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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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' MOTION FOR SUMMARY  
DISPOSITION OF CASE ALLEGATION  
REGARDING SECTION PROPERTY VALUES

Pursuant to 10 C.F.R. §2.749, Texas Utilities Generating Company, et al. ("Applicants") hereby move the Atomic Safety and Licensing Board ("Board") for summary disposition of the Citizens Association for Sound Energy's ("CASE") allegations regarding use in design of different sets of member property values for tube steel. As demonstrated in the accompanying affidavit (Attachment 1) and statement of material facts (Attachment 2), there is no genuine issue of fact to be heard regarding this issue. Applicants urge the Board to so find, to conclude that Applicants are entitled to a favorable decision as a matter of law, and to dismiss this issue in this proceeding.

I. BACKGROUND

This issue was raised by CASE's witness, Mr. Walsh, who alleged that different sets of member property values for tube steel sections were used by PSE in the design of pipe supports

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for Comanche Peak, and that as a result, the reactions and deflections calculated for these supports could be off by as much as 25%. (CASE Exhibit 659). The different sets of property values used were from the 1974 Welded Structural Tube Institute Manual of Cold Formed Welded Structural Steel Tubing and the 7th and 8th Editions of the American Institute of Steel Construction (AISC) Manuals. (Applicants Exhibit 142 at 29 and NRC Staff Exhibit 207 at 52). CASE provided Surrebuttal Testimony of Mr. Doyle (CASE Exhibit 763 at 27).

Although CASE originally was concerned only about the section property values utilized by PSE, it raised an additional issue regarding NPSI's and ITT-Grinnell's use of section property values from the 7th Edition of the AISC Manual (Tr. 6859-64). The NRC Staff testified that the 7th Edition's section property values are more conservative than the 8th Edition, and therefore the use of these values do not represent a safety concern (Tr. 6867-70).

Following litigation of the pipe support design allegations, each of the parties submitted proposed findings addressing, inter alia, this issue (see Applicants' Proposed Findings of Fact Concerning Pipe Support Design Questions (August 5, 1983) at 71-73; NRC Staff Proposed Findings of Fact (August 30, 1983) at 82-84; CASE Proposed Findings of Fact and Conclusions of Law (August 22, 1983) at Section XVIII; and Applicants' Response to CASE's Proposed Findings (September 6, 1983) at 43-4.

In the Board's Memorandum and Order of December 28, 1983 regarding design issues, the Board did not expressly address CASE's allegation concerning section property values.

## II. APPLICANTS' MOTION FOR SUMMARY DISPOSITION

### A. General

Applicants have previously discussed the legal requirements applicable to motions for summary disposition in their "Motion for Summary Disposition of Certain CASE Allegations Regarding AWS and ASME Code Provisions Related to Welding," filed April 15, 1984 (at 5-8). We incorporate that discussion herein, by reference.

### B. CASE's Allegations Regarding Section Properties Should Be Summarily Dismissed

CASE's allegations regarding this issue which are in this proceeding are (1) that PSE used in the design of pipe supports different sets of property values for tube steel sections (i.e., values from the 1974 Welded Structural Tube Institute Manual of Cold Formed Welded Structural Steel Tubing and the 7th and 8th Editions of the AISC Manuals) and that such use resulted in calculations of reactions and deflections that could be off by as much as 25%, and (2) that ITT and NPSI's use of property values from the 7th Edition of the AISC manual instead of from the 8th Edition was not conservative.

Applicants have conducted an evaluation of these issues. The results of this evaluation is set forth in the Attached Affidavit of J.C. Finneran and R.C. Iotti regarding CASE's Allegation Concerning Section Property Values ("Affidavit") (Attachment 1) and is summarized below.

Prior to January, 1982, ITT, NPSI and PSE all used tube steel properties from the AISC Manual of Steel Construction, 7th Edition. The AISC included one set of values to cover both hot rolled and cold formed steel. Affidavit at 2. However, the values listed conformed mostly to the hot rolled steel. Id. In January 1981, PSE elected to use properties from the 1974 Welded Structural Tube Institute Manual of Cold Formed Welded Structural Steel Tubing. Id. PSE used these values from January 1981 to January 1982. Id. During this time, the Welded Structural Tube Institute ("WSTI") revised and reissued its manual, lowering the member properties to agree precisely with the values listed in the 8th Edition of the AISC Manual of Steel Construction. Id. (The 8th Edition of the AISC Manual had increased the member properties from the 7th Edition. PSE adopted these values in January 1982. Id. at 2-3.

All tube steel at CPSES is 500 Grade B, which conforms to the AISC 8th Edition values. Id. at 3. The most important property value is the moment of inertia. An analysis of the difference between the WSTI (1974) values for the moment of inertia and those of the 8th Edition of AISC important for the

tube steel of concern reflects a range from 4.4% to 11.4%, with the average being 6.3%. (Hardly the misleading 20 and 25% values that Mr. Walsh has alleged.) A complete listing of changes is set forth in the Affidavit.

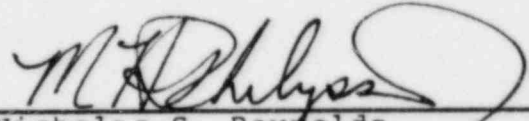
To provide assurance that this very minor change has no impact on pipe supports, Applicants have committed to conduct a complete reanalysis of all small bore Class I and large bore support designs to the 8th Edition AISC values. Applicants Exhibit 142 at 29.

In sum, the difference in member property values is relatively small and results in only minor variations in stress levels calculated for supports, and the AISC 7th Edition property values are equal to or more conservative than the AISC 8th Edition's values. Thus, CASE's allegation is unfounded and does not raise a genuine issue of fact subject to litigation in this proceeding.

#### IV. CONCLUSION

For the reasons set forth above, Applicants request that the Board grant Applicants' motion for summary disposition.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "M. H. Philips, Jr.", written over a horizontal line.

Nicholas S. Reynolds  
William A. Horin  
Malcolm H. Philips, Jr.

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May 18, 1984