

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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

AFFIDAVIT OF JOHN C. FINNERAN
REGARDING BOARD INQUIRIES CONCERNING STATUS OF
PIPE SUPPORT DESIGN VERIFICATION AND UNSTABLE SUPPORTS

I, John C. Finneran, Jr., being first duly sworn, depose and state as follows: I am employed by Texas Utilities Services, Inc., as Pipe Support Engineer for Comanche Peak. As such, I am familiar with the status of the pipe support design verification program and instances of unstable support design. A statement of my professional qualifications were submitted into evidence in this proceeding as Applicants' Exhibit 142B. This affidavit provides information in response to the Board's inquiries regarding the pipe support design program and unstable support designs.

The Board requested that Applicants provide a status report of the design verification program as it relates to pipe support designs (Tr. 7184). Below is a discussion of the status of the design verification process for pipe supports and a table setting forth the status of that process for each pipe support design organization. In addition, the Board has asked that Applicants

provide a response to the following question:

Based on a check of CMC documents, were there any individual group leaders or supervisors who signed off on a disproportionate number of unstable supports?

I present below the results of my investigation into this matter.

I. STATUS OF PIPE SUPPORT DESIGN VERIFICATION PROGRAM

Comanche Peak has implemented a comprehensive verification program as part of the iterative design process for piping and and pipe supports. As demonstrated in the table below, as of May 24, 1983, that program has proceeded to the point where approximately 86% of all pipe supports have been vendor certified. Of 16,119 Unit I and common (to Units 1 and 2) supports, 13,861 have been vendor certified. Approximately 50% of the review process for the remaining 2,258 supports has already been completed. Thus, there is ample time to complete that process prior to the scheduled fuel load date of September, 1983. In fact, based on current production rates and staffing levels, all organizations should complete their pipe support verification programs by no later than mid-August, 1983.

The vendor certification program currently involves a total of 120 people. As I have testified (Tr. 7185-90), each pipe support design organization employs three levels of review in the final vendor certification process. The first level involves the review by pipe support engineering personnel of the final as-built support design using the as-built piping stress analysis. Next, an independent review is performed by

different individuals of the design review conducted by engineering personnel. Finally, each final support design package is then reviewed and checked by designated group leaders or senior engineers authorized to certify the support design. The table below sets forth the status of the pipe support design review for each design organization, as well as the breakdown of the man-hours spent and personnel utilized by each support design organization in the vendor certification process.

PIPE SUPPORT VENDOR CERTIFICATION STATUS
AS OF 5-24-83

PIPE SUPPORT ENGINEERING -- LARGE BORE

Vendor Certification Complete	1207	
Remaining Supports	<u>443</u>	
TOTAL	1655	(Status: 73% Complete)
<u>Design Review Stage</u>	<u>Man-Hours/Support^{*/}</u>	<u>Current Staff</u>
Engineering	8.5	13
Independent Review	4.0	7
Certification	0.5	2

PIPE SUPPORT ENGINEERING -- SMALL BORE

Vendor Certification Complete	6426	
Remaining Supports	<u>491</u>	
TOTAL	6917	(Status: 93% Complete)

*/ Average man-hours required to complete respective stages of design review for each support.

<u>Design Review Stage</u>	<u>Man-Hours/Support</u>	<u>Current Staff</u>
Engineering	4.5	29
Independent Review	2.0	14
Certification	0.5	7

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Vendor Certificate Complete	4615
Remaining Supports	<u>632</u>
TOTAL	5247 (Status: 88% Complete)

<u>Design Review Stage</u>	<u>Man-Hours/Support</u>	<u>Current Staff</u>
Engineering	8.5	9
Independent Review	4.0	4
Certification	0.5	1

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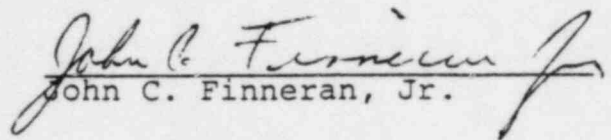
Vendor Certification Complete	1613
Remaining Supports	<u>687</u>
TOTAL	2300 (Status: 70% Complete)

<u>Design Review Stage</u>	<u>Man-Hours/Support</u>	<u>Current Staff</u>
Engineering	10.5	22
Independent Review	5.0	11
Certification	0.5	2

II. DESIGN OF UNSTABLE SUPPORTS

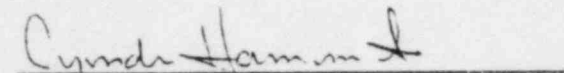
In response to the Board's question regarding unstable supports, I have determined that a total of 21 supports have been identified to date in the final vendor certification process as requiring modifications to improve stability.

My review of CMC's against these support designs indicated that no individual signed off on more than two CMC's causing potential instability in these supports. These instances of potential instability are an insignificant fraction of the total CMC's written against the 13,861 vendor certified supports.


John C. Finneran, Jr.

County of Somervell)
State of Texas)

Subscribed and sworn to before me this 2nd day of June, 1983


Notary Public

Commission expires June 11, 1984