

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING APPEAL BOARD

In the Matter of	)	
	)	
VIRGINIA ELECTRIC AND POWER	)	
COMPANY	)	Docket Nos. 50-338 OL
	)	50-339 OL
(North Anna Nuclear Power	)	
Station, Units 1 and 2)	)	

AFFIDAVIT OF ROBERT D. POLLARD

I, ROBERT D. POLLARD, hereby make my affidavit as follows:

I am the staff nuclear safety engineer in the Washington, D.C., office of the Union of Concerned Scientists.

My formal education in nuclear technology began in May, 1959, when I was selected to serve as an electronics technician in the nuclear power program of the United States Navy. After completing the required training, I became an instructor responsible for teaching naval personnel both the theoretical and practical aspects of operation, maintenance and repair of naval nuclear power plants.

From February, 1964, to April, 1965, I served as the senior reactor operator and supervised the reactor control division aboard the U.S.S. Sargo, a nuclear-powered submarine. In 1965, I was honorably discharged from the U.S. Navy and attended Syracuse University, where I received the degree of Bachelor of Science magna cum laude in Electrical Engineering in June, 1969.

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In July, 1969, I was hired by the U.S. Atomic Energy Commission (AEC) and continued as a technical expert with the AEC and its successor, the NRC, until February, 1976. After joining the AEC, I studied advanced electrical and nuclear engineering at the Graduate School of the University of New Mexico in Albuquerque. I subsequently advanced to the positions of Reactor Engineer (Instrumentation) and Project Manager.

As a Reactor Engineer assigned to the Electrical, Instrumentation and Control Systems Branch, I was primarily responsible for analyzing and evaluating the adequacy of the design of reactor protection systems, control systems and emergency electrical power systems in proposed nuclear facilities. In September, 1974, I was promoted to the position of Project Manager and became responsible for planning and coordinating all aspects of the design and safety reviews of applications for licenses to construct and operate several commercial nuclear power plants.

I am a member of the Institute of Electrical and Electronics Engineers (IEEE). I have served as the NRC representative on various IEEE committees that developed some of the IEEE standards used by the NRC to evaluate the safety of nuclear power plants.

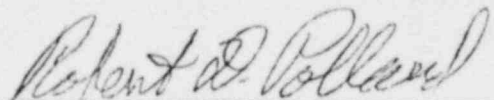
One of the duties to which I was assigned while at the AEC was to act as the principal staff reviewer for the turbine missile generic issue. My duties in that area during the

period of 1972 - 1973 were approximately equivalent to those now assigned to the Task Action Manager for this subject. Among other tasks, I performed the calculations for probability of strike for high and low trajectory missiles, analyzed the possible mitigating effect of reinforcing steel and steel liners for reinforced concrete structures, and performed calculations attempting to analyze the damage caused by missile impact as a function of the angle of incidence.

Portions of this work were used to support the conclusions reached by S. H. Bush in "Probability of Damage to Nuclear Components," Nuclear Safety, Vol. 14, No. 3, May-June, 1973, which is a major document referenced in Regulatory Guide 1.115, "Protection Against Low-Trajectory Turbine Missiles." So far as I am aware, the staff has developed no new information or analysis inconsistent with my work.

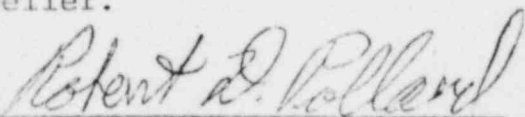
I have reviewed the staff submissions on this issue in the North Anna proceedings and provided the technical analysis contained in the UCS reply brief which accompanies this affidavit. The technical statements are accurate to the best of my knowledge.

By:


  
Robert D. Pollard  
Union of Concerned Scientists

December 13, 1978

I hereby affirm that the foregoing is true and correct to the best of my knowledge and belief.

  
Robert D. Pollard

Subscribed and sworn to on  
December 13, 1978, at  
Washington, D.C.

  
Notary Public

Commission expires January 31, 1983.

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CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing, UCS Reply Brief, Amicus Curiae, and Affidavit of Robert D. Pollard were mailed postage pre-paid this 14th day of December 1978, to the following parties:

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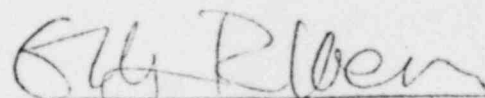
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