

Log # TXX-6730 File # 10110 903.8 Ref #10CFR50.55(e)

September 21, 1987

William G. Counsil Executive Vice President

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

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)

DOCKET NOS. 50-445 AND 50-446

"SNUG TIGHT" TORQUING OF STRUCTURAL BOLTS

SDAR: CP-87-61 (INTERIM REPORT)

Gentlemen:

On August 21, 1987, we verbally notified your Mr. H. S. Phillips of a deficiency involving bolting utilized in structural connections which may not be torqued as required. This is an interim report of a potentially reportable item under the provisions of 10CFR50.55(e).

This deficiency was discovered as a result of investigations performed for Corrective Action Request (CAR) 87-011 involving missing jam nuts for structural bolting on the Unit 1 rotating platform.

FSAR Section 3.8 states that structural connections will conform to the requirements of AISC 7th Edition, which requires all high strength bolts to be torqued to a specified pretension. Contrary to this statement, Construction Procedure CCP-22, "Structural Steel Erection," Revision 3 (issued March 2, 1982) and Inspection Procedure QI-QP-11.14-1, "Inspection of Site Fabrication and Installation of Structural and Miscellaneous Steel," Revision 6 (issued June 15, 1982) were issued allowing high strength bolts in bearing connections to be installed only snug tight. Design Change Authorization (DCA) 18853 was issued October 3, 1983, revising Structural Specification 2323-SS-16b, "Structural Steel/Miscellaneous Steel (Category I & II)," also allowing high strength bolts in bearing connections to be installed only snug tight. Snug tight is defined as the tightness attained by a few impacts on an impact wrench or the full effort of a man using an ordinary spud wrench.

The scope of this issue is limited to high strength bolts in bearing type connections, since the above documented revisions still required high strength bolts in friction type connections to be torqued to a specified pretension. Prior to these revisions, the specification and procedures implemented the requirements of AISC 7th Edition, which required all high strength bolts to be torqued to a specified pretension.

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A subsequent review of inspection records (dated after the above document revisions) for high strength bolted connections has revealed that some records indicate the torque obtained for each bolt while other records do not record torque verification.

Our evaluation of this issue for safety significance will include validation of all high strength bolts (bearing and friction connections) to assure the bolted connections received the required torque. Field Verification Method (FVM) CPE-SWEC-FVM-EE/ME/IC/CS-090 has been issued to control this effort. Connections for which the torque cannot be validated will be documented on Nonconformance Reports (NCRs). The validation effort is currently scheduled for completion by March 1, 1988. The results of this backfit validation are required to determine the impact of this issue upon the safety of plant operations.

Our next report on this issue will be submitted no later than March 15, 1988.

Very truly yours,

W G Counsil

CBC:tgj

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

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