

April 2, 1981

James P. Gleason, Esq., Chairman  
Administrative Judge  
513 Gilmoure Drive  
Silver Spring, Maryland 20901

Dr. Paul W. Purdom  
Administrative Judge  
245 Gulph Hills Road  
Radnor, Pennsylvania 19087

Gleen O. Bright  
Administrative Judge  
Atomic Safety and Licensing Board  
U.S. Nuclear Regulatory Commission  
Washington, D. C. 20555

In the Matter of  
PENNSYLVANIA POWER AND LIGHT COMPANY and  
ALLEGHENY ELECTRIC COOPERATIVE, INC.  
(Susquehanna Steam Electric Station, Units 1 and 2)  
Docket Nos. 50-387 0L and 50-388 0L

Gentlemen:

The NRC Staff has discovered its inadvertent failure to include the Statement of Professional Qualifications of Shou-nein Hou, the affiant which supported the "NRC Staff Response Supporting Applicants' Motion for Summary Disposition of Contention 12," dated March 30, 1981. This Statement is enclosed. The Staff regrets any inconvenience this omission may have caused.

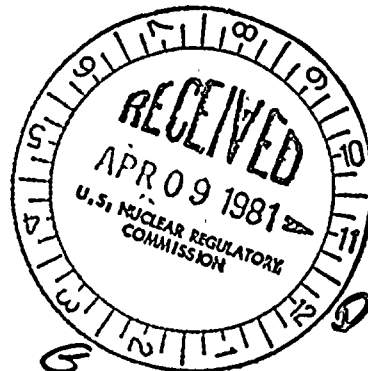
Sincerely,

Jessica H. Laverty  
Counsel for NRC Staff

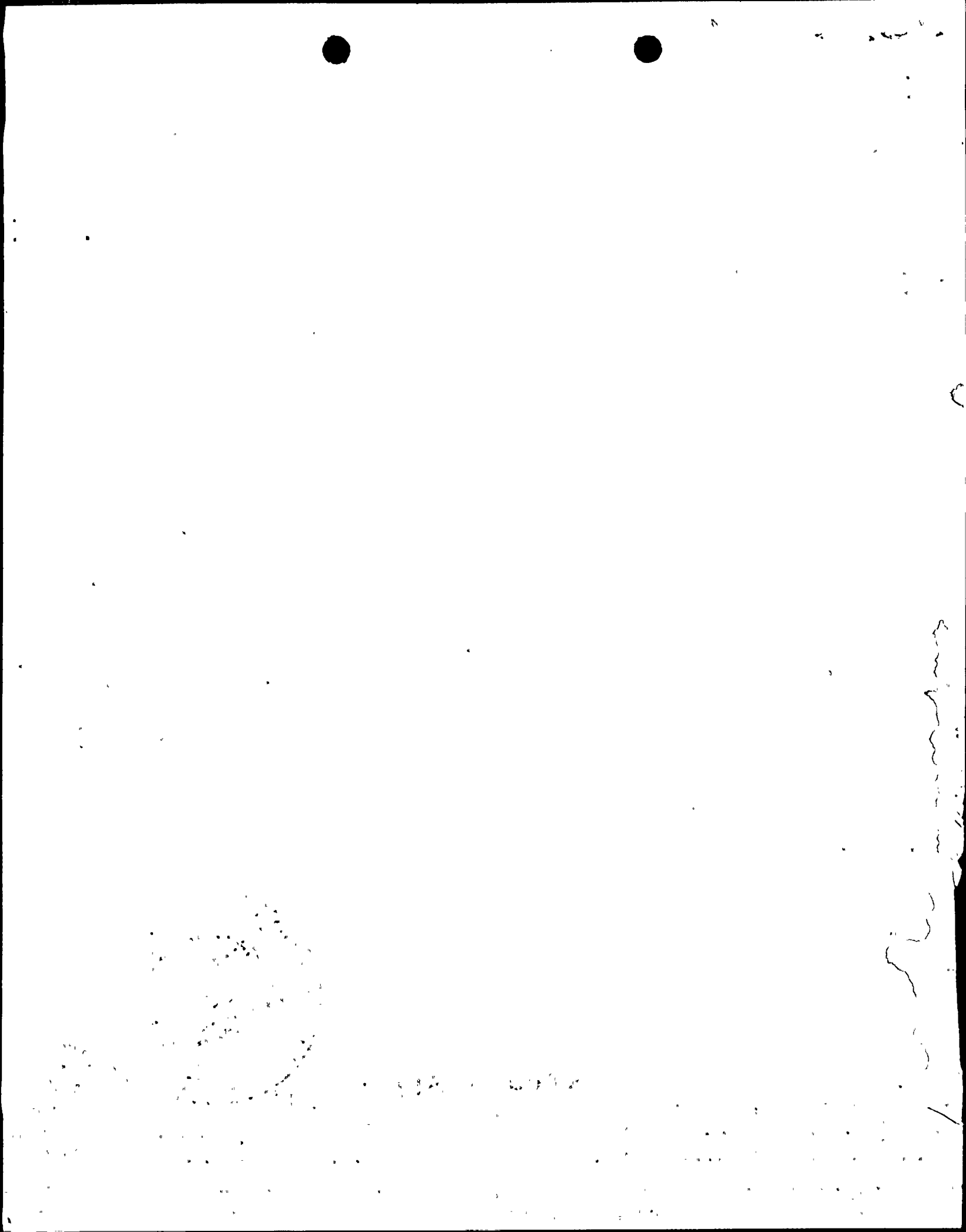
Enclosure as stated

cc (w/ encl.):  
Jay Silberg, Esq.  
Bryan A. Snapp, Esq.  
Dr. Judith H. Johnsrud  
Mr. Thomas M. Gerusky  
Ms. Colleen Marsh  
Mr. Thomas J. Halligan  
Susquehanna Environmental Advocates  
Mr. Robert M. Gallo  
Robert W. Adler  
Richard S. Salzman, Esq.  
Dr. John H. Buck

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OFFICE	Mr. Thomas S. Moore					
SURNAME	Atomic Safety and Licensing Board Panel					
DATE	Atomic Safety and Licensing Appeal Board Panel					
	Secretary					





UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

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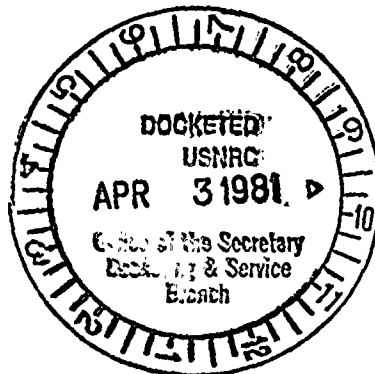
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*Jessica H. Laverty*  
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Counsel for NRC Staff

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Mr. Thomas S. Moore  
Atomic Safety and Licensing Board Panel  
Atomic Safety and Licensing Appeal Board Panel  
Secretary





## PROFESSIONAL QUALIFICATIONS

DR. SHOU-NIEN HOU

U. S. NUCLEAR REGULATORY COMMISSION

MECHANICAL ENGINEERING BRANCH

DIVISION OF ENGINEERING

I am a Principal Mechanical Engineer, an assistant to the Chief of the Mechanical Engineering Branch (MEB) for performing independent review of generic matters and coordinating technical position among the staff. For nine years in MEB, I have reviewed plant design criteria, plant operating problems, plant safety considerations and dynamic analysis and testing of piping, equipment, reactor internals and nuclear safety features. I also served as the leader of the Seismic Qualification Review Team for conducting plant seismic audit, and the Task Manager for developing staff position on plant safety against the postulated pipe rupture event. In addition, I am on several National Standard Committees and participated in several Regulatory Guide developments.

Born 1934 in China, I came to USA in 1957. I received the B.S. in Civil Engineering from Taiwan University in 1955, the M.S. in Structural Dynamics from Virginia Tech. in 1958, and the Ph.D. in Structural Mechanics from M.I.T. in 1968. For 26 years after the B.S., I have had various working experiences in structural design, stress analysis, research and development in space vehicle dynamics, and technical review in nuclear power plant safety. I was a visiting lecturer to universities in England (1971), and Chile (1975), and to the government in Taiwan, China (1975). I was the author of a dozen technical papers, a recipient of Apollo Achievement Award from NASA (1969) and a High Quality Performance Increase from AEC (1975), and a member of Sigma Xi, Tau Beta Pi, Chi Epsilon, AIAA and ANS.

During 1955-57 I served as a commissioned engineering liaison officer with the National Chinese Navy in various US-aid military projects, and passed the Examination of Professional Engineers.

In 1957 I came to the USA with teaching assistantship from VPI where I completed the M.S. degree in one year. The thesis was entitled "Vibration Behavior of Parabolic Arches." I received "VPI Structural Ten" award after graduation.

During 1958-64 I was a Bridge Design Engineer with Virginia Highway Department. For six years, I worked in stress analysis of steel, reinforced concrete and prestressed concrete structures. In 1960, after taking short courses with IBM, I was assigned to perform independent studies in developing computer capability in design and analysis. In 1963 I published the solution manual for "The Mechanics of Solid" authored by G. L. Rogers.

In 1964 I received a Research Assistantship from MIT where I completed the Ph.D. degree in 1968. My studies were emphasized on mechanical vibrations,

material behavior under various loading and temperature conditions, and stochastic processes in engineering applications. Based on my research in random vibration theories, I completed the doctoral thesis entitled "Earthquake Simulation Models and Their Applications." In MIT I was elected to honor societies of Sigma Xi in 1965, Tau Beta Pi in 1966, and Chi Epsilon in 1967.

During 1968-71 I worked as a member of the technical staff with the Space Vehicle Dynamics Department of Bellcomm, Inc., which was performing technical studies, system planning and analysis in the Office of Manned Space Flight within NASA headquarters, Washington, D.C. My works were related to investigation, evaluation and development of dynamic analysis and testing technology in space vehicle and missile dynamics, as well as participating in task groups for solving problems such as POGO, rover stability, wind simulations, and fuel tank sloshing etc. I also had full responsibility for developing computer capability to perform large system dynamic analysis, such as modal synthesis. I received "Apollo Achievement Award" by NASA in 1970 and "Recognition of Accomplishment" by AT&T in 1971. I was a visiting lecturer to England in 1971 and published ten technical papers in this period of time.

In January 1972 I joined the U.S. Atomic Energy Commission and have remained with this organization through the transition to the U.S. Nuclear Regulatory Commission. During this time I have participated in the review of plant operating problems and design criteria and evaluation of over forty construction permits and operating license applications in the area of dynamic effects of LOCA, earthquakes, pipe rupture, and operating transients on systems, components, equipment, reactor internals and nuclear safety instrumentation. I had served as the leader of SQRT (Seismic Qualification Review Team) for conducting plant seismic audit, and Task Manager of a generic program for investigating design criteria for plant protection against postulated high energy line rupture. I am a member of industry code and standards writing bodies including: ANSI N176, "Design Basis for Protection of Nuclear Power Plants Against Effects of Postulated Pipe Rupture," and Standard IEEE-344 "Recommended Practices for Seismic Qualification of Class 1E Equipment for Nuclear Power Generating Stations." During my service in NRC, I have received one "High Quality performance Step Increase" and published two technical papers. In 1975 I was invited by the University in Chile to give lectures regarding seismic design of nuclear power plants and by the National Chinese government to discuss various subjects concerning nuclear power plant safety.

