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USNRC

'84 MAY 22 A9:28

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
COMANCH

In the Matter of	)	
	)	
TEXAS UTILITIES ELECTRIC	)	Docket Nos. 50-445 and
COMPANY, <u>et al.</u>	)	50-446
	)	
(Comanche Peak Steam Electric	)	(Application for
Station, Units 1 and 2)	)	Operating Licenses)

APPLICANTS' STATEMENT OF MATERIAL FACTS AS  
TO WHICH THERE IS NO GENUINE ISSUE REGARDING  
APPLICANTS' USE OF GENERIC STIFFNESSES INSTEAD  
OF ACTUAL STIFFNESSES IN PIPING ANALYSIS

1. In computing the response of a piping system which is either ASME Safety Class 2 or 3, Applicants use generic stiffness values. For Safety Class 1 systems, Applicants use the actual support stiffnesses. (Iotti, Finneran Affidavit at 2.)
2. The use of generic stiffness values is a common industry practice and has been found acceptable by the NRC provided that the generic stiffnesses adequately represent the stiffness of the installed supports (Iotti, Finneran Affidavit at 2-3.)
3. Applicants have conducted reanalyses of three piping stress problems using actual support stiffnesses effects both prior and in response to the Board's December 28, 1983, Memorandum and Order (Quality Assurance for Design). (Iotti, Finneran Affidavit at 4-10.)
4. Applicants reviewed a total of about sixty supports as part of their reanalyses to determine stiffness effects. Of the

sixty, only four experienced increases in loads in excess of a factor of 2.0. All four were originally lightly loaded. The reanalyses demonstrated that only three of the sixty supports (less than 4%) would now have calculated loads which exceed allowable values. All three supports have snubbers. For two of these supports, only the snubbers themselves were computed to experience loads which exceed the manufacturer's rating. (One exceeds its rating by 14% and the other by 57%). The remaining components of these supports are within specified design allowables. The third support is computed to be overloaded (exceed the allowable by less than 5 percent). In no instance were recalculated nozzle or anchor loads or pipe stresses found to exceed allowable values. All other supports (frames, components, and base plates of these supports) are within specified design allowables for the recalculated loads. (Iotti, Finneran Affidavit at 19-20.)

5. Tests conducted on snubbers with the same rating as the two for which the calculated loads exceeded manufacturer's rated loads (Pacific Scientific Snubbers rated at 1500 lb. for normal and upset loads), have shown that the snubber will perform its intended function at loads which are considerably higher than rated. In addition, the tested snubbers would still function as intended during a seismic event, i.e., in locked position, at even higher loads. (Iotti, Finneran Affidavit at note 10.) Thus, there is no real safety concern with these snubbers.

6. Applicants' analyses provide reasonable assurance that for variations of actual stiffness from generic stiffness less than one order of magnitude (i.e., less than a factor of 10), there is no adverse effect on the seismic response of piping systems. In addition, the tests indicate that variations in excess of one order of magnitude will, in general, occur only for supports that have light initial loadings, which supports, because of the light initial loadings, are capable of accommodating relatively large increases in loads (Iotti, Finneran Affidavit at 7-10 and 15-20.)