



CYGES

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Mr. J. B. George  
Project Manager  
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Highway FM 201  
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Subject: Pipe Support Review Questions  
Comanche Peak Steam Electric Station  
Independent Assessment Program - Phase 4  
Texas Utilities Generating Company  
Job No. 84056

Dear Mr. George:

Attachment A to this letter contains pipe support review questions which require TUGCO response in order for Cygna to complete the reviews. One last letter containing pipe support questions will be sent on 8/7/84. Don't hesitate to call if you require any clarification or additional information.

Very truly yours,

*N. H. Williams*

N. H. Williams  
Project Manager

cc: Mr. D. Wade (w/attachment)  
Mr. G. Grace (w/attachment)  
Mr. S. Burwell (w/attachment)  
Mr. S. Treby (w/attachment)  
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ATTACHMENT A

PIPE SUPPORT QUESTIONS

1. During walkdown, Cygna noted that struts do not bear a nameplate or tag indicating their rating (for example, SRS-80 for an NPSI component). How does the quality control inspector ensure that the appropriate strut has been installed for a particular pipe support?
2. In reviewing the calculation package for pipe support CC-2-019-713-A43S, Revision 1, dated 10/6/83, Cygna noted two extra sheets dated 2/15/84 and stamped "CHECK PRINT." These sheets did refer to this support. Similarly, in the support package for CC-1-019-004-A33R, Revision 0, were three sheets dated 3/6/84, which is after the Revision 0 approval date. Were these pages part of a calculation revision for which the cover sheets were not supplied to Cygna? If this is the case, please provide the cover sheets; otherwise, explain the relevance of these sheets to the calculation.
3. In reviewing the Component Cooling Water supports for Phase 4, Cygna has noted a number of instances in which the dimensions given on the drawing are insufficient to center the attachment on the baseplate. The attachment is dimensioned with respect to the bolt holes, but the bolt holes are dimensioned to the edge of the plate by the notation: "1-1/2 MIN TYP" or appropriate edge distance. For a 19" plate with 14" between bolt holes, this can mean 1 bolt with 1-1/2" edge distance and the other with 3-1/2" edge distance or any combination which sums to 5".

Since the bolt loads and plate stresses are affected by the attachment which is detailed as a function of bolt edge distance, please provide the technical basis TUGCO uses to ensure that the effects of moving the bolt-holes relative to the plate edge are consistently negligible as far as the attachments are concerned.

Examples:      CC-2-051-004-A43R, Rev. 6  
                  CC-2-019-705-A43R, Rev. 1  
                  CC-2-019-703-A43S, Rev. 2  
                  CC-2-019-713-A43S, Rev. 2  
                  CC-2-019-715-A43K, Rev. 3

4. During the Phase 3 reviews, Cygna questioned TUGCO on the effects of tube steel warpage. TUGCO replied that warpage was accounted for by applying a 5% reduction in section properties. During the Phase 4 walkdown, Cygna examined the Main Steam supports in question and observed side wall distortions of 1/4" - 1/2" from straight. This was especially noticeable at open tube ends which are now under some load such as deadweight. Cygna is currently performing calculations to evaluate the structural capability of the slightly warped section against localized bending or buckling. Please supply TUGCO calculations which justify that the 5% decrease sufficiently considers the effect at the tube end.