B&W FUEL COMPANY

An American Company with Worldwide Resources

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September 25, 1991

Mr. John Hickey
Uranium Fuel Section
Fuel Cycle Safety Branch
Division of Industrial and
Medical Safety, NMSS
Nuclear Regulatory Commission
Washington, D.C. 20555

REFERENCE: SNM-1168 License, Docket 70-1201

Dear Mr. Hickey:

B&W Fuel Company's Commercial Nuclear Fuel Plant has a restructured their organization. An amendment was submitted on March 18, 1991 to the NRC to reflect other organizational changes but has not received NRC approval. Therefore, this amendment will include both organizational changes from the changes in March and those that took place in September. Please retract the amendment submitted to you in March and replace it with this submittal.

Six copies of the affected pages are included. The changes are indicated by a side-bar and are detailed in Attachment I.

If you should have any questions regarding this matter or foresee any upcoming licensing problems, please feel free to call me at (804) 522-6202.

Sincerely,

B&W FUEL COMPANY
COMMERCIAL NUCLEAR FUEL PLANT

Kathryn S. Lester

Kathryn S. Lester
Manager, Safety & Licensing

ATTACHMENT I

CHAPTER	SECTION/PAGE	CHANGE
2	Figure 2.1/2-1	The revised organizational chart includes the position of the Manager, Production & Inventory Control. In the organization prior to March 1991, the position denoted as the Manager, Production & Materials Control, reported to the Manager, Fuel Operations. The Manager, Fuel Operations is no longer in the CNFP organization. The Manager, Production & Inventory Control has replaced the position of the Manager, Production & Materials Control and reports directly to the Plant Manager. It was also modified to indicate that the Health Safety Monitors report directly to the Health Safety Foreman who reports to the Manager, Safety & Licensing.
2	2.1.2/2-2	With the removal of the Fuel Operations position, the section now recognizes the Manager, Fuel Manufacturing as a production manager.
11	11.2.1/11-1	This section replaced the Manager, Fuel Operations with the Manager, Fuel Manufacturing.
11	11.2.4/11-2	This section was revised to indicate the Health-Safety Foreman reports directly to the Manager, Safety & Licensing.

11	11.3	The resumes for the following positions have been included: the Manager, Fuel Manufacturing, the Health Physicist (new hire), the Manager, Materials & Transportation (new position), the Industrial Safety and Environmental Control Officer (new position and new hire), the Manager, Facilities and Services (new hire), the Manager, Production & Inventory Control (new position and new hire).
11	Figure 11.1/11-35	The organizational chart has been modified to reflect the new management. The line from the Manager, Field Operations, Manager, Accounting, and Manager, Purchasing is dotted as they actually report to the Old Forest Road organization. However, they do reside at the CNFP and are responsible to comply with our SNM license and therefore indirectly report to the CNFP Plant Manager.

2.1 Organizational Responsibilities and Authority

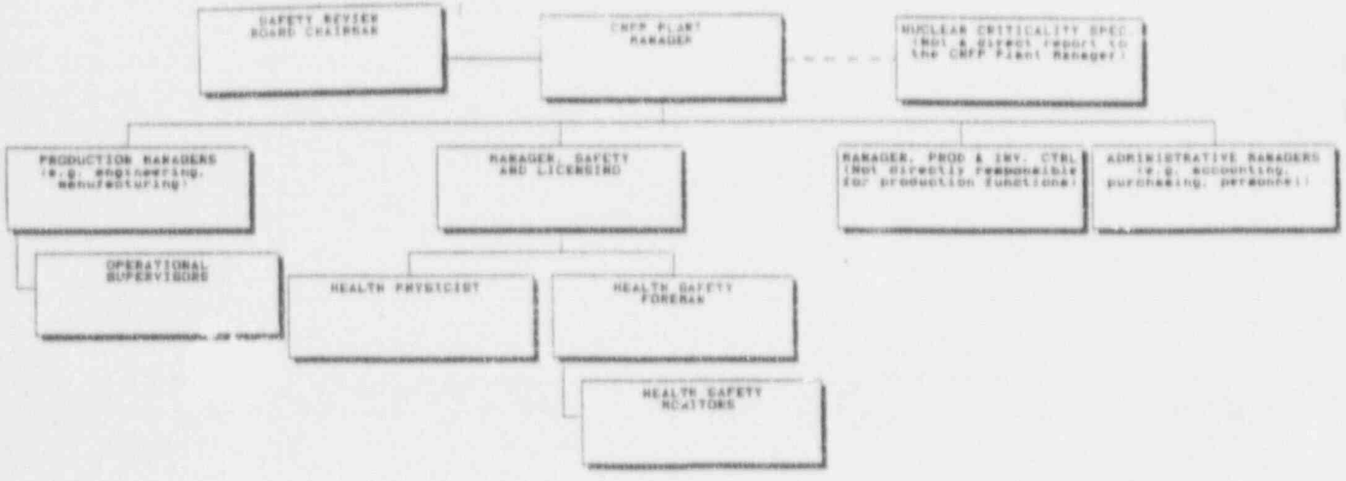
2.1.1 Management

It is the responsibility of the Plant Manager to assure the safety of the operation and compliance with license conditions. Control shall be established by:

- designation of responsibility to qualified personnel
- review and approval of Health-Safety procedures
- review of program effectiveness
- prompt correction of nonconforming conditions

The CNFP management structure is as shown in Figure 2.1.

Figure 2.1



2.1 Organizational Responsibilities and Authority

2.1.2 Production Managers

Production Managers report directly to the plant manager. They are responsible for managing operational area supervisors and are responsible for production functions. The Managers of Manufacturing Engineering, Fuel Manufacturing and Field Operations are production managers.

The Production Managers shall have at, a minimum, a bachelor's degree in science or engineering, followed by two years experience in the nuclear industry.

2.1.3 Operational Area Supervision

Operational area supervision is that supervision directly responsible for the control of materials, personnel, equipment, and activities in specific areas. Those responsibilities include assuring that approved control procedures developed by Health-Safety shall be available in writing to operators and other concerned personnel and shall be adhered to.

Minimum qualification of operational area supervision shall include:

(a) A high school education and a minimum of 2 years experience in the nuclear industry. Experience shall include the practical application of criticality control techniques and a familiarity with the applicable specific limitations imposed on CNFP operations.

2.1.4 The Health-Safety Section

The Health-Safety Section shall be responsible to interpret the license conditions, provide monitoring facilities, develop safe operation guidelines, maintain training programs, and review and approve operating procedures to assure safe operation and license compliance.

These responsibilities include maintenance of nuclear safety and radiation safety with the approval authority limited to authorized specific or general license conditions. The Health-Safety section shall not be directly responsible for the performance of manufacturing operations.

11.1 Organizational Responsibilities

Figure 11.1 illustrates the departmental and managerial organization at the CNFP.

The key organization responsible for maintaining the health and safety aspects at the CNFP is the Health-Safety Section. The Health-Safety Section is a part of the Safety and Licensing Group. The Health-Safety Section reports to the Manager, Safety and Licensing. The Manager, Safety and Licensing reports directly to the Plant Manager.

11.2 Key Personnel Function

11.2.1 Overall Program Management

Responsibility for planning, coordinating, administering and managing the health and safety aspects of the CNFP is vested in the Manager, Safety and Licensing. This position is organizationally parallel to other member of the Plant Manager's staff such as the Managers of Manufacturing Engineering and Fuel Manufacturing.

11.2.2 The Health-Safety Section

Health-Safety personnel are responsible for the general surveillance of all plant safety related functions. Specifically, these functions are described as follows:

- Maintaining appropriate control of hazardous material, shipments, and receipts.
- Supervising and coordinating the hazardous waste disposal program.
- Assisting in personnel and equipment decontamination.
- Distribution and processing of personnel monitoring equipment.
- Maintaining individual exposure records.
- Orienting and training CNFP personnel in radiological and nuclear safety.

11.2 Key Personnel Functions

11.2.2 The Health-Safety Section

- Furnishing consulting services and advice on radiation protection to plant supervision and management.

- Generating or acquiring, maintaining, and appropriately distributing all records and reports required by applicable regulations or procedures.

- Leak testing on sealed radioactive sources.

- Developing and disseminating procedures related to radiation safety and reviewing procedures prepared by other operating sections for regulatory compliance and the adequacy of safety considerations.

The key positions within the Health-Safety Section are the Health Physicist, the Health-Safety Foreman and the Health-Safety Monitors.

11.2.3 Health Physicist

The Health Physicist is responsible to provide management with assurance of the effectiveness of the entire health and safety program from a radiological, nuclear, industrial, and chemical safety aspect. This position is responsible for evaluating the potential for exceeding authorized control limits and to recommend appropriate restrictions or corrective measures. The Health Physicist reports directly to the Manager, Safety & Licensing.

11.2.4 Health-Safety Foreman

The Health-Safety Foreman is responsible for supervising the activities of the Health-Safety Monitors and to assure that the requirements of the Health-Safety program as defined by license and procedures are carried out. The Health-Safety Foreman reports directly to the Manager, Safety & Licensing.

11.2 Key Personnel Functions

11.2.5 Industrial Safety & Environmental Control Officer

The Industrial Safety & Environmental Control Officer is responsible for implementing the occupational and industrial safety programs to include chemical and fire safety.

11.2.6 Health-Safety Monitor

The Health-Safety Monitor is responsible for conducting routine monitoring, sample collection and analytical tests to determine radiation and contamination levels.

11.3 Resumes

Since it is also the responsibility of the entire plant management to assure safe operations and regulatory compliance, we are including resumes from other managerial organizations within the CNFP as well as those within the Quality and Safety Group. These are as follows:

Name	Title
R. A. Alto	Plant Manager, Commercial Nuclear Fuel Plant
J. T. Ford	Manager, Fuel Manufacturing (Production Manager)
C. G. Dideon	Manager, Manufacturing Engineering (Production Manager)
B. W. Pugh	Manager, Materials & Transportation
K. S. Lester	Manager, Safety & Licensing
G. B. Lindsey	Health-Safety Foreman
D. L. Gordon	Health Physicist
K. L. Bennett	Industrial Safety & Env. Control Officer
W. T. Foot	Manager, Facilities and Services
R. W. Penoza	Manager, Field Operations (Production Manager)
F. M. Alcorn	Manager, Nuclear Criticality Safety Engineering
J. M. Harwell	Nuclear Criticality Specialist Engineer
J. G. Tennant	Manager, Production & Inventory Control

NAME: Richard A. Alto

TITLE: Plant Manager, Commercial Nuclear Fuel Plant

CITIZEN OF UNITED STATES

EDUCATION: Carnegie Institute of Technology
Brooklyn Polytechnic University
New York State University

EXPERIENCE: 1950-1956 Westinghouse Electric Corp., Bettis Facility. Factory Engineer. Responsible for manufacturing process analysis, facilities planning, and plant layout planning for Naval nuclear fuel development and fabrication.

1956-1958 U. S. Army, Radar Mechanic, responsible for assuring operational status of antiaircraft detection radar. Honorably Discharged.

1958-1959 Westinghouse Electric Corp., Cheswick, Pa. Project Engineer. Responsible for resolution of technical and process problems during shift operations and for determination of repair procedures for Naval nuclear fuel development and fabrication.

1959-1963 Sylvania Electric Products Inc. - SYLCOR. General Foreman responsible for administration of special nuclear material accountability and for coordination of AEC licensing for fabrication of nuclear test reactor fuel.

1963-1966 Sylvania Electric Products Inc. - SYLCOR. General Foreman responsible for all plant manufacturing and maintenance activities for fabrication of nuclear test reactor fuel.

NAME: Richard A. Alto

EXPERIENCE:

1966-1969 National Lead Co. - Nuclear Division. Assistant Manufacturing Superintendent, responsible for direction of manufacturing operations for [illegible] test reactor fuel production, and [illegible] administration of nuclear material accountability.

1969-1972 Babcock & Wilcox Co. - Commercial Nuclear Fuel Plant. Manager, all components responsible for nuclear materials safeguards; nuclear, radiation, industrial safety; AEC (NRC) and other governmental licensing and regulatory compliance; production and materials control; and cost control.

1973-1980 Babcock & Wilcox Co. - Commercial Nuclear Fuel Plant. Manager, Manufacturing. Responsible for all plant manufacturing engineering, equipment and tooling, manufacturing operations, and maintenance.

1981-Present B&W Fuel Company, (Babcock & Wilcox Co.) - Commercial Nuclear Fuel Plant. Plant Manager. Responsible for all plant operations including safety, licensing, safeguards, environment, manufacturing, and quality.

NAME: J. T. Ford

TITLE: Manager, Fuel Manufacturing

CITIZEN OF UNITED STATES

EDUCATION:
1969 Davidson County Community College - A.A.
1975 Central Virginia Community College - Nuclear Technology

MILITARY: 1970-1972 U. S. Army

EXPERIENCE:
1970-1972 Manufacturing Technician, B&W, Commercial Nuclear Fuel Plant.

1972-1975 Data Evaluation Technician, B&W Commercial Nuclear Fuel Plant, Reviewed and certified fuel assemblies and control components.

1975-1978 Foreman, Pelletizing Operations. B&W, Commercial Nuclear Fuel Plant. Responsible for pellet operations.

1978-1979 Foreman, Grid Manufacturing, B&W, Commercial Nuclear Fuel Plant, Responsible for grid manufacturing.

1979-1981 Foreman, Bundle Assembly, B&W, Commercial Nuclear Fuel Plant, Responsible for assembly operations, and the shipment of finished products.

1981-1982 License Administrator, B&W, Commercial Nuclear Fuel Plant. Responsible for obtaining and administering all licenses and permits including those issued by NRC, EPA, State, and Local agencies.

1982-1985 Manager, Regulatory Control, B&W, Commercial Nuclear Fuel Plant. Responsible for nuclear materials control, licensing, health-safety, physical security, nuclear safety, receiving and stores.

1985- Manager, Fuel Manufacturing, B&W, Commercial Nuclear Fuel Plant. Responsible for fuel rod, control component, grid, fuel bundle, and incore detector fabrication.

NAME: Charles G. Dideon

TITLE: Manager, Manufacturing Engineering

CITIZEN OF UNITED STATES

EDUCATION: 1961 University of Washington - B.S. Mechanical Engineering

EXPERIENCE: 1990-Present B&W Fuel Company - Manager, Manufacturing Engineering. Unit manager with responsibility for manufacturing procedures and processes used for production of nuclear fuel components. Unit provides technical responsibility for equipment design, fabrication methods, process qualifications and evaluation of deviated components. Function includes liaison with vendors, fuel design engineering and customers.

1976-1990 Babcock & Wilcox - Supervisory Engineer, Fuel Mechanical engineering. Supervisor of various technical groups within the mechanical section of nuclear fuel design. Supervisor of the Fuel Production Engineering group with responsibility for the technical designs used in nuclear fuel and incore detector manufacturing.

1971-1976 Babcock & Wilcox - Senior Engineer, Advanced Reactor Design. Mechanical design of advanced reactor internal structures and fuel components for new product development. Provided integration management between engineering disciplines to coordinate design and analysis activities associated with nuclear reactor design.

1976-1971 The Boeing Co., - Research Engineer, Aerospace Division, Seattle, Washington. Conducted environmental testing of missile and airplane components for design verification. Developed test programs, equipment, and conducted testing to simulate static and dynamic loading for mechanical components.

1964-1966 Westinghouse Electric Corp. - Field Engineer, Bettis Atomic Power Laboratory. Provided mechanical engineering support for nuclear reactor refueling equipment and procedures and provided technical direction during on-site core refueling at contractor shipyards.

1961-1964 The Boeing Co. - Associate Engineer, Seattle, Washington and Huntsville, Alabama. Designed mechanical support equipment for missile systems and directed related test programs.

PROFESSIONAL AFFILIATIONS: ASME and ANS member
Licensed Professional Engineer - State of Virginia.

NAME: Bob W. Pugh

TITLE: Manager, Materials & Transportation

CITIZEN OF UNITED STATES

EDUCATION: 1963 Phillips Business College - Data Processing

EXPERIENCE: 1969-1970 Production Sponsor, Jr., Babcock & Wilcox Company, Commercial Nuclear Fuel Plant, Lynchburg, Virginia. Responsible for requisition and monitoring Contract Materials.

1970-1975 Production Sponsor, Babcock & Wilcox Company, Lynchburg, Virginia. Responsible for Materials Control Function.

1976-1983 Supervisor, Materials Control, Babcock & Wilcox Company, Lynchburg, Virginia. Responsible for Materials Control, Stores, and Shipping and Receiving Functions.

1983-1985 Manager, Special Projects, Babcock & Wilcox Company, Lynchburg, Virginia. Responsible for all special project activities.

1985-1991 Manager, Production & Materials Control, B&W Fuel Company (Babcock & Wilcox Co.), Lynchburg, Virginia.

1991-Present Manager, Materials & Transportation, B&W Fuel Company, Lynchburg, VA

NAME: Kathryn S. Lester

TITLE: Manager, Safety & Licensing

EDUCATION: 1985 - University of Nevada, Las Vegas - B. S. Health Physics

EXPERIENCE:

Jan 1990 - Present: B&W Fuel Company, Manager, Safety & Licensing. Responsible for coordinating the technical aspects of radiation control for the fuel manufacturing plant and for the field operations refurbishment facility. Involved in the decommissioning, training, emergency preparedness, and transportation programs. Responsible for budgeting for the Health-Safety Section. Liaison with regulatory agencies.

May 1989 - Jan 1990: B&W Fuel Company, License and Control Administrator. Liaison with Federal, State and Local regulatory agencies. Assist in the Health Physics Program for CNFP.

Feb 1987 - May 1989: Transnuclear, Inc., Radiation Safety Officer. Functioned as the Corporate Radiation Safety Officer. Responsible for all aspects of the radiation protection program to include: regulatory compliance (both State and Federal), radioactive material shipments, training, waste management, calibration of instrumentation, records maintenance (both personnel and operational history), radiation monitoring (both personnel and environmental), and liaison with licensing authorities.

NAME: Kathryn S. Lester

EXPERIENCE: 1987-1989 Also responsible for analyses and evaluations to assure that radiological protection and ALARA considerations are incorporated into system and facility designs, operations and handling procedures, and personnel training programs for both customers and employees.

Sept. 1986 -
Feb. 1987 Chem-Nuclear Systems, Inc., Senior Radiological Control Technician and DOT broker. As DOT broker, acted as the Company's legal representative for verifying that the contents of radioactive waste shipments were in compliance with all State and Federal laws, rules and regulations, and CNSI's low-level radioactive waste burial site criteria. Supervised projects for the proper handling, packaging, shipping, and ultimate disposal of various radioactive materials.

This included supervising work activities, scheduling and personnel utilization, and providing technical guidance, and addressing the interpretation of waste disposal criteria for special wastes.

As Senior Radiological Control Technician, was responsible for implementing the radiation and safety program, directing daily project activities to minimize radiation exposure, conducting radiological and safety surveys, radiological training programs, and maintaining project records.

Participated in a major radioactive waste cleanup and disposal project with the U. S. Air Force involving curie-level contamination of Americium-241.

NAME: Kathryn S. Lester

EXPERIENCE:

Sept. 1985-
Sept. 1986 — Chem-Nuclear Systems, Inc., Health Physics Technician. Verified that incoming shipments met DOT regulations and CNSI site disposal criteria. Responsible for ensuring off-load operations were conducted in a safe manner and personnel exposures were kept as low as reasonably achievable. Also conducted surveys and released equipment and vehicles off-site.

April 1985-
Sept. 1985 — Department of Energy, Nevada Operations, Co-op Health Physicist. Involved in classified projects with the nation's weapons testing program at the Nevada test site. Researched noble gas leakage and developed reports on the extremity TLD program.

NAME: Gerald B. Lindsey

TITLE: Health-Safety Foreman

CITIZEN OF UNITED STATES

EDUCATION: 1975 Graduate of Virginia Polytechnic Institute and State University, Blacksburg, Virginia - B. S. in Biology

CVCC Emergency Medical Technician - 110 hours (coordinated through Blue Ridge Emergency Medical Service)

EXPERIENCE: 1969-1976 Lynchburg General Hospital Emergency Room. Duties include vital signs, emergency aid, patient care.

1976-1983 Babcock & Wilcox Company, Commercial Nuclear Fuel Plant. Employed as a QA lab technician - 5 years; Health-Safety Monitor - 2 years.

1983-1985 Babcock & Wilcox Company, Lynchburg Research Center. Employed as a H.P. Surveyor for the Building C Decommissioning Project.

Oct. 1985 - Apr 1986 Babcock & Wilcox Company, Commercial Nuclear Fuel Plant. Employed as a Senior Health-Safety Monitor.

April 1986 - Present B&W Fuel Company (Babcock & Wilcox Co.). Employed as Health-Safety Foreman. Duties include standard review and implementation, safety training program, plant safety audits, procedure writing, accident investigations.

NAME: Darryl L. Gordon

TITLE: Health Physicist

CITIZEN OF UNITED STATES

EDUCATION: 1988 - University of Lowell, Lowell, MA - B.S. Radiological Sciences

EXPERIENCE: May 1991 - Present

B&W Fuel Company, Commercial Nuclear Fuel Plant, Health Physicist. Responsible for Coordination, Management and Technical Development of the Radiation Protection Program for fuel manufacturing and field operations refurbishment divisions. This responsibility includes radiological training, emergency response coordination, compliance with NRC, EPA, State, and Local regulations, procedure development, Bioassay, and ALARA Program.

July, 1988 - April, 1991

Portsmouth Naval Shipyard, Portsmouth, NH, Radiological Control Technician. Responsible for Radiation and Contamination control associated with the overhaul, maintenance, and refueling of Naval nuclear propulsion systems. Established guidelines for various industrial tradesmen to reduce exposure, minimize radwaste, and prevent spread of contamination to uncontrolled areas, personnel, tools and equipment. Assisted in Processing and disposal of waste, man-rem estimates, procedure development, environmental impact monitoring, decommissioning, and radioactive material shipments.

Jan. 1986 - Jan. 1987

Pennsylvania Power and Light Company, Allentown, PA, Health Physicist. As Cooperative Associate, performed various activities to assist the corporate Health Physics organization in support of an operational two-unit BWR (SusquehannaSES) including resolution of operational HP problems, ALARA review, LLRW storage facility safety analysis, primary system gamma

spectroscopy, and man-rem estimates. Also coordinated the activities of the company's by-products materials license including source management and inventory, regulatory compliance, and instrument calibration services.

May, 1985 -
August, 1985
Applied Health Physics, Inc., Holyoke, MA, Health Physics Technician. Performed cleanup operations of a large manufacturing facility following a fire involving Polonium-210. Responsible for air, water, soil, and surface contamination surveys and removal of contaminated plant equipment. Packaged and shipped Radioactive-LSA waste and interacted with regulatory officials (NRC/EPA) to monitor the total environmental impact of the fire.

MEMBERSHIPS/CERTIFICATIONS:

Certified Radiological Control Technician -
(NAVSEA 389-0288 Art. 108)

NAME: Karl L. Bennett

TITLE: Industrial Safety and Environmental Control Officer

EDUCATION: 1990 - Masters Degree in Safety Management, West Virginia University, Morgantown, West Virginia

1985 - Associate of Arts Degree, Major in Mining Technology, Salem College, Salem, West Virginia

1982 - Graduate, Resident II College Cooperative Safety Training Program, National Mine Health and Safety Academy, Beckley, West Virginia

1979 - Bachelors Degree, Major in Social Studies/Minor in Safety, 1979 Glenville State College, Glenville, West Virginia

EXPERIENCE:

1990 - Present

Industrial Safety and Environmental Control Officer - Working for the Health-Safety Department. Responsibilities include: Investigating and filing accident reports, ensuring compliance with the local safety rules, maintaining compliance for our NPDES permit to include reporting commitments, and ensure adequate training is being performed for CNFP personnel and the emergency teams in regard to industrial safety.

1985-1990

Section Foreman, Consolidated Coal Corporation, Morgantown, West Virginia. Promoted from Project Engineer to Section Foreman with responsibilities for coal production and safety. Trained and supervised a crew of seven. Conducted routine mine inspections to evaluate hazardous risks and implement various appropriate safety procedures.

1983-1985

Supply Sergeant, US Army, Salem, West Virginia

Primarily responsible for the planning, procurement and management of supply functions in support of a 70-man combat engineering unit. Forecasted material requirements, completed all documentation, and distributed/documented inventory. Assisted commander with a variety of personnel and administrative matters.

CERTIFICATIONS:

- Assistant Mining Foreman #35244-36, State of West Virginia, 1987
- Impoundment Inspection, 1982
- Noise Level Testing, 1981
- Dust Calibration and Maintenance (Underground & Surface), 1981
- Dust Sampling (Underground and Surface), 1981
- Secondary Education Teaching Certification, State of West Virginia, 1978

PROFESSIONAL AFFILIATION:

- Member, American Society of Safety Engineers
- Member, Non-Commissioned Officer Club

NAME: William T. Foot

TITLE: Facilities Manager

EDUCATION: 1970 BS in Industrial Economics, Purdue University, West Lafayette, Indiana

EXPERIENCE: Sept. 1991 to Present

Facilities Manager, B&W Fuel Company - Responsible for operation and maintenance of plant, grounds, and equipment. Supervise 3 persons directly and 15 indirectly. Plans additions to buildings and plans for efficient layout of equipment.

Aug. 1989 - Aug. 1991

President, Purchasing Services, Inc. - PSI provided services to clients in the areas of Project Buying, Cost Reduction Projects, Expediting, Vendor Sourcing and Evaluations, and recommended and provided Personal Computer software for Purchasing to clients. PSI also provided temporary replacement for buyers and purchasing managers.

April 1988 - Present

Project Procurement Manager, William T. Foot, CPM - As a self-employed individual and under contract to Babcock & Wilcox, Fossil Power Division, I managed the purchase of over 35 million dollars worth of materials and engineered products for a paper mill expansion project (Weyerhaeuser). I coordinated the purchasing activities on the project between B&W and the engineering firm (CRS Sirrine) hired by B&W. I developed a Purchasing plan, hosted vendor meetings, interfaced with engineers and salesmen, determined strategy and led negotiations, and wrote purchase orders.

Oct. 1984 - Feb. 1987

Manager, Plant Purchasing, B&W - Supervised four buyers who purchased raw materials and MRO supplies to support manufacture of nuclear fuel for electric utilities. Personally responsible for purchase of the two highest

value commodities totalling 13 million dollars annually. Interfaced with vendors, engineers, and plant manufacturing personnel. Responsible for sourcing, vendor evaluations, proposal analysis, contract writing, and expediting.

March 1983 -
Oct. 1984

Group Leader, Sublet Purchasing - Supervised five buyers who purchased machined parts and welded fabrications for nuclear power and coal-fired utility boiler projects. Developed a computerized data base for sublet fabricators and machine shops that enables buyers to find the ideal vendor for practically any conceivable project.

March 1980 -
March 1983

Purchasing Coordinator, B&W, Barberton, OH - Supervised three people who supported B&W's fossil boiler proposal group. Responsible for scheduling and expediting buyers to purchase heavy equipment to meet contract schedules. Developed purchasing plans for new contracts, resolved problems such as cancellations, delays, extension of warranties, etc.

July 1977 -
March 1980

Senior Buyer, B&W, Barberton, OH - Purchased electric motors, gears, reducers, couplings and other power transmission products for large utility boiler projects. Achieved over 8% cost savings on total order value of over fifteen million dollars. Developed sources and placed orders with Japanese vendors for precision gearing.

1970-1977

Various Manufacturing Assignments, B&W, Barberton, OH - Held several assignments within Manufacturing including Mfg. Trainee, Project Engineer, Shop Foreman, and Mrf. Engineer in B&W's Naval Nuclear Division.

PROFESSIONAL CERTIFICATIONS AND AFFILIATIONS:

Certified Purchasing Manager, National Association of Purchasing Management

PMAC-V, Purchasing Management Association of the Carolinas and Virginia - Member

Central Virginia Chapter, PMAC-V - Membership Chairman, Board of Directors

NAME: Richard W. Penoza

TITLE: Manager, Field Operations

CITIZEN OF UNITED STATES

EDUCATION: B.S. - Mechanical Engineering, Lawrence Institute of Technology
M.A. - Industrial Management, Lynchburg College

EXPERIENCE: 1971-1973 DACAM Corporation - Assistant Chief Engineer. Responsible for the design and development of new packaging equipment, production follow, and field service engineering.

1973-1979 Babcock & Wilcox Company, Naval Nuclear Fuel Division - Engineer. Held several positions related to the manufacture of shipboard nuclear reactor core components during this time period including Manufacturing Engineer, Process Control Engineer, and Sales Specialist.

1979-1981 Owen & Mayes - Project Engineer. Responsible for the design and installation of industrial process piping systems and production equipment.

1981-1983 Babcock & Wilcox, Special Products & In-Service Inspection - Tooling Design Supervisor. Responsible for supervising 4 to 6 engineers whose duties include the design, fabrication and testing of special mechanical tooling for all nuclear applications.

1983-1986 Babcock & Wilcox, Special Products & In-Service Inspection - Plant Service Tooling Manager, Tooling Applications Manager. Managed teams of 7 to 18 engineering personnel whose duties included the design, fabrication, and testing of special remote tooling and video support equipment for use in the inspection and servicing of nuclear reactors.

NAME: Richard W. Penoza

EXPERIENCE: 1986-
Present B&W Fuel Company (Babcock & Wilcox Co.) - Field Operations Manager. Manages and directs all activities related to field operations on irradiated nuclear fuel. Responsibilities include directing the design, fabrication, testing and qualification of new field service tooling; overseeing eh maintenance, reconditioning, transportation, and documentation of the adequacy of existing tooling; providing for the training and certification of field service personnel; and interfacing with customer representatives at the reactor sites to assure satisfaction with the work.

NAME: Francis M. Alcorn

TITLE: Manager, Nuclear Criticality Safety Engineering

CITIZEN OF UNITED STATES

EDUCATION: B.S. - Nuclear Engineering, North Carolina State University, 1957

M.B.A. - Master of Business Administrati[on] Lynchburg College, 1974 - Graduate Study in Nucl[ear] Engineering, University of Virginia

EXPERIENCE: 1957 - 1960 Babcock & Wilcox, Atomic [Power Divis]ion, Lynchburg, VA. Functioned [as a Nuclear] Engineer doing both core n[uclear] and shielding calculations.

1960 - 1961 General Nuclear Engineering Cor[poration] Staff Physicist. Engaged in core neutron physics design and analysis of the Boiling Nuclear Superheat Reactor. Wrote physics articles for Power Reactor Technology, which was published by GNEC for the AEC at that time.

1961 - 1964 Babcock & Wilcox, Nuclear Power Generation Division, Lynchburg, VA. Concerned with core neutron physics analysis and design of the Consolidated Edison Reactor, the Liquid Metal Fuel Reactor, the Babcock & Wilcox Test Reactor, the Advanced Test Reactor, the Heavy Water-Organic Cooled Reactor Concept, and Babcock & Wilcox Pressurized Water Reactor Concepts. Developed methods for and performed calculations for criticality, fuel depletion, nuclear safety coefficients, power profiles, nuclear fuel costs, and critical experiment analysis. Worked in the areas of kinetic safety analysis.

NAME: Francis M. Alcorn

EXPERIENCE:

1964 - 1969 Babcock & Wilcox, Utility Power Generation Division (formerly Nuclear Power Generation Division), Lynchburg, VA. Physicist in the PWR Development Section and was responsible for determining the most economical method for utilizing plutonium as a recycle fuel in B&W's pressurized water reactor concepts. In addition, was Nuclear Criticality Safety Advisor to the Company's Naval Nuclear Fuel Division.

1969 - 1971 Babcock & Wilcox Company, Lynchburg Research Center, Lynchburg, VA - Criticality Specialist, Nuclear Safety Engineer. Transferred to the LRC as Nuclear Criticality Safety Specialist for Babcock & Wilcox's Naval Nuclear Fuel Plant, Commercial Nuclear Fuel Plant, and the LRC.

1971 to April 1987 Babcock & Wilcox, Lynchburg Research Center, Lynchburg, VA - Supervisor, Nuclear Criticality Safety Group. This group was the Company's central organization which provided guidance, developed and validated the analytical methods needed for criticality evaluations, did criticality calculations, performed nuclear safety audits, and gave assistance to the various divisions of the Company and the Company's customers in matters related to nuclear criticality safety. In addition to responsibility as supervisor of this group, was the Nuclear Safety Officer for the Lynchburg Research Center (LRC).

NAME: Francis M. Alcorn

EXPERIENCE: April 1987 - Present Manager, Nuclear Criticality Safety Engineering. Responsible for managing the Nuclear Criticality Safety Engineering Unit which develops and validates the analytical methods needed for criticality safety evaluations, performs criticality safety calculations needed within Babcock & Wilcox, conducts nuclear safety audits, and assists the various divisions of the Company and the Company's customers in matters related to nuclear criticality safety. This unit, within the Naval Nuclear Fuel Division, was formerly located within the Research and Development Division; its responsibilities and functions remain essentially unchanged. Also the Nuclear Safety Officer for the Naval Nuclear Fuel Division Research Laboratory (formerly the Lynchburg Research Center).

NAME: J. Wayne Harwell

TITLE: Principal Engineer, Nuclear Criticality Safety

CITIZEN of UNITED STATES

EDUCATION: B. S. Nuclear Engineering, 1963
Mississippi State University
M. S. Nuclear Engineering, 1968
Mississippi State University

EXPERIENCE: 1963-1964 Ingalls Shipbuilding Corporation - Engineer, Shielding Structure Unit Performed nuclear shield design modifications and project management related duties for shielded structures on nuclear submarines during construction.

1964-1968 Mississippi State University - Instructor & Graduate Assistant Engineering Graphics Department. Graduate assistant and instructor teaching freshmen engineering drawing classes. Attended graduate school in nuclear engineering.

1968-1976 Babcock & Wilcox, Nuclear Power Division, Senior Engineer, Nuclear Development Work related to self-powered neutron detectors signal-to-power conversion, core physics analytical modeling and benchmarking, core model analyses, core and fuel assembly design optimization and reactor vessel fluence analysis.

1976-1976 Southern Company Services, Senior Core Analysis Engineer. Developed core physics models for the Farley PWR cores including generation of cross section tablesets and geometries for PDQ07 using EPRI ARMP code package.

NAME: J. Wayne Harwell

EXPERIENCE: 1976-1988 Babcock & Wilcox, Fuel Management Analysis. Responsible for fuel cycle design and fuel management analyses for Connecticut Yankee and B&W design 177 fuel assembly reactor cores using the PDQ07 computer code. Work includes cross section tableset generation and fitting strategy development, advanced fuel and reactivity control concept development, new fuel management concepts and use of transport codes for analytical model development.

1988- Babcock & Wilcox Company - Principal Engineer Nuclear Criticality Safety Engineering. Performs nuclear criticality safety evaluations using the SCALE computer code package that utilizes the Monte Carlo computer codes (KENO-4 and KENO-5) and transport computer code (XSDRN). Responsible for methods development along with computer codes benchmarking, verification, and validations for the codes used in nuclear criticality calculations.

NAME: James G. Tennant

TITLE: Manager, Production & Inventory Control

EDUCATION: 1970 BS, Industrial Technology, East Tennessee State University. Kepner-Tregoe Project Management and Problem Solving/Decision Analysis courses; AMA Manufacturing Management; GE Manufacturing Systems Implementation and Experienced Manager courses; Creative Leadership courses; plus various other professional workshops.

EXPERIENCE:

1991-
Present Manager, Production & Inventory Control, B&W Fuel Company, Lynchburg, VA. Responsible for the Nuclear Material Control plan, accountability, scheduling and transportation.

1989-1991
Manager, Advanced Manufacturing Systems, Acadia Polymers, Inc., Roanoke, Virginia. Reporting to Vice President of Development. Responsible for corporate MRPII objectives; including system implementation, J.I.T. education, product on-time delivery, master planning and inventory objectives.

1983-1989
Program Manager, Manufacturing and Engineering Systems, General Electric Company, Mobile Communications Business, Lynchburg, Virginia. Reported to Manager of Information Systems. Directed ten information systems and end-users in new systems implementation and interfaced with manufacturing and engineering management to define systems strategies for manufacturer of mobile communications equipment.

1979-1983
Director, Manufacturing Support, The Singer Company, American Meter Division, Philadelphia, Pennsylvania. Reported to Vice President of Manufacturing. Directed two project specialists and supervised five site managers. Responsible for division manufacturing MRPII and information systems including systems implementation, production planning, new product introduction, and monitoring of customer service performance for manufacturer of gas meters and regulations

1970-1979

Manufacturing Manager, The Singer Company, Motor Products Division, Pickens, SC, and Clarksville, AR. Reported to Plant Manager. Directed activities of three general foremen, 22 production supervisors, and up to 1300 hourly employees in the manufacture of portable electric tools. Responsible for all aspects of shop operations, materials and production control, operations training and safety programs. Controlled $8MM operating budget.

11.4 Operating Procedures

Written procedures for the conduct of specific operations including maintenance and development of work within the plant are prepared by the functional component responsible for that activity. Health Safety activities are controlled by detailed operating procedures developed by Health-Safety to assure standardization and accuracy. All written procedures are reviewed and approved by appropriate representatives of plant management. If SNM or other radioactive materials are involved in an activity, approval by the Manager, Safety and Licensing or his designee shall be required prior to implementation. Likewise all Health-Safety procedures are approved by the manager, Safety and Licensing as well as by affected members of plant management. Health-Safety procedures are reviewed periodically and updated accordingly.

Applicable procedures are made available in the work area and adherence to procedure is required of all personnel.

11.5 Training

All personnel receive basic training in radiological, industrial, and nuclear safety upon being hired. This initial training is a cooperative effort involving Personnel, Health-Safety, and the employee's supervisor and is designed to satisfy the requirements of 10 CFR 19.12.

particular emphasis is placed on the nature of the materials handled, ALARA plant safety program and rules, 10 CFR 19 requirements, and the emergency evacuation system. Specific areas covered in the safety training program are as follows:

11.5.1 Initial Employee Training

Employees are referred to Health-Safety by the Personnel Department for initial training in safety. The entire plant safety program is reviewed in some detail with particular emphasis being placed on specific areas depending on the employee's job assignment. A brief discussion of, and familiarization with, the general principles of health physics and nuclear safety is included. The employee is informed of his rights and responsibilities under CFR 19, and OSHA.

11.5 Training

11.5.1 Initial Employee Training

Following the initial indoctrination, the employee receives additional safety training from his immediate supervisor regarding the nuclear and radiological safety requirements of his specific job assignment. Training sessions are documented and filed as part of the employee's Health-Safety record.

11.5.2 Employee Retraining

Continuing training of a general nature is provided as necessary by Health-Safety and supervision. This training may be formalized (i.e., "classes") or informal and conducted as a part of routine Health-Safety audits. Formalized retraining may be utilized to explain operational changes affecting safety, control of special problems such as increased airborne activity, or changes in license specifications. The responsibility for determining the necessity for retaining or special training rests with Health-Safety based on plant conditions or the request of supervision.

Radiation workers are all retrained annually as a routine part of our safety training program. The retraining sessions are documented and kept as part of the employee's Health-Safety record.

11.5.3 Specialized Training

11.5.3.1 Respiratory Protection

Training and retraining in the use of respiratory protection devices is provided by Health-Safety as required. Points relating to proper use are covered as the unit is issued and fitted by Health-Safety. This approach provides continuing review of respiratory protection requirements. Should situations arise where frequent use of a respirator is necessary, frequent Health-Safety surveillance will assure continued proper application.

11.5 Training

11.5.3.2 Emergency Teams Training

Specialized training for special and emergency response units such as the Fire Brigade, Radiation Monitoring Team and First Aid personnel is coordinated by Health-Safety. Fire Brigade training is conducted by representatives of Health-Safety and/or local Fire Departments and covers the use of fire fighting equipment and agents available at CNFP. Radiation Monitoring Team members receive periodic training from Health-Safety in emergency response techniques, instrument use and maintenance, health physics and nuclear safety fundamentals, respiratory protection and contamination control. Annual evacuation drills are generally utilized as a training period for the emergency teams. First aid training is given by a qualified instructor and is the standard Red Cross program or equivalent. Efforts are made to recruit individuals who have had previous training such as military damage control or Civil Defense radiation monitoring.

11.6 Changes in Procedures, Facilities, and Equipment

11.6.1 Procedural Changes

Procedural changes are initiated by the functional component responsible for that activity. Such procedural changes are reviewed and approved by plant management prior to implementation. If the activity involves SNM or other radioactive materials, the Manager, Safety and Licensing must approve the procedural change prior to implementation.

11.6.2 Facilities and Equipment Changes

Changes or modifications to facilities and equipment that have a potential impact on nuclear,

11.6 Changes in Procedures, Facilities, and Equipment

11.6.2 Facilities and Equipment Changes

radiological, industrial, or chemical safety must be reviewed and approved by the Safety Review Board and/or the Safety Review Board Chairman or his qualified designee prior to initiation. The Safety Review Board is described in detail in Chapter 2.0 of Part I.

11.6.2.1 Initiating Changes

The responsibility for initiating changes as described in 11.6.2 is usually given to the immediate operational supervisor or manager. The requested change is documented and submitted to the Safety Review Board Chairman for initial review.

11.6.2.2 Analysis of Changes

The Safety Review Board Chairman determines what safety evaluations are needed. If the proposed modification changes the basis on which the nuclear criticality safety was originally assessed, a technical evaluation by the nuclear criticality safety group will be initiated. The organizational structure and minimum qualifications of the nuclear criticality safety group is as described in Chapter 4.0.

Radiation safety evaluations will be performed for new or revised operations to assure personnel protection is maintained. Chemical and industrial safety aspects of proposed modifications will also be evaluated for acceptability. These evaluations are documented and retained as described in 11.6.2.6.

11.6.2.3 Management Review

As a minimum, the Safety Review Board Chairman or his qualified designee shall review all safety analyses performed the plant modifications prior to implementation. The Safety Review Board Chairman will determine if Safety Review Board approval is required.

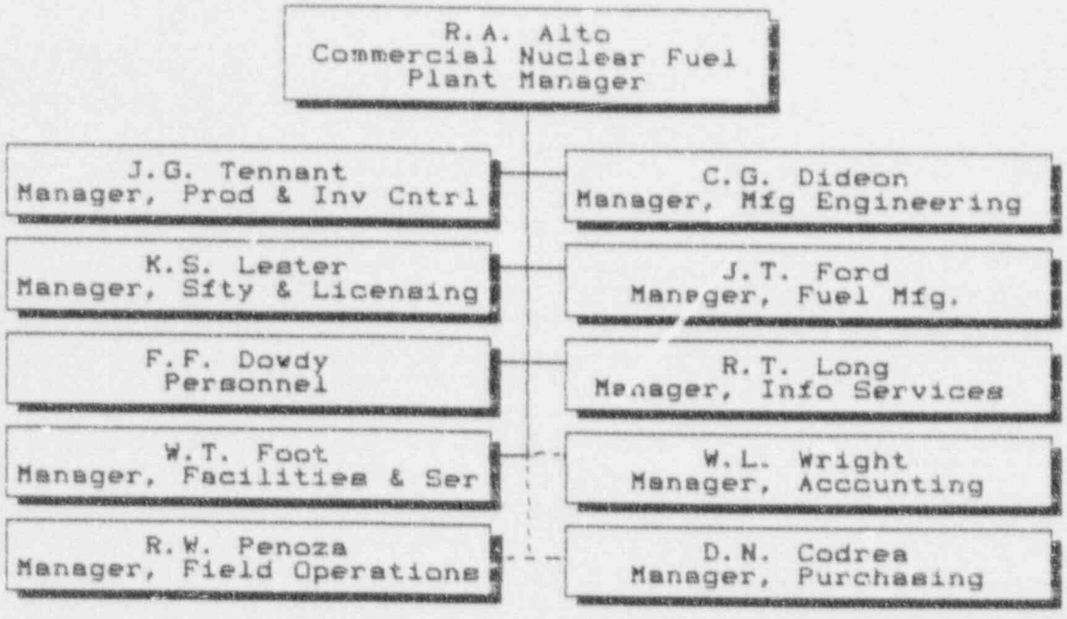
11.6.2.4 Approval and Verification of Changes

Approval and release of plant modifications for routine use is dependent upon satisfactory completion of a pre-operational evaluation. This evaluation is a final verification that the proposed change has been installed consistent with the analyses performed under 11.6.2.2. This evaluation will consider nuclear, radiological, industrial, and chemical safety as well as license compliance. This evaluation is performed by Health-Safety personnel and is approved by the Safety Review Board Chairman prior to implementation. Compliance of plant modifications is assured by our existing Health-Safety controls and audit programs with regard to contamination control, personnel exposures, nuclear safety, chemical and industrial hazards.

11.6.2.5 Records

All analyses, evaluations, pre-operational evaluations and other pertinent documentation relating to plant modifications will be maintained on file for at least six months after termination of the operation.

FIGURE 11.1


R.A. Alto
Commercial Nuclear Fuel
Plant Manager
J.G. Tennant
Manager, Prod & Inv Cntrl
K.S. Lester
Manager, Sfty & Licensing
F.F. Dowdy
Personnel
W.T. Foot
Manager, Facilities & Ser
R.W. Penoza
Manager, Field Operations
C.G. Dideon
Manager, Mfg Engineering
J.T. Ford
Manager, Fuel Mfg.
R.T. Long
Manager, Info Services
W.L. Wright
Manager, Accounting
D.N. Codrea
Manager, Purchasing