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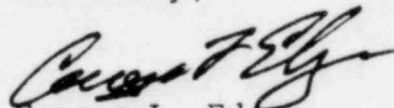
Barbara A. Finamore, Esquire
Natural Resources Defense Council, Inc.
1725 Eye Street, N.W.
Suite 600
Washington, D.C. 20006

Re: Docket No. 50-537

Dear Ms. Finamore:

Enclosed please find the remaining Statements of Qualifications for Applicants' intended witnesses as identified in Applicants' supplemental discovery response.

Sincerely,



George L. Edgar
Attorney for Project
Management Corporation

cc: Service List

GLE:rw

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STATEMENT OF QUALIFICATION

Vencil S. O'Block
Westinghouse Electric Corporation
Advanced Power Systems Division
Advanced Reactors Division
Oak Ridge, Tennessee 37830

Since early 1980, I have been Technical Assistant to the Westinghouse Oak Ridge (CRBRP) Manager of Systems Integration. In this position I am responsible for Systems Integration NRC licensing coordination, resolution of key technical issues and review and concurrence of CRBRP Engineering Change Proposals.

I received a Ph.D. degree in Nuclear Engineering from the University of Wisconsin in 1967, a Master of Science degree in Nuclear Engineering from Pennsylvania State University in 1962, a Bachelor of Science degree in Mechanical Engineering from the Carnegie Institute of Technology in 1960 and a Bachelor of Arts degree from Washington and Jefferson College in 1960.

From February to September 1962, I worked for Westinghouse Electric Corporation as an Associate Engineer in the Astronuclear Division. In this position, I performed experiments to support calculations of reactivity insertions rates due to immersion of a Nuclear Engine Rocket for Vehicle Application (NERVA) core in water. I then left Westinghouse to attend the University of Wisconsin.

I rejoined Westinghouse Electric Corporation in 1966, as a Senior Engineer in the Astronuclear Division. In this position, I performed and analyzed nuclear and shielding experiments.

From 1971 to 1974, I was with the Westinghouse Hanford Company on the Fast Flux Test Facility (FFTF) Project. For approximately one-half of the service, I was a Senior Development Engineer responsible for the technical and programmatic management of the FFTF Heating and Ventilating and Radioactive Waste Systems. The remainder of the time I was an Engineering Associate responsible for performing radiological dose calculations due to the accidental release of radioactivity from FFTF and supported the review and maintenance of the FFTF PSAR.

From 1974 to 1975, I was a Senior Engineer with Westinghouse Advanced Reactors Division on the Clinch River Breeder Reactor Plant (CRBRP) Project in Plant Systems. In this position I performed special technical and programmatic tasks for the Manager of Plant Systems.

In 1975, upon formation of the Westinghouse Lead Reactor Manufacturer (LRM) organization for CRBRP, I was named Manager of General Electric (GE) Plant Systems. In this position I was responsible for the technical and programmatic management of the GE design and procurement activities for the CRBRP main sodium coolant pumps and drives and for the following: Piping and Equipment Electrical Heating and Control System, Reactor Heat Transport Instrumentation and Control System, Steam Generator Auxiliary Heat Removal System, Intermediate Heat Transport System and the Reactor Heat Transport Instrumentation and Control System. I continued in this position until mid 1978.

During the remainder of 1978 and early part of 1979, I was Technical Assistant to the LRM Manager of GE Programs and subsequently Technical Assistant to the Manager of AI Programs. In these positions, I was responsible for resolving key technical issues, reviewing Engineering Change Proposals and conducting a Key Systems Review on the Spent Fuel Transport, Storage and Cooling Systems.

From the latter part of 1979 to early 1980, I was the LRM Acting Manager of Systems Engineering. In this position I was responsible for the CRBRP reliability and Nuclear Steam Supply System (NSSS) availability programs, liquid metal insulation design contract, maintenance of the Overall Plant Design Description document and overall Systems Engineering function.

STATEMENT OF QUALIFICATIONS

Douglas C. Newton
Nuclear Engineer
Division of Waste Repository Deployment
U.S. Department of Energy
Washington, D.C. 20545

I was graduated from the University of Oklahoma in 1967 with a Bachelor of Science degree in Electrical Engineering. In 1973 I received a masters degree in Nuclear Engineering and a masters degree in Business Administration from the University of New Mexico.

After graduation from the University of Oklahoma I served two years as an officer in the United States Army supervising teams in the escort of shipments of hazardous materials (chemical and biological warfare agents and sensitive explosives).

Following my military duty I was employed by Public Service Company of New Mexico from 1971 to 1974 as an Electrical Engineer in their Rates and Contracts Division. I was involved in formulating and evaluating contracts, performing cost-of-service studies, and preparing testimony for rate cases.

In 1974 I left Public Service Company of New Mexico to accept a job with the Atomic Energy Commission as a Nuclear Reactor Engineer in the Safety Office for the Liquid Metal Fast Breeder Reactor Program. Over the next four years worked for the AEC, and the successor agencies (ERDA and DOE), on R&D programs concerned with sodium fires, radiological assessments, and post-accident heat removal. My responsibilities included identification of safety issues, formulation of plans to resolve these issues, and the technical direction of contractors to accomplish supporting work.

From 1978 to the present I have worked in Waste Management for the Department of Energy. My responsibilities have included oversight of DOE interactions with NRC for licensing nuclear waste repositories, coordination with EPA in the development of a Standard for nuclear waste repositories, interactions with NRC in the development of their rule, 10 CFR 60, for high-level waste repositories, and the preparation and review of environmental documents for the waste disposal program.

I was a registered professional engineer in the State of New Mexico--my registration is not current.

STATEMENT OF QUALIFICATIONS

Roger O. McClellan

President and Director

Inhalation Toxicology Research Institute

Lovelace Biomedical and Environmental Research Institute

Albuquerque, NM 87185

I received a Doctor of Veterinary Medicine degree with highest honors from Washington State University in 1960 and a Master of Management Science degree from the University of New Mexico in 1980. In 1967, I was certified (by examination) as a Diplomate of the American Board of Veterinary Toxicology and in 1980, certified in General Toxicology by the American Board of Toxicology.

Following graduation from Washington State University, I was employed in the Biology Laboratory, Hanford Atomic Product Operations, General Electric Company, Richland, Washington, Progressing from a Position as Biological Scientist to Senior Scientist. My responsibilities included the design, conduct and interpretation of studies on the metabolism, dosimetry and toxicity of internally deposited radionuclides. This included studies with ^{90}Sr , ^{137}Cs , ^{131}I and transuranic radionuclides. A major portion of my effort was directed to conducting a multi-generation study of the effects of daily ingestion of ^{90}Sr in miniature pigs.

From 1965 to 1966 I served as scientific staff member in the Medical Research Branch, Division of Biology and Medicine, U. S. Atomic Energy Commission. In this position, I had responsibility for monitoring a major portion of the Commission's research on internally deposited radionuclides and providing advice and counsel to senior management on such matters.

In September 1966 I joined the staff of the Lovelace Foundation for Medical Education and Research in Albuquerque, New Mexico, with responsibility for directing the Foundation's extensive program on the toxicity of inhaled radionuclides. This program was initially concerned with fission product radionuclides and in the late 1960's was broadened to include research on plutonium and other transuranic radionuclides. More recently the program has been expanded to include research on airborne materials associated with utilization of coal and use of diesel-powered vehicles.

Since 1976 I have served as President of the Lovelace Biomedical and Environmental Research Institute (a subsidiary of the Lovelace Medical Foundation) and as Director of the Inhalation Toxicology Research Institute, which is operated by the Lovelace organization for the U.S. Department of Energy. My responsibilities include management of the Institute and participation in the design and interpretation of studies on the toxicity of radioactive and non-radioactive airborne materials. I am especially interested in the late-occurring effects of exposure to pollutants and the use of data from laboratory animals to estimate health consequences for people.

I have served on numerous advisory groups concerned with assessing the health effects of occupational and environmental exposure to a wide range of materials.

STATEMENT OF QUALIFICATIONS

Roy C. Thompson
Senior Staff Scientist
Pacific Northwest Laboratory
Richland, WA 99352

Dr. Roy C. Thompson is a Senior Staff Scientist in the Biology Department of Pacific Northwest Laboratory, which is operated for the Department of Energy by Battelle Memorial Institute. His current position title in the Biology Department is Coordinator of Nuclear Programs. He is extensively involved in DOE activities related to the toxicity of plutonium and other actinides.

Dr. Thompson has worked at the DOE/ERDA/AEC laboratories in Richland, Washington since 1950. Prior to that time he held positions as Assistant Professor of Chemistry at the University of Texas, and as Research Assistant at the University of California in Berkeley and at the University of Chicago Metallurgical Laboratory (Manhattan Project).

Dr. Thompson received Bachelor of Arts, Master of Arts, and Doctor of Philosophy (Bio-Organic Chemistry) degrees from the University of Texas. He was born in Kansas City, Missouri on June 19, 1920 and presently resides in Pasco, Washington.

STATEMENT OF QUALIFICATIONS

John W. HEALY

Staff Member

Los Alamos National Laboratory

Los Alamos, NM 87545

Mr. John W. Healy is a staff member in the Health Division of the Los Alamos National Laboratory which is operated for the Department of Energy by the University of California. In his current position, he is advisor to the Division Leader, Health Division. He is extensively involved in DOE activities related to plutonium in the environment.

Mr. Healy received training at Oak Ridge in radiation protection in 1944. Following nine months of training, he moved to Hanford where he spent the next 16 years. During this period of time, he established the environmental monitoring, low-level analytical radiochemistry, and bioassay programs for the laboratory. During this period he also was involved in the internal dosimetry, dose assessment, reactor safety and meteorology programs. In 1960 he transferred to New York where he was concerned with reactor safety and product safety for the General Electric Company. In 1968 he moved to the Los Alamos National Laboratory where his activities have included the bases for and development of radiation standards and regulations, radiation dose assessments, and the application of risk estimates to such dose assessments.

Mr. Healy received a Bachelor of Science degree from Pennsylvania State College in 1942. He was born in Corry, Pennsylvania, on May 9, 1920, and presently resides in Los Alamos.

THE S. M. STOLLER CORPORATION

ALBERT A. WEINSTEIN

Mr. Weinstein is Manager of Engineering at SMSC responsible for the areas of reactor servicing and operations, mechanical systems design, and real-time systems applications.

As Manager of Engineering he provides consulting services to nuclear utilities on refueling systems analysis, plant operational and maintenance support, design review and quality assurance, and plant arrangement and system design. In this context, he is responsible for safety analysis and licensing support in special areas, such as cask drop, and fuel handling accidents, and leads SMSC efforts in support of facilities design review, including fuel storage pool arrangements and fuel inspection and reconstitution facilities.

Mr. Weinstein also leads activities at SMSC related to nuclear power plant decommissioning. He served on the AIF task force assigned to monitor and review the preparation of AIF/NESP-009SR, "An Engineering Evaluation of Nuclear Power Reactor Decommissioning Alternatives". He has reviewed LWR plant designs for ease of decommissioning, and has participated in the actual decommissioning of the BONUS nuclear plant in Puerto Rico, where he served as the resident engineer, responsible for program definition, planning and scheduling. Mr. Weinstein has directed the preparation of decommissioning cost estimates for both PWR and BWR nuclear power plants.

He is presently also Project Manager for the D.C. Cook NPP combined RE&M/Security System and as such, is responsible for system development and installation, client and subcontractor interface and other project related activities. Mr. Weinstein has been extensively involved in the design and application of the RE&M System since its beginnings and continues in this capacity. He is also responsible for service administration after installations are complete.

Mr. Weinstein entered the nuclear business in 1957 at Combustion Engineering Company, where he participated in the mechanical design and analysis of the SIC reactor core with responsibility for startup and testing procedures relating to mechanical safety of the core. He assisted in subsequent reactor disassembly and inspection of radioactive core components. In 1960 he joined the United Nuclear Corporation, and, in 1967, Mr. Weinstein was named Manager of the Engineering Section of the Mechanical Design Department. Mr. Weinstein has directed the design of fuel inspection equipment and supervised the on-site inspection of commercial irradiated fuel, utilizing underwater video equipment and measuring devices. While at UNC Mr. Weinstein served on the Technical Support Team under contract to the AEC to provide technical assistance for the Elk River, BONUS, and LaCrosse nuclear reactor plants. He was assigned lead responsibility for the technical support for the BONUS nuclear reactor in Puerto Rico.

Mr. Weinstein received a B.S. in Civil Engineering from the University of Southern California in 1954, and an M.S. in Applied Mechanics from the University of Connecticut in 1959. He has performed additional graduate work in Engineering Mechanics and is a Licensed Professional Engineer in the State of Connecticut.

STATEMENT OF QUALIFICATIONS

James F. Murdock
Engineering Division
Clinch River Breeder Reactor Plant Project Office
P.O. Box U
Oak Ridge, TN 37830

Current Position: Reactor Engineer
Reactor and Plant Components Branch
USDOE - CRBRP Project Office

I received a B.S. degree in Metallurgical Engineering from Virginia Polytechnic Institute in 1959 and a M.S. degree from the University of Tennessee in 1964.

From 1956 to 1957, I was employed at the Oak Ridge National Laboratory as a cooperative engineering student in the Solid State Division. My work involved assembly and disassembly in hot cells of experiments from test reactors.

From 1959 to 1967, I was employed as a metallurgist in the Metals and Ceramics Division of the Oak Ridge National Laboratory. I performed research studies of radioisotope tracer diffusion in pure metals and alloys.

From 1967 to the present, I have been employed by the United States Atomic Energy Commission (then ERDA and now DOE). After an intensive training program in reactor theory and practical operation in the Operations Division of the Oak Ridge National Laboratory, I was assigned the position of Site Representative for the Division of Reactor Development and Technology (DRDT) at the Boiling Nuclear Superheat Reactor (BONUS) near Rincon, Puerto Rico. I was liaison between the contractors at BONUS and the various AEC program and contracting organizations during the decommissioning of the BONUS facility. I provided review and comment on the decommissioning plans and approval of the detailed procedures for decommissioning. Upon completion of the BONUS decommissioning in 1970, I was assigned the position of Site Representative for DRDT at the La Crosse Boiling Water Reactor, Genoa, Wisconsin. I was liaison between the operating and support organizations at LACBWR and the AEC program and contracting organizations providing on-site monitoring of the operating plant. In 1972, I assumed the additional duties of Site Representative for the decommissioning efforts at the Elk River Reactor, Elk River, Minnesota. My

STATEMENT OF PROFESSIONAL QUALIFICATIONS

Richard K. Disney

Current Position: Manager, Shielding Analysis
Nuclear Systems Engineering
Engineering Department
Westinghouse Electric Corporation
Advanced Reactors Division
P.O. Box 158
Madison, Pennsylvania 15663

Education: B.S. in Nuclear Engineering, Kansas State University, 1958 Graduate
Studies, Washington University of St. Louis, 1962

Since 1971, I have been employed at the Westinghouse Advanced Reactors Division, Waltz Mill Site at Madison, Pennsylvania, where I have been assigned various management positions.

I have been Manager of the Shielding Analysis group at ARD since 1974 with primary responsibility for the Clinch River Breeder Reactor Project radiation protection, radiation analysis, and shielding design efforts. In this capacity, I have been responsible for efforts to define the radiation shielding and radiation protection philosophy of CRBRP. Included in the responsibilities are prediction of radiation environments in CRBRP reactor systems, development of the ALARA review program for CRBRP, review of radiation shielding designs of CRBRP plant component and systems, technical guidance of experimental programs related to LMFBR radiation shielding, review of the refueling system radiation protection and shielding design efforts, and development of radiation source terms for components, systems, and radiological and safety analyses or studies.

In 1972-1973, I was responsible for the radiation shielding design, radiation environment predictions, and personnel radiation exposure predictions for the Fast Flux Test Facility sodium-cooled nuclear test reactor. Responsibilities included review of plant shielding, definition and review of radiation shielding experimental programs, definition of component radiation environment, definition of radiation source terms, analysis of reactor system shielding systems, prediction of radiation shielding performance, and personnel radiation exposure predictions.

In 1971, I was responsible for the development of advanced radiation transport methods for use in LMFBR radiation shielding analysis and the implementation of these methods on large scale mainframe computer systems.

In the period 1968-1971, I was assigned to a management position in the NERVA (Nuclear Engine for Rocket Vehicle Application) Project at the Astronuclear Laboratory of Westinghouse Electric Corporation at Large, Pennsylvania. In this capacity, I was responsible for the analysis of nuclear and radiation shielding experiments and for the development and evaluation of advanced analytical techniques and data for nuclear, radiation, and shielding design in the NERVA Project.

In the period 1965-1968, I was assigned to a variety of projects including the NERVA Project. I was responsible for the development of advanced computational methods including advanced discrete ordinate transport methods. I was also responsible for prediction of radiation environments in the large-size propulsion reactors for space vehicle applications. In addition, I established radioisotope fuel form and radiation shielding requirements for an implantable circulatory support system (artificial heart).

Narinder N. Kaushal

Dr. Kaushal is the Deputy Assistant Director for Engineering at the Clinch River Breeder Reactor Plant Project. In this capacity he serves as the principal technical, administrative and operating official of the Engineering Division, coordinating and executing approved programs, policies and decisions of the Assistant Director. He also advises and assists the Assistant Director in the formulation of engineering programs and policies and acts for the Assistant Director with full responsibilities and authorities assigned to that position, except where redelegation by the Director is expressly prohibited.

Dr. Kaushal also serves as the Chief, Reactor and Plant Systems Branch, a position which he has held since February 1978. In this capacity, he directs the day-to-day activities of CRBRP participants involved in the design, development, fabrication, test, evaluation, installation, checkout, startup test, safety, operation, and plant security of the major systems and components of the reactor and balance-of-plant.

From February 1975 to 1978, Dr. Kaushal served as the Chief, Instrumentation, Control and Electrical Branch with a full range of management responsibilities for the reactor and plant controls, instrumentation and electrical systems.

Dr. Kaushal has a broad technical background in Applied Nuclear Physics with expertise in reactor physics, reactor engineering, radiation protection and control, nuclear and digital instrumentation, computer applications and electronic data processing. He holds bachelor's degrees in mathematics and physics, masters degrees in both physics and electronics and doctorate degrees from Rensselaer Polytechnic Institute in nuclear physics and solid-state physics. From 1967, when he received his doctorate degree, until he joined CRBRP in 1974, he was a Research Associate in Rensselaer Polytechnic Institutes' Linear Acceleration Laboratory, where he had Supervisory responsibility for the Fast Neutron Spectrum Analysis Program.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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OFFICE OF SECRETARY
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In the Matter of
UNITED STATES DEPARTMENT OF ENERGY
PROJECT MANAGEMENT CORPORATION
TENNESSEE VALLEY AUTHORITY
(Clinch River Breeder Reactor Plant)

Docket No. 50-537

CERTIFICATE OF SERVICE

Service has been effected on this date by personal
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Washington, D. C. 20545

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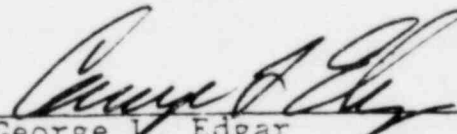
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George V. Edgar
Attorney for
Project Management Corporation

DATED: August 13, 1982

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