

AFFIDAVIT OF PAUL REILLY

City of Glen Rose     )  
                              )  
State of Texas         )     ss:

Paul Reilly, being duly sworn, deposes and says:

1. My name is Paul Reilly. I am an employee of Stone and Webster Engineering Corporation (SWEC). I presently have approximately 18 years of nuclear industry experience. Attached to this affidavit as Exhibit A is my resume.

2. The purpose of this affidavit is to describe the review of the NSRS perceptions in which I, and others in my group, participated at the TVA's Watts Bar site in early 1986. I was not interviewed by the NRC on this subject.

3. In January, 1986, I spent several working days at the Watts Bar site, along with six other experienced SWEC employees, conducting a review to evaluate the validity of eleven so-called "perceptions" that had been formed by TVA's Nuclear Safety Review Staff (NSRS). The members of our group, under the direction of Mr. Craig Lundin, had extensive experience in the particular areas of nuclear plant activity that were covered by the NSRS perceptions. My own experience is in the engineering area, and I had recently been involved in the startup of Millstone III.

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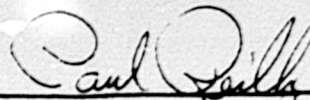
4. Our group spent a short, but intensive, period of time at the Watts Bar site conducting an investigation to determine whether the information that had been provided by the NSRS supported its perceptions.

5. Our group worked both collectively and individually. I reviewed documentation, I interviewed some TVA engineers, and I observed activities at the plant. At daily exit meetings with Mr. Lundin and throughout the day, the members of the group discussed the facts that we were finding. There was some overlap in the group's activities, as well, which was a useful source of information and resulted in substantial discussion of the issues. Throughout our review, we worked in close communication with each other. Although our effort was not formalized, the lack of formality in no way affected our attitude, our approach, or the results of our efforts.


6. We were given a free hand to investigate whatever we felt was necessary, and there was absolutely no effort by Mr. Lundin or anyone else to influence the outcome of our effort.

7. Our group did not produce a report. Instead, each day we shared the information we had gathered with Craig

Lundin, and at the end of the review process, we participated in a final meeting with Mr. Lundin to discuss our work.

  
\_\_\_\_\_  
Paul Reilly

Subscribed and sworn to before me  
this 17<sup>th</sup> day of November, 1988.

  
\_\_\_\_\_  
Notary Public

My Commission Expires: 4-19-90



REILLY, PAUL

PRINCIPAL ELECTRICAL ENGINEER  
ELECTRICAL DIVISION

EDUCATION

Northeastern University - Bachelor of Science in Electrical Engineering 1970  
Various Stone & Webster Continuing Education Courses and Management Workshops

LICENSES AND REGISTRATIONS

Professional Engineer - Massachusetts, Virginia, Connecticut, Pennsylvania

EXPERIENCE SUMMARY

Mr. Reilly is a Principal Electrical Engineer in the Electrical Division. He has been involved in the engineering, design, and construction of power plants for over eighteen years. He is currently assigned as Assistant Project Manager on the Comanche Peak nuclear power plant project. As Assistant Project Manager, he serves as the primary project interface between the Utility's Nuclear Operations group and SWEC engineering. He is responsible for monitoring status, problem areas, and changes in scope and schedules to ensure that engineering and design activities will support the overall testing effort.

Since joining Stone & Webster Engineering Corporation (SWEC) in June 1970, he has been assigned to pressurized water reactor plant projects as Assistant Project Manager, Assistant Project Engineer, Lead Electrical, Assistant Lead Electrical, and Support Electrical Engineer. These projects were involved with the review of existing designs, the development of original engineering, design, and licensing as well as modifications made to operating plants. He was assigned as a Field Engineer at the Surry Nuclear Power Plant - Units 1 and 2 construction site.

In addition, he has been assigned as a Support Electrical Engineer to a fossil project which consisted of the installation of two 600 MW units utilizing lignite-fired steam generators.

Prior to joining SWEC, he worked for approximately 18 months with the Brockton Edison Company where he was involved with the layout, design, and construction of 13.8 kV transmission lines and substations.

PROFESSIONAL AFFILIATIONS

Institute of Electrical and Electronics Engineers - Senior Member

DETAILED EXPERIENCE RECORD  
REILLY, PAUL 76246

STONE & WEBSTER ENGINEERING CORPORATION, BOSTON, MA (June 1970 to Present)

Appointments:

Principal Electrical Engineer - July 1987  
Senior Electrical Engineer - Jan 1983  
Electrical Engineer - Apr 1978  
Engineer, Electrical Division - June 1971  
Engineer (Career Development) - June 1970

Comanche Peak Steam Electric Station - Texas Utilities Generating Company (Oct 1987 to Present)

As ASSISTANT PROJECT MANAGER responsible for the project interface with the Utility's Nuclear operations group. Particular duties include development and maintenance of procedures and descriptions of work for interface with Operations, as well as monitoring status, problem areas, and schedules to ensure that engineering and design activities will support the overall testing effort.

Beaver Valley Power Station - Unit 2, Duquense Light Company (July 1986 to Sept 1987)

As ASSISTANT PROJECT ENGINEER responsible for the administration and direction of the electrical and instrumentation and controls efforts. Particular duties included coordination of the headquarters effort with construction and the Site Engineering Group (SEG).

Comanche Peak Steam Electric Station - Unit 1, Texas Utilities Generating Company (May 1986 to June 1986)

Assigned to the Comanche Peak Engineering and Design Assessment Team. Under the direction of the Team Leader, responsible for the coordination and performance of the Electrical and Controls engineering and design evaluation of Comanche Peak, Unit 1.

Electrical Division Staff (Mar 1986 to Apr 1986)

Worked on the evaluation and disposition of potentially reportable deficiencies under 10CFR50.55(e) and the reporting of defects and failures to comply under 10CFR21.

Millstone Nuclear Power Station - Unit 3, Northeast Utilities Service Company (Feb 1982 to Feb 1986)

As ASSISTANT PROJECT ENGINEER (Sept 1983 to Feb 1986), responsible for the administration and direction of the Post Turnover Engineering Group. This group, located onsite, coordinated and assigned responsibility for all system deficiencies identified after a system was turned over to the Client. This



included those identified as part of the Client startup program as well as those identified during the ongoing engineering, design, and construction efforts. As head of the STLEG, he was a member of the Millstone - Unit 3 Joint Test Group (JTG) which served as an advisory body on matters relating to the proper conduct of the startup test program, review/approval of test procedures and results, and approving the disposition of deficiencies resulting from construction and/or testing. It was comprised of five members representing the major groups concerned with the design, construction, and startup of the unit.

As ASSISTANT PROJECT ENGINEER (Feb 1982 to Sept 1983) under direction of the Project Engineer, responsible for management of personnel and activities in the electrical, instrument and controls, hydraulics, and advisory operations disciplines for a 1,200 MW pressurized water reactor plant in Waterford, CT. Responsibilities also involved the evaluation of remaining work scope for input to Project Estimate 5, development of the FSAR, and resolution of NRC questions.

Malakoff Generating Station - Units 1 and 2, Houston Lighting and Power Company (Oct 1981 to Jan 1982)

As SUPPORT ELECTRICAL ENGINEER, assigned as the work package engineer for the auxiliary electrical system, power transformers, and 480 V load centers. Responsibilities included the development and control of the scope of work, schedule, and manhours associated with these work packages; review and approval of manhour allocations, change control, and other documentation associated with the work packages; performing the work in the package and coordinating the work of other disciplines within the work package; and preparing analysis reports which explained schedule and cost variances.

North Anna - Units 1 and 2 and Surry - Units 1 and 2 Nuclear Power Plant, Virginia Electric and Power Company (Sept 1979 to Sept 1981)

As LEAD ELECTRICAL ENGINEER for the Operations Services Division, involved with modifications made at four licensed nuclear power stations. Responsibilities included the electrical portion for determination and supervision of the electrical manpower, coordination and scheduling of the engineering and design effort, procurement of equipment, and coordination with the site extension office and construction effort.

North Anna Nuclear Power Plants - Units 3 and 4, Virginia Electric and Power Company (Sept 1971 to Aug 1979)

As LEAD ELECTRICAL ENGINEER (July 1974-Aug 1979), responsibilities included the electrical portion for the work involved with the engineering and design of two pressurized water nuclear power plants, determination of manpower requirements, coordination and scheduling of the engineering and design effort, and procurement of equipment.

Responsibility for the overall electrical engineering portion of the plant including drawings, specifications, design criteria, compliance with PSAR, and preparation of FSAR. Responsibilities included supervision of the overall electrical engineering and design effort, coordination with and review of nuclear steam supplier systems and equipment, conformance with AEC guidelines,

and coordination of the Boston engineering and design effort with Fischback & Moore (the electrical contractor at the site).

As ASSISTANT LEAD ELECTRICAL ENGINEER (Jan 1974-June 1974), supervised six Support Electrical Engineers and reported to the Lead Electrical Engineer. Responsible for the supervision of the physical layout of the electrical portion of the plant and the procurement of the following equipment: 4 kV ac motors, emergency diesel generator sets, 480 V motor control centers, cable tray, fire detection equipment, cable, and protective relays.

As SUPPORT ELECTRICAL ENGINEER (Sept 1971 to Dec 1973), responsibilities included the development of electrical system codes for equipment identification and assignment of electrical equipment identification numbers, development of the project's electrical load list, formulation of the emergency diesel generator loading schedule, procurement of the 4 kV ac induction motors, procurement of the emergency diesel sets, physical layout of the reactor containment area with regard to electrical equipment, review of the motor section of specifications used by other disciplines for procurement of equipment, review of nuclear steam supplier's motor specifications for compliance with the client's contract and project requirements, and development of response to AEC questions concerning separation of safety-related equipment and cables.

North Anna - Units 1 and 2, Virginia Electric and Power Company  
(June 1971 to Aug 1971)

As part of the Career Development Program, assignments included:

#### Electrical Design

Worked on developing company wiring diagrams from manufacturer's prints and also the computer scheduling of cable. Cable scheduling work involved both the identification and routing of cables.

#### Controls

Worked on the development of one line and elementary diagrams and attended a lecture series given on same.

#### Systems Analysis and Programming

As part of assignment, a refresher course was taken on computer programming. Became involved with the system being set up for cable scheduling.

Surry - Units 1 and 2, Virginia Electric and Power Company  
(July 1970 to May 1971)

As FIELD ENGINEER assigned to the Electrical Group, responsibilities included the scheduling and supervision of the installation of electrical equipment and cable. Work also included coordination with electrical design regarding resolution of installation problems concerning routing and separation of redundant cables and cable terminations.

### Electrical Division

As SUPPORT ELECTRICAL ENGINEER, assignments included sag calculations and structure spacing for transmission lines and also involved the taking of field radio signals measurements for use in a radio interference study being done for a future transmission line.

#### BROCKTON EDISON COMPANY, BROCKTON, MA (1967-1970) (6 Co-Op Terms)

As ENGINEERING AIDE, involved in the layout and construction of a 13.8 kV transmission line. Work included right-of-way profiling, structure location and spacing, guying, and line clearances. Substation work included lot survey and slab, conduit, and pole location.

Both field and in the office layout work was done on these projects. The last two co-op terms spent in the Main Street office were the observance of the management end of the company.