

Log # TXX-92266 File # 10010 Ref. # 10CFR30.55a

TUELECTRIC June 1, 1992

William J. Cahill, Jr. Group Vic. President

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

SUBJECT:

COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)

DOCKET NO. 50-446

REDUEST FOR ADDITIONAL INFORMATION FOR PRESERVICE INSPECTION RELIEF REQUEST F-1

REF: 1) TU Electric letter logged TXX-92117 from William J. Cahill, Jr. to the NRC, dated March 31, 1992

Gentlemen:

During a telecon on May 26, 1992, your staff requested additional information regarding TU Electric's Relief Request F-1 (Ref. 1). The requested information follows:

The requirements for Preservice Inspection are found in Section XI of the ASME Boiler and Pressure Code, Table IWF-2500-1.

Additional information requested is found in the enclosure to this letter.

Again, as requested in Reference 1, we request that your approval be provided by June 15, 1992.

If there are any questions, please call Mr. C. E. Jensen at (214) 812-8826.

Sincerely,

William J. Cahill. Jr.

D. R. Woodlan

Docket Licensing Manager

08,00

Enclosure

c - Mr. R. D. Martin, Region IV Resident Inspectors, CPSES (2) Mr. B. E. Holian, NRR

ENCLOSURE TO TXX-92266

ENCLOSUPE

Examination

Component supports are examined during the initial construction phase when individual supports are complete, at the end of the construction phase when the system is being certified (N-5), during Fiot Functional Testing, and at system turnover to Operation.

The ASME Section XI Code required examinations for PSI from Table IWF 2500-1 are listed below:

Item No.	Paris Examined	Examination Method
F1.10/F2.10/F3.10	Mechanical connections to pressure retaining components and building structure	VT-3
F1.20/F2.20/F3.20	Weld connections to building structure	VT-3
F1.30/F2.30/F3.30	Weld and mechanical connections at intermediate joints in multiconnected integral and nonintegral supports	VT-3
F1.40/F2.40/F3.40	Component displacement settings of guides and stops, misalignment of supports, assembly of support items	VT-3
F3.50	Spring type supports, constant load type supports, shock absorbers, hydraulic and mechanical type snubbers	VT-4

The "NA" certificate holder performs the following comparable examination during the initial construction phase:

- Supports shall be fabricated and installed free of cracks, corrosion, erosion or physical damage.
- Adequate distance must be maintained between supports and circumferential butt welds to allow the pipe to move.
- Support base plates may have gaps less than 1/16" between the plates surface and concrete.
- For U-bolts used on variable and constant opring supports the u-bolt fits snugly against pipe.
- Fasteners are not damaged, free of extraneous material, locking devices provided, torque values are obtained or are snug tight.
- Cotter pins are installed and are of the correct size.
- Threaded hardware shall have minimum thread engagement.
- Installation of variable springs/constant supports shall be in accordance with the design drawings.

- Plumbness of rods for spring type supports shall be within ± 2°.
- Cold load setting for variable springs shall be within ± 10% of the cold load shown on the design drawing.
- Cold load setting for constant supports shall be within 1/4" of the setting shown on the design drawing.
- Spherical bearings (struts & snubbers) shall not be dislodged, free of extraneous material, staked and free to swivel.
- Eyerod thread engagement for struts and snubbers shall be verified utilizing sight holes.
- Offset angle between the strut/snubber and clamp/rear bracket shall have a tolerance of \pm 2°, however in no case can the angle be greater than 5°
- Snubbers shall be scroked through the full operating range prior to installation.
- For snubbers, the transition kit mounting bolts shall be safety wired.
- The snubber shall be installed at its cold position.
- Final surfaces of support welds, the heat affected zone for 1/2" on each
 material shall be visually examined for:
 - correct size
 - surfaces shall be free of coarse ripples, grooves, overlaps, etc.
 - cracks
 - incomplete fusion
 - weld profile
 - weld overlap
 - surface porosity
 - under fill / under cut

Reference Procedures

AQP-10.15, "Visual Examination of Weldments"
ACP-11.8, "Fipe Support Adjustments and Verification"
ACP-11.5, "Component Support Fabrication and Installation"

The NA certificate holder performs the following examination during the N-5 certification process:

- Removable mechanical items (i.e., cotter pins ue rings, jam nuts and fasteners) are installed and exhibit no looseness.
- General configuration/support type and function.
- Strut, snubber and spring angularity.

- Snubber settings.
- Strut lenghts.
- Minimum clearance in unrestrained direction for one way box restraints.

Reference Procedure

ACP-11.5, "Component Support Fabrication and Installation"

During HFT, supports will be examined for the following comparable attributes:

- Spring and snubber settings remain within their working range.
- Snubbers and struts do not bind.
- Snubbers and spring cans are walked down to ensure they are adjusted to their cold settings and are unpinned prior to start of HFT.
- Pipe support installations are in accordance with the current design drawing prior to start of HFT.
- Snubbers have been stroked to ensure freedom of motion.
- During HFT plateaus, snubber and spring settings are verified to be with their working range.
- During HFT plateaus, snubber and spring cans are verified not to be topped or bottomed out and not binding.
- At return to ambient temperature, snubber and spring can settings are verified to be at the cold position.

Reference Procedure

2CP-PT-90.03, "Hot Functional Piping Systems Thermal Expansion Test"

At system turnover from Startup to Operations, the system engineers walk the systems down to ensure:

- All supports are installed.
- Shipping and pre operational restraints on springs and snubbers have been removed.

Reference Procedures

STA-802, "Acceptance of Station Systems and Equipment" REI-305, "System Transfer Package and Operability Status Checklist"

Personnel Qualification

Personnel performing the construction and startup examinations are Mechanical Level II Quality Control Inspectors (QCI). Qualification for Non-Destructive Examination Personnel performing VT-3/*T-4 is provided in ASME Section XI Code paragraph IWA-2300. A comparison of those requirements and the requirements for Mechanical Level II QCI is shown below. This comparison shows that Mechanical Level II QCI are equivalent to VT-3/VT-4 inspectors.

VT-3/VT-4 Requirement

Personnel performing NDE shall be qualified in accordance with SNT-TC-1A 1980

Personnel performing VT-3 shall be qualified in accordance with ANSI N45.2.6 1973

Qualification shall be based on education, training, experience, and testing evaluation

Visual acuity

Recertification every 3 years

Mechanical Level II QCI

AAP 2.3 qualifications are to SNT-TC-1A, 1980 Edition

AAP 2.3 and AAP 2.4 qualifications are to ANSI N45 2.3 - 1978

AAP 2.3 and AAP 2.4 provides the same requirements for education, training, experience, & testing

AAP 2.3 and AAP 2.4 requires eye exams comparable to ASME Section XI

AAP 2.3 and AAP 2.4 provides for recertification every 3 years

Reference Procedures

AAP 2.3, "QA Personnel Training and Qualification" AAP 2.4, "Nondestruction Personnel Certification"

Records

Examination results from initial construction and N-5 walkdown are maintained by the NA certificate holder in accordance with his Quality Assurance Program. At the completion of the construction activity, those records will be transferred to TU Electric. At this time the records will be placed in the TU Electric records vault and maintained in accordance with the TU Electric QA Program. HFT records and turnover walkdowns will be maintained in the TU Electric vault in accordance with the TU Electric QA program. These records will be maintained for the life of the plant.

TABLE IWF-2500-1 EXAMINATION CATEGORIES

Item No.	Parts Examined	Examination Requirements / Fig. No.	Examination Method	Acceptance Standard	Extent of Examination	Frequency of Examination
F1.10	Mechanical connections to pressure retaining components and building structure	IWF-1300-1	Visual, VT-3	IWF-3416	1V+ 300 1WF-2510	Each inspection interval
F1 70	Weld connections to building structure	IWF-1300-1	Visual, VT-3	EWF 3410	IWF-1390 IWF-2510	Each inspection interval
F1.30	Weld and mechanical connections at intermediate joints in multiconnected integral and nonintegral supports	1WF-1300-1	Visual, VT-3	1WF-3410	IWF-1300 IWF 2510	Each inspection interval
F1.40	Component displacement settings of guides and stops, misalignment of supports, assembly of support items	TWF-1300-1	Visual, VT-3	IWF 3410	*	Each inspection inte.val

NOTE:

⁽¹⁾ Reference -- IWA-2210.

TABLE IWF-2500-1 (CONT'D) **EXAMINATION CATEGORIES**

Item No.	Parts Examined	Examination Requirements/ Fig. No.	Examination Method'	Acceptance Standard	Extent of Examination	Frequency of Examination
F2.10	Mechanical connections to pressure retaining components and building structure	IWF-1300-1	Visual, VT-3	IWF-3410	f VF-1300 IWF-2510	Each inspertion intriva
F2.20	Weld connections to building structure	IWΓ-1300-	Visual, VT-3	IWF-3410	IWF-1300 IWF-2510	Each inspection interva
F2.30	Weld and mechanical connections at intermediate joints in multiconnected internal and nonintegral supports	1WF-1300-1	Visual, VT-3	IWF-3410	IWF-1300 IWF-2510	Each inspection interva
F2.40	Crimporent displacement settings of guides and stops, misalignment of supports, assembly of support items	IWF-1300-1	Visual, VT-3	1WF-341G	1WF-13P0 1WF-2510	Each inspection interva

NOTE: (1) Reference — IWA-2 13.

TABLE IWF-2500-1 (CONT'D) EXAMINATION CATEGORIES

Parts Examined	Examination Requirements / Fig. No.	Examination Method	Acceptance Standard	Extent of Examination	Frequency of Examination
Mechanical connections to pressure retaining components and building structure	IWF-1300-1	Visual, VT-3	IWF-3410	IWF-1300 IWF-2510	Each inspection interval
Weld connections to building structure	IWF-1300-1	Visuał, VT-3	IWF-3410	IWF-1300 IWF-2510	Each inspection interval
Weld and mechanical connections at intermediate joints in multiconnected integral and nonintegral supports	IWF-1300-1	Visual, VT-3	IWF-3410	1WF-1300 1WF-2510	Each inspection interval
Component displacement settings of guides and stops, misalignment of supports, assembly of support items	IWF-1300-1	Visual, VT-3	IWF-3430	IWF-1300 IWF-2510	Each inspection interval
Spring type supports, constant load type supports, shock absorbers, hydrautic and mechanical type snubbers	fWF-1300-1	Visual, VT-4	IWF-3410	IWF-1300 IWF-2510	Each inspection interval
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NOTE:

(1) Reference — IWA-2210.