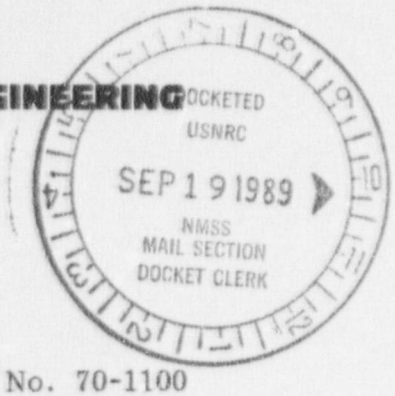
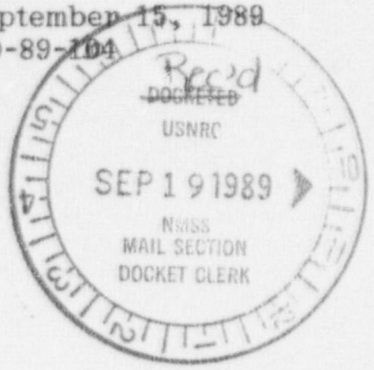
RETURN TO ~~396-SS~~ P1-137

70-1100

COMBUSTION ENGINEERING




September ~~15~~, 1989
LD-89-~~104~~




Docket No. 70-1100
License No. SNM-1067

Mr. Leland C. Rouse, Chief
Fuel Cycle Safety Branch
Division of Industrial and
Medical Nuclear Safety
Office of Nuclear Material
Safety and Safeguards
U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D. C. 20555

Subject: Revision to Windsor Nuclear Fuel Manufacturing Facility Organization Amendment Request

Reference: Letter LD-89-066, A. E. Scherer (C-E) to L. C. Rouse (NRC), dated June 23, 1989

Dear Mr. Rouse:

In our letter of June 23, 1989, (Reference), Combustion Engineering submitted a revised amendment request pertaining to our Windsor Nuclear Fuel Manufacturing Facility organization. This amendment was subsequently discussed with Mr. D. A. McCaughey of your staff on several occasions. We have considered the comments provided and have further revised the organization amendment, which is provided in the Enclosures to this letter.

Enclosure I provides a tabulation of affected pages and their respective revision numbers. In order to facilitate your review, also provided in Enclosure I is a tabulation of the changes made on each of the pages provided herewith. The revised license amendment is provided in Enclosure II. Ten (10) copies of the Enclosures are included for your use.

1/1

D03

Power Systems
Combustion Engineering, Inc.
1000 Prospect Hill Road
Post Office Box 500
Windsor, Connecticut 06095-0500
(203) 688-1911
Telex: 99297



adds info 25954

If I can be of further assistance in this matter, please do not hesitate to call me or Mr. J. F. Conant of my staff at (203) 285-5002.

Very truly yours

COMBUSTION ENGINEERING, INC.

for E. A. Kennedy

A. E. Scherer
Director
Nuclear Licensing

AES:jeb

Enclosures: As Stated

cc: D. McCaughey (NRC)
J. Roth (NRC-Region I)

Docket No. 70-1100
License No. SNM-1067

ENCLOSURE I

COMBUSTION ENGINEERING, INC.

WINDSOR FUEL MANUFACTURING FACILITY

REQUEST FOR LICENSE AMENDMENT

LIST OF AFFECTED PAGES

SEPTEMBER, 1989

Docket No. 70-1100
License No. SNM-1067

# WINDSOR FUEL MANUFACTURING FACILITY

## REQUEST FOR LICENSE AMENDMENT

Combustion Engineering requests that the application for license (SNM-1067), for the Windsor Fuel Manufacturing Facility, be amended to reflect changes which have been made to the organization structure and the various programs. Changes are denoted by a bar in the right hand margin of each affected page. This change package supercedes the specified pages from our amendment package submitted on June 23, 1989 (LD-88-066). The proposed change pages are provided in Enclosure II.

The application pages affected by this amendment and their respective revision numbers are listed below:

| Deleted Page | | Added Page | |
|---|---|---|---|
| Page No. | Rev. | Page No. | Rev. |
| 1 | 03 | 1 | 04 |
| I.2-2 | 03 | I.2-2 | 04 |
| I.2-3 | 05 | I.2-3 | 06 |
| I.2-4 | 05 | I.2-4 | 06 |
| I.2-5 | 03 | I.2-5 | 04 |
| I.2-6 | 05 | I.2-6 | 06 |
| I.2-7 | 05 | I.2-7 | 06 |
| I.2-11 | 03 | I.2-11 | 04 |
| I.2-12 | 05 | I.2-12 | 06 |
| I.2-14 | 05 | I.2-14 | 06 |
| I.2-15 | 03 | I.2-15 | 04 |
| I.3-2 | 06 | I.3-2 | 07 |
| -- | -- | I.3-2a | 00 |
| I.4-2 | 04 | I.4-2 | 05 |
| II.3-2 | 03 | II.3-2 | 04 |
| II.3-3 | 05 | II.3-3 | 06 |
| II.3-4 | 03 | II.3-4 | 04 |
| II.3-13 | 03 | II.3-13 | 04 |
| II.3-14 | 02 | II.3-14 | 03 |
| II.3-29 | 03 | -- | -- |
| II.3-30 | 03 | -- | -- |

Docket No. 70-1100
License No. SNM-1067

In order to facilitate your review the following tabulation provides a description of the differences from our June 23, 1989 submittal on each of the pages affected.

| Page No. | Change Description |
|---|---|
| 1 | Corrected title to Section 2.8 |
| I.2-2 | Section 2.1.3, clarify responsibility of the Program Manager, Radiological and Industrial Safety. |
| I.2-3 | Carryover of existing material due to adding discussion on p. I.2-2 above. |
| I.2-4 | Section 2.1.8, delete reference to supervisor issuing RWPs. |
| I.2-5 | Section 2.1.10, delete reference to supervisor issuing RWPs. |
| I.2-6 | Section 2.2.3 and 2.2.4, update position qualification description. |
| I.2-7 | Section 2.2.5 and 2.2.8, update position qualification description. |
| I.2-11 | Section 2.5.1, included training for Product Development in 2nd paragraph and deleted 3rd paragraph. Added new 3rd paragraph to address training for experienced individuals.<br>Section 2.5.2, added Product Development to annual refresher training and added 1 month grace period to annual refresher training requirement. |
| I.2-12 | Section 2.6, clarify qualifications of individuals to review safety related operating procedures. |
| I.2-14 | Section 2.7.2, clarified who can perform audits.<br>Section 2.7.2.1, added section describing safety committee oversight role. |
| I.2-15 | Section 2.8, corrected title to conform to Reg. Guide 3.52 and changed organizational responsibility for investigation of abnormal occurrences.<br>Section 2.9, minor text correction for readability. |
| I.3-2 | First paragraph, minor text correction.<br>Second paragraph, clarify content of RWPs and definition of individuals authorized to approved RWPs. |

Docket No. 70-1100
License No. SNM-1067

| Page No. | Change Description |
|---|---|
| I.3-2a | New page to accommodate overflow due to insertion of material on Page I.3-2. |
| I.4-2 | Section 4.1.2, clarify responsibility of Supervisor, RP and IS. Section 4.1.5, correct titles of individuals for review and sign-off and specify witten approval following independent review. |
| II.3-2 | Section 3.1.6, add new section describing responsiblity of Training Manager. |
| II.3-3 | Top of page, continued description of Training Manager responibility. |
| II.3-4 | New organization chart, shows new Training Manager position and temporary assignment to position of Manager, Radiological Protection and Industrial Safety. |
| II.3-13 | Delete resume of Manager, Radiological Protection and Industrial Safety. Relocate resume of Radiological Protection and Industrial Safety Technician. |
| II.3-14 | Same as Page II.3-13. |
| II.3-29 | Delete resume of Radiological Protection and Industrial Safety Technician which was relocated to Pages II.3-13 and II.3-14. |
| II.3-30 | Same as Page II.3-29. |

Docket No. 70-1100
License No. SNM-1067

ENCLOSURE II

COMBUSTION ENGINEERING, INC.

WINDSOR FUEL FABRICATION FACILITY

REQUEST FOR LICENSE AMENDMENT

PROPOSED LICENSE APPLICATION PAGES

SEPTEMBER, 1989

# TABLE OF CONTENTS

PART I LICENSE CONDITIONS

SECTION

2.1.3 Program Manager, Radiological and Industrial Safety

The Program Manager, Radiological and Industrial Safety reports to the Vice President and General Manager and is responsible for defining programs and standards related to radiological, criticality and industrial safety, environmental protection and emergency planning for both the fuel manufacturing facility and the product development laboratories. The programs and standards address safety criteria, monitoring, procedures and training materials necessary to ensure the protection of employees, the public and the environment.

The Program Manager, Radiological and Industrial Safety has no production responsibility. He or she has the authority to halt any operation in the fuel manufacturing facility or product development laboratories that he or she believes presents a safety hazard to employees, the public or the environment. If any operation is halted for a safety reasons(s) it shall not be restarted without the concurrence of the Program Manager or his/her designee. A person with the credentials of the Senior Criticality Specialist will approve the execution of those aspects of the Program Manager's function which relate to criticality safety.

2.1.4 Senior Criticality Specialist

The Senior Criticality Specialist may be a member of the technical staff of the Nuclear Fuel organization or an outside consultant who reports in a functional manner to the Program Manager, Radiological and Industrial Safety. He or she provides assistance to the Program Manager in executing those aspects of the Program Manager's function which relate to criticality safety. The Senior Criticality Specialist also serves as the second reviewer for Criticality evaluations performed by the Nuclear Criticality Specialist (first reviewer).

The Senior Criticality Specialist has no production responsibilities. The Senior Criticality Specialist has the authority to halt any operation in the fuel manufacturing facility or product development laboratories that he or she believes to represent an unsafe criticality condition. If an operation is halted for a criticality safety reason(s) it shall not be restarted without the concurrence of the Program Manager, Radiological and Industrial Safety or his/her designee.

2.1.5 The Manager, Radiological Protection and Industrial Safety

The Manager, Radiological Protection and Industrial Safety reports to the Vice President and General Manager. The

function of the Manager is to provide information, advice, and assistance to the operating and engineering Line Managers to ensure personnel and environmental protection measures are adequate and to keep records documenting safety related facility operations. He or she has the responsibility to implement the programs defined by the Program Manager, Radiological and Industrial Safety in the areas of radiological, criticality and industrial safety, environmental protection and emergency planning. As part of this responsibility, he or she assures that ALARA is considered in the implementation process. The Manager reviews and approves safety related operating procedures. These responsibilities are executed for both the fuel manufacturing facility and the product development laboratories by working with the cognizant Line Managers to ensure safety limits and operating procedures are acceptable.

The Manager, Radiological Protection and Industrial Safety has no production responsibility. If the Manager believes any operation in the fuel manufacturing facility or product development laboratories to be unsafe, he or she has the authority to halt that operation. If an operation is halted for a safety reason(s) it shall not be restarted without the concurrence of the Program Manager, Radiological and Industrial Safety or his/her designee.

2.1.6 Nuclear Criticality Specialist

The Nuclear Criticality Specialist is a member of the technical staff of the Nuclear Fuel organization and reports in a functional manner to the Manager, Radiological Protection and Industrial Safety. The Nuclear Criticality Specialist works with the cognizant Line Managers to ensure that nuclear fuel manufacturing facility or product development laboratory operations (processes, procedures and equipment) or changes thereto are acceptable with regard to nuclear criticality safety. He or she executes this responsibility by advising the cognizant Line Managers regarding criticality safety practices, arranges for analyses or reviews and approves changes to processes, procedures or equipment related to criticality safety.

The Nuclear Criticality Specialist has no production responsibilities. The Nuclear Criticality Specialist has the authority to halt any operation in the fuel manufacturing facility or product development laboratories that he or she believes to represent an unsafe criticality condition. If an operation is halted for a criticality safety reason(s) it shall not be restarted without the concurrence of the Program Manager, Radiological and Industrial Safety or his/her designee.

2.1.7 Nuclear Criticality Analyst

The Nuclear Criticality Analyst performs the detailed numerical criticality calculations as prescribed by the Nuclear Criticality Specialist to verify the acceptability of fuel manufacturing facility or product development laboratory processes or equipment.

2.1.8 Supervisor, Radiological Protection and Industrial Safety

The Supervisor, Radiological Protection and Industrial Safety reports to the Manager, Radiological Protection and Industrial Safety. He or she assists the Manager in carrying out his/her duties and is responsible for surveillance of nuclear fuel manufacturing and product development activities related to radiological, criticality and industrial safety, environmental protection and emergency planning. This surveillance ensures that operations are being conducted in accordance with Federal, State and local regulations, the conditions set down in this application and certificates of compliance, as applicable.

The Supervisor, Radiological Protection and Industrial Safety has no production responsibility. If the Supervisor believes any operation in the fuel manufacturing facility or product development laboratories to be outside specified limits or unsafe, he or she has the authority to halt that operation. If an operation is halted for a safety reason(s) it shall not be restarted without the concurrence of the Program Manager, Radiological and Industrial Safety or his/her designee.

2.1.9 Industrial Safety Specialist

The Industrial Safety Specialist reports to the Manager of Radiological Protection and Industrial Safety. He or she acts as a consultant to the Manager on matters relating to industrial safety and environmental protection at the fuel manufacturing facility and product development laboratories. He or she also advises the Radiation Protection and Industrial Safety Technicians in the proper methods of monitoring industrial safety and environmental protection compliance. The Industrial Safety Specialist has no production responsibility.

2.1.10 Radiological Protection and Industrial Safety Technicians

The Radiological Protection and Industrial Safety Technicians report to the Supervisor, Radiological Protection and Industrial Safety. The Technicians are responsible for the day-to-day monitoring of operations at the fuel manufacturing facility and the product development laboratories. Monitoring is accomplished through the collection of data which allows the effectiveness of radiological, criticality and industrial safety, environmental protection and emergency planning programs to be assessed. Technicians also monitor the proper implementation of Radiation Work Permits. The Radiological Protection and Industrial Safety Technicians have no production responsibilities.

2.1.11 Manager, Production

The Manager of Production reports to the Vice President and General Manager. He or she is responsible for the planning, scheduling and control of the production process for the fabrication of fuel assemblies and their subsequent shipment to meet customer needs. Facility process/equipment operators are under the cognizance of the Production Manager. He or she is responsible for ensuring the proper training of personnel and that procedures and safety limits are followed. The Production Manager also oversees material and equipment purchasing, receiving, warehousing and inventory control.

2.1.12 Manager, Manufacturing Engineering

The Manager of Manufacturing Engineering reports to the Vice President and General Manager. Engineering activities related to facility equipment, process, methods and construction, whether new or a modification are directed by the Manager of Manufacturing Engineering. As part of this responsibility he or she assures that ALARA is considered as part of the design process. The Manager is also responsible for equipment maintenance at the fuel manufacturing facility. Through the appropriate engineering design, he or she ensures that radiological, criticality and industrial safety as well as environmental protection requirements are satisfied. He or she is also responsible for the preparation of procedures and training materials concerning facility equipment and the manufacturing process.

2.1.13 Emergency Director

The Emergency Director reports to the Vice President and General Manager. In this capacity he or she coordinates the actions of the emergency response team members (for both on- and off-site support). The Emergency Director shall remain in control of emergency operations until the situation is stabilized or terminated depending on the severity of the incident. The Emergency Director has authority to direct recovery operations for any emergency condition which may arise in the Nuclear Fuel Manufacturing facility or Product Development laboratories. The Emergency Director may designate qualified alternates.

## 2.2 Personnel Education and Experience Requirements for Key Positions Important to Safety

### 2.2.1 Vice President and General Manager

The minimum qualifications for this position are a bachelor's degree in one of the sciences or engineering, with ten (10) years experience, including at least five (5) years in management positions in the nuclear industry.

### 2.2.2 Director, Product Development

The minimum qualifications for this position are a bachelor's degree in one of the sciences or engineering, with ten (10) years experience, including at least five (5) years in management positions relating to product development activities in the nuclear industry.

### 2.2.3 Program Manager, Radiological and Industrial Safety

The minimum qualifications for this position are a bachelor's degree in one of the sciences or engineering, with four (4) years experience in health physics, including two (2) years in operational health physics with uranium bioassay techniques, internal exposure controls and radiation measurement techniques.

### 2.2.4 Senior Criticality Specialist

The minimum qualifications for this position shall be a bachelor's degree in one of the sciences or engineering, with two (2) years experience performing the duties of a Nuclear Criticality Specialist.

2.2.5 Manager, Radiological Protection and Industrial Safety

The minimum qualifications for this position are a bachelor's degree in one of the sciences or engineering, with two (2) years experience in health physics, including one (1) year in operational health physics with uranium bioassay measurement techniques, internal exposure controls and radiation measurement techniques.

2.2.6 Nuclear Criticality Specialist

The minimum qualifications for this position shall be a bachelor's degree in one of the sciences or engineering, with two (2) years experience performing criticality evaluations.

2.2.7 Nuclear Criticality Analyst

The minimum qualifications for this position shall be a bachelor's degree in one of the sciences or engineering, with one (1) year of experience performing criticality analyses. An analyst without the one year experience may perform analyses under the supervision of a qualified Nuclear Criticality Analyst as a means of obtaining the necessary experience.

2.2.8 Supervisor, Radiological Protection and Industrial Safety

The minimum qualifications for this position are a high school diploma with five (5) years direct experience in at least one of the safety related areas within his or her cognizance. Three (3) of the five (5) years of safety related experience shall have been as a senior radiological protection technician. A senior technician is an individual who has had at least one (1) year experience as a radiological protection technician.

2.2.9 Industrial Safety Specialist

The minimum qualifications for this position shall be an associate's degree in industrial safety, with two (2) years of related experience in industrial safety and/or environmental protection.

2.5.1 Initial Training

Employees and visitors (as necessary) working in the Windsor Nuclear Fuel Manufacturing facility or the Product Development laboratories shall participate in a General Employee Training program. This program shall include information necessary for each individual to understand the nature of the work done at these facilities and to perform his or her duties in a safe manner. As a minimum, the General Employee Training program shall cover the following subject areas; 1) Organization and Administration, 2) Facility Description, 3) Quality Control, 4) Security, 5) Industrial Safety, 6) Radiation Safety, 7) Criticality Safety, and 8) Emergency Preparedness. The General Employee Training program for Nuclear Fuel Manufacturing and Product Development shall be appropriate to the activities conducted in those respective facilities.

Employees and visitors (as necessary) working in Product Development laboratories, the Nuclear Fuel Manufacturing facility Pellet Shop or whose job involves working with unclad nuclear material shall also participate in a Radiation Worker Training Program. This program shall include information necessary for each individual to understand the nature of the work performed in the work area and to perform his or her duties in a safe manner, especially as relates to the handling of unclad nuclear materials. As a minimum, the Radiation Worker Training program shall provide a higher level of detail concerning radiological and criticality safety than the GET program which is appropriate to facility operations.

Individuals that have had prior radiological protection training, consistent with the activities conducted in Product Development and Nuclear Fuel Manufacturing, may be exempted from participation in the training program described above upon the successful completion of a challenge examination. Individuals not familar with site specific information shall be instructed in those details to allow their safe conduct while at the facility.

2.5.2 Refresher Training

Employees and visitors (as necessary) working in Product Development, the Nuclear Fuel Manufacturing facility Pellet Shop or whose job involves working with unclad nuclear material shall participate in an annual, not to exceed thirteen months, Radiation Worker refresher training program. The refresher training program shall emphasize the key safety aspects of their jobs and shall include, as a minimum: 1) a module covering significant abnormal occurrences and operational deficiencies identified at the

facility and the corrective actions taken to preclude recurrence, 2) Radiation Safety, and 3) Criticality Safety.

2.5.3 Training Records

Formal training sessions shall be documented and competency demonstrated by passing a test to verify training effectiveness. When changes are made in radiation protection or criticality safety limits, affected individuals shall be informed and instructed in the new material. At the discretion of the Manager, Radiological Protection and Industrial Safety and based on the complexity of the new material, formal testing to assess an individuals understanding may be waived.

Training records shall be retained for the duration of an individuals employment at Combustion Engineering or a minimum of two years, whichever is greater.

2.6 Operating Procedures

Routine Nuclear Fuel Manufacturing facility and Product Development laboratory operations which involve licensed materials shall be conducted in accordance with written procedures. The preparation of written safety related procedures are the responsibility of the cognizant Line Manager and shall be approved by the cognizant Manager, the Manager of Radiological Protection and Industrial Safety and the Nuclear Criticality Specialist. Written procedures that affect radiation and/or nuclear criticality safety shall include limits and controls which are required for nuclear safety of the subject activity. Safety related work in the Product Development area is done under a Radiation Work Permit issued by the Manager or Supervisor, Radiological Protection and Industrial Safety.

The preparation, review, revision, approval and implementation of safety related operating procedures shall be accomplished through a document control system. As a minimum, safety-related operating procedures shall be reviewed every two years. This review shall be conducted by the cognizant Line Manager and individuals having the qualifications of the Radiological Protection and Industrial Safety Manager and the Nuclear Criticality Specialist in their respective areas of expertise.

Safety related operating procedures, and changes thereto, shall be retained for a period of six (6) months following procedure revision or termination of the operation involved, whichever is longer.

2.7.2 Audits

Audits are performed by individuals independent of day-to-day operating activities being audited at the Nuclear Fuel Manufacturing facility or Product Development laboratories to verify that operations are being conducted according to established criteria. Audits are conducted in accordance with a written plan. A report documenting audit results is prepared and distributed to the Vice President and General Manager and the Director Product Development, with copies to Nuclear Fuel Manufacturing facility Line Managers and the Chairperson of the Facility Review Group.

The Program Manager, Radiological and Industrial Safety shall ensure the conduct of quarterly audits of the Radiation Protection, Criticality Safety, Fire Safety, Hazardous Material (non-radioactive) Safety, and Environmental Protection Programs in use at the Nuclear Fuel Manufacturing facility and Product Development laboratories. These audits shall be conducted by the Program Manager, members of his/her staff or consultants. The purpose of the audit is to verify the adequacy of program implementation and that designated limits and controls are being properly followed. Individual(s) conducting audits in either the areas of radiological or criticality safety shall meet the qualification requirements of the Program Manager, Radiological and Industrial Safety or the Senior Criticality Specialist, respectively.

Records of audit reports shall be retained for a period of three (3) years from the date of issue or until closure of findings is obtained, whichever is later.

2.7.2.1 Safety Committee Oversight

An independent safety committee shall conduct an annual audit of nuclear fuel manufacturing and product development operations involving licensed material covered by this application. The safety committee shall be appointed by and report to the President, Nuclear Power Businesses and be comprised of senior engineers and scientists from within the Nuclear Power Businesses technical community. The Committee may establish subcommittees and/or use consultants, as necessary, to carry out its responsiblities. Written audit findings shall be provided to the President, Nuclear Power Businesses; Vice President, Nuclear Fuel; Vice President and General Manager, Nuclear Fuel Manufacturing; Director, Product Development; and the Chairperson of the Facility Review Group.

Audit findings, as well as documentation of corrective actions shall be retained for a period of three (3) years

from the date of issue or until closure of findings is obtained, whichever is later.

2.8 Investigations and Reporting

Abnormal occurrences are investigated in accordance with written procedures and are reported to the Vice President and General Manager, Nuclear Fuel Manufacturing or the Director, Product Development, as appropriate. Reports to the Nuclear Regulatory Commission are made in accordance with specific conditions of this application and/or the applicable Federal Regulations. Regulatory Guide 10.1, Compilation of Reporting Requirements for Persons Subject to NRC Regulations, is used as a guide in identifying applicable reporting requirements. The level of investigation and the need for corrective action are determined based on the severity of the incident. The severity of an incident is based on the levels of uranium released and/or the degree of potential for exposure to workers or the public. An Abnormal Occurrence Review Committee is charged with the responsibility for investigating abnormal occurrences and recommending corrective action(s), as appropriate. The Committee is comprised of Line Managers from the Nuclear Fuel Manufacturing organization.

Records of investigations of abnormal occurrences reported to the Nuclear Regulatory Commission are retained for a period of three (3) years after closure of the investigation.

2.9 Records

Records pertaining to health and safety, facility modifications, abnormal occurrences, criticality analyses, inspections, audits, instrument calibrations, ALARA findings, employee training and refresher training, personnel exposures, routine radiation and contamination surveys and environmental surveys are retained to demonstrate compliance with the conditions of this application and the applicable Federal, State and local regulations. Records are retained for the periods specified in this application or the governing regulations, whichever is longer.

Nuclear Fuel Manufacturing involving those non-routine maintenance operations in which ventilated containment systems are breached shall be covered by a Radiation Work Permit (RWP).

The RWP shall be requested by the cognizant engineer or supervisor and it shall establish the radiological safety requirements. The Manager, Radiological Protection and Industrial Safety shall approve the initial issue of all RWPs. Subsequent RWPs, for similar activities, may be re-authorized by the Supervisor, Radiological Protection and Industrial Safety. RWPs may be verbally authorized in circumstances where the qualified individual is not on-site. Such verbal authorization shall be documented and the subject RWP shall be signed within one working shift of the qualified individuals return to the site. Radiological Protection and Industrial Safety Technicians are responsible for monitoring proper implementation of RWP's.

As a minimum, RWP's shall be reviewed for their need every 30 days. The Manager or Supervisor of Radiological Protection and Industrial Safety acting on input from the Radiological Protection and Industrial Safety Technicians shall close out all RWP's to assure that the specific work was completed in a satisfactory manner prior to permitting restart of the subject operation.

## 3.2 Technical Requirements

### 3.2.1 Access Controls

All personnel entering the unclad fuel handling areas must do so through the change areas provided for this purpose.

As a minimum, the following protective clothing shall be worn:

- Coverall or Lab Coat
- Special shoes or shoe covers
- Safety glasses

It shall be the responsibility of the Supervisor, Radiological Protection and Industrial Safety to assure that each work station is properly posted.

4.1.3 Request for Changes and Criticality Analysis

All proposed changes in process, equipment, and/or facilities that could affect nuclear criticality, radiological or industrial safety shall be approved in accordance with the responsibilities and authorities set forth in Section 2.1 of this part. The necessary analysis and resultant safety limits shall be established by a person having the minimum qualifications of a Nuclear Criticality Specialist. Procedures have been established for requesting changes and all request forms, approval forms, and associated documentation shall be maintained under the direction of the Manager, Radiological Protection and Industrial Safety.

4.1.4 Posting of Limits

All special nuclear material work stations and storage areas shall be posted with a nuclear criticality safety limit approved by the Manager of Radiological Protection and Industrial Safety and the Nuclear Criticality Specialist. The Supervisor, Radiological Protection and Industrial Safety, maintains records of the review and approval of each posted nuclear criticality safety limit.

4.1.5 Internal Review Requirements

All process/equipment/facility changes which affect nuclear criticality safety shall be reviewed and approved in writing by the Nuclear Criticality Specialist and the Program Manager, Radiological and Industrial Safety. An independent review and written approval shall be performed by the Senior Nuclear Criticality Specialist.

3.1.3 Manager, Quality Assurance

The Manager of Quality Assurance reports to the Vice President and General Manager. Quality control and quality assurance functions are under the direction of the Quality Assurance Manager. He or she is responsible for establishing quality control inspection procedures to ensure that manufacturing operations produce a product that meets or exceeds customer specifications. He or she also prepares and implements the Quality Assurance Manual for the Windsor Nuclear Fuel Manufacturing facility.

The Manager, Quality Assurance has no production responsibility. He has the authority to shutdown operations which inspection reveals are not producing a product consistent with customer specifications.

3.1.4 Manager, Accountability and Security

The Manager of Accountability and Security reports to the Vice President and General Manager. The implementation of the Fundamental Nuclear Material Control Plan, maintaining custodial control of nuclear materials, warehousing when not under the control of the Production Manager and management of radioactive waste are the responsibility of the Manager of Accountability and Security. He or she maintains nuclear materials measurement control systems and records of nuclear materials in the production process. He or she is also responsible for the preparation and implementation of the Physical Security Plan and oversight of the security force for the Windsor Nuclear Fuel Manufacturing facility.

3.1.5 Manager, Operations

The Manager of Operations reports to the Vice President and General Manager. He or she is responsible for the coordination of activities amongst Line Managers to ensure that the facility production goals are satisfied within the limits imposed by Federal, State and local regulations, this license application, certificates of compliance and other permits, as applicable.

3.1.6 Manager, Training

The Manager of Training reports to the Vice President and General Manager. He or she is responsible for the training program for facility personnel as well as other Combustion Engineering employees or visitors that require unescorted access to the facility. The Manager assures that

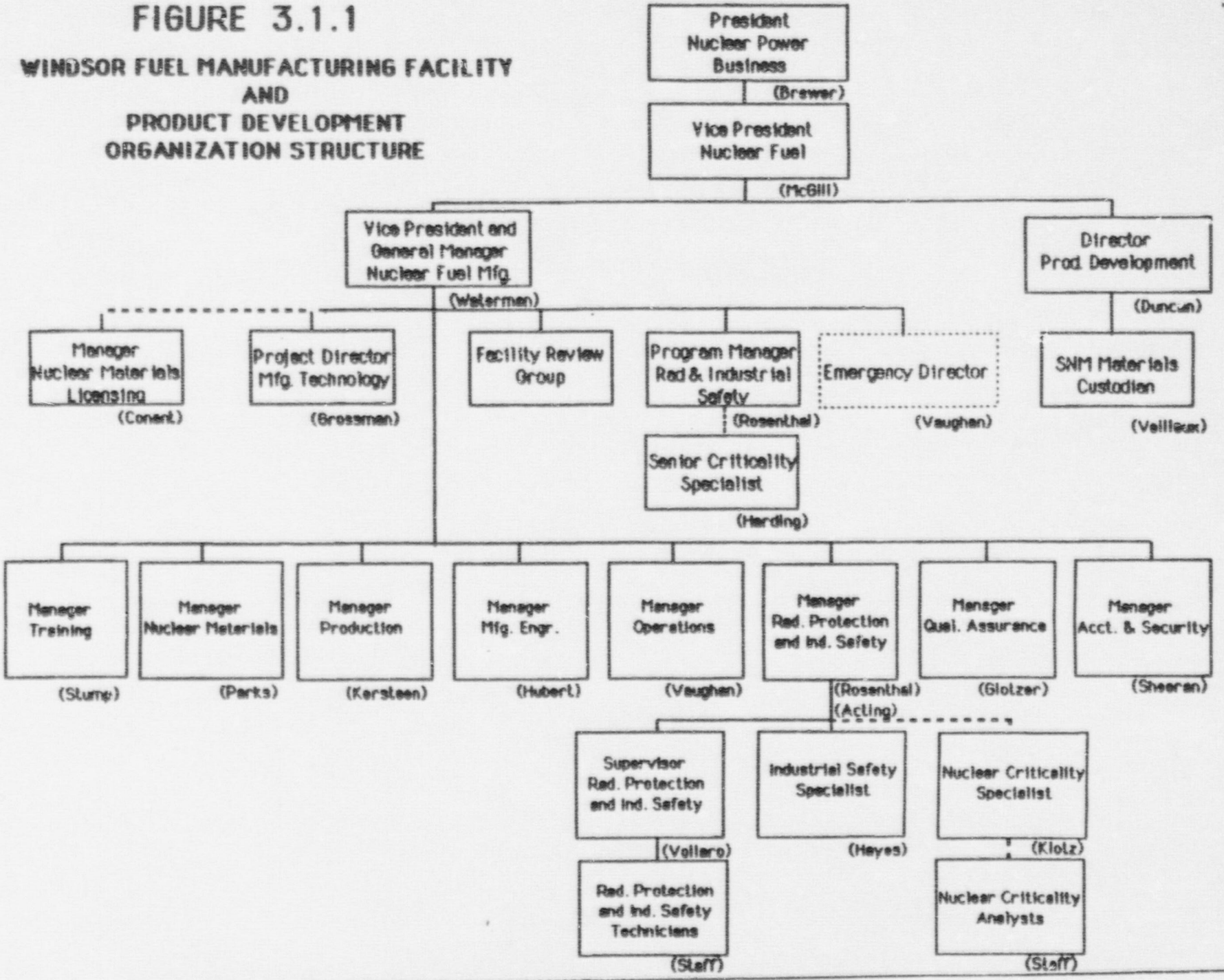
appropriate training materials are prepared and administered, testing is performed and records are retained as called for in Part I of this license application.

3.2 Resumes of Key Personnel Important to Safety

Resumes of key personnel important to safety are provided on Pages II.3-5 through II.3-28.

# FIGURE 3.1.1

## WINDSOR FUEL MANUFACTURING FACILITY AND PRODUCT DEVELOPMENT ORGANIZATION STRUCTURE



MAURICE E. HATCHER - Radiological Protection and Industrial Safety Technician

EDUCATION

Jonathan Law High School, Milford, CT, 1981

EXPERIENCE

COMBUSTION ENGINEERING, INC. 1988 to Present
Windsor Nuclear Fuel Manufacturing

Radiological Protection and Industrial Safety Technician

Power Systems Energy Services, Inc. Sept. 1987 to 1988

Senior Health Physics Technician

Senior Health Physics Technician assigned to support various utilities on a contract basis. Responsibilities have included identifying radioactive waste, controlling high level waste, performing routine radiation, contamination and airborne surveys and releasing equipment.

Bartlett Nuclear, Inc. Feb. 1987 to Sept. 1987

Health Physics Technician

Health Physics Technician assigned to support various utilities on a contract basis. Responsibilities have included performing routine radiation, contamination and airborne surveys. Worked in the ALARA unit responsible for pre- and post-job survey data; installation of numerous contamination control devices; installation of various HEPA ventilation units to control the spread of loose surface contamination. Performed surveys of tools and equipment to allow for free release. Performed decontamination of articles above established limits. Issued respiratory protection equipment.

USS HUNLEY (Submarine Tender) May 1983 to Oct. 1986
Article 108 Qualified

Radiological Controls Monitor

Duties included: ensuring proper radiological controls were enforced during all radioactive work, including supervision of Control Point Watches; ensuring numerous radioactive material transfers were properly executed; maintaining nuclear grade "A" cleanliness of primary systems; monitoring personnel exiting highly contaminated work areas; monitoring personnel

MAURICE E. HATCHER

exposure; ensuring that all personnel received exposure within established limits. Performed job coverage of two Steam Generator primary side inspections and various Radioactive Liquid Waste tank dives. Assigned primary collateral duties as Radioactive Materials Control Petty Officer and Primary Radiological Controls Monitor for the Northern Europe Radiological Casualty Assistance Fly-Away Team.