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January 29, 1988

William G. Council  
Executive Vice President  
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  
INSPECTION REPORT NOS. 50-445/87-18 and 50-446/87-14  
UPDATED RESPONSE TO NOTICE OF DEVIATION (NOD) 445/8718-D-10

REF: TU Electric Letter TXX-6939 from W. G. Council  
to NRC dated December 7, 1987

Gentlemen:

The referenced letter provided our response to Notice of Deviation (NOD) 445/8718-D-10. In that response we stated that by January 29, 1988, an update describing the results of our assessment of generic implications would be provided. Our updated response is attached. Those portions of the response which have been revised are denoted by a revision bar in the right margin.

Very truly yours,

*W.G. Council*

W. G. Council

By: *D. R. Woodlan*

D. R. Woodlan  
Supervisor,  
Docket Licensing

RDD/mgt  
Attachment

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

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NOTICE OF DEVIATION  
(445/8718-D-10)

Section 4.1, "Walkdown Guidelines," of Revision 1 to Impell Project Instruction (PI) 0210-0J2-004, 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 6. Support Deficiencies

- Identify any gross deficiencies in the support...

"Item 7. Hilti Kwik Anchor Bolt Information

- Identify letter stamp and Projection Length of all anchor bolts on supports...."

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) For analysis tag A-03173 in Room 206, Impell incorrectly recorded the length designator on the end of a 1/4" diameter Hilti Kwik bolt as being an "E" stamp (3 1/2" long). The NRC inspector observed the length designator to be a "D" stamp (3" long).
- (2) For analysis tag A-03173 in Room 206, it was determined during the NRC inspector's inspection that an 1/8" gap exists between the 3/4" diameter conduit and the conduit support shim plate, thus invalidating its three-way restraint design function. This invalidates all portions of the Impell analysis where this three-way support was considered.
- (3) For analysis tag A-03177 in Room 206, Impell had recorded that the projected length of the 1/4" diameter Hilti Kwik bolt was 3/4". The subsequent NRC inspection determined this length to be 1 1/8". The specified allowable tolerance was 1/4".
- (4) For Calculation No. A-03451 in Room 54, Impell had recorded on RFI No. RFI-E5-1-1043, that Hilti Kwik bolt No. 1 was located 4 1/2" from the top edge of the Unistrut channel. The NRC inspector, however, determined the bolt to be located 3" from the edge. The specified allowable tolerance was 1/4".

- (5) For Calculation No. A-03138 in Room 54, Impell had recorded that the projected length of the 1/2" diameter Hilti Kwik bolt for support A-03145/NQ-08290 was 1". The subsequent NRC inspection determined this length to be 1 1/2". The specified allowable tolerance was 1/4" (445/8718-D-10).

In addition to the deviation specified above, the NRC inspectors have identified other discrepancies of a similar nature. These discrepancies have been presented as Open Items in NRC Inspection Report 50-445/87-25; 50-446/87-19. The Open Items are restated below:

"While performing the walkdown for Calculation L2-S-1-EC-130, the NRC inspector identified a discrepancy in the Impell work. It involved the span length between supports 2-23955 and 2-23956. Impell had recorded this span length as 40" while the NRC inspector determined it to be 47 1/2." Subsequently, Impell stated that the Level 6 interaction evaluation determined that there were no safety-related equipment, systems, or components in the room. Accordingly, no interactions (either acceptable or unacceptable) will occur in this room and the conclusions initially arrived at would not be affected. The NRC inspector concurred with this explanation; however, a determination must still be made as to whether this error was an isolated case and what impact, if any, it would have on other walkdowns that the identified individuals were involved with. This subject is an open item pending the making of this determination (445/8725-0-02).

"While performing the field walkdown on the Request for Field Information (RFI) data for the Level 5 calculation A-00631, the NRC inspector identified a discrepancy. It involved the span distance between supports A-00632 (N/Q-07192) and A-00633 (N/Q-07191). Impell had recorded this dimension as 11 1/2" while the NRC inspector determined it to be 35 1/2". Upon notification of this discrepancy, Impell informed the NRC inspector that this error had occurred on Revision 0 of the calculation which had been superseded by Revision 1 which states, "Supports in this calculation have been qualified by Level 6." The Level 6 evaluation showed that no safety-related equipment existed in the vicinity of these supports. The NRC inspector verified that the supports were qualified by the Level 6 support interaction evaluation; however, a determination must still be made as to whether this error was an isolated case and what impact, if any, it would have on other walkdowns that the identified individuals were involved with. This subject is an open item pending this determination (445/8725-0-03).

UPDATED RESPONSE TO DEVIATION  
(445/8718-D-10)

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

1. Reason for Deviation

The five discrepancies identified in the Notice of Deviation and the two discrepancies identified in the Open Items all resulted from inaccurate recording and checking of walkdown data on the part of personnel.

2. Corrective Steps Taken and Results Achieved

The discrepant conditions described in items 1 through 4 of 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 applicable walkdown forms and calculations have been revised accordingly. In each case, the qualification status of the conduit support did not change.

The discrepant condition described in item 5 of the Notice of Deviation was examined in the field by Impell personnel. The results of the examination showed that the projection length of the 1/2 inch Hilti bolt was 1 3/8 inches instead of 1 inch as recorded on the RFI. The applicable walkdown forms and calculations have been revised accordingly. The qualification status of the support did not change.

The discrepant conditions described in Open Items 445/8725-0-02 and -03 were examined in the field by Impell personnel. The results of the examination confirmed the NRC inspectors observation. However, Impell had subsequently determined that for both cases, there was no safety related equipment in the vicinity per the Level 6 support interaction evaluation. Hence, the discrepant calculations were rendered unnecessary.

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

Those engineers that are still on site who were involved in the walkdowns that resulted in items 1 through 3 of the Notice of Deviation, as well as all other personnel involved in the structural integrity group have been retrained on the importance of documenting walkdown data accurately.

The Comanche Peak Manager of Civil Engineering has met with several groups involved in structural walkdowns, including the Impell Train C personnel. Examples of recently identified walkdown discrepancies were presented and the importance of accurate recording and checking of walkdown data was re-emphasized.

Impell Train C project instructions have been reviewed for areas that could be misinterpreted which potentially affect the accuracy of field measurements. Clarifications have been made to instructions to improve measurement consistency when measuring spans with bends. Clarification has also been given to Train C project personnel regarding the need for documenting the use of conservative values when exact values are difficult or impossible to obtain.

To assess the generic implications of walkdown discrepancies identified by the NRC, Impell has conducted a study and issued a report on the accuracy and adequacy of Train C walkdown data. The study included a review of audits and surveillances performed by various independent organizations. It was noted that no major deficiencies have been identified and that none of the deficiencies affected the qualification status of any Train C supports. The study also included a sample reinspection which covered 78 supports and encompassed a total of 5,271 attributes. The attribute discrepancy rate was found to be approximately 1.9% of which only 0.7% were unconservative. None of the discrepancies resulted in the disqualification of the affected conduit systems. Furthermore, it was demonstrated that Train C conduit systems generally exhibit large safety margins between demand and ultimate capacity. Based on these results TU Electric does not consider additional reinspection to be warranted. However, we are concerned with such errors and are endeavoring to reduce personnel errors through the training described above.

4. Date When Full Compliance Will be Achieved

The Impell retraining of Train C walkdown personnel was completed by December 18, 1987.

The meeting of walkdown personnel with the Manager of Civil Engineering was held January 20, 1988.

The clarification of Impell instructions was completed by January 22, 1988.

The Impell Accuracy and Adequacy of Walkdown Information Report was completed January 26, 1988.