comanche Peak Steam  
Electric Station  
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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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TXX-03120  
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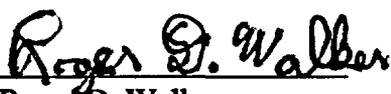
If you have any questions regarding this request, please contact Jack C. Hicks at  
(254) 897-6725.

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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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-**

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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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-**

**VI. Duration of Proposed Alternative:**

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

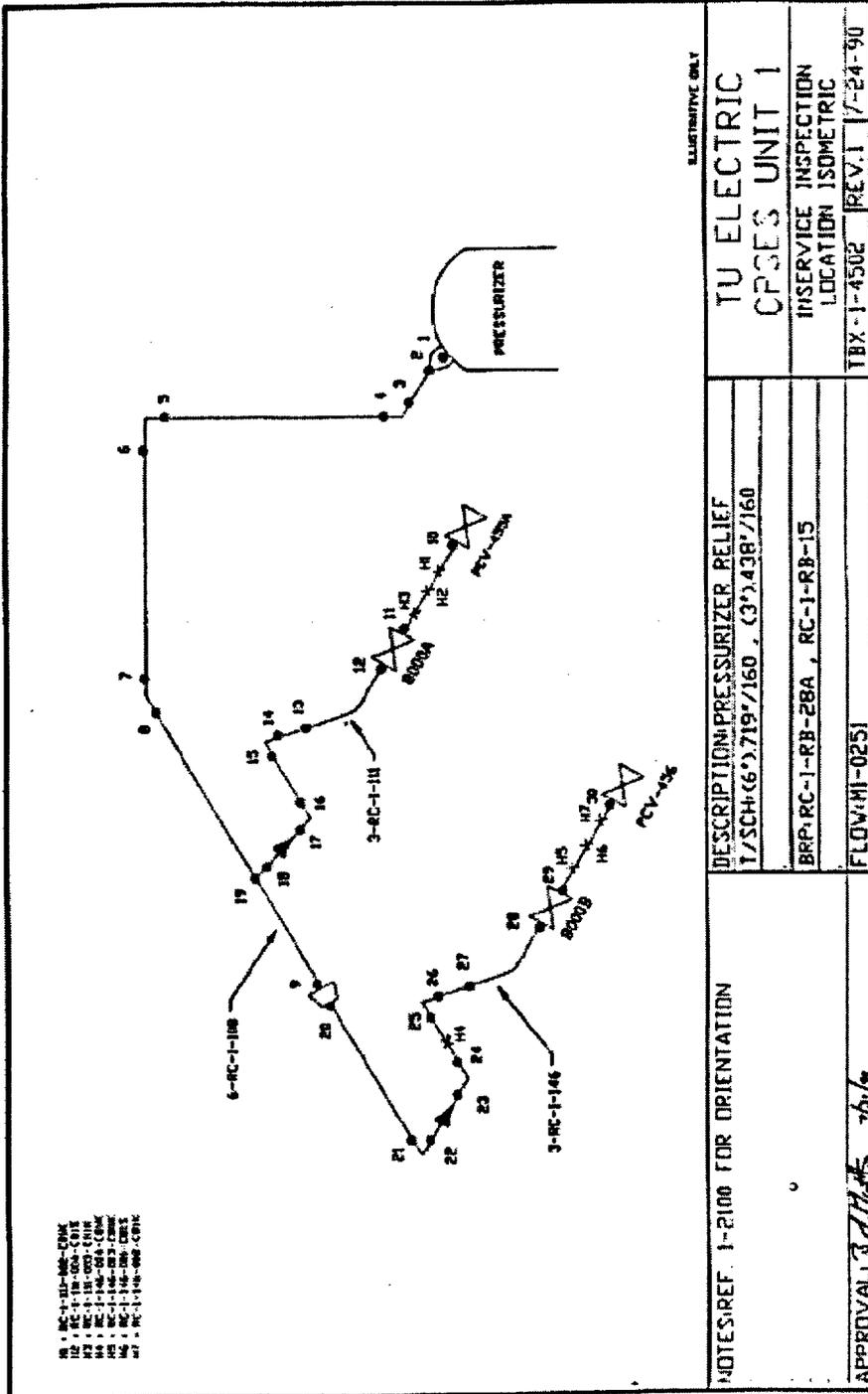






**TXU GENERATION COMPANY LP  
COMANCHE PEAK STEAM ELECTRIC STATION UNIT 1  
FIRST TEN-YEAR INTERVAL ISI RELIEF REQUEST NO. B-2**

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



- 10 - RC-1-111-000-COM
- 11 - RC-1-111-000-COM
- 12 - RC-1-111-000-COM
- 13 - RC-1-111-000-COM
- 14 - RC-1-111-000-COM
- 15 - RC-1-111-000-COM
- 16 - RC-1-111-000-COM
- 17 - RC-1-111-000-COM

ILLUSTRATIVE ONLY

NOTES: REF. 1-2100 FOR ORIENTATION	DESCRIPTION: PRESSURIZER RELIEF	TU ELECTRIC
	T/SCH: (6) 719/160, (3) 438/160	CPES UNIT 1
	BRP: RC-1-RB-28A, RC-1-RB-15	INSERVICE INSPECTION LOCATION ISOMETRIC
APPROVAL: <i>J.H.H.</i> 7/24/90	FLOW: HI-0251	TBX-1-4502 REV. 1 / 7-24-90