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Ref: 10 CFR 50.55a

CPSES-200700708
Log # TXX-07079

April 5, 2007

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

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)
DOCKET NO. 50-446
EVALUATION OF PRESSURIZER WELD OVERLAY
CONFIRMATORY ANALYSES

REF: TXU Power letter, logged TXX-07027, from Mike Blevins to the NRC dated February 2, 2007

Dear Sir or Madam:

By means of the referenced letter, TXU Generation Company LP (TXU Power) previously committed to submit a report summarizing the results of the final PDI/UT examination of weld overlays within 14 days following completion of ultrasonic (UT) examinations of the pressurizer weld overlays performed on Unit 1 and prior to startup from refueling outage 1RF12. TXU Power completed the UT examination of the Unit 1 pressurizer weld overlays on March 23, 2007. Entry into Mode 2 for Unit 1 plant startup is currently scheduled to occur at 1000 on April 25, 2007.

Please find enclosed the final PDI/UT report for the pressurizer structural weld overlays performed at CPSES Unit 1 during refueling outage 1RF12.

Also, as required by Code case N-504-2 paragraph (g)(3), the impact of weld shrinkage on piping systems connected to the pressurizer nozzles has been evaluated. The analyses performed have shown that the maximum weld shrinkage of 0.3 inches experienced by the nozzles has no adverse effect on connected piping or pipe supports. The piping stresses have remained within allowable stress limits.

This communication contains no new or revised licensing basis commitments for CPSES.

Sincerely,

TXU Generation Company LP

By: TXU Generation Management Company LLC,
Its General Partner

Mike Blevins

By: Fred W. Madden
Director, Oversight and Regulatory Affairs

RAS

Enclosure: Comanche Peak SES Unit 1 Pressurizer Structural Weld Overlay Project Final Report: Spring 2007 PDI/NDE Inspections

c - B. S. Mallett, Region IV
M. C. Thadani, NRR
Resident Inspectors, CPSES

Comanche Peak SES Unit 1
Pressurizer Structural Weld Overlay Project
Final Report

Spring 2007 PDI / NDE Inspections

Prepared by / Date: 03/24/07
T. Binder

Prepared by / Date for MM 3/26/07
Mark Marra

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Comanche Peak Unit 1
Pressurizer Structural Weld Overlay Project
Final Report

Summary

In support of the Structural Weld Overlay project during RFO 1R12 at Comanche Peak Unit 1, WesDyne performed the PDI exam of six pressurizer nozzles. This Final Report documents the results of the NDE inspections performed by WesDyne in support of that project.

Table 1, "Indications for Pressurizer Weld Overlays", provides detailed results of the initial PDI UT inspections performed on the six pressurizer nozzles.

Nozzle	Weld Identifications (DM/SS)	Number of Indications Initial PDI Inspection	Indication Assessment Summary
Safety A	TBX-1-4501-1 OL TBX-1-4501-2 OL	No Recordable Indications	N/A
Safety B	TBX-1-4501-12 OL TBX-1-4501-13 OL	3 Laminar Indications	The three laminar indications were acceptable. No Repair performed
Safety C	TBX-1-4501-23 OL TBX-1-4501-24 OL	No Recordable Indications	N/A
PORV	TBX-1-4502-1 OL TBX-1-4502-2 OL	No Recordable Indications	N/A
Spray	TBX-1-4503-31 OL TBX-1-4503-30 OL	No Recordable Indications	N/A
Surge	TBX-1-4500-8 OL TBX-1-4500-7 OL	No Recordable Indications	N/A

Table 1 - Indications for Pressurizer Weld Overlays

Coverage

As summary of the exam coverage is as follows:

	SURGE	SPRAY	SAFETY A	SAFETY B	SAFETY C	PORV
Weld Overlay Volume						
0 degree Beam	99.3%	98.1%	99.3%	98.9%	98.9%	99.3%
Circ Beams	92.3%	92.5%	93.2%	92.2%	93.9%	94.9%
Axial Beams	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
DM Weld Volume						
Axial Beams	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Circ Beams	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SS Weld Volume						
Axial Beams	100.0%	100.0%	100.0%	98.5%	100.0%	100.0%
Circ Beams	100.0%	100.0%	100.0%	99.99%	100.0%	100.0%

Specific coverage analysis for each nozzle is included in this report in the section labeled "II- COVERAGE".

Examination Procedures

The procedures used for the inspection of the pressurizer nozzles at Comanche Peak were as follows:

- WDI-STD-1007, "Generic Procedure for the Ultrasonic Examination of Weld Overlaid Similar and Dissimilar Metal Welds Using PDI-UT-8", Revision 0.
- PDI-UT-8, "PDI Generic Procedure for the Ultrasonic Examination of Weld Overlaid Similar and Dissimilar Metal Welds", Rev F.
- TX-ISI-10, "Qualification of Ultrasonic Manual Equipment for CPSES"

Copies of specific procedures used during inspection of the pressurizer nozzle are included in this report in the section labeled "III- PROCEDURES".

Examination Program Plan

The Examination Program Plan utilized to perform the inspections and implement the examination procedures was:

- WDI-PJF-1303605-EPP-001, "Examination Program Plan for the Pre-service Inspection of Pressurizer Nozzle Structural Weld Overlays at Comanche Peak Unit 1", Revision 0.

A copy of the Exam program plan is included in this report in the section labeled "IV- Exam Program Plan".

Personnel and Certifications

Included in this report are the NDE Certifications, Certificates of Eye Examinations, and applicable PDI-issued Performance Demonstration Qualification Summaries (PDQS's) for the following personnel:

- Ackerman, Harry
- Charbonnet, Shane
- Langreck, Nathan
- Morini, George
- Valden, Paul
- Binder, Tim
- Gonzales, Benjamin
- LaSoya, Carey L.
- Orihuela, Michael

Copies of the NDE Certifications are included in this report in the section labeled "V- PERSONNEL CERTS".

Equipment Used and Certifications

Report section "VI- EQUIPMENT CERTS" contains the UT Scope Linearities, and the certifications for the; couplant, thermometers, and calibration blocks. Report section "VII- TRANSDUCERS" contains the certifications for all the transducers used for the inspection.

NDE Reports

Specific NDE reports for each nozzle are included in this report in the section labeled "VIII- NDE REPORTS". This section contains; weld coverage, probe selection sheets, the final contours, calibration sheets, indication sheets, repair inspection data, and indication evaluations.

Table 1
Indications for Comanche Peak Unit 1 Pressurizer Weld Overlays
(Pre-Weld Repairs)

NOZZLE ID	THICKNESS RANGE OF OVERLAY	OVERLAY WIDTH	INDICATION NUMBER	INDICATION TYPE	MEASURED DEPTH FROM OUTSIDE SURFACE TO CENTER OF INDICATION	LENGTH OF INDICATION MEASURED ON OD	MEASURED POSITION OF INDICATION FROM REFERENCE MARK (As Marked on Sketches)	MEASURED CIRCUMF. POSITION OF INDICATION IN INCHES FROM 0 REFERENCE POINT	MEASURED THROUGH WALL EXTENT OF INDICATION	MEASURED THICKNESS OF OVERLAY IN LOCATION OF INDICATION	MEASURED WIDTH OF LAMINAR	INDICATION DISPOSITION						INDICATION INCLUDED IN REPAIR EXCAVATION AREA	REMARKS
												Table IWB-3514-3	<10% Reduction in Coverage	IWB-3514-2 Inservice Examination	IWB-3514-2 Preservice Examination	Propogation in outer 25% of underlying weld/ base metal	IWB-3640 Eval. for assumed flaw		
SAFETY A	No Indications	No Indications	No Indications	No Indications	No Indications	No Indications	No Indications	No Indications	No Indications	No Indications	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
SAFETY B	0.54 to 1.12"	11.0"	1	Laminar	0.16"	0.70"	8.80"	7.50"	N/A	0.83"	0.50"	ACCEPTABLE 0.3 sq. in. -vs- allowable 7.5 sq. in.	ACCEPTABLE DM Weld No RIC SS Weld Circ.: 0.0% Max Axial: 0.41% Max.	ACCEPTABLE CONDITION: The largest axial planar flaw that could exist has an a/t of 4.2% compared to the allowable a/t of 11.0%. The largest circumferential planar flaw that could exist has an a/t of 6.0% compared to an allowable a/t of 11.2%.	ACCEPTABLE: Not a Planar Indication	ACCEPTABLE CONDITION: No planar flaw indications detected in outer 25% of underlying DM and SS welds and base metal	N/A	N/A	
			2	Laminar	0.18"	0.65"	8.70"	9.75"	N/A	0.86"	0.50"	ACCEPTABLE 0.3 sq. in. -vs- allowable 7.5 sq. in.	ACCEPTABLE DM Weld No RIC SS Weld Circ.: 0.01% Max Axial: 0.40% Max.	ACCEPTABLE CONDITION: The largest axial planar flaw that could exist has an a/t of 4.1% compared to the allowable a/t of 11.0%. The largest circumferential planar flaw that could exist has an a/t of 5.8% compared to an allowable a/t of 11.1%.	ACCEPTABLE: Not a Planar Indication	ACCEPTABLE CONDITION: No planar flaw indications detected in outer 25% of underlying DM and SS welds and base metal	N/A	N/A	
			3	Laminar	0.14"	1.80"	8.85"	18.20"	N/A	0.82"	0.45"	ACCEPTABLE 0.8 sq. in. -vs- allowable 7.5 sq. in.	ACCEPTABLE DM Weld No RIC SS Weld Circ.: 0.00% Max Axial: 0.71% Max.	ACCEPTABLE CONDITION: The largest axial planar flaw that could exist has an a/t of 5.5% compared to the allowable a/t of 10.9%. The largest circumferential planar flaw that could exist has an a/t of 5.5% compared to an allowable a/t of 11.0%.	ACCEPTABLE: Not a Planar Indication	ACCEPTABLE CONDITION: No planar flaw indications detected in outer 25% of underlying DM and SS welds and base metal	N/A	N/A	
SAFETY C	No Indications	No Indications	No Indications	No Indications	No Indications	No Indications	No Indications	No Indications	No Indications	No Indications	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
PORV	No Indications	No Indications	No Indications	No Indications	No Indications	No Indications	No Indications	No Indications	No Indications	No Indications	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
SPRAY	No Indications	No Indications	No Indications	No Indications	No Indications	No Indications	No Indications	No Indications	No Indications	No Indications	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
SURGE	No Indications	No Indications	No Indications	No Indications	No Indications	No Indications	No Indications	No Indications	No Indications	No Indications	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

NOTES:

1 Direction of flow is into the pressurizer

ABBREVIATIONS

RiC - Reduction in Coverage
DM - Nozzle/Safe End Weld
SS- Safe End/Pipe Weld