UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	Docket No. 50-344
PORTLAND GENERAL ELECTRIC COMPANY, ET AL.	)	(Control Building)
	)	
(Trojan Nuclear Plant)	)	

JOINT AFFIDAVIT OF CHARLES M. TRAMMELL, III
AND KENNETH S. HERRING ON LENGTH OF
INTERIM OPERATION FOR THE AS-BUILT CONTROL BUILDING

STATE OF MARYLAND)SS
COUNTY OF MONTGOMERY)

I, Charles M. Trammell, III, being duly sworn, depose and state:

1. I am a Senior Project Manager, Division of Operating Reactors, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

2. I have prepared the statement of Professional Qualifications attached hereto, and, if called upon, would testify as set forth therein.

3. I am the NRC Staff Project Manager for the Trojan Nuclear Plant. In this capacity, I have been involved in the NRC Staff's review and evaluation of interim operation of the as-built Control Building since the issuance of the NRC's Order for Modification of License on this matter on May 26, 1978.

I. Kenneth S. Herring, being duly sworn, depose and state:

4. I am a senior structural engineer, Engineering Branch, Division of Operating Reactors, U.S. Nuclear Regulatory Commission, Washington DC 20555.

5. I have prepared the statement of Professional Qualifications attached hereto, and if called upon, would testify as set forth therein.

6. In my capacity as senior structural engineer, I have had primary responsibility for the NRC Staff's evaluation of the structural adequacy of the as-built Control, Auxiliary and Fuel Building Complex for interim operation since the NRC was informed of the Control Building design deficiencies in April, 1979.

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We the affiants Charles M. Trammell, III and Kenneth S. Herring, being duly sworn, depose and state:

7. The analyses demonstrating the structural adequacy of the as-built Control Building Complex for interim operation were deterministic and had no time dependence. Therefore, no time limit is dictated by the analyses performed. Accordingly, we see no need at this time for an explicit time limit on the length of interim operation.

8. At the same time, interim operation of the as-built plant is at reduced margins relative to those provided by the original operating license criteria. These margins should be restored to bring the Control Building into substantial conformance with the FSAR criteria and the restoration should be made with all deliberate speed. As such, we are of the view that evidence should be presented in the hearings on the proposed modifications on the length of time that will reasonably be required after authorization of modifications to complete the modifications and the licensee should be required to complete them within that time.

Kenneth S. Herring

Kenneth S. Herring

Charles M. Trammell, III

Charles M. Trammell, III

Subscribed and sworn to before
me this 19th day of December, 1979

Notary Public

My Commission expires: July 1, 1982

CHARLES M. TRAMMELL, III

DIVISION OF OPERATING REACTORS

U. S. NUCLEAR REGULATORY COMMISSION

PROFESSIONAL QUALIFICATIONS

I am a senior project manager in the Division of Operating Reactors, Office of Nuclear Reactor Regulation, U. S. Nuclear Regulatory Commission. As such, I am responsible for managing and participating in the safety and environmental reviews associated with licensing actions regarding the design and operation of assigned operating power and research reactors. This includes planning and coordinating the efforts of other Commission personnel involved in the reviews.

I have a Bachelor of Arts degree in mathematics from Brown University, and one year of graduate studies in mathematics at Rennselaer Polytechnic Institute where I worked as a graduate assistant.

From November 1962 until February 1964, I attended U. S. Naval Destroyer School at Newport, Rhode Island, and was subsequently assigned as Engineer Officer of USS Farragut (DLG-6), where I was responsible for all aspects of propulsion engineering and related auxiliary equipment.

My experience in the nuclear field began in 1964, when I entered the Navy Nuclear Power Program. I attended a one-year course in naval nuclear power, and was subsequently selected for a staff position at the Navy's prototype nuclear power plant (D1G) at West Milton, New York. There I

was in charge of a shift crew which operated the plant for training and engineering testing. I was responsible for the training and nuclear qualification of assigned officers and enlisted men.

From 1967 until 1974, I was employed by Public Service Electric and Gas Company where I was responsible initially for the Preliminary Safety Analysis Report for the Salem Nuclear Generating Station. Later, I attended the Westinghouse Reactor Operator Training Program (10 months) which led to certification of equivalency as Reactor Operator thereby establishing eligibility for a "cold" senior reactor operator license at Salem. In 1969, I was promoted to Reactor Engineer at the Salem station where I was responsible for developing physics and core performance tests and fuel handling procedures while the plant was under construction. Training at Westinghouse Nuclear Operations Division and startup testing experience at Indian Point, Ginna, H. B. Robinson and Surry stations led to qualification as nuclear engineer in accordance with ANSI Standard N18.1. In September 1973, I was promoted to the position of Quality Assurance Engineer at the Salem site, where I was responsible for developing the quality assurance program for the operational phase of the Salem station.

I have held my position with the Commission since September 1974. I have participated in numerous safety and environmental reviews of all types of commercial nuclear power plants, including testifying as an expert witness in the Trojan Spent Fuel Pool Expansion Hearing.

PROFESSIONAL QUALIFICATIONS
OF
KENNETH S. HERRING

EXPERIENCE:

Jan. 1977 to Present

U.S. Nuclear Regulatory Commission
Engineering Branch, Division of Operating Reactors
Office of Nuclear Reactor Regulation
Washington, D.C. 20555
Applied Mechanics Engineer (1/77 to 1/79)
Structural Dynamicist (1/79 to 10/79)
Senior Structural Engineer (10/79 to Present)
Responsible for the review, the analysis, and the evaluation of structural and mechanical aspects related to safety issues for reactor facilities licensed for power operation, and test reactor facilities, including the formulation of regulations and safety criteria. An emphasis is placed on seismic, impact and other dynamic loading considerations, in addition to static loading considerations; and linear and nonlinear, concrete and steel behavior.
Responsible for coordinating various outside technical assistance programs and internal tasks related to structural and mechanical applications tc nuclear power plants.

Aug. 1974 to Dec. 1976

Stone and Webster Engineering Corporation
3 Executive Campus
Cherry Hill, New Jersey
Structural Engineer in the Structural Mechanics Group
Responsible for conducting static and dynamic, including seismic, finite element analysis and design of structures in nuclear power generation facilities.
Responsible for maintaining the Strucural Mechanics computer facilities at CHOC.
Fortran IV programming experience.

Aug. 1973 to Aug. 1974

University of Illinois, Department of Civil Engineering
Urbana, Illinois 61801
Research Assistant
Responsible for conducting an investigation into the material properties of fiber reinforced concrete using quick-setting cements for the Department of Transportation, Federal Railroad Administration. A report on the outcome of the study was published.

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EDUCATION:

State University of New York at Stony Brook - Bachelor of Engineering - May 1973

University of Illinois at Urbana-Champaign - Master of Science in Civil Engineering (Structures) - August 1974

ENGINEER-IN-TRAINING: New Jersey

TECHNICAL SOCIETIES:

American Society of Civil Engineers - Associate Member - April 1974 to Present.

ASME BOILER AND PRESSURE VESSEL CODE COMMITTEES:

Section XI - Subgroup on Containment - Member - January 1979 to Present.

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