

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

VIRGINIA ELECTRIC AND POWER COMPANY

DOCKET NO. 50-338

NORTH ANNA POWER STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 30 License No. NPF-4

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The applications for amendments by Virginia Electric and Power Company (the licensee) dated July 30, 1980, August 28, 1980 and October 15, 1980 as supplemented by letters dated August 1, 1980 and February 23, 1981, comply 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 requiations:
 - 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.

\$108030 473

 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. 30, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective May 29, 1981.

FOR THE NUCLEAR REGULATORY COMMISSION

Robert A. Clark, Chief Operating Reactors Branch #3

Division of Licensing

Attachment: Changes to the Technical Specifications

Date of Issuance: May 22, 1981

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 30 TO FACILITY OPERATING LICE' & 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.

Pages

IIIVX

XIX

6-1

6-la (added)

6-2

6-3

6-4a

6-5

6-6

5-7

6-8

6-9

6-10

6-11

6-12

6-21

INDEX

DESI	GN FEATURES	
SECT	<u>IN</u>	PAGE
5.1	SITE	
	Exclusion Area	5-1
	Low Population Zone	5-1
5.2	CONTAINMENT	
	Configuration	5-1
	Design Pressure and Temperature	5-4
5.3	REACTOR CORE	
	Fuel Assemblies	5-4
	Cor. ol Rod Assemblies	5-4
5.4	REACTOR COOLANT SYSTEM	
	Design Pressure and Temperature	5-4
	Volume	5-5
5.5	METEOROLOGICAL TOWER LOCATION	5-5
5.6	FUEL STORAGE	
	Criticality	5-5
	Drainage	5-6
	Capacity	5-6
5 7	COMPONENT CYCLE OF TRANSFERT LIMIT	5.6

INDEX

AUMINISTRATIVE CUNTRULS	
SECTION	PAGE
6.1 RESPONSIBILITY	6-1
6.2 ORGANIZATION	
Offsite	6-1
Facility Staff	6-1
Safety Engineering Staff	6-la
Shift Technical Advisor	6-1a
6.3 FACILITY STAFF QUALIFICATIONS	6-5
6.4 TRAINING	6-5
6.5 REVIEW AND AUDIT	
6.5.1 STATION NUCLEAR SAFETY AND OPERATING COMMITTEE (SNSOC)	
Function	6-5
Composition	6-5
Alternates	6-5
Meeting Frequency	6-6
Quorum	6-6
Responsibilities	6-6
Authority	€-7
Records	6-7
6.5.2 SAFETY EVALUATION AND CONTROL (SEC)	
Function	6-7
Composition	5-8

INDEX

ADMINISTRATIVE CONTROLS

SECTION		
Consultants	6-8	
Meeting Frequency	6-8	
Review	6-8	
Authority	6-9	
Records	6-9	
6.5.3 QUALITY ASSURANCE DEPARTMENT		
Function	6-10	
Authority	6-10	
Records	6-11	
6.6 REPORTABLE OCCURRENCE ACTION	6-12	
6.7 SAFETY LIMIT VIOLATION	6-12	
6.8 PROCEDURES	6-13	
6.9 REPORTING REQUIREMENTS		
6.9.1 ROUTINE REPORTS AND REPORTABLE OCCURRENCES	6-13	
6.9.2 SPECIAL REPORTS	6-18	
6.10 RECORD RETENTION	6-20	
6.11 RADIATION PROTECTION PROGRAM	6-21	
6.12 HIGH RADIATION AREA	6-22	
6.13 ENVIRONMENTAL QUALIFICATION	6-23	

6.1 RESPONSIBILITY

- 6.1.1 The Station Manager shall be responsible for overall facility operation. In his absence, the Assistant Station Manager 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 assence 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 activites of licensed operators. A management directive to this effect, signed by the Executive Vice President-Power, shall be reissued to all station personnel on an annual basis.

6.2 ORGANIZATION

OFFSITE

6.2.1 The offsite organization for facility management and technical support shall be as shown on Figure 6.2-1.

FACILITY STAFF

- 6.2.2 The Facility organization shall be as shown on Figure 6.2-2 and:
 - a. Each on duty shift shall be composed of at least the minimum thift 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 on site 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 Bricade 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 Brigage 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 SAFETY ENGINEERING STAFF (SES)

FUNCTION

6.2.3.1 The SES 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 The SES shall be composed of at least five dedicated, full-time engineers located onsite.

RESPONSIBILITIES

5.2.3.3 The SES 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.

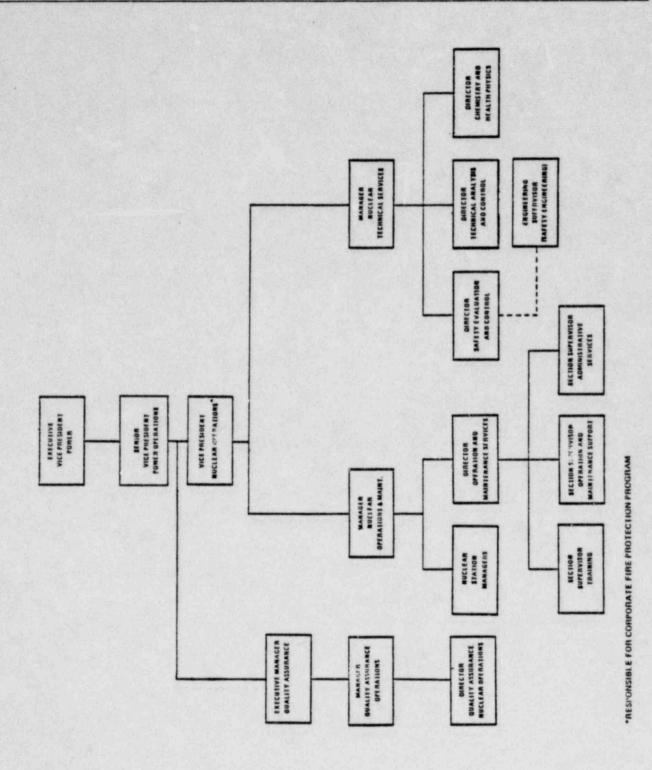
AUTHORITY

6.2.3.4 The SES shall make detailed recommendations for revised procedures, equipment modifications, or other means of improving plant safety to the Station Manager and the Director-Safety Evaluation and Control.

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.
- 6.2.4.2 The Shift Technical Advisor shall disseminate relevant operational experience identified by the SES.

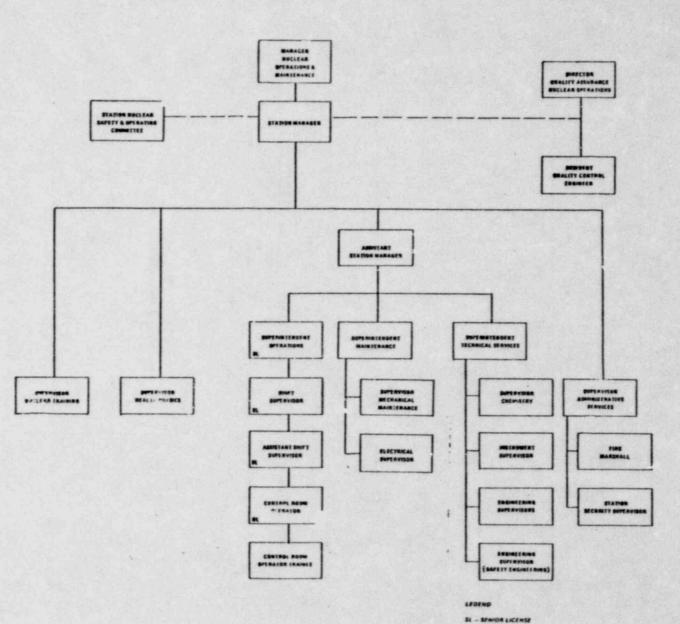
^{*}Not responsible for sign-off function.



POOR ORIGINAL

POOR ORIGINAL

Figure 6.2-2 Facility Organization - North Anna - Units 1 and 2



OL - OPERATOR'S LICENSE ... - COMMUNICATIONS

TABLE 6.2-1
MINIMUM SHIFT CREW COMPOSITION

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

POSITION	NUMBER OF INDIVIDUALS REQU	
	MODES 1, 2, 3, & 4	MODES 5 & 6
SS	1ª	1ª
SRC	1	none
RC	2	1
AO	2	2 ^b
STA	1	none

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

POSITION	NUMBER OF INDIVIDUALS REQU MODES 1, 2, 3, & 4	MODES 5 & 6
SS	1 ^a	1ª
SRO	1ª	none
RO	2 ^b	1
AO	2 ^b	1
STA	1ª	none

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

JAMINISO RUUT

 $[\]underline{b}/$ One of the two required individuals may fill the same position on Unit 2.

TABLE 6.2-1 (Continued)

SS - Shift Supervisor with a Senior Reactor Operators License on Unit 1.

SRO - Individual with a Senior Reactor Operators License on Unit 1.

RO - Individual with a Reactor Operators License on Unit 1.

AO - Auxiliary Operator

STA - Shift Technical Advisor

Except for the Shift Supervisor the Shift Crew Composition may be one less than the minimum requirements of Table 6.2-1 for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the Shift Crew Composition to within the minimum requirements of Table 6.2-1. This provision does not permit any shift crew position to be unmanned upon shift change due to an oncoming shift crewman being late or absent.

During any absence of the Shift Supervisor from the Control Room while the unit is in MODE 1, 2, 3 or 4, an individual (other than the Shift Technical Advisor) with a valid SRO license shall be designated to assume the Control Room command function. During any absence of the Shift Supervisor from the Control Room while the unit is in MODE 5 or 6, an individual with a valid RO license (other than the Shift Technical Advisor) shall be designated to assume the Control Room command function.

Licensed operators shall:*

1. Not work more than 12 hours straight,

2. Not work more than 24 hours in any 48-hour period,

3. Not work more than 72 hours in any 7-day period,

Not work more than 14 consecutive days without having 2 consecutive days
off.

^{*}Deviation from these requirements may be authorized by the Station Manager in accordance with established procedures and with documentation of the cause.

Overtime limits do not include the shift turnover time.

6.3 FACILITY STAFF QUALIFICATIONS

6.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI N18.1 - 1971 for comparable positions and the supplemental requirements specified in the March 28, 1980 NRC letter to all licensees, except for (1) the Supervisor - 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.

5.4 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 5.5 of ANSI N18.1 - 1971 and Appendix "A" of 10 CFR Part 55 and the supplemental requirements specified in the March 28, 1980 NRC letter to 11 licensees, and shall include familiarization with relaval tindustry operational experience identified by the SES.

6.5 REVIEW AND AUDIT

6.5.1 STATION NUCLEAR SAFETY AND OPERAT NG COMMITTEE (SNSOC)

FUNCTION

6.5.1.1 The SNSOC sha'l 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:

Station Manager

Vice Chairman:

Assistant Station Manager Superintendent-Operations

Member:

Superintendent-Uperations
Superintendent-Maintenance

Member:

Superintendent-Tech: cal Services

Member:

Supervisor-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.

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 Specification 6.8.1 and changes thereto, 2) any other proposed procedures or changes thereto as determined by the Station Manager to affect nuclear safety.
 - Review of all proposed tests and experiments that affect nuclear safety.
 - c. Review of all proposed changes to Appendix "A" Technical Specifications.
 - d. Review of all proposed changes or modifications to plant systems or equipment that affect nuclear safety.
 - e. Investigation of all violations of the Technical Specifications including the preparation and forwarding or reports covering evaluation and recommendations to prevent recurrence to the Manager-Nuclear Operations and Maintenance and the Director-Safety Evaluation and Control.
 - f. Review of events requiring 24 hour written notification to the Commission.
 - 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.
 - Review of the Plant Security Plan and implementing procedures and shall submit recommended changes to the Chairman of the Station Nuclear Safety and Operating Committee.
 - j. Review of the Emergency Plan and implementing procedures and shall submit recommended changes to the Chairman of the Station Nuclear Safety and Operating Committee.

AUTHORITY

5.5.1.7 The SNSOC shall:

- a. Recommend to the Station Manager written approval or disapproval of items considered under 6.5.1.6(z) through (d) above.
- 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 Manager-Nuclear Operations and Maintenance and the Director-Safety Evaluation and Control 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 Manager-Nuclear Operations and Maintenance and the Director-Safety Evaluation and Control.

6.5.2 SAFETY EVALUATION AND CONTROL (SEC)

FUNCTION

- 6.5.2.1 SEC 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
 - Other appropriate fields associated with the unique characteristics of the nuclear power plant

COMPOSITION

6.5.2.2 The SEC staff shall be composed of the Director-Sarety Evaluation and Control and a minimum of three individuals who are qualified as staff specialists. Each SEC 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 Director-Safety Evaluation and Control to provide expert advice to the SEC.

MEETING FREQUENCY

6.5.2.5 The SEC 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 SEC:
 - 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 MRC 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 Director-Safety Evaluation and Control 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.

- d. Violations and reportable occurrences such as:
 - Violations of applicable codes, regulations, orders, Technical Specifications, license requirements or internal procedures or instructions having safety significance;
 - Significant operating abnormalities or deviations from normal or expected performance of station safety-related structures, systems, or components; and
 - Reportable occurrences as defined in the station Technical Specification 6.9.1.8.

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 Director-Safety Evaluation and Control by the Station Nuclear Safety and Operating Committee.
- g. Reports and meeting minutes of the Station Nuclear Safety and Operating Committee.

AUTHORITY

5.5.2.9 The Director-Safety Evaluation and Control shall report to and advise the Manager-Nuclear Technical Services, who shall advise the Vice President-Nuclear Operations on those areas of responsibility specified in Section 6.5.2.7.

RECORDS

- 6.5.2.10 Records of SEC activities required by Section 6.5.2.7 shall be prepared and maintained in the SEC files and a summary shall be disseminated as indicated below each calendar month.
 - 1. Vice President-Nuclear C. grations
 - 2. Nuclear Power Station Managers
 - 3. Manager-Nuclear Operations and Maintenance
 - 4. Manager-Nuclear Technical Services
 - Manager-Quality Assurance, Operations
 - 6. Others that the Director-Safety Evaluation and Control may designate.

6.5.3 QUALITY ASSURANCE DEPARTMENT

FUNCTION

- 5.5.3.1 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 24 months.
 - f. The Station Security Plan and implementing procedures at least once per 24 months.
 - g. Any other area of facility operation considered appropriate by the Executive Manager-Quality Assurance or the Senior Vice President-Power Operations.
 - 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.

AUTHORITY

6.5.3.2 The Quality Assurance Department shall report to and advise the Executive Manager-Quality Assurance, who shall advise the Senior Vice President-Power Operations 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 as indicated below:
 - 1. Nuclear Power Station Manager
 - 2. Manager-Nuclear Operations and Maintenance
 - 3. Manager-Nuclear Technical Services
 - 4. Manager-Quality Assurance, Operations
 - 5. Director-Quality Assurance, Nuclear Operations
 - 6. Director-Safety Evaluation and Control
 - 7. Supervisor of area audited
 - 8. Nuclear Power Station Resident Quality Control Engineer

6.6 REPORTABLE OCCURRENCE ACTION

- 6.6.1 The following actions shall be taken for REPORTABLE OCCURRENCES:
 - a. The Commission shall be notified and/or a report submitted pursuant to the requirements of Specification 6.9.
 - b. Each REPORTABLE OCCURRENCE requiring 24 hour notification to the Commission shall be reviewed by the SNSOC and submitted to the Director-Safety Evaluation and Control and the Manage Muclear Operations and Maintenance.

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 Safety Limit violation shall be reported to the Commission, the Manager-Nuclear Operations and Maintenance and to the Director-Safety Evaluation and Control 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 Director-Safety Evaluation and Control and the Manager-Nuclear Operations and Maintenance within 14 days of the violation.

- Records and drawing changes reflecting facility design modifia. cations made to systems and equipment described in the Final Safety Analysis Report.
- Records of new and irradiated fuel inventory, fuel transfers b. and assembly burnup histories.
- C. Records of facility radiation and contamination surveys.
- d. Records of radiation exposure for all individuals entering radiation control areas.
- Records of gaseous and liquid radioactive material released to 0 the environs.
- Records of transient operational cycles for those facility components identified in Table 5.9-1.
- Records of reactor tests and experiments. g.
- Records of training and qualification for current members of h. the plant staff.
- Records of in-service inspections performed pursuant to these Technical Specifications.
- Records of Quality Assurance activities required by the O: Manual.
- Records of reviews performed for changes made to procedures or k. equipment or reviews of tests and experiments pursuant to 10 CFR 50.59.
- Records of meetings of the SNSOC.
- Records of meetings of the System Nuclear Safety and Operating m. Committee to issuance of Amendment No.
- Records of secondary water sampling and water quality. n.
- Records of Environmental Qualification which are covered under the provisions of paragraph 6.13.

6.11 RALLATION PROTECTION PROGRAM

Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved. maintained and adhered to for all operations involving personnel radiation exposure.

6.12 HIGH RADIATION AREA

- 6.12.1 In lieu of the "control device" or "alarm signal" required by paragraph 20.203(c)(2) of 10 CFR 20. each high radiation area in which the intensity of radiation is greater than 100 mrem/hr but less than 1000 mrem/hr shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit.* Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:
 - a. A radiation monitoring device which continuously indicates the radiation dose rate in the area.
 - b. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate level in the area has been established and personnel have been made knowledgeable of them.
 - c. An individual qualified in radiation protection procedures who is equipped with a radiation dose rate monitoring device. This individual shall be responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the facility Health Physicist in the Radiation Work Permit.
- 6.12.2 The requirements of 6.12.1, above, shall also apply to each high radiation area in which the intensity of radiation is greater than 1000 mrem/hr. In addition, locked doors shall be provided to prevent unauthorized entry into such areas and the keys shall be maintained under the administrative control of the Shift Supervisor on duty and/or the Plant Health Physicist.

^{*}Health Physics personnel shall be exempt from the RWP issuance requirement during the performance of their assigned radiation protection duties, provided they comply with approved radiation protection procedures for entry into high radiation areas.

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 30 TO FACILITY OPERATING LICENSE NO. NPF-4

DOCKET NO. 50-338

Replace the following pages of the Appendix "B" 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.

Pages

I-i

I-ii

I-5-1

I-5-2 1-5-3

1-5-4

I-5-5

TABLE OF CONTENTS

				Page
1.0	DEFI	NITIONS.		1-1
2.0			DITIONS FOR OPERATION	2-1
	2.1		iological	2-1
	2.2	Radioact	tive Effluents	2-1
		2.2.1	Specifications for Liquid Waste Effluents	2.2
		2.2.2	Specifications for Liquid Waste Sampling	
			and Monitoring	2-3
		2.2.3	Specifications for Gaseous Waste Effluents	2-7
		2.2.4	Specifications for Gaseous Waste Sampling	
			and Monitoring	2-13
		2.2.5	Specifications for Solid Waste Handling	
			and Disposal	2-1
3.0	ENVI	RONMENTAL	L SURVEILLANCE	3-1
	3.1	Non-rad	iological Surveillance	3-1
		3.1.1	Abiotic - Aquatic	3-1
		3.1.2	Biotic Aquatic	3-1
		3.1.3	Abiotic - Terrestrial	3-1
		3.1.4	Onsite Meteorology Monitoring	3-1
		3	onsite necessary nonrestring	3-1
	3.2	Radiolo	gical Environmental Monitoring	3-2
4.0	SPECIAL SURVEILLANCE AND STUDY ACTIVITIES			4-1
5.0	ADMI	NISTRATI	VE CONTROLS	5-1
3.0				
	5.1	Respons	ibility	5-1
	5.2		ation	5-1
	5.3	Review	and Audit	5-1
		5.3.1	Station Nuclear Safety and Operating Committee	
			(SNSOC)	5-1
		9	회사 마양병이 가득하는 때 학교를 내려가 되었다. 그 때 그림	
			.3.1.1 Function	5-1
			5.3.1.2 Responsibility	5-1
			5.3.1.3 Authority	5-3
			5.3.1.4 Records	5-3

TABLE OF CONTENTS (Cont'd)

			Page
	5.3.2	Quality Assurance Department	5-4
		5.3.2.1 Function	
			5-4
		5.3.2.2 Audits	5-4
		5.3.2.3 Records	5-4
	5.3.3	Safety Evaluation and Control (SEC)	5-4
		5.3.3.1 Function	5-4
		5.3.3.2 Review	5-4
		5.3.3.3 Responsibility	5-5
		5.3.3.4 Authority	5-5
		5.3.3.5 Records	5-5
		J.J.J. Records	3-3
5.4	State and	Federal Permits and Certificates	5-5
5.5		s	5-5
	5.5.1	Writzen Procedures	5-5
	5.5.2	Operating Procedures	5-5
	5.5.3	Procedures for Environmental Surveillance -	3-3
	3.3.3		
	5.5.4	Radiological	5-6
	3.3.4	Procedures for Environmental Surveillance -	
		Nonradiological	5-6
	5.5.5	Quality Assurance of Program Results	5-6
	5.5.6	Changes in Procedures, Station Design or	
		Operation	5-6
	5.5.7	Consistency with Initially Approved Programs	5-7
5.6	Station R	eporting Requirements	5-7
	5.6.1	Routine Reports	5-7
		5.6.1.1 Annual Environmental Operating Report	
		the state of the s	5-7
		5.6.1.2 Radioactive Effluent Release Report	5-8
	5.6.2	Nonroutine Reports	5-9
		5.6.2.1 Nonroutine Non-Radiological Environmental	
		Operating Report	5-9
		The state of the s	Mary and
		Operating Reports	5-10
	5.6.3	Changes in Environmental Technical Specifications.	5-11
	5.6.4	Changes in Permits and Certifications	5-11
3.1	Records R	etention	5-11

5.0 ADMINISTRATIVE CONTROLS

Administrative controls below apply to Appendix B Part I only.

5.1 Responsibility

The responsibility for implementing the Environmental Techncial Specifications is assigned to the Manager-Nuclear Operations and Maintenance at the corporate level and to the Station Manager at the station level. The Superintendent - Operations shall be responsible for ensuring that the station is operated in accordance with the Limiting Conditions of Operation. The Station Supervisor - Health Physics shall be responsible for the radiological environmental surveillance requirements. The Executive Manager of Environmental Services shall be responsible for providing services which will fulfill the non-radiological environmental surveillance requirements.

5.2 Organization

The relationship between the Nuclear Operations Department and the Environmental Services Department is shown in Figure 5.2-1.

5.3 Review and Audit

5.3.1 Station Nuclear Safety and Operating Committee (SNSOC)

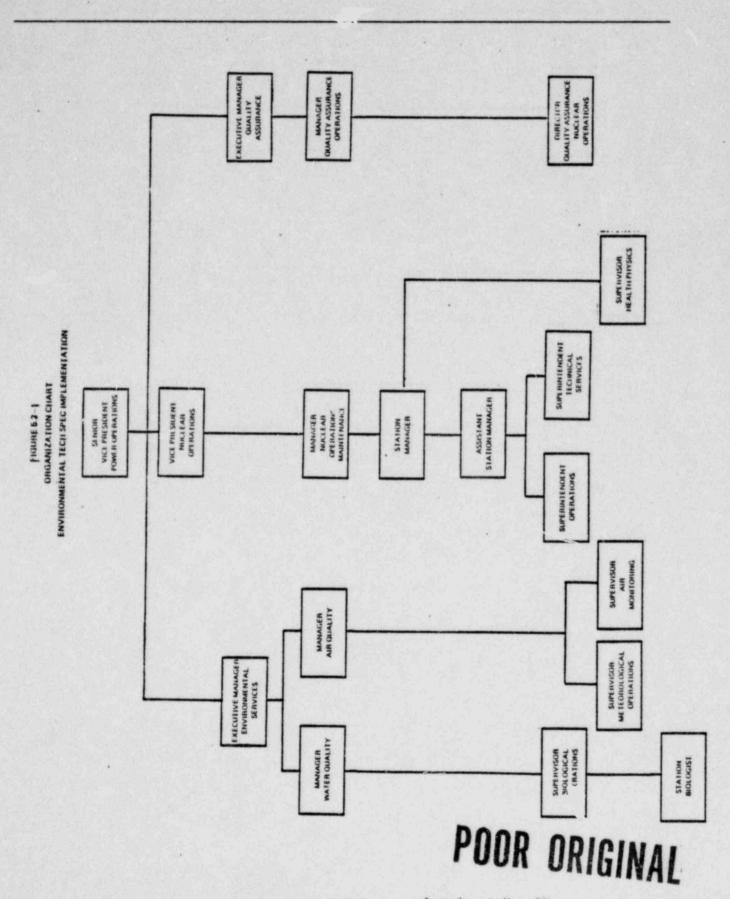
5.3.1.1 Function

The SNSOC, as described in Section 6.5.1 of Appendix A of this license, shall function to advise the Station Manager on matters related to the environmental impact of the station. With the SNSOC is exercising its responsibility for non-radiological aspects of the ETS, the Station Biologist or his alternate shall be consulted.

5.3.1.2 Responsibility

The SNSOC shall be responsible for:

- a. Coordination of the Environmental Technical Specifications with the Safety Technical Specifications (Appendix A) to avoid conflicts and maintain consistency.
- b. Review of changes to the Environmental Technical Specifications and the evaluation of the environmental impact of the change.



- c. Review of proposed written procedures required by Section 5.5.2 and 5.5.3 below and changes thereto, which affect the environmental impact of the station.
- d. Review of proposed changes to station systems to determine the environmental impact of the changes.
- e. Investigation of all reported instances of violation of the Environmental Technical Specifications; and where the investigation indicates, evaluation and formulation of recommendations to prevent recurrence.
- f. Review of environmental monitoring programs to detect potential or existing significant adverse environmental impacts that have not been evaluated, or that are significantly greater than that evaluated by the Commission.

5.3.1.3 Authority

The SNSOC shall:

- a. Review the environmental evaluation of all changes described in Section 5.3.1.2 a, b and c, above. When the evaluation indicates that such activity may result in a significant adverse environmental impact that was not evaluated, or that is significantly greater than that evaluated by the Commission, the SNSOC shall ensure that a written evaluation of such activities is provided to and prior approval is obtained from the Director of Nuclear Reactor Regulation for the activities.
- b. If the SNSOC determines that unexpected harmful effects or evidence of irreversible damage are occurring as a result of operation of the station, the SNSOC shall ensure that an acceptable analysis of the problem and a plan of action to eliminate or significently reduce the harmful effects or damage is submitted to the Commission for review and approval.
- c. Review written reports prepared as a result of investigations and reviews conducted under 5.3.1.2 a, e and f.

5.3.1.4 Records

The SNSOC shall maintain written minutes of each meeting and copies shall be provided to the Director-Safety Evaluation and Control.

5.3.2 Quality Assurance Department

5.3.2.1 Function

The Quality Assurance Department shall perform independent audits of the implementation of the Environmental Technical Specifications.

5.3.2.2 Audits

The following audits shall be completed:

- a. The conformance of facility operation to provisions contained within these Environmental Technical Specifications and applicable license conditions at least once per 12 months.
- b. The performance, training and qualifications of the facility staff involved in ensuring and monitoring compliance with these Environmental Technical Specifications at least once per 12 months.
- c. The results of action taken to correct deficiencies occurring in facility equipment, structures, systems or method of operation that affect the environmental impact of the station at least once per 12 months.

5.3.2.3 Records

Provide a written report of the results of the audits required by 5.3.2.2 above to the SNSOC, the Director-Safety Evaluation and Control, and the Station Manager.

5.3.3 Safety Evaluation and Control (SEC)

5.3.3.1 Function

SEC, as described in Section 6.5.2 of Appendix A of this license, shall function to provide independent review of designated activities related to the environmental impact of the station.

5.3.3.2 Review

SEC shall review and, where necessary, comment on the results of the reviews conducted by the SNSOC and the independent audits conducted by the Quality Assurance Department.

5.3.3.3 Responsibility

SEC has the responsibility for ensuring, through appropriate reviews, that the station is operated in accordance with the requirements of this license and applicable NRC regulations.

5.3.3.4 Authority

The Director-Safety Evaluation and Control shall report to and advise the Manager-Nuclear Technical Services, who shall advise the Vice President-Nuclear Operations on those areas relating to the environmental impact of the station.

5.3.3.5 Records

The records of SEC activities relating to the environmental impact of the station shall be prepared and maintained in the SEC files and a summary shall be disseminated as indicated below each calendar month.

- 1. Vice President Nuclear Operations
- 2. Nuclear Power Station Managers
- 3. Manager-Nuclear Operations and Maintenance
- 4. Manager-Nuclear Technical Services
- 5. Manager-Quality Assurance, Operations
- Others that the Director-Safety Evaluation and Control may designate.

5.4 State and Federal Permits and Certificates

None

5.5 Procedures

5.5.1 Written Procedures

Detailed written procedures, including applicable checklists and instructions, shall be prepared and followed for all activities involved in carrying out the Environmental Technical Specifications as defined in Section 5.5.2, 5.5.3, and 5.5.4, below. Procedures shall include sampling, data recording and storage, instrument calibration, measurements and analyses, and actions to be taken when limits are approached or exceeded. Testing frequency of any alarm shall be included. These frequencies shall be determined from experience with similar instruments in similar environments and from manufacturer's technical manuals.

5.5.2 Operating Procedures

Plant standard operating procedures shall include provisions, in addition to the procedures specified in Section 5.5.1, to ensure that all plant systems and components are operated in compliance with the Limiting Conditions of Operations established as part of the Environmental Technical Specifications.



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

VIRGINIA ELECTRIC AND POWER COMPANY

DOCKET NO. 50-339

NORTH ANNA POWER STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 11 License No. NPF-7

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The applications for amendments by Virginia Electric and Power Company (the licensee) dated July 30, 1980, August 28, 1980 and October 15, 1980 as supplemented by letters dated August 1, 1980 and February 23, 1981, comply 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 a 1 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. 11, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective May 29, 1981.

FOR THE NUCLEAR REGULATORY COMMISSION

Robert A. Clark, Chief Operating Reactors Branch #3

Division of Licensing

Attachment: Changes to the Technical Specifications

Date of Issuance: May 22, 1981

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 11 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 completaness.

Pages

IVX

XVII

6-1

6-1a

6-2

6-3

6-6

6-7

6-9

5-10

6-11

6-12

6-13

6-20



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

VIRGINIA ELECTRIC AND POWER COMPANY

DOCKET NO. 50-339

NORTH ANNA POWER STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 11 License No. NPF-7

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The applications for amendments by Virginia Electric and Power Company (the licensee) dated July 30, 1980, August 28, 1980 and October 15, 1980 as supplemented by letters dated August 1, 1980 and February 23, 1981, comply 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 andangering 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.

 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. 11, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective May 29, 1981.

FOR THE NUCLEAR REGULATORY COMMISSION

Robert A. Clark, Chief

Operating Reactors Branch #3

Division of Licensing

Attachment: Changes to the Technical Specifications

Date of Issuance: May 22, 1981

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 11 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.

Pages

XVI

XVII

6-1 6-1a

6-2

6-3

6-6

6-7

6-9

6-10

6-11

6-12

6-13

6-20

INDEX

DESIGN FEATURES

SECT	ION	PAGE
5.1	SITE	
	Exclusion Area	5-1
	Low Population Zone	5-1
5.2	CONTAINMENT	
	Configuration	5-1
	Design Pressure and Temperature	5-1
5.3	REACTOR CORE	
	Fuel Assemblies	5-4
	Control Rod Assemblies	5-4
5.4	REACTOR COOLANT SYSTEM	
	Design Pressure and Temperature	5-4
	Volume	5-4
5.5	METEOROLOGICAL TOWER LOCATION	5-5
5.6	FUEL STORAGE	
	Criticality	5-5
	Drainage	5-5
	Capacity	5-5
5.7	COMPONENT CYCLE OR TRANSIENT LIMIT	5-6

INDEX

ADMINISTRATIVE CONTROLS	
SECTION	PAGE
6.1 RESPONSIBILITY	6-1
6.2 ORGANIZATION	
Offsite	6-1
Facility Staff	6-1
Safety Engineering Staff	6-1a
Shift Technical Advisor	6-1a
6.3 FACILITY STAFF QUALIFICATIONS	6-6
6.4 TRAINING	6-6
6.5 REVIEW AND AUDIT	
6.5.1 STATION NUCLEAR SAFETY AND OPERATING COMMITTEE (SNSOC)	
Function	6-6
Composition	6-6
Alternates	6-6
Meeting Frequency	6-7
Quorum	6-7
Responsibilities	6-7
Authority	6-8

6-8

6-8

6-9

Records.....

6.5.2 SAFETY EVALUATION AND CONTROL (SEC)

Function.....

Composition.....

INDEX

ADMINISTRATIVE CONTROLS

SECTION	PAGE
Consultants	6-9
Meeting Frequency	6-9
Review	6-9
Authority	6-10
Records	6-10
6.5.3 QUALITY ASSURANCE DEPARTMENT	
Function	6-11
Authority	6-12
Records	6-12
6.6 REPORTABLE OCCURRENCE ACTION	6-13
6.7 SAFETY LIMIT VIOLATION	6-13
6.8 PROCEDURES	6-13
6.9 REPORTING REQUIREMENTS	
6.9.1 ROUTINE REPORTS AND REPORTABLE OCCURRENCES	6-14
6.9.2 SPECIAL REPORTS	6-18
6.10 RECORD RETENTION	6-18
6.11 RADIATION PROTECTION PROGRAM	6-20
6.12 HIGH RADIATION AREA	6-10

6.1 RESPONSIBILITY

- 6.1.1 The Station Manager shall be responsible for overall facility operation. In his absence, the Assistant Station Manager 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 activites of licensed operators. A management directive to this effect, signed by the Executive Vice President-Power, shall be reissued to all station personnel on an annual basis.

6.2 ORGANIZATION

OFFSITE

6.2.1 The offsite organization for facility management and technical support shall be as shown on Figure 6.2-1.

FACILITY STAFF

- 6.2.2 The Facility organization shall be as snown on Figure 6.2-2 and:
 - Each on duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.2-1.
 - 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.
 - A health physics technician# shall be on site when fuel is in the reactor.
 - 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 auring this operacion.
 - A site Fire Bridade of at least 5 members shall be maintained onsite e. at all times#. The Fire Brigade shall not include the minimum shift we shown in Table 6.2-1 or any personnel required for other essential feactions during a fire emergency.

[#]The health physics technician and Fire Brigade composition may be less than the minimum requirement 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.

6.2.3 SAFETY ENGINEERING STAFF (SES)

FUNCTION

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

COMPOSITION

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

RESPONSIBILITIES

6.2.3.3 The SES 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.

AUTHORITY

6.2.3.4 The SES shall make detailed recommendations for revised procedures, equipment modifications, or other means of improving plant safety to the Station Manager and the Director-Safety Evaluation and Control.

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.
- 6.2.4.2 The Shift Technical Advisor shall disseminate relevant operational experience identified by the SES.

^{*}Not responsible for sign-off function.

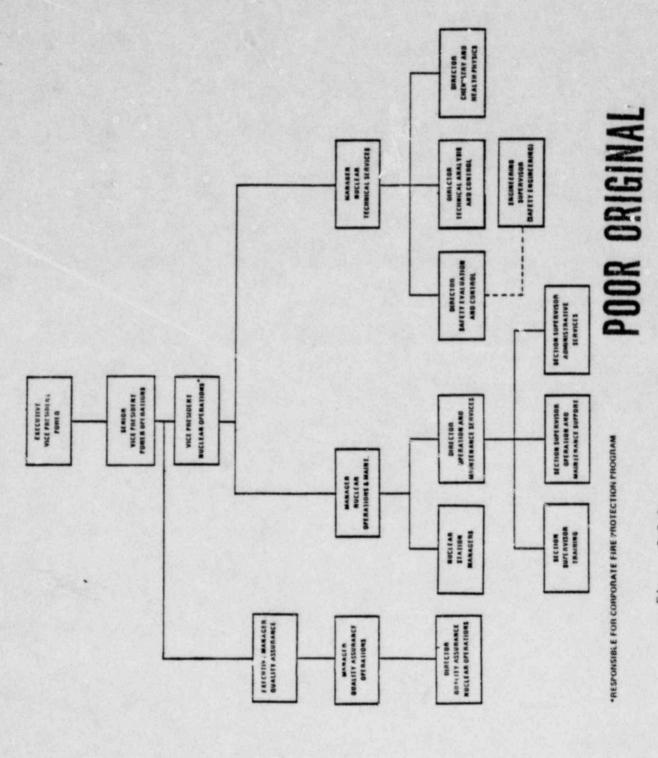


Figure 6.2-1 Offsite Organization for Facility Management and Technical Support

Figure 6.2-2 Facility Organization - North Anna - Units 1 and 2 PARTIE ... ACHINISTRATIVE MERVICES PRALITY CONTROL Deposits SMORTENIES (SAME) ----PAPTAVEDS CHEMINA BUTTER DECHMENTABLES TO SECURE BICHANISA BICHANICAL BAINTERANCE INSURITARIAN LANG BUCITAL BUCITA BUTTERSTRADIRES PTAAITONS BETT RUBOR SAFETT & OFTRAINS ----

NORTH ANNA - UNIT 2

6-3

Amendment No. 11-

TABLE 6.2-1 MINIMUM SHIFT CREW COMPOSITION

WITH UN]	T 1	IN	MODE	5	OR	6	OR	DE-	FUEL	ED
----------	-----	----	------	---	----	---	----	-----	------	----

POSITION	NUMBER OF INDIVIDUALS REQU MODES 1, 2, 3, & 4	MODES 5 & 6
SS	1ª	1ª
SRO	1	none
RO	2	1
AO	2	2 ^b
STA	1	none

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

POSITION	NUMBER OF INDIVIDUALS REQU MODES 1, 2, 3, & 4	MODES 5 & 6
SS	1a	7a
SRO	1ª	none
RO	2 ^b	1
AO	2 ^b	1
STA	1ª	none

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

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

TABLE 6.2-1 (Continued)

SS - Shift Supervisor with a Senior Reactor Operators License on Unit 2.

SRO - Individual with a Senior Reactor Operators License on Unit 2.

RO - I dividual with a Reactor Operators License on Unit 2.

AO - Auxiliary Operator

374 - Shift Technical Acvisor

Except for the Shift Supervisor, the Shift Crew Composition may be one less than the minimum requirements of Table 6.2-1 for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the Shift Crew Composition to within the minimum requirements of Table 6.2-1. This provision does not permit any shift crew position to be unmanned upon shift change due to an oncoming shift crewman being late or absent.

During any absence of the Shift Supervisor from the Control Room while the unit is in MODE 1, 2, 3 or 4, an individual (other than the Shift Technical Advisor) with a valid SRO license shall be designated to assume the Control Room command function. During any absence of the Shift Supervisor from the Control Room while the unit is in MODE 5 or 6, an individual with a valid RO license (other than the Shift Technical Advisor) shall be designated to assume the Control Room command function.

Licensed operators shail:*

Not work more than 12 hours straight,

2. Not work more than 24 hours in any 48-hour period,

3. Not work more than 72 hours in any 7-day period,

4. Not work more than 14 consecutive days without having 2 consecutive days off.

^{*}Deviation from these requirements may be authorized by the Station Manager in accordance with established procedures and with documentation of the cause.

Overtime limits do not include the shift turnover time.

6.3 FACILITY STAFF QUALIFICATIONS

6.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI N18.1 - 1971 for comparable positions and the supplemental requirements specified in the March 28, 1980 NRC letter to all licensees, except for (1) the Supervisor - 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 5.5 of ANSI N18.1 - 1971 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 SES.

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:

Station Manager

Vice Chairman:

Assistant Station Manager

Member:

Superintendent-Operations Superintendent-Maintenance

Member: Member:

Superintendent-Technical Services

Member:

Supervisor-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; howeer, no more than one alternate shall participate as a voting member in SNSTD activities at any one time.

MEETING FREQUENCY

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

QUORUM

6.5.1.5 A quorum of the SNSOC shall consist 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 Specification 6.8.1 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.
 - Review of all proposed tests and experiments that affect nuclear safety.
 - c. Review of all proposed changes to Appendix "A" Technical Specifications.
 - d. Review of all proposed changes or modifications to plant systems or equipment that affect nuclear safety.
 - 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 Manager-Nuclear Operations and Maintenance and the Director-Safety Evaluation and Control.
 - Review of events requiring 24 hour written notification to the Commission.
 - 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.
 - i. Review of the Plant Security Plan and implementing procedures and shall submit recommended changes to the Chairman of the Station Nuclear Safety and Operating Committee.
 - j. Review of the Emergency Plan and implementing procedures and shall submit recommended changes to the Chairman of the Station Nuclear Safety and Operating Committee.

AUTHORITY

6.5.1.7 The SNSOC shall:

- a. Recommend to the Station Manager written approval or disapproval of items considered under 6.5.1.6(a) through (d) above.
- 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 Manager-Nuclear Operations and Maintenance and the Director-Safety Evaluation and Control 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 Manager-Nuclear Operations and Maintenance and the Director-Safety Evaluation and Control.

6.5.2 SAFETY EVALUATION AND CONTROL (SEC)

FUNCTION

- 6.5.2.1 SEC 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
 - Other appropriate fields associated with the unique characteristics of the nuclear power plant

COMPOSITION

6.5.2.2 The SEC staff shall be composed of the Director-Safety Evaluation and Control and a minimum of three individuals who are qualified as staff specialists. Each SEC 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 Director-Safety Evaluation and Control to provide expert advice to the SEC.

MEETING FREQUENCY

6.5.2.5 The SEC 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 SEC:
 - 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 aid 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 CFP 50.59(a)(2). Matters of this kind shall be referred to the Director-Safety Evaluation and Control 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.

REVIEW (Cont'd)

- d. Violations and reportable occurrences such as:
 - Violations of applicable codes, regulations, orders, Technical Specifications, license requirements or internal procedures or instructions having safety significance;
 - Significant operating abnormalities or deviations from normal or expected performance of station safety-related structures, systems, or components; and
 - Reportable occurrences as defined in the station Technical Specification 6.9.1.8.

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 a duly appointed subcommittee or committee member deems appropriate for consideration, or which is referred to the Director-Safety Evaluation and Control by the Station Nuclear Safety and Operating Committee.
- g. Reports and meeting minutes of the Station Nuclear Safety and Operating Committee.

AUTHORITY

6.5.2.9 The Director-Safety Evaluation and Control shall report to and advise the Manager-Nuclear Technical Services, who shall advise the Vice President-Nuclear Operations on those areas of responsibility specified in Section 6.5.2.7.

RECORDS

- 6.5.2.10 Records of SEC activities required by Section 6.5.2.7 sh.11 be prepared and maintained in the SEC files and a summary shall be disseminated as indicated below each calendar month.
 - Vice President-Nuclear Operations
 - 2. Nuclear Pawer Station Managers
 - 3. Manager-Nuclear Operations and Maintenance

RECORDS (Cont'd)

- 4. Manager-Nuclear Technical Services
- 5. Manager-Quality Assurance, Operations
- 6. Others that the Director-Safety Evaluation and Control may designate.

6.5.3 QUALITY ASSURANCE DEPARTMENT

FUNCTION

- 6.5.3 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 24 months.
 - f. The Station Security Plan and implementing procedures at least once per 24 months.
 - g. Any other area of facility operation considered appropriate by the Executive Manager-Quality Assurance or the Senior Vice President-Power Operations.
 - 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.

AUTHORITY

6.5!3.2 The Quality Assurance Department shall report to and advise the Executive Manager-Quality Assurance, who shall advise the Senior Vice President-Power Operations 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 as indicated below:
 - 1. Nuclear Power Station Manager
 - 2. Manager-Nuclear Operations and Maintenance
 - Manager-Nuclear Technical Services
 - 4. Manager-Quality Assurance, Operations
 - 5. Director-Quality Assurance, Nuclear Operations
 - 6. Director-Safety Evaluation and Control
 - 7. Supervisor of area audited
 - 8. Nuclear Power Station Resident Quality Control Engineer

6.6 REPORTABLE OCCURRENCE ACTION

- 6.6.1 The following actions shall be taken for REPORTABLE OCCURRENCES:
 - a. The Commission shall be notified and/or a report submitted pursuant to the requirements of Specification 6.9.
 - b. Each REPORTABLE OCCURRENCE requiring 24 hour notification to the Commission shall be reviewed by the SNSOC and submitter to the Director-Safety Evaluation and Control and the Manager-Nuclear Operations and Maintenance

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 Manager-Nuclear Operations and Maintenant, and the Director-Safety Evaluation and Control 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 Director-Safety Evaluation and Control and the Manager-Nuclear Operations and Maintenance 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

- c. Surveillance and test activities of safety related equipment.
- d. Security Plan implementation.
- e. Emergency Plan implementation.
- f. Fire Protection Program Implementation.
- 6.8.2 Each procedure of 6.8.1 above, and changes thereto, shall be reviewed by the SNSOC and approved by the Station Manager prior to implementation and reviewed periodically as set forth in administrative procedures.
- 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 by the SNSOC and approved by the Station Manager within 14 days of implementation.
- 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.

- c. Each REPORTABLE OCCURRENCE submitted to the Commission.
- d. Records of surveillance activities, inspections and calibrations required by these Technical Specifications.
- e. Records of changes made to Operating Procedures.
- f. Records of radioactive shipments.
- g. Records of sealed source leak tests and results.
- h. Records of annual physical inventory of all sealed source material of record.
- 6.10.2 The following records shall be retained for the duration of the Facility Operating License:
 - a. Records and drawing changes reflecting facility design modifications made to systems and equipment described in the Final Safety Analysis Report.
 - b. Records of new and irradiated fuel inventory, fuel transfers and assembly burnup histories.
 - c. Records of facility radiation and contamination surveys.
 - Records of radiation exposure for all individuals entering radiation control areas.
 - Records of gaseous and liquid radioactive material release to the environs.
 - Records of transient or operational cycles for those facility components identified in Table 5.7-1.
 - g. Records of reactor tests and experiments
 - h. Records of training and qualification for current members of the plant staff.
 - Records of in-service inspections performed pursuant to these Technical Specifications.
 - j. Records of Qua'ity Assurance activities required by the QA Manual.
 - k. Records of the service lives of all hydraulic snubbers listed on Table 3.7-4a including the date at which the service life commences. (This requirement commences with the Full Power License.)

ADMINISTRATIVE CONTROLS

- Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR 50.59.
- m. Records of meetings of the SNSOC.
- n. Records of meetings of the System Nuclear Safety and Operating Committee to issuance of Amendment No.
- o. Records of secondary water sampling and water quality.
- P. Records for Environmental Qualification which are covered under the provisions of Paragraph 2.C(4)(e) of License No. NPF-7.

6.11 RADIATION PROTECTION PROGRAM

Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure.

6.12 HIGH RADIATION AREA

- 6.12.1 In lieu of the "control device" or "alarm signal" required by paragraph 20.203(c)(2) of 10 CFR 20, each high radiation area in which the intensity of radiation is greater than 100 mrem/hr but less than 1000 mrem/hr shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit.* Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:
 - a. A radiation monitoring device which continuously indicates the radiation dose rate in the area.
 - b. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate level in the area has been established and personnel have been made knowledgeable of them.
 - c. An individual qualified in the protection procedures who is equipped with a radiation dose rate monitoring device. This individual shall be responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the facility Health Physicist in the Radiation Work Permit.

^{*}Health Physics personnel or personnel escorted by Health Physics personnel shall be exempt from the RWP issuance requirement during the performance of their assigned radiation protection duties, provided they comply with approved radiation protection procedures for entry in high radiation areas.

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 11 TO FACILITY OPERATING LICENSE NO. NPF-7

DOCKET NO. 50-339

Replace the following pages of the Appendix "B" 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.

Pages

I-f

I-ii

1-5-1

1-5-2

1-5-3

I-5-4

I-5-5

TABLE OF CONTENTS

				Page
1.0	DEFI	NITIONS		1-1
2.0	LIMI	TING CONT	DITIONS FOR OPERATION	2-1
	2.1	Non-Radi	iological	2-1
	2.2	Radioact	tive Effluents	2-1
		2.2.1 2.2.2	Specifications for Liquid Waste Effluents Specifications for Liquid Waste Sampling	
			and Monitoring	
		2.2.3	Specifications for Gaseous Waste Effluents Specifications for Gaseous Waste Sampling	2-7
			and Monitoring	2-13
		2.2.5	Specifications for Solid waste Handling	
			and Disposal	2-17
3.0	ENVI	RONMENTAL	L SURVEILLANCE	3-1
	3.1	Non-radi	iological Surveillance	3-1
		3.1.1	Abiotic - Aquatic	3-1
		3.1.2	Biotic Aquatic	3-1
		3.1.3	Abiotic - Terrestrial	3-1
		3.1.4	Onsite Meteorology Monitoring	3-1
	3.2	Radiolog	gical Environmental Monitoring	3-2
4.0	SPEC	IAL SURVI	EILLANCE AND STUDY ACTIVITIES	4-1
5.0	ADMI	NISTRATIV	VE CONTROLS	5-1
	5.1	Respons	ibility	5-1
	5.2	Organiza	ation	5-1
	5.3	Review	and Audit	5-1
		5.3.1	Station Nuclear Safety and Operating Committee	
			(SNSOC)	5-1
			5.3.1.1 Function	
			5.3.1.2 Responsibility	
			5.3.1.3 Authority	
			5.3.1.4 Records	5-3

TABLE OF CONTENTS (Cont'd)

			Page
	5.3.2	Quality Assurance Department	5-4
		5.3.2.1 Function	5-4
		5.3.2.2 Audits	5-4
		5.3.2.3 Records	5-4
	5.3.3	Safety Evaluation and Control (SEC)	5-4
		5.3.3.1 Function	5-4
		5.3.3.2 Review	5-4
		5.3.3.3 Responsibility	5-5
		5.3.3.4 Authority	• . 5-5
		5.3.3.5 Records	5-5
5.4	State and	Federal Permits and Certificates	5-5
5.5	Procedure	S	5-5
	5.5.1	Written Procedures	5-5
	5.5.2	Operating Procedures	5-5
	5.5.3	Procedures for Environmental Surveillance -	
		Radiological	5-6
	5.5.4	Procedures for Environmental Surveillance -	
		Nonradiological	5-6
	5.5.5	Quality Assurance of Program Results	5-6
	5.5.6	Changes in Procedures, Station Design or	
		Operation	5-6
	5.5.7	Consistency with Initially Approved Programs	5-7
5.6	Station R	eporting Requirements	5-7
	5.6.1	Routine Reports	5-7
		5.6.1.1 Annual Environmental Operating Report	5-7
		5.6.1.2 Radioactive Effluent Release Report	5-8
	5.6.2	Nonroutine Reports	5-9
		5.6.2.1 Nonroutine Non-Radiological Environmental Operating Report	5-9
		5.6.2.2 Nonroutine Radiological Environmental	
		Operating Reports	5-10
	5.6.3	Changes in Environmental Technical Specifications.	5-11
	5.6.4	Changes in Permits and Certifications	5-11
	3.0.4	Changes in reimics and certificactons	
5.7	Records R	etention	5-11

5.0 ADMINISTRATIVE CONTROLS

Administrative controls below apply to Appendix B Part I only.

5.1 Responsibility

The responsibility for implementing the Environmental Techncial Specifications is assigned to the Manager-Nuclear Operations and Maintenance at the corporate level and to the Station Manager at the station level. The Superintendent - Operations shall be responsible for ensuring that the station is operated in accordance with the Limiting Conditions of Operation. The Station Supervisor - Health Physics shall be responsible for the radiological environmental surveillance requirements. The Executive Manager of Environmental Services shall be responsible for providing services which will fulfill the non-radiological environmental surveillance requirements.

5.2 Organization

The relationship between the Nuclear Operations Department and the Environmental Services Department is shown in Figure 5.2-1.

5.3 Review and Audit

5.3.1 Station Nuclear Safety and Operating Committee (SNSOC)

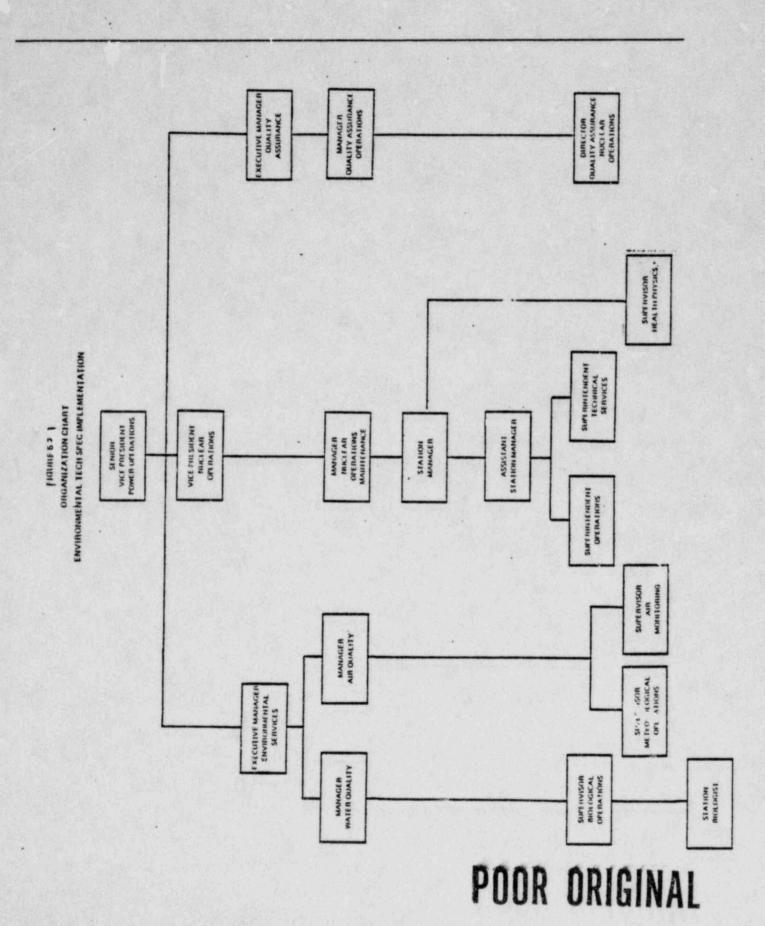
5.3.1.1 Function

The aNSOC, as described in Section 6.5.1 of Appendix A of this license, shall function to advise the Static Manager on matters related to the environmental impact of the station. With the SNSOC is exercising its responsibility for non-radiological aspects of the ETS, the Station Biologist or his alternate shall be consulted.

5.3.1.2 Responsibility

The SNSOC shall be responsible for:

- a. Coordination of the Environmental Technical Specifications with the Safety Technical Specifications (Appendix A) to avoid conflicts and maintain consistency.
- b. Review of changes to the Environmental Technical Specifications and the evaluation of the environmental impact of the change.



- c. Review of proposed written procedures required by Section 5.5.2 and 5.5.3 below and changes thereto, which affect the environmental impact of the station.
- d. Review of proposed changes to station systems to determine the environmental impact of the changes.
- e. Investigation of all reported instances of violation of the Environmental Technical Specifications; and where the investigation indicates, evaluation and formulation of recommendations to prevent recurrence.
- f. Review of environmental monitoring programs to detect potential or existing significant adverse environmental impacts that have not been evaluated, or that are significantly greater than that evaluated by the Commission.

5.3.1.3 Authority

The SNSOC shall:

- a. Review the environmental evaluation of all changes described in Section 5.3.1.2 a, b and c, above. When the evaluation indicates that such activitiy may result in a significant adverse environmental impact that was not e aluated, or that is significantly greater than that evaluated by the Commission, the SNSOC shall ensure that a written evaluation of such activities is provided to and prior approval is obtained from the Director of Nuclear Reactor Regulation for the activities.
- b. If the SNSOC determines that unexpected harmful effects or evidence of irreversible damage are occurring as a result of operation of the station, the SNSOC shall ensure that an acceptable analysis of the problem and a plan of action to eliminate or significantly reduce the harmful effects or damage is submitted to the Commission for review and approval.
- c. Review written reports prepared as a result of investigations and reviews conducted under 5.3.1.2 a, e and f.

5.3.1.4 Records

The SNSOC shall maintain written minutes of each meeting and copies shall be provided to the Director-Safety Evaluation and Control.

5.3.2 Quality Assurance Department

5.3.2.1 Function

The Quality Assurance Department shall perform independent audits of the implementation of the Environmental Technical Specifications.

5.3.2.2 Audits

The following audits shall be completed:

- a. The conformance of facility operation to provisions contained within these Environmental Technical Specifications and applicable license conditions at least once per 12 months.
- b. The performance, training and qualifications of the facility staff involved in ensuring and monitoring compliance with these Environmental Technical Specifications at least once per 12 months.
- c. The results of action taken to correct deficiencies occurring in facility equipment, structures, systems or method of operation that affect the environmental impact of the station at least once per 12 months.

5.3.2.3 Records

Provide a written report of the results of the audits required by 5.3.2.2 above to the SNSOC, the Director-Safety Evaluation and Control, and the Station Manager.

5.3.3 Safety Evaluation and Control (SEC)

5.3.3.1 Function

SFC, as described in Section 6.5.2 of Appendix A of this license, shall function to provide independent review of designated activities related to the environmental impact of the station.

5.3.3.2 Review

SEC shall review and, where necessary, comment on the results of the reviews conducted by the SNSOC and the independent audits conducted by the Quality Assurance Department.

5.3.3.3 Responsibility

SEC has the responsibility for ensuring, through appropriate reviews, that the station is operated in accordance with the requirements of this license and applicable NRC regulations.

5.3.3.4 Authority

The Director-Safety Evaluation and Control shall report to and advise the Manager-Nuclear Technical Services, who shall advise the Vice President-Nuclear Operations on those areas relating to the environmental impact of the station.

5.3.3.5 Records

The records of SEC activities relating to the environmental impact of the station shall be prepared and maintained in the SEC files and a summary shall be disseminated as indicated below each calendar month.

- 1. Vice President Nuclear Operations
- 2. Nuclear Power Station Managers
- 3. Manager-Nuclear Operations and Maintenance
- 4. Manager-Nuclear Technical Services
- 5. Manager-Quality Assurance, Operations
- Others that the Director-Safety Evaluation and Control may designate.

5.4 State and Federal Permits and Certificates

None

5.5 Procedures

5.5.1 Written Procedures

Detailed written procedures, including applicable checklists and instructions, shall be prepared and followed for all activities involved in carrying out the Environmental Technical Specifications as defined in Sections 5.5.2, 5.5.3, and 5.5.4, below. Procedures shall include sampling, data recording and storage, instrument calibration, measurements and analyses, and actions to be taken when limits are approached or exceeded. Testing frequency of any alarm shall be included. These frequencies shall be determined from experience with similar instruments in similar environments and from manufacturer's technical manuals.

5.5.2 Operating Procedures

Plant standard operating procedures shall include provisions, in addition to the procedures specified in Section 5.5.1, to ensure that all plant systems and components are operated in compliance with the Limiting Conditions of Operations established as part of the Environmental Technical Specifications.