TU ELECTRIC

Log # TXX-88081
File # 10130
IR 87-31
IR 87-23
Ref. # 10CFR2.201

William G. Counsil
Executive Vice President

January 18, 1988

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

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)
DOCKET NOS. 50-445 AND 50-446
RESPONSE TO NRC INSPECTION REPORT
NOS. 50-445/87-31 AND 50-446/87-23

Gentlemen:

We have reviewed your letter dated December 18, 1987, concerning the inspection conducted by Mr. L. E. Ellershaw and consultants during the period from November 4 through December 1, 1987. This inspection covered activities authorized by NRC Construction Permits CPPR-126 and CPPR-127 for Comanche Peak Steam Electric Station Units 1 and 2. Attached to your letter was a Notice of Violation and a Notice of Deviation.

We hereby respond to these notices in the attachment to this letter.

Very truly yours,

W. G. Counsil

RDD/mlh
Attachment

c - Mr. R. D. Martin, Region IV
Resident Inspectors, CPSES (3)

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NOTICE OF VIOLATION
ITEM A (445/8731-V-01)

A. Criterion V of Appendix B to 10 CFR Part 50, as implemented by Section 5.0, Revision 3 of the TU Electric Quality Assurance Plan (QAP), states, in part, "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, or a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings. . . ."

Section 7.7.1 of Revision 2 to EBASCO's Field Verification Method (FVM) CPE-EB-FVM-CS-033, states, in part, "The Walkdown Engineer will identify each type of support by comparison with Supplement I and/or 2323-S-0910 sketches or drawings, and will as-built the support on the applicable sketch or drawing . . . ." Paragraph K of this section of the FVM further states, "All dimensions and/or attributes shown will be verified . . . . If the designed dimensions/attributes are incorrect, they shall be lined out and the actual dimension/attribute recorded." Further, paragraph N states that the walkdown engineer will redline ". . . any HKB/HSKB spacing violation per Table 2."

Contrary to the above, the following conditions were identified:

1. For support C13007808-04, which is a 2323-S-0910 Type CA-1a support, the anchor bolts identified as bolts A, E, and F were lined out. This implied that anchor bolts did not exist at these locations for this unique support. During a subsequent walkdown by the NRC inspector, however, an anchor bolt was found to exist at the location designated for anchor bolt A. This bolt was determined to be a 1/4" Hilti Kwik bolt with the letter designation "D" and a projection of 1". While the existence of this additional anchor bolt will not have a detrimental effect on the structural integrity of the support, the fact that it was not identified during the EBASCO walkdown is of significance relative to the adequacy of the walkdown itself.

2. On support C14G21398-03 the walkdown engineer failed to record one of the dimensions required to fully locate the structural tubing on the base plate. This information is required in order to calculate base plate stress and anchor bolt loads. This dimension is one of the dimensions required to be reported for this type of support (2323-S-0910 sh. CSM-18 type support).

NOTICE OF VIOLATION (CONT'D)
ITEM A (445/8731-V-01)

3. On support C14B13125-02, the walkdown engineer failed to note a spacing violation between the 1/4" Hilti Kwik bolt designated as Bolt F on the support in question, and a 3/8" HKB on an adjacent conduit support. The NRC inspector found these anchor bolts to be 2 1/4" apart; while the FVM required a spacing of at least 3 1/8" (445/8731-V-01).

RESPONSE TO NOTICE OF VIOLATION
ITEM A (445/8731-V-01)

TU Electric agrees with the alleged violation and the requested information follows:

1. Reason for Violation

The violation resulted from errors on the part of personnel recording and checking walkdown data.

2. Corrective Steps Taken and Results Achieved

The discrepant conditions described in the Notice of Violation have been examined by Ebasco personnel. In each case the NRC inspectors observation was confirmed. The information contained on the applicable walkdown forms have been revised. None of the discrepancies affected the structural integrity of the support. Deficiency Reports (DRs) C-87-04771 and C-87-05411 have been written to document the discrepancies and resolutions.

3. Corrective Steps Which Will be Taken to Avoid Further Violations

All appropriate Ebasco walkdown personnel will be retrained on the importance of documenting walkdown data completely and accurately.

NRC inspectors have informed TU Electric of additional apparent Ebasco walkdown discrepancies. We are investigating these discrepancies and will formulate appropriate actions to address any generic implications that are found. An update to this response will be submitted describing any additional actions.

4. Date When Full Compliance Will be Achieved

The retraining of walkdown personnel will be completed by January 29, 1988.

An update to this response describing any additional actions will be submitted no later than April 1, 1988.

NOTICE OF VIOLATION
ITEM B (445/8731-V-02; 446/8723-V-01)

B. Criterion XVI of Appendix B to 10 CFR Part 50, as implemented by Section 16.0, Revision 0, of the TU Electric QAP, states, in part, "Measures shall be established to assure that conditions adverse to quality . . . are promptly identified and corrected . . . and corrective action taken to preclude repetition."

Nuclear Engineering and Operation Procedure NEO 3.06, "Reporting and Control of Deficiencies," requires deficiencies (principally programmatic and not directly related to hardware problems) to be identified, the cause established, and action taken to prevent repetition.

Contrary to the above, the "rework" dispositions of NCRs I-85-101890SX and C-86-200378X were incorrectly revised to "Use-As-Is" dispositions, subsequent to engineering becoming aware that the conditions which created the need for the NCRs had been corrected outside of the scope and control of the NCRs. By revising the dispositions and closing out the NCRs, actions were not taken to determine the cause of the deficiency (uncontrolled work) or to prevent repetition (445/8731-V-02; 446/8723-V-01).

RESPONSE TO NOTICE OF VIOLATION
ITEM B (445/8731-V-02; 446/8723-V-01)

TU Electric agrees with the alleged violation and the requested information follows:

1. Reason for Violation

Personnel responsible for dispositioning and subsequent review and approval of NCRs I-85-101890SX and C-86-200378X erred by not initiating a Deficiency Report (DR) in accordance with NEO 3.06 upon identification of the condition noted in this violation.

2. Corrective Steps Taken and Results Achieved

DRs C-88-00041 and P-88-00054 have been initiated to document the correction of the identified items outside the scope and control of NCRs CC-87-8190X (previously C-86-200378X) and I-85-101890SX respectively. Additionally, DR C-88-00040 has been initiated to address the failure of personnel responsible for revising the dispositions of these NCRs to "Use-As-Is" including Quality Engineering review and approval, to comply with the requirements of NEO 3.06. Since the "Use-As-Is" dispositions resolve the hardware concerns relative to these items no further action is deemed necessary.

RESPONSE TO NOTICE OF VIOLATION (CONT'D)
ITEM B (445/8731-V-02; 446/8723-V-01)

3. Corrective Steps Which Will be Taken to Avoid Further Violations

Engineering and Quality Engineering personnel responsible for NCR dispositions, including review and approval, shall be reinstructed in the requirements of NEO 3.06 relating to DR initiation when similar conditions occur. Additional corrective measures may be taken as required by the disposition of CR-C-88-00040.

4. Date When Full Compliance Will be Achieved

Full compliance will be achieved upon completion of the reinstruction described above and closure of DRs C-88-00040, C-88-00041 and P-88-00054 which is anticipated to be on or before March 18, 1988.

NOTICE OF DEVIATION
(445/8731-D-03)

Section 4.1, "Walkdown Guidelines" of Revision 2 to Impell Project Instruction (PI) 0210-052-004 states, in part, "The Walkdown information will be documented using the checklists provided in Attachment B . . . . Table 1 provides the acceptable tolerances to be used in the walkdown process.

"Guidelines for performing the conduit support and conduit routing walkdowns are provided below:

"Item 5. Support Configuration

- Draw an as-built sketch
- Identify all structural/Unistrut member sizes, lengths . . ."

"Item 7. Hilti Kwik Anchor Bolt Information

- Identify letter stamp and projection length of all anchor bolts on supports . . ."

"Conduit Routing Checklist"

"Item 1 Conduit Isometrics

- Draw an as-built sketch showing conduit routing . . .

- Determine span lengths"

Section 4.1.4, "Seismic Evaluation of Train C Conduit Supports," of Revision 3 to Impell PI 02310-052-003, states, in part, ". . . SSE support loads are generally calculated by multiplying the conduit tributary mass times the equivalent static acceleration . . . ." Paragraph 4.3.4 further states, ". . . for interaction of . . . loads, the following interaction . . . equation shall be used . . . ."

The following examples, identified by the NRC during inspection and review of the post construction hardware validation program (PCHVP) module, Train C Conduit Less Than or Equal to 2", are in deviation from the above criteria:

1. On the Type 7 support A-02456/NQ-16508, the NRC inspector identified several discrepancies. The baseplate was reported to be 8" long but was found by the NRC inspector to be 9" long. Impell also reported that the anchor bolts were 1/2" Hilti Kwik bolts; however, they were found to be 1/2" Hilti Super Kwik bolts. Impell reported that the Nelson studs were 1/4" diameter while the NRC inspector determined these bolts to be 3/8" diameter.

NOTICE OF DEVIATION (CONT'D)
(445/8731-D-03)

2. On the support identified as detail "B", a Type 7 support, Impell reported that the anchor bolts were Hilti Kwik bolts; however, the NRC inspector determined that they were Hilti Super Kwik bolts.

3. On the isometric provided on page 4 of 8 in Appendix A of Calculation/Problem No. A-02603, Impell reported a length of conduit between the Type 5 support identified as A-02628 and an adjacent Type 5 support as 21"; however, the NRC inspector determined this length to be 12 1/2".

4. In Calculation/Problem No. A-02454, while performing the load calculation for the northeast/southwest direction for support A-02605, the engineer neglected to include a 14" length of conduit between the support being evaluated and an adjacent support.

5. On the Type 5 support evaluation for support A-02605-NQ-16507, the calculated embedment length for the Hilti Kwik bolt was found to be incorrect. Furthermore, the interaction check for the "finger" clamp exceeded the allowable and was justified by adding a note which stated that the calculation is conservative; however, this support is the same support mentioned in paragraph 4 above for which the load calculation is incorrect (445/8731-D-03).

RESPONSE TO NOTICE OF DEVIATION
(445/8731-D-03)

TU Electric agrees with the alleged deviation and the requested information follows:

1. Reason for Deviation

The discrepancies identified in the Notice of Deviation resulted from inaccurate recording, checking and calculating of Train C (non-safety related) 2 inch and under conduit walkdown data on the part of personnel involved.

2. Corrective Steps Taken and Results Achieved

The discrepant conditions described in the Notice of Deviation were examined in the field by Impell personnel. The results of the examination confirmed the NRC inspectors observation in each case. The information in the applicable walkdown forms and calculations have been revised accordingly. In each case, the qualification status of the conduit system did not change. Deficiency Report C-87-4800 has been written to document walkdown discrepancies.

RESPONSE TO NOTICE OF DEVIATION (CONT'D)
(445/8731-D-03)

3. Corrective Steps Which Will be Taken to Avoid Further Deviations

Those engineers that are still onsite and are involved in the subject walkdowns, as well as all other personnel involved in the Impell structural integrity group have been retrained on this subject.

Similar discrepancies have been identified in previous NRC Inspection Reports (50-445/87-18; 50-446/87-14 and 50-445/87-25; 50-446/87-19). We are assessing the generic implications of Train C conduit walkdown errors and will provide an update to this response describing the results of our assessment.

4. Date When Full Compliance Will be Achieved

The correction of identified walkdown discrepancies was completed by December 30, 1987.

An update to this response describing the results of our assessment will be submitted no later than January 29, 1988.