



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

VIRGINIA ELECTRIC AND POWER COMPANY

OLD DOMINION ELECTRIC COOPERATIVE

DOCKET NO. 50-338

NORTH ANNA POWER STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 99  
License No. NPF-4

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Virginia Electric and Power Company et al., (the licensee) dated March 17, 1988, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

8805180036 880428  
PDR ADOCK 05000338  
PDR

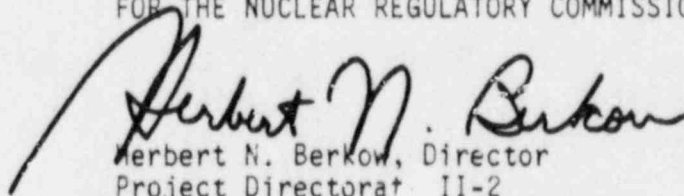
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.D.(2) of Facility Operating License No. NPF-4 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 99 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Herbert N. Berkow, Director  
Project Directorate II-2  
Division of Reactor Projects-I/II  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: April 28, 1988

ATTACHMENT TO LICENSE AMENDMENT NO. 99

TO FACILITY OPERATING LICENSE NO. NPF-4

DOCKET NO. 50-338

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages as indicated. The revised pages are identified by amendment number and contain vertical lines indicating the area of change. The corresponding overleaf pages are also provided to maintain document completeness.

Page

6-1  
6-1a  
6-1b (new page)  
6-2  
6-3  
6-6  
6-7  
6-8  
6-9  
6-10  
6-11  
6-12

## 6.0 ADMINISTRATIVE CONTROLS

### 6.1 RESPONSIBILITY

6.1.1 The Station Manager shall be responsible for overall facility operation. In his absence, the Assistant Station Manager (Operations and Maintenance) shall be responsible for overall facility operation. During the absence of both, the Station Manager shall delegate in writing the succession to this responsibility.

6.1.2 The Shift Supervisor (or during his absence from the Control Room, a designated individual) shall be responsible for the Control Room command function and shall be the only individual that may direct the licensed activities of licensed operators. A management directive to this effect, signed by the Senior Vice President - Power, shall be reissued to all station personnel on an annual basis.

### 6.2 ORGANIZATION

#### ONSITE AND OFFSITE ORGANIZATION

##### 6.2.1 Onsite and Offsite Organization

An onsite and an offsite organization shall be established for facility operation and corporate management. The onsite and offsite organization shall include the positions for activities affecting the safety of the nuclear power plant.

- a. Lines of authority, responsibility, and communication shall be established and defined for the highest management levels through intermediate levels to and including all operating organization positions. These relationships shall be documented and updated, as appropriate, in the form of organization charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements shall be documented in the UFSAR.
- b. The Station Manager shall be responsible for overall unit safe operation and shall have control over those onsite activities necessary for safe operation and maintenance of the plant.
- c. The Vice President - Nuclear shall have corporate responsibility for overall plant nuclear safety and shall take any measures needed to ensure acceptable plant performance of the staff in operating, maintaining, and providing technical support to the plant to ensure nuclear safety.
- d. The management position responsible for training of the operating staff and the management position responsible for the quality assurance functions shall have sufficient organizational freedom including sufficient independence from cost and schedule when opposed to safety considerations.

## ADMINISTRATIVE CONTROLS

---

- e. The management position responsible for health physics shall have direct access to that onsite individual having responsibility for overall facility management. Health physics personnel shall have the authority to cease any work activity when worker safety is jeopardized or in the event of unnecessary personnel radiation exposures.

## FACILITY STAFF

6.2.2 The Facility organization shall be as shown in the UFSAR.

- a. Each on duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.2-1.
- b. At least one licensed Reactor Operator shall be in the control room when fuel is in the reactor. In addition, while the unit is in MODES 1, 2, 3 or 4, at least one licensed Senior Reactor Operator shall be in the Control Room.
- c. A health physics technician# shall be onsite when fuel is in the reactor.
- d. ALL CORE ALTERATIONS shall be observed and directly supervised by either a licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation.
- e. A Fire Brigade of at least 5 members shall be maintained onsite at all times#. The Fire Brigade shall not include the minimum shift crew shown in Table 6.2-1 or any personnel required for other essential functions during a fire emergency.

---

#The health physics technician and Fire Brigade composition may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence provided immediate action is taken to fill the required positions.

## ADMINISTRATIVE CONTROLS

---

### 6.2.3 NUCLEAR SAFETY ENGINEERING (NSE)

#### FUNCTION

6.2.3.1 NSE shall function to examine plant operating characteristics, NRC issuances, industry advisories, Licensee Event Reports, and other sources which may indicate areas for improving plant safety.

#### COMPOSITION

6.2.3.2 NSE shall be composed of at least five dedicated, full-time engineers located onsite.

#### RESPONSIBILITIES

6.2.3.3 NSE shall be responsible for maintaining surveillance of plant activities to provide independent verification\* that these activities are performed correctly and that human errors are reduced as much as practical.

6.2.3.4 NSE shall disseminate relevant operational experience.

#### AUTHORITY

6.2.3.5 The NSE shall make detailed recommendations for revised procedures, equipment modifications, or other means of improving plant safety to the Assistant Station Manager (Nuclear Safety and Licensing).

### 6.2.4 SHIFT TECHNICAL ADVISOR

6.2.4.1 The Shift Technical Advisor shall serve in an advisory capacity to Shift Supervisor on matters pertaining to the engineering aspects of assuring safe operation of the unit.

---

\*Not responsible for sign-off function

DELETED

DELETED



TABLE 6.2-1  
MINIMUM SHIFT CREW COMPOSITION

---

WITH UNIT 2 IN MODE 5 OR 6 OR DE-FUELED

---

POSITION	NUMBER OF INDIVIDUALS REQUIRED TO FILL POSITION	
	MODES 1, 2, 3, & 4	MODES 5 & 6
SS	1 <sup>a</sup>	1 <sup>a</sup>
SRC	1	none
RO	2	1
AO	2	2 <sup>b</sup>
STA	1	none

---



---

WITH UNIT 2 IN MODES 1, 2, 3, OR 4

---

POSITION	NUMBER OF INDIVIDUALS REQUIRED TO FILL POSITION	
	MODES 1, 2, 3, & 4	MODES 5 & 6
SS	1 <sup>a</sup>	1 <sup>a</sup>
SRO	1 <sup>a</sup>	none
RO	2 <sup>b</sup>	1
AO	2 <sup>b</sup>	1
STA	1 <sup>a</sup>	none

---

a/ Individual may fill the same position of Unit 2.

b/ One of the two required individuals may fill the same position on Unit 2.

## ADMINISTRATIVE CONTRLS

### 6.3 FACILITY STAFF QUALIFICATIONS

6.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications of ANS 3.1-(12/79 Draft) for comparable positions and the supplemental requirements specified in the March 28, 1980 NRC letter to all licensees, except for (1) the Superintendent - Health Physics who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975 and (2) the Shift Technical Advisor who shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in plant design, and response and analysis of the plant for transients and accidents.

### 6.4 TRAINING

6.4.1 The Station Manager is responsible for ensuring that retraining and replacement training programs for the facility staff are maintained and that such programs meet or exceed the requirements and recommendations of Section 5 of ANS 3.1-(12/79 Draft) and Appendix "A" of 10 CFR Part 55 and the supplemental requirements specified in the March 28, 1980 NRC letter to all licensees, and shall include familiarization with relevant industry operational experience identified by the NSE.

### 6.5 REVIEW AND AUDIT

#### 6.5.1 STATION NUCLEAR SAFETY AND OPERATING COMMITTEE (SNSOC)

##### FUNCTION

6.5.1.1 The SNSOC shall function to advise the Station Manager on all matters related to nuclear safety.

##### COMPOSITION

6.5.1.2 The SNSOC shall be composed of the :

Chairman: Assistant Station Manager (Nuclear Safety and Licensing)  
Vice Chairman: Assistant Station Manager (Operations and Maintenance)  
Member: Superintendent-Operations  
Member: Superintendent-Maintenance  
Member: Superintendent-Technical Services  
Member: Superintendent-Health Physics

##### ALTERNATES

6.5.1.3 All alternate members shall be appointed in writing by the SNSOC Chairman to serve on a temporary basis; however, no more than one alternate shall participate as a voting member in SNSOC activities at any one time.

## ADMINISTRATIVE CONTROLS

---

### MEETING FREQUENCY

6.5.1.4 The SNSOC shall meet at least once per calendar month and as convened by the SNSOC Chairman or his designated alternate.

### QUORUM

6.5.1.5 A quorum of the SNSOC consists of the Chairman or Vice-Chairman and two members including alternates.

### RESPONSIBILITIES

6.5.1.6 The SNSOC shall be responsible for:

- a. Review of 1) all procedures required by Specifications 6.8.1, 6.8.2 and 6.8.3 and changes thereto, 2) all programs required by Specification 6.8.4 and changes thereto, 3) any other proposed procedures or changes thereto as determined by the Station Manager to affect nuclear safety.
- b. Review of all proposed tests and experiments that affect nuclear safety.
- c. Review of all proposed changes or modifications to plant systems or equipment that affect nuclear safety.
- d. Review of all proposed changes to Appendix "A" Technical Specifications and Appendix "B" Environmental Protection Plan. Recommended changes shall be submitted to the Station Manager.
- e. Investigation of all violations of the Technical Specifications including the preparation and forwarding of reports covering evaluation and recommendations to prevent recurrence to the Vice President-Nuclear and the offsite management position responsible for independent/operational event review.
- f. Review of all REPORTABLE EVENTS and Special Reports.
- g. Review of facility operations to detect potential nuclear safety hazards.
- h. Performance of special reviews, investigations or analyses and reports thereon as requested by the Chairman of the Station Nuclear Safety and Operating Committee or Station Manager.
- i. Review of the Plant Security Plan and implementing procedures and shall submit recommended changes to the Station Manager.
- j. Review of the Emergency Plan and implementing procedures and shall submit recommended changes to the Station Manager.

## ADMINISTRATIVE CONTROLS

- k. Review of every unplanned onsite release of radioactive material to the environs including the preparation of reports covering evaluation, recommendations and disposition of the corrective action to prevent recurrence and the forwarding of these reports to the Vice President-Nuclear and the offsite management position responsible for independent/operational event review.
- l. Review changes to the PROCESS CONTROL PROGRAM and the OFFSITE DOSE CALCULATION MANUAL.

### AUTHORITY

6.5.1.7 The SNSOC shall:

- a. Provide written approval or disapproval of items considered under 6.5.1.6(a) through (c) above. SNSOC approval shall be certified in writing by an Assistant Station Manager.
- b. Render determinations in writing with regard to whether or not each item considered under 6.5.1.6(a) through (e) above constitutes an unreviewed safety question.
- c. Provide written notification within 24 hours to the Vice President-Nuclear and the offsite management position responsible for independent/operational event review of disagreement between the SNSOC and the Station Manager; however, the Station Manager shall have responsibility for resolution of such disagreements pursuant to 6.1.1 above.

### RECORDS

6.5.1.8 The SNSOC shall maintain written minutes of each meeting and copies shall be provided to the Station Manager, Vice President-Nuclear and the offsite management position responsible for independent/operational event review.

## 6.5.2 INDEPENDENT/OPERATIONAL EVENT REVIEW (IOER) GROUP

### FUNCTION

6.5.2.1 The IOER Group shall function to provide independent review of designated activities in the areas of:

- a. Nuclear power plant operations
- b. Nuclear engineering
- c. Chemistry and radiochemistry
- d. Metallurgy
- e. Instrumentation and control
- f. Radiological safety
- g. Mechanical and electrical engineering
- h. Administrative controls and quality assurance practices
- i. Other appropriate fields associated with the unique characteristics of the nuclear power plant

## ADMINISTRATIVE CONTROLS

### COMPOSITION

6.5.2.2 The IOER Group staff shall be composed of the offsite management position responsible for IOER and a minimum of three individuals who are qualified as staff specialists. Each IOER staff specialist shall have an academic degree in an engineering or physical science field and, in addition, shall have a minimum of five years technical experience in one or more areas given in Specification 6.5.2.1. These staff specialists shall not be directly involved in the licensing function.

### CONSULTANTS

6.5.2.4 Consultants shall be utilized as determined by the offsite management position responsible for IOER to provide expert advice to the IOER.

### MEETING FREQUENCY

6.5.2.5 The IOER Group staff shall meet at least once per calendar month for purpose of fostering interaction of reviews regarding safety-related operational activities.

### REVIEW

6.5.2.7 The following subjects shall be reviewed by the IOER Group:

- a. Written safety evaluations of changes in the stations as described in the Safety Analysis Report, changes in procedures as described in the Safety Analysis Report and tests or experiments not described in the Safety Analysis Report which are completed without prior NRC approval under the provisions of 10 CFR 50.59(a)(1). This review is to verify that such changes, tests or experiments did not involve a change in the technical specifications or an unreviewed safety question as defined in 10 CFR 50.59(a)(2) and is accomplished by review of minutes of the Station Nuclear Safety and Operating Committee and the design change program.
- b. Proposed changes in procedures, proposed changes in the station, or proposed tests or experiments, any of which may involve a change in the technical specifications or an unreviewed safety question as defined in 10 CFR 50.59(a)(2). Matters of this kind shall be referred to the offsite management position responsible for IOER by the Station Nuclear Safety and Operating Committee following its review prior to implementation.
- c. Changes in the technical specifications or license amendments relating to nuclear safety prior to implementation except in those cases where the change is identical to a previously reviewed proposed change.

## ADMINISTRATIVE CONTROLS

- d. Violations, REPORTABLE EVENTS and Special Reports such as:
1. Violations of applicable codes, regulations, orders, Technical Specifications, license requirements or internal procedures or instructions having safety significance;
  2. Significant operating abnormalities or deviations from normal or expected performance of station safety-related structures, systems, or components; and
  3. All REPORTABLE EVENTS submitted in accordance with Section 50.73 to 10 CFR Part 50 and Special Reports required by Specification 6.9.2.

Review of events covered under this paragraph shall include the results of any investigations made and recommendations resulting from such investigations to prevent or reduce the probability of recurrence of the event.

- e. The Quality Assurance Department audit program at least once per 12 months and audit reports.
- f. Any other matter involving safe operation of the nuclear power stations which is referred to the offsite management position responsible for IOER.
- g. Reports and meeting minutes of the Station Nuclear Safety and Operating Committee.

### AUTHORITY

6.5.2.9 The offsite management position responsible for IOER shall report through the established organization structure and advise the Vice President-Nuclear on any safety concerns discovered during the independent review of those areas of responsibility specified in Section 6.5.2.7.

### RECORDS

6.5.2.10 Records of IOER Group activities required by Section 6.5.2.7 shall be prepared and maintained in the IOER Group files and a summary shall be disseminated each calendar month to the Vice President-Nuclear, the corporate management position responsible for the quality assurance audit program, and other appropriate management personnel.

## ADMINISTRATIVE CONTROLS

### 6.5.3 QUALITY ASSURANCE DEPARTMENT

#### FUNCTION

6.5.3.1 The Quality Assurance Department shall function to audit station activities. These audits shall encompass:

- a. The conformance of facility operation to provisions contained within the Technical Specifications and applicable license conditions at least once per 12 months.
- b. The performance, training and qualifications of the entire facility staff at least once per 12 months.
- c. The results of actions taken to correct deficiencies occurring in facility equipment, structures, systems or method of operation that affect nuclear safety at least once per 6 months.
- d. The performance of activities required by the Operational Quality Assurance Program to meet the criteria of Appendix "B", 10 CFR 50, at least once per 24 months.
- e. The Station Emergency Plan and implementing procedures at least once per 12 months.
- f. The Station Security Plan and implementing procedures at least once per 12 months.
- g. Any other area of facility operation considered appropriate by the corporate management position responsible for the quality assurance audit program or the Vice President-Nuclear.
- h. The Station Fire Protection Program and implementing procedures at least once per 24 months.
- i. An independent fire protection and loss prevention program inspection and audit shall be performed at least once per 12 months utilizing either qualified offsite licensee personnel or an outside fire protection firm.
- j. An inspection and audit of the fire protection and loss prevention program shall be performed by a qualified outside fire consultant at least once per 36 months.
- k. The radiological environmental monitoring program and the results thereof at least once per 12 months.
- l. The OFFSITE DOSE CALCULATION MANUAL and implementing procedures at least once per 12 months.

## ADMINISTRATIVE CONTROLS

---

- m. The PROCESS CONTROL PROGRAM and implementing procedures for processing and packaging of radioactive wastes at least once per 12 months.

### AUTHORITY

6.5.3.2 The Quality Assurance Department shall advise the Vice President-Nuclear on those areas of responsibility specified in Section 6.5.3.1.

### RECORDS

6.5.3.3 Records of the Quality Assurance Department audits shall be prepared and maintained in the company files. Audit reports shall be disseminated to the Vice President-Nuclear and the management position responsible for the areas audited.



## ADMINISTRATIVE CONTROLS

### 6.6 REPORTABLE EVENT ACTION

6.6.1 The following actions shall be taken for REPORTABLE EVENTS:

- a. The Commission shall be notified and a report submitted pursuant to the requirements of Section 50.73 to 10 CFR Part 50, and
- b. Each REPORTABLE EVENT shall be reviewed by the SNSOC and the results of this review shall be submitted to the Vice President-Nuclear and the offsite management position responsible for IOER.

### 6.7 SAFETY LIMIT VIOLATION

6.7.1 The following actions shall be taken in the event a Safety Limit is violated:

- a. The facility shall be placed in at least HOT STANDBY within one hour.
- b. The NRC Operations Center shall be notified by telephone as soon as possible and in all cases within one hour. The Vice President-Nuclear and the offsite management position responsible for IOER shall be notified within 24 hours.
- c. A Safety Limit Violation Report shall be prepared. The report shall be reviewed by the SNSOC. This report shall describe (1) applicable circumstances preceding the violation, (2) effects of the violation upon facility components, systems or structures, and (3) corrective action taken to prevent recurrence.
- d. The Safety Limit Violation Report shall be submitted to the Commission, the Vice President-Nuclear and the offsite management position responsible for IOER within 14 days of the violation.

### 6.8 PROCEDURES AND PROGRAMS

6.8.1 Written procedures shall be established, implemented and maintained covering the activities referenced below:

- a. The applicable procedures recommended in Appendix "A" of Regulatory Guide 1.33, Revision 2, February 1978.
- b. Refueling operations.



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

VIRGINIA ELECTRIC AND POWER COMPANY

OLD DOMINION ELECTRIC COOPERATIVE

DOCKET NO. 50-339

NORTH ANNA POWER STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 86  
License No. NPF-7

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Virginia Electric and Power Company, et al., (the licensee) dated March 17, 1988, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public;  
and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

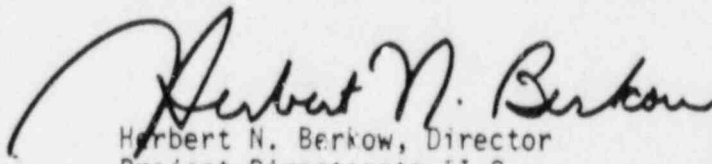
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-7 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 86, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Herbert N. Berkow, Director  
Project Directorate II-2  
Division of Reactor Projects-I/II  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: April 28, 1988

ATTACHMENT TO LICENSE AMENDMENT NO. 86

TO FACILITY OPERATING LICENSE NO. NPF-7

DOCKET NO. 50-339

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages as indicated. The revised pages are identified by amendment number and contain vertical lines indicating the area of change. The corresponding overleaf pages are also provided to maintain document completeness.

Page

6-1  
6-1a  
6-1b (new page)  
6-2  
6-3  
6-7  
6-8  
6-9  
6-10  
6-11  
6-12  
6-13

## 6.0 ADMINISTRATIVE CONTROLS

### 6.1 RESPONSIBILITY

6.1.1 The Station Manager shall be responsible for overall facility operation. In his absence, the Assistant Station Manager (Operations and Maintenance) shall be responsible for overall facility operation. During the absence of both, the Station Manager shall delegate in writing the succession to this responsibility.

6.1.2 The Shift Supervisor (or during his absence from the Control Room, a designated individual) shall be responsible for the Control Room command function and shall be the only individual that may direct the licensed activities of licensed operators. A management directive to this effect, signed by the Senior Vice President-Power, shall be reissued to all station personnel on an annual basis.

### 6.2 ORGANIZATION

#### ONSITE AND OFFSITE ORGANIZATION

##### 6.2.1 Onsite and Offsite Organization

An onsite and an offsite organization shall be established for facility operation and corporate management. The onsite and offsite organization shall include the positions for activities affecting the safety of the nuclear power plant.

- a. Lines of authority, responsibility, and communication shall be established and defined for the highest management levels through intermediate levels to and including all operating organization positions. These relationships shall be documented and updated, as appropriate, in the form of organization charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements shall be documented in the UFSAR.
- b. The Station Manager shall be responsible for overall unit safe operation and shall have control over those onsite activities necessary for safe operation and maintenance of the plant.
- c. The Vice President-Nuclear shall have corporate responsibility for overall plant nuclear safety and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support to the plant to ensure nuclear safety.
- d. The management position responsible for training of the operating staff and the management position responsible for the quality assurance functions shall have sufficient organizational freedom including sufficient independence from cost and schedule when opposed to safety considerations.

## ADMINISTRATIVE CONTROLS

---

- e. The management position responsible for health physics shall have direct access to that onsite individual having responsibility for overall facility management. Health physics personnel shall have the authority to cease any work activity when worker safety is jeopardized or in the event of unnecessary personnel radiation exposures.

### FACILITY STAFF

6.2.2 The Facility organization shall be as shown in the UFSAR.

- a. Each on duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.2-1.
- b. At least one licensed Reactor Operator shall be in the control room when fuel is in the reactor. In addition, while the unit is in MODES 1, 2, 3 or 4, at least one licensed Senior Reactor Operator shall be in the Control Room.
- c. A health physics technician# shall be onsite when fuel is in the reactor.
- d. ALL CORE ALTERATIONS shall be observed and directly supervised by either a licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation.
- e. A Fire Brigade of at least 5 members shall be maintained onsite at all times#. The Fire Brigade shall not include the minimum shift crew shown in Table 6.2-1 or any personnel required for other essential functions during a fire emergency.

---

#The health physics technician and Fire Brigade composition may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence provided immediate action is taken to fill the required positions.

## ADMINISTRATIVE CONTROLS

---

### 6.2.3 NUCLEAR SAFETY ENGINEERING (NSE)

#### FUNCTION

6.2.3.1 NSE shall function to examine plant operating characteristics, NRC issuances, industry advisories, Licensee Event Reports, and other sources which may indicate areas for improving plant safety.

#### COMPOSITION

6.2.3.2 NSE shall be composed of at least five dedicated, full-time engineers located onsite.

#### RESPONSIBILITIES

6.2.3.3 NSE shall be responsible for maintaining surveillance of plant activities to provide independent verification\* that these activities are performed correctly and that human errors are reduced as much as practical.

6.2.3.4 NSE shall disseminate relevant operational experience.

#### AUTHORITY

6.2.3.5 NSE shall make detailed recommendations for revised procedures, equipment modifications, or other means of improving plant safety to the Assistant Station Manager (Nuclear Safety and Licensing).

### 6.2.4 SHIFT TECHNICAL ADVISOR

6.2.4.1 The Shift Technical Advisor shall serve in an advisory capacity to Shift Supervisor on matters pertaining to the engineering aspects of assuring safe operation of the unit.

---

\*Not responsible for sign-off function.

DELETED



DELETED

TABLE 6.2-1  
MINIMUM SHIFT CREW COMPOSITION

WITH UNIT 1 IN MODE 5 OR 6 OR DE-FUELED

POSITION	NUMBER OF INDIVIDUALS REQUIRED TO FILL POSITION	
	MODES 1, 2, 3, & 4	MODES 5 & 6
SS	1 <sup>a</sup>	1 <sup>a</sup>
SRO	1	none
RO	2	1
AO	2	2 <sup>b</sup>
STA	1	none

WITH UNIT 1 IN MODES 1, 2, 3, OR 4

POSITION	NUMBER OF INDIVIDUALS REQUIRED TO FILL POSITION	
	MODES 1, 2, 3, & 4	MODES 5 & 6
SS	1 <sup>a</sup>	1 <sup>a</sup>
SRO	1 <sup>a</sup>	none
RO	2 <sup>b</sup>	1
AO	2 <sup>b</sup>	1
STA	1 <sup>a</sup>	none

a/ Individual may fill the same position of Unit 1.

b/ One of the two required individuals may fill the same position on Unit 1.

## ADMINISTRATIVE CONTROLS

### MEETING FREQUENCY

6.5.1.4 The SNSOC shall meet at least once per calendar month and as convened by the SNSOC Chairman or his designated alternate.

### QUORUM

6.5.1.5 A quorum of the SNSOC consists of the Chairman or Vice-Chairman and two members including alternates.

### RESPONSIBILITIES

6.5.1.6 The SNSOC shall be responsible for:

- a. Review of 1) all procedures required by Specifications 6.8.1, 6.8.2 and 6.8.3 and changes thereto, 2) all programs required by Specification 6.8.4 and changes thereto, 3) any other proposed procedures or changes thereto as determined by the Station Manager to affect nuclear safety.
- b. Review of all proposed tests and experiments that affect nuclear safety.
- c. Review of all proposed changes or modifications to plant systems or equipment that affect nuclear safety.
- d. Review of all proposed changes to Appendix "A" Technical Specifications and Appendix "B" Environmental Protection Plan. Recommended changes shall be submitted to the Station Manager.
- e. Investigation of all violations of the Technical Specifications including the preparation and forwarding of reports covering evaluation and recommendations to prevent recurrence to the Vice President-Nuclear and the off-site management position responsible for independent/operational event review.
- f. Review of all REPORTABLE EVENTS and Special Reports.
- g. Review of facility operations to detect potential nuclear safety hazards.
- h. Performance of special reviews, investigations or analyses and reports thereon as requested by the Chairman of the Station Nuclear Safety and Operating Committee or Station Manager.
- i. Review of the Plant Security Plan and implementing procedures and shall submit recommended changes to the Station Manager.
- j. Review of the Emergency Plan and implementing procedures and shall submit recommended changes to the Station Manager.

## ADMINISTRATIVE CONTROLS

- k. Review of every unplanned onsite release of radioactive material to the environs including the preparation of reports covering evaluation, recommendations and disposition of the corrective action to prevent recurrence and the forwarding of these reports to the Vice President-Nuclear and the offsite management position responsible for independent/operational event review.
- l. Review changes to the PROCESS CONTROL PROGRAM and the OFFSITE DOSE CALCULATION MANUAL.

### AUTHORITY

6.5.1.7 The SNSOC shall:

- a. Provide written approval or disapproval of items considered under 6.5.1.6(a) through (c) above. SNSOC approval shall be certified in writing by an Assistant Station Manager.
- b. Render determinations in writing with regard to whether or not each item considered under 6.5.1.6(a) through (e) above constitutes an unreviewed safety question.
- c. Provide written notification within 24 hours to the Vice President-Nuclear and the offsite management position responsible for independent/operational event review of disagreement between the SNSOC and the Station Manager; however, the Station Manager shall have responsibility for resolution of such disagreements pursuant to 6.1.1 above.

### RECORDS

6.5.1.8 The SNSOC shall maintain written minutes of each meeting and copies shall be provided to the Station Manager, the Vice President-Nuclear and the offsite management position responsible for independent/operational event review.

### 6.5.2 INDEPENDENT/OPERATIONAL EVENT REVIEW (IOER) GROUP

#### FUNCTION

- 6.5.2.1 The IOER Group shall function to provide independent review of designated activities in the areas of:
- a. Nuclear power plant operations
  - b. Nuclear engineering
  - c. Chemistry and radiochemistry
  - d. Metallurgy
  - e. Instrumentation and control
  - f. Radiological safety
  - g. Mechanical and electrical engineering
  - h. Administrative controls and quality assurance practices
  - i. Other appropriate fields associated with the unique characteristics of the nuclear power plant.

## ADMINISTRATIVE CONTROLS

---

### COMPOSITION

6.5.2.2 The IOER Group Staff shall be composed of the offsite management position responsible for IOER and a minimum of three individuals who are qualified as staff specialists. Each IOER staff specialist shall have an academic degree in an engineering or physical science field and, in addition, shall have a minimum of five years technical experience in one or more areas given in Specification 6.5.2.1. These staff specialists shall not be directly involved in the licensing function.

### CONSULTANTS

6.5.2.4 Consultants shall be utilized as determined by the offsite management position responsible for IOER to provide expert advice to the IOER.

### MEETING FREQUENCY

6.5.2.5 The IOER Group staff shall meet at least once per calendar month for the purpose of fostering interaction of reviews regarding safety-related operational activities.

### REVIEW

- 6.5.2.7 The following subjects shall be reviewed by the IOER Group.
- a. Written safety evaluations of changes in the stations as described in the Safety Analysis Report, changes in procedures as described in the Safety Analysis Report and tests or experiments not described in the Safety Analysis Report which are completed without prior NRC approval under the provisions of 10 CFR 50.59(a)(1). This review is to verify that such changes, tests or experiments did not involve a change in the technical specifications or an unreviewed safety question as defined in 10 CFR 50.59(a)(2) and is accomplished by review of minutes of the Station Nuclear Safety and Operating Committee and the design change program.
  - b. Proposed changes in procedures, proposed changes in the station, or proposed tests or experiments, any of which may involve a change in the technical specifications or an unreviewed safety question as defined in 10 CFR 50.59(a)(2). Matters of this kind shall be referred to the offsite management position responsible for IOER by the Station Nuclear Safety and Operating Committee following its review prior to implementation.
  - c. Changes in the technical specifications or license amendments relating to nuclear safety prior to implementation except in those cases where the change is identical to a previously reviewed proposed change.

## ADMINISTRATIVE CONTROLS

- d. Violations, REPORTABLE EVENTS and Special Reports such as:
1. Violations of applicable codes, regulations, orders, Technical Specifications, license requirements or internal procedures or instructions having safety significance;
  2. Significant operating abnormalities or deviations from normal or expected performance of station safety-related structures, systems, or components; and
  3. All REPORTABLE EVENTS submitted in accordance with Section 50.73 to 10 CFR Part 50 and Special Reports required by Specification 6.9.2.

Review of events covered under this paragraph shall include the results of any investigations made and recommendations resulting from such investigations to prevent or reduce the probability of recurrence of the event.

- e. The Quality Assurance Department audit program at least once per 12 months and audit reports.
- f. Any other matter involving safe operation of the nuclear power stations which is referred to the offsite management position responsible for IOER.
- g. Reports and meeting minutes of the Station Nuclear Safety and Operating Committee.

### AUTHORITY

6.5.2.9 The offsite management position responsible for IOER shall report through the established organization structure and advise the Vice President-Nuclear on any safety concerns discovered during the independent review of those areas of responsibility specified in Section 6.5.2.7.

### RECORDS

6.5.2.10 Records of IOER Group activities required by Section 6.5.2.7 shall be prepared and maintained in the IOER Group files and a summary shall be disseminated each calendar month to the Vice President-Nuclear, the corporate management position responsible for the quality assurance audit program, and other appropriate management personnel.

## ADMINISTRATIVE CONTROLS

---

### 6.5.3 QUALITY ASSURANCE DEPARTMENT

#### FUNCTION

6.5.3.1 The Quality Assurance Department shall function to audit station activities. These audits shall encompass:

- a. The conformance of facility operation to provisions contained within the Technical Specifications and applicable license conditions at least once per 12 months.
- b. The performance, training and qualifications of the entire facility staff at least once per 12 months.
- c. The results of actions taken to correct deficiencies occurring in facility equipment, structures, systems or method of operation that affect nuclear safety at least once per 6 months.
- d. The performance of activities required by the Operational Quality Assurance Program to meet the criteria of Appendix "B", 10 CFR 50, at least once per 24 months.
- e. The Station Emergency Plan and implementing procedures at least once per 12 months.
- f. The Station Security Plan and implementing procedures at least once per 12 months.
- g. Any other area of facility operation considered appropriate by the corporate management position responsible for the quality assurance audit program or the Vice President-nuclear.
- h. The Station Fire Protection Program and implementing procedures at least once per 24 months.
- i. An independent fire protection and loss prevention program inspection and audit shall be performed at least once per 12 months utilizing either qualified offsite licensee personnel or an outside fire protection firm.
- j. An inspection and audit of the fire protection and loss prevention program shall be performed by a qualified outside fire consultant at least once per 36 months.

## ADMINISTRATIVE CONTROLS

---

- k. The radiological environmental monitoring program and the results thereof at least once per 12 months.
- l. The OFFSITE DOSE CALCULATION MANUAL and implementing procedures at least once per 12 months.
- m. The PROCESS CONTROL PROGRAM and implementing procedures for processing and packaging of radioactive wastes at least once per 12 months.

## AUTHORITY

6.5.3.2 The Quality Assurance Department shall report to and advise the Vice President-Nuclear on those areas of responsibility specified in Section 6.5.3.1.

## RECORDS

6.5.3.3 Records of the Quality Assurance Department audits shall be prepared and maintained in the department files. Audit reports shall be disseminated to the Vice President-Nuclear and the management position responsible for the areas audited.



## ADMINISTRATIVE CONTROLS

### 6.6 REPORTABLE EVENT ACTION

6.6.1 The following actions shall be taken for REPORTABLE EVENTS:

- a. The Commission shall be notified and a report submitted pursuant to the requirements of Section 50.73 to 10 CFR Part 50, and
- b. Each REPORTABLE EVENT shall be reviewed by the SNSOC and the results of this review shall be submitted to the Vice President-Nuclear and the offsite management position responsible for IOER.

### 6.7 SAFETY LIMIT VIOLATION

6.7.1 The following actions shall be taken in the event a Safety Limit is violated:

- a. The facility shall be placed in at least HOT STANDBY within one hour.
- b. The NRC Operations Center shall be notified by telephone as soon as possible and in all cases within one hour. The Vice President-Nuclear and the offsite management position responsible for IOER shall be notified within 24 hours.
- c. A Safety Limit Violation Report shall be prepared. The report shall be reviewed by the SNSOC. This report shall describe (1) applicable circumstances preceding the violation, (2) effects of the violation upon facility components, systems or structures, and (3) corrective action taken to prevent recurrence.
- d. The Safety Limit Violation Report shall be submitted to the Commission, the Vice President-Nuclear and the offsite management position responsible for IOER within 14 days of the violation.

### 6.8 PROCEDURES AND PROGRAMS

6.8.1 Written procedures shall be established, implemented and maintained covering the activities referenced below:

- a. The applicable procedures recommended in Appendix "A" of Regulatory Guide 1.33, Revision 2, February 1978.
- b. Refueling operations.

## ADMINISTRATIVE CONTROLS

---

- c. Surveillance and test activities of safety related equipment.
- d. Security Plan implementation.
- e. Emergency Plan implementation.
- f. Fire Protection Program implementation.
- g. PROCESS CONTROL PROGRAM implementation.
- h. OFFSITE DOSE CALCULATION MANUAL implementation.
- i. Quality Assurance Program for effluent and environmental monitoring, using the guidance in Regulatory Guide 1.21, Revision 1, June 1974 and Regulatory Guide 4.1, Revision 1, April 1975.

6.8.2 Each procedure of 6.8.1 above, except 6.8.1.d and 6.8.1.e and changes thereto, shall be reviewed and approved by the SNSOC prior to implementation and reviewed periodically as set forth in administrative procedures. Procedures of 6.8.1.d and 6.8.1.e shall be reviewed and approved as per 6.5.1.6.i and 6.5.1.6.j. SNSOC approval shall be certified in writing by an Assistant Station Manager.

6.8.3 Temporary changes to procedures of 6.8.1 above may be made provided:

- a. The intent of the original procedure is not altered.
- b. The change is approved by two members of the plant supervisory staff, at least one of whom holds a Senior Reactor Operator's License on the unit affected.
- c. The change is documented, reviewed and approved by the SNSOC within 14 days of implementation. SNSOC approval shall be certified in writing by an Assistant Station Manager.

6.8.4 The following programs shall be established, implemented, and maintained:

a. Primary Coolant Sources Outside Containment

A program to reduce leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. The systems include the recirculation spray, safety injection, chemical and volume control, gas stripper, and hydrogen recombiners. The program shall include the following:

- (i) Preventive maintenance and periodic visual inspection requirements and
- (ii) Integrated leak test requirements for each system at refueling cycle intervals or less.