

UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001



Envelope Properties (3EDE19B1.028 : 14 : 20520)

Subject: Re: Unit 2 Code Relief A-9

Creation Date: 6/4/03 12:08PM

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

nrc.gov

Files

MESSAGE

RPV Studs and Nuts.pdf

RPV Studs and Nuts.doc

Mime.822

Size

948

151140

100864

347514

Date & Time

06/04/03 12:08PM

Options

Expiration Date: None

Priority: Standard

Reply Requested: No

Return Notification: None

Concealed Subject: No

Security: Standard

From: <obaidd@txu.com>
To: <DHJ@nrc.gov>
Date: 6/4/03 12:09PM
Subject: Re: Unit 2 Code Relief A-9

Ok I separated them and hi-lighted the new changes.....

Please just let me know when you get via e-mail

(See attached file: RPV Studs and Nuts.pdf)(See attached file: RPV Studs and Nuts.doc)

Thanks.

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

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Page 2 of 2

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

CPSES-200300XXX
Log # TXX-03XXX

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June XX, 2003

Deleted: March 6

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

**SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)
DOCKET NO. 50-446
RELIEF REQUEST A-9 TO THE UNIT 2 INSERVICE INSPECTION
(ISI) FROM 1986 EDITION OF ASME CODE, SECTION XI, NO
ADDENDA (SECOND INTERVAL START DATE: AUGUST 2003)**

Pursuant to 10 CFR 50.55a(a)(g)(4)(iv), TXU Generation Company LP (TXU Energy) hereby requests NRC approval of the enclosed relief request (A-9) for second ten-year inservice inspection interval for Unit 2. Relief is requested from the requirements of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, 1986 Edition with no Addenda, Table IWB-2500-1, Category B-G-1.

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1

TXU Energy requests approval of this relief request by August of 2003. The approval date was selected to allow for NRC review and approval prior to the fall refueling outage.

Deleted: Please note that TXU Energy will be submitting the Inservice Inspection Plan in August 2003, committing to the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, 1998 Edition thru the 2002 Addenda.
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Page 3 of 2

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This communication contains no new licensing basis commitments regarding CPSES.
If you have any questions regarding this request, please contact Obaid Bhatty at
(254) 897-5839.

Comment: Reg Affairs you need to put
your guys name here.

Deleted: Douglas W. Snow at (254)
897-8448

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

OAB/dws
Attachment

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Deleted: Enclosure

c - E. W. Merschoff, 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 2
SECOND TEN-YEAR INTERVAL ISI RELIEF REQUEST NO. A-9**

**PROPOSED USE OF SUBSEQUENT ASME CODE EDITION AND ADDENDA
PURSUANT TO 10 CFR 50.55a(g)(4)(iv),**

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CASE N-307-35

I. System/Component for Which Relief is Requested:

ASME Class 1 Reactor Pressure Vessel (RPV) Closure Head Nuts and Studs. The subject items are depicted as TBX-1-1400-37 through 54 in the Comanche Peak Steam Electric Station Unit 1 ISI Program Plan.

II. Applicable Code Edition and Addenda:

ASME Section XI, "Rules for Inservice Inspection of Nuclear Power plant Components", 1986 Edition, No addenda, Table IWB-2500-1 for category B-G-1, Reactor Vessel Parts.

III. Code Requirement from Which Relief is Requested:

TXU Energy requests relief from the 1986 Edition of the ASME Section XI Table IWB-2500-1, Category B-G-1 for the following:

- 1) Table IWB-2500-1 requires that the examinations include both a surface *and* [emphasis added] volumetric method when the studs are removed.
- 2) Exam Figure IWB-2500-12 for Item No. B6.30 requires that the examination volume be defined as the full volume of the load-bearing portion of the studs.
- 3) Table IWB-2500-1 for Item No. B6.10 requires a surface examination for closure head nuts.

IV. Proposed Subsequent Code Edition and Addenda and Code Case:

TXU Energy proposes to use 1998 Edition, 1999 Addenda and 2000 Addenda of the ASME Section XI Table IWB-2500-1 for category B-G-1, Item No. B6.30, Closure Studs when removed. Additionally, TXU Energy proposes to use 1998 Edition, 1999 Addenda and 2000 Addenda of the ASME Section XI Table IWB-2500-1 for category B-G-1, Item No. B6.10, Closure Head Nuts. Additionally, TXU Energy will comply with the corresponding Items for Category B-G-1 (i.e., B6.10, B6.30, B6.40, B6.50). Except Item B6.20 "Closure Studs, in place", because, it is CPSES practice to examine the RPV Closure Studs, when removed, and not in place.

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**TXU GENERATION COMPANY LP
COMANCHE PEAK STEAM ELECTRIC STATION UNIT 2
SECOND TEN-YEAR INTERVAL ISI RELIEF REQUEST NO. A-9**

**PROPOSED USE OF SUBSEQUENT ASME CODE EDITION AND ADDENDA
PURSUANT TO 10 CFR 50.55a(g)(4)(iv),
(Continued)**

- Items 1) & 2): Table IWB-2500-1 in the 2000 Addenda of the ASME Code Section XI for Item B6.30 specifies that a volumetric *or* [emphasis added] surface examination be performed when the RPV studs are removed. TXU Energy will be performing volumetric examination of the removed RPV studs as described in the 2000 Addenda of the ASME Code.
- Item 3): Table IWB-2500-1 in the 2000 Addenda of the ASME Code Section XI specifies that a visual, VT-1 examination be performed for Item B6.10 (Reactor Vessel Closure Head Nuts). TXU Energy is proposing to use the examination requirements from Table IWB-2500-1 in the 2000 Addenda of the ASME Code Section XI for Item B6.10.

V. Basis of Using Subsequent Code Editions and Addenda and Code Case:

The 1998 Edition, 1999 Addenda and 2000 addenda of the ASME Section XI allows the method of examination proposed by TXU Energy. The NRC staff incorporated these changes by reference in 10 CFR 50.55a(b). The changes to Table IWB-2500-1 examination criteria do not affect other parts of the Code. Additionally, the volumetric examinations will be performed with procedures and personnel qualified in accordance with ASME Section XI, Appendix VIII as required by 10 CFR 50.55a(g)(6)(ii)(C). Therefore, the proposed change will result in an acceptable level of quality and safety.

In lieu of the examination requirements of ASME Section XI 1986 Edition, Figure IWB-2500-12, Item B6.30. The 2000 Addenda of ASME Section XI reduces the examination region to that of a volumetric cylinder 1/4" deep from the root of the threads. The root of the threads are stress risers and preferred sites for crack initiation. Cracks at the root of the threads would be perpendicular to straight beam UT performed from the stud ends, and the cracks would create a corner trap for angle beam UT examinations performed from a center hole in the stud. The capabilities of a UT examination finding cracks in a stud are demonstrated through procedure and personnel qualifications. These are performance-based qualifications according to the requirements of Section XI, Appendix VIII, Supplement 8.

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CASE N-307-3

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Deleted: Additionally, Code Case N-307-3 further reduces the examination requirements of Section XI, Figure IWB-2500-12, Item B6.30. Code Case N-307-3 reduces the examination volume to that of a volumetric cylinder, 1/4" deep from the root of the threads. TXU Energy is proposing to use the Code Case N-307-3 and the examination requirements from Table IWB-2500-1 in the 2000 Addenda of the ASME Code Section XI for Item B6.30.

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With respect to the utilization of Code Case N-307-3, portions of the Code Case [as identified in revision 2] have been incorporated in the 2000 Addenda of the ASME Code Section XI. The 2000 Addenda of the Code reduces the required volume as depicted in the 1986 Edition. ¶

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Code Case N-307-3

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**TXU GENERATION COMPANY LP
COMANCHE PEAK STEAM ELECTRIC STATION UNIT 2
SECOND TEN-YEAR INTERVAL ISI RELIEF REQUEST NO. A-9**

**PROPOSED USE OF SUBSEQUENT ASME CODE EDITION AND ADDENDA
PURSUANT TO 10 CFR 50.55a(g)(4)(iv),
(Continued)**

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CASE N-307-3

Additionally, the examination requirements of the 2000 addenda of ASME Section XI, Table IWB-2500-1, Item B6.30, eliminates surface examination of the RPV closure stud when removed. The function of UT examination is to find cracks in the stud volume. These cracks, if they exist, initiate from the surface. The function of the surface examination is to find cracks on the surface. Performing both volumetric and surface examinations on a stud duplicates the intent of the examinations which is to find cracks. Of the two nondestructive examination methods, surface examinations are tedious and subjective, and performance-based UT provides demonstrated assurances for finding cracks.

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Therefore, elimination of the surface examination does not diminish the effectiveness in detecting cracks.

For Item 3 the 1998 Edition, 1999 Addenda and 2000 addenda of the ASME Section XI allows the use of a Visual, VT-1 in lieu of a surface examination. Therefore, the proposed change will result in an acceptable level of quality and safety.

It should be noted that this is the third period of the CPSES Unit 2, first interval. Additionally, this is the last outage of the first interval. CPSES inservice program is in accordance with inspection program B (IWA-2432), only 18 RPV Closure Nuts, Closure Studs, Closure Washers, Bushings and Threads are left to do during this upcoming refueling outage. Moreover, it is CPSES practice to examine the RPV Closure Studs, when removed, and not in place. Therefore, Examination Category B-G-1, Item B6.20 "Closure Studs, in place" does not apply.

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VI. Duration of Proposed Alternative:

TXU Energy requests approval of this relief request by August of 2003. The approval date was selected to allow for NRC review and approval prior to the fall refueling outage.

VII. Similar Precedents:

1. Letter from NRC to Vogtle Electric Generating Plant dated February 20, 2002
(TAC No. MB3242 and MB3243)
2. Letter from NRC to Edwin I. Hatch Plant dated July 2, 2002
(TAC No. MB3060 and MB3061)

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

CPSES-200300XXX
Log # TXX-03XXX

June XX, 2003

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
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Page 3 of 2

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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

OAB/dws
Attachment

c - E. W. Merschoff, Region IV
W. D. Johnson, Region IV
D. H. Jaffe, NRR
Resident Inspectors, CPSES
Terry Parks, Chief Inspector, TDLR
J.C. Hair ANIL, CPSES

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**TXU GENERATION COMPANY LP
COMANCHE PEAK STEAM ELECTRIC STATION UNIT 2
SECOND TEN-YEAR INTERVAL ISI RELIEF REQUEST NO. A-9**

**PROPOSED USE OF SUBSEQUENT ASME CODE EDITION AND ADDENDA
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**TXU GENERATION COMPANY LP
COMANCHE PEAK STEAM ELECTRIC STATION UNIT 2
SECOND TEN-YEAR INTERVAL ISI RELIEF REQUEST NO. A-9**

**PROPOSED USE OF SUBSEQUENT ASME CODE EDITION AND ADDENDA
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1. Similar Precedents:

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Attachment 1 to TXX-03048
Page 8 of 3

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(TAC No. MB3242 and MB3243)
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