

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
COMPANY, <u>et al.</u>)	50-446
)	
(Comanche Peak Steam Electric)	(Application for
Station, Units 1 and 2))	Operating License)

TESTIMONY OF FRANK M. STRAND
REGARDING CYGNA REVIEW OF DOCUMENT CONTROL

- Q.1. Please state your name and address.
- A.1. My name is Frank M. Strand. I reside at 188 Oak Trail Drive, Oak Hills, Granbury, Texas. A copy of my professional qualifications is attached to my written testimony.
- Q.2. What was your position at Comanche Peak during the Cygna review of document control?
- A.2. I was employed as Supervisor of Document Control for Brown & Root. As such, I was responsible for the distribution of engineering documentation needed in the construction of Comanche Peak. This activity was centered in the main Document Control Center ("DCC") and its Document Control Satellite Centers.
- Q.3. Are you familiar with the Cygna review of document control last October?
- A.3. Yes.

Testimony of Frank M. Strand (2)

Q.4. In connection with that reverification, did you receive a copy of a list of drawings in advance of the Cygna review of DCC last October?

A.4. Yes. On Tuesday, October 25, 1983, I was in my office with Heyward Hutchinson, my immediate supervisor, and with J. M. Strange, a TUGCO Nuclear Engineering Supervising Engineer. At around 3:30 p.m., Steve Bibo from Cygna entered my office and handed me a list of drawings. He stated that these were the drawings that he would be looking at the following day and indicated that we should generate distribution lists and design change logs for each drawing.

Q.5. What did you do with the list?

A.5. I gave it to the DCC Staff and had them prepare the information Cygna requested. In addition, I had them reproduce a copy of each drawing on the list for Mr. Bibo.

Q.6. Did you give your staff any special instructions to follow when preparing this material?

A.6. No.

Q.7. Did you give the list of drawings to anyone else?

A.7. Yes. I gave the list of documents to Dobie Hatley.

Q.8. Why did you give Ms. Hatley the list of documents?

A.8. Because she was the supervisor over all of the satellites.

Testimony of Frank M. Strand (3)

Q.9. What instructions did you give Ms. Hatley when you gave her the list?

A.9. I didn't give her any specific instructions.

Q.10. What did you expect she would do with the list?

A.10. I didn't expect her to do anything specific with the list. I wanted to make sure that the satellites were neat and that all of the filing was current. I had no concerns regarding whether the specific documents Cygna requested were in the satellite files. I assumed that they were.

Brown & Root, Inc.

FRANK MARK STRAND
DOCUMENT CONTROLLER V

SUMMARY OF EXPERIENCE:

I have 25 years of experience in application engineering and market analyses in heat transfer products in relation to aerospace, marine and industrial applications. Estimating, design and sales of hydro electric heavy fabrications. Consultant work in regenerative cycle gas turbine. Upon joining Brown & Root was responsible for the implementation of initial and final documentation of piping system as they apply to a nuclear power plant. For two years conducted site I.E. studies. As of June 1, 1982 - Supervisor Document Control Center.

PROJECT TYPES:

Nuclear Power Plants
Hydro Electric Plants

ACTIVITIES:

Civil, Structural Design
Cost Estimates
Bid Evaluations
Progress Analyses
Marketing Studies
Design Analyses
Personnel Evaluations
Contractual Drawings
Checking of Drawings & Calculations
Documentation Verification
Marketing Implementations & Management
CPSES Studies
Document Control Supervisor

LANGUAGE PROFICIENCIES:

German

PERSONAL DATA:

Born October 25, 1919, Buffalo, New York
Regents Diploma from St. Joseph's Collegiate Institute, Buffalo, New York
Vocational Training from Buffalo Technical High School, Buffalo, New York
Married, two children

EMPLOYMENT HISTORY

Brown & Root, Inc.
Hood & Somervell Sheriff's Dept.
Self Employed
General Motor Corporation
ADSCO
Strand Manufacturing Co.

Since 1980
6 years
4 years
11 years
4 years
4 years

SOCIAL SECURITY NO.: 071-16-5846

February, 1983

FRANK MARK STRAND
DOCUMENT CONTROLLER V

DETAILED PROFESSIONAL EXPERIENCE:

Brown & Root, Inc. - Since 1980

Was responsible for having documentation prepared in relation to the piping system of the plant and verification of completed work prior to installation in the system. Also responsible for manpower and material usage studies in relation to the site.

For two years conducted various types of studies primarily tool and equipment related.

As of June 1, 1982 became Document Control Center Supervisor.

Comanche Peak Steam Electric Station -
Glen Rose, Texas

Hood & Somervell Sheriff's Dept.: (6 years)

Deputy:

During this period of time I was employed as a Sheriff's Deputy

Hood & Somervell County Sheriff's Department -
Glen Rose and Granbury, Texas

Self-Employed: (4 years)

Consultant:

This work is a spin-off from the writer's involvement with General Motors development of plate fin regenerators for use with the industrial gas turbine. Gas turbine regenerators are 60 to 130 ton heat recovery systems which significantly increase the thermal efficiency of the gas turbines used in driving compressors for natural gas pipelines and for power generation by public utilities. Services rendered are design and supervision of special air and flow testing. Special installation design and supervision and cycle analysis. Typical clients were Northern Natural Gas, Trans-Canada Pipelines, Pacific Gas Transmission, Colonial Pipeline, City of Bryan, Ohio and others.

General Motors Corporation, Harrison Radiator Division: (11 years)

Senior Sales Engineer:

Joined this organization in August, 1959, as a senior sales engineer. Duties consisted of sales, marketing and application engineering. Products sold were capital equipment such as gas turbine regenerators, industrial gas turbines and allied industrial, marine and aircraft heat transfer equipment. Performed in-depth market studies and analyses for G. M. Central Office. Successful projects too numerous to list here but have completed many individual sales in excess of \$1,000,000. Left this organization because for personal reasons, could not accept transfer back to the home office in the Northeast.

General Motors Corporation, Harrison Radiator Division, -
Lockport, New York

FRANK MARK STRAND
DOCUMENT CONTROLLER V

ADSCO Division, YUBA Industries: (4 years)

Assistant Sales Manager:

Joined this organization as Assistant Manager, Estimating and Preliminary Design. Estimating of sophisticated structural steel projects such as Corps. of Engineer Canal Locks, miter gates and bridges and hydroelectric fabrication occupied the first two years of my tenure with this Company. Was promoted to Assistant Sales Manager, Heavy Fabrication, with responsibility for all sales and estimating for all territory East of the Mississippi. Successful projects were the Alben Barclay Bridge on the Cumberland River; Miter Gates on the Monongahela at Pittsburgh, Pennsylvania; Green River Locks at Owensboro, Kentucky; Penstocks and Draft tubes at Lewiston, New York and others. Resigned from this organization to accept position with General Motors.

ADSCO Division, YUBA Industries, -
Buffalo, New York

Strand Manufacturing Company, Inc.: (4 years)

President/General Manager:

Organized this Corporation as President and General Manager with four (4) other investors, to design and manufacture steel and steel and wood cable reels and special shipping and handling devices. This Company, because of differences among the investors was merged into another organization known as Strand-Buffalo Corporation. The Corporation is still operating in North Tonawanda, New York, the writer's interest having been sold in 1955.

Strand Manufacturing Co., Inc. -
Lackawanna, New York

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)

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing "Applicants' Motion Regarding Advance Notice of Cygna Review of Document Control"; "Additional Testimony of Heyward Asgell Hutchinson, Jr. Regarding Cygna Review of Document Control"; "Testimony of Jesse Michael Strange Regarding Cygna Review of Document Control"; and "Testimony of Frank M. Strand Regarding Cygna Review of Document Control" in the above-captioned matter were served upon the following persons by overnight delivery (*), or deposit in the United States mail, first class, postage prepaid, this 12th day of April, 1984, or by hand delivery (**) on the 13th day of April, 1984.

**Peter B. Bloch, Esq.
Chairman, Atomic Safety and
Licensing Board
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Chairman, Atomic Safety and
Licensing Appeal Panel
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

*Dr. Walter H. Jordan
881 West Outer Drive
Oak Ridge, Tennessee 37830

Mr. William L. Clements
Docketing & Service Branch
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

*Dr. Kenneth A. McCollom
Dean, Division of Engineering
Architecture and Technology
Oklahoma State University
Stillwater, Oklahoma 74074

**Stuart A. Treby, Esq.
Office of the Executive
Legal Director
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Mr. John Collins
Regional Administrator,
Region IV
U.S. Nuclear Regulatory
Commission
611 Ryan Plaza Drive
Suite 1000
Arlington, Texas 76011

Chairman, Atomic Safety and
Licensing Board Panel
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Renea Hicks, Esq.
Assistant Attorney General
Environmental Protection
Division
P.O. Box 12548
Capitol Station
Austin, Texas 78711

Lanny A. Sinkin
114 W. 7th Street
Suite 220
Austin, Texas 78701

*Mrs. Juanita Ellis
President, CASE
1426 South Polk Street
Dallas, Texas 75224

**Ellen Ginsberg, Esquire
Atomic Safety and Licensing
Board Panel
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555


Sanford L. Hartman

cc: Homer C. Schmidt
Robert Wooldridge, Esq.
David R. Pigott, Esq.