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May 3, 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 NO. 50-445
REVISED RESPONSE TO NRC INSPECTION REPORT NO. 50-445/87-22

REF: Letter logged TXX-88309 from W. G. Council to the NRC
dated March 11, 1988

Gentlemen:

TU Electric has reviewed Open Item 445/8722-0-03 in your letter dated January 12, 1988, concerning the inspection conducted by Messrs. A. Singh and D. Kelley and NRC consultants during the period October 19, 1987 through October 23, 1987. Our response to this open item is provided in the attachment to this letter.

Additionally, in order to provide you with the latest status on other items in the inspection report, an update to the following open and unresolved items is also provided.

Item #

- 445/8722-0-02
- 445/8722-0-05
- 445/8722-0-07
- 445/8722-0-09
- 445/8722-U-01
- 445/8722-U-02

Very truly yours,

W. G. Council

W. G. Council

By: *D. R. Woodlan*
D. R. Woodlan
Manager, Docket Licensing

JDS/grr
Attachment

c-Mr. R. D. Martin, Region IV

Resident Inspectors, CPSES (3)

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OPEN ITEM
(445/8722-0-02)

During this inspection several barriers separating redundant trains of safe shutdown equipment were identified by the inspector as not being three-hour-rated. Specifically, unrated steel hatches were located in fire area boundaries. The applicant presented an analysis which stated that due to low combustible loading on either side of the hatches, automatic suppression on at least one side of the hatch and a one hour fire resistive coating on both sides of the hatch, it was not likely that a fire would propagate through the hatch. The inspector reviewed the analysis and found it acceptable. However, it was identified that this was a deviation from Section D.1.j of Appendix A to BTP APCS 9.5-1 and must be identified as such in the FSAR. The applicant committed to identify these unrated steel hatches in a future FSAR amendment. This item is considered open pending submittal by the applicant of an FSAR amendment addressing this deviation (445/8722-0-02).

RESPONSE
(445/8722-0-02)

These unrated steel hatches are identified in letter logged TXX-88418, dated April 29, 1988, which transmits an advance copy of an update to the CPSES FSAR to be included in a future amendment. A deviation to Section D.1.j of Appendix A to BTP APCS 9.5-1 has been added in FSAR Section 9.5.1.6.2.

OPEN ITEM
(445/8722-0-03)

Appendix A to APCS 9.5-1 Section D.1(j) states that "Penetrations in fire barriers, including conduits and piping, should be sealed or closed to provide a fire resistive rating at least equal to that of the fire barrier itself. Door openings should be protected with equivalent rated door frames and hardware that have been tested and approved by a nationally recognized laboratory." During the inspection, the inspector expressed concern that the method of sealing conduits four inches in diameter and smaller was not in accordance with rated configurations and had not been identified as a deviation from staff guidance. The applicant stated that conduits with either suppression or detection on both sides of the penetration would only be sealed on one side while conduits with no detection or suppression on at least one side would be sealed on both sides at the first opening. The inspector was concerned that this plan would allow for only one seal outside of the barrier in locations where there was only detection on both sides on the barrier with no suppression on either side. The applicant agreed to revise their position and committed to seal conduits four inches and smaller on both sides at the first opening regardless of the presence of detection or suppression. This item is considered open pending the completion of the seal installation (445/8722-0-03).

RESPONSE
(445/8722-0-03)

The commitment to seal conduits four inches and smaller was not recognized by TU Electric as having occurred during the Fire Protection Program inspection in October, 1987. TU Electric has reviewed this item and provides the following response.

Where suppression and detection are provided on both sides of the barrier, conduits four (4) inches and smaller will be sealed on one side or in the barrier. Where suppression and detection are not provided on both sides of the barrier, the conduit penetration will be sealed on both sides or in the barrier. Discussion of internal conduit seals have been identified in a letter logged TXX-88418, dated April 29, 1988, which transmits an advance copy of an update to the CPSES FSAR to be included in a future amendment.

OPEN ITEM
(445/8722-0-05)

The areas identified in the 84-44 inspection as lacking lights had been provided with lights and therefore open item 445/8444-0-04 is considered closed. New areas requiring lights had been identified by the applicant resulting from changes in the safe shutdown analyses. As noted in Section 6.1.2 of this report, areas were identified by inspectors where additional emergency lights may be required. Pending completion of TU Electric's evaluation identifying locations requiring additional lights, including resolution of the emergency lighting issues discussed in Section 6.1.2 of this report, this item is considered open (445/8722-0-05).

RESPONSE
(445/8722-0-05)

Impell Calculation 0210-063-0034 will be revised by May 27, 1988, to address additional lighting required as a result of the revision of the Safe Shutdown Analysis. Required changes in lighting design will be identified in Deficiency Reports.

Deficiency Report # P87-05230 was issued to identify a need for an 8-hour battery pack emergency lighting unit at valve 1-HV-8112, as discussed in Section 6.1.2 of NRC inspection report 87-22. Other valves discussed in Section 6.1.2 (1-8808D, 1-FCV-618, 1-HCV-606, ICI-650, and ICI-651) are valves necessary to achieve Cold Shutdown. Equipment required to attain cold shutdown does not require emergency lighting, since cold shutdown procedures are less time critical and may be accomplished using onsite capability such as additional manpower, battery powered portable hand lights or establishing onsite power.

DCA 64,191, Revision 1, will include required new lighting. Implementation of this DCA is scheduled for July 31, 1988. A clarification for emergency lighting was provided in a letter logged TXX-88418, dated April 29, 1988, which transmits an advance copy of an update to the CPSES FSAR to be included in a future amendment.

OPEN ITEM
(445/8722-0-07)

Regarding the section in the procedure involving repairs, attachment 6 for the emergency air supply hook up to RHR valves 1-FCV-618 and 1-HCV-606 referenced actions to close instrument air valves ICI-650 and ICI-651 which were difficult to locate and poorly labeled. There also did not appear to be 8-hour emergency lights in the area. The need for TUEC to complete their assessment of locations where emergency lighting is required is addressed in Section 4.3 of this report. The issue of the poorly labeled valves is considered an open item pending further review by the staff (445/8722-0-07).

RESPONSE
(445/8722-0-07)

TU Electric Operations has installed new signs for these valves.

OPEN ITEM
(445/8722-0-09)

- a. The applicant analysis of protection of associated circuits related to safe shutdown was found to be substantially completed. The analysis resulted in the need for a number of modifications, many of which have not been completed. One area where a significant amount of work remained to be done was installation of Thermo-Lag. Until the analysis is completed and the staff reviews the results, this item is considered open (445/8722-0-09).
- b. The applicant identified circuits which were not completely analyzed to account for ampacity effects due to the increased operating temperature resulting from the Thermo-Lag wrap. The applicant indicated that Revision 4 of the CPSES FSSA Calculation No. 152 will address this issue and could result in further circuit modifications or Thermo-Lag changes. The common bus concern cannot be satisfactorily resolved until Revision 4 of the FSSA and the final Thermo-Lag report, ECF-M1700, have been completed. The issue of ampacity effects due to increased operating temperatures resulting from Thermo-Lag wrap will remain open subject to completion of TU Electric's analysis. This item is considered part of Open Item (445/8722-0-09).

RESPONSE
(445/8722-0-09)

- a. The revision of the analysis is complete and available for NRC review. Applicable DCAs will be initiated by June 1, 1988 to implement any identified modifications.
- b. The Thermo-Lag Removal Program at CPSES has addressed cables identified to have ampacity problems due to Thermo-Lag wrap. Impell Calculation 0210-142-C102 "Thermo-Lag Removal Detailed Analysis" identified sections of Thermo-Lagged raceways which were potential candidates for Thermo-Lag removal. Impell Calculations 0210-063-0077, 0210-063-0079 and EPM Calculation P257-169 reviewed the 66 cables which originally had been identified as ampacity issues and through Thermo-Lag reduction, decreased the list to 21 cables requiring analysis. SWEC Electrical is currently completing analysis of ampacity effects due to Thermo-Lag wrap (ECD 6-3-88). TU Electric will complete the necessary plant modifications by October 23, 1988.

UNRESOLVED ISSUE
(445/8722-U-01)

A number of stairwell walls were identified during the inspection where the inspector considered the justification was not adequate to support two hour rated construction. The applicant presented an evaluation which was conducted to determine the rating of fire area and stairwell boundaries. This evaluation was used to justify the fire rating of those boundaries which were not built specifically to the specifications of an independent testing organization. Where specific installation criteria of a recognized approval agency was not followed, the evaluation was used to determine if criteria were met or exceeded in such items as wall thickness and material type. The inspector identified six stairwell walls that could not be directly related to the installation criteria established by a recognized approval agency. The applicant has committed to take actions to resolve this issue. Pending actions taken by the applicant to resolve this issue and NRC review of those actions, this item is considered unresolved (445/8722-U-01).

RESPONSE
(445/8722-U-01)

DR # C-87-414 was initiated on October 14, 1987 by SWEC Civil/Structural identifying the six stairwell walls requiring field verification of construction by opening the walls. Impell Fire Protection has identified the requirements necessary to adequately disposition the Deficiency Report, and initiate revisions to DCA's to incorporate attributes into design documents and update Specification 2323-AS-36. Verification of hidden construction attributes and dispositioning of the deficiency report will be performed by SWEC Civil/Structural as part of the Post Construction Hardware Validation Program.

UNRESOLVED ISSUE
(445/8722-U-02)

"...The applicant presented a revised listing of manual actions... The list indicated that some revisions to Table 2 were necessary and that some actions had been deleted. The new listing of actions would be presented in a previously planned Revision 4 of Calculation No. 152.

The issue of the adequacy of manual actions which must be taken in the same area as the postulated fire remains unresolved pending TU Electric's revision to Calculation No. 152 and NRC review of the document (445/8722-U-02).

RESPONSE
(445/8722-U-02)

Calculation No. 152, Revision 4 is complete and available for NRC review. It contains a revised listing of manual actions by fire area, which easily identifies actions required in the same area as the fire. Justifications for the adequacy of these actions is provided.