



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

PUBLIC SERVICE COMPANY OF COLORADO

DOCKET NO. 50-267

FORT ST. VRAIN NUCLEAR GENERATING STATION

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 24  
License No. DPR-34

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The applications for amendment by Public Service Company of Colorado (the licensee) dated October 28, 1981 and October 30, 1981 comply with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the applications, the provisions of the Act, and the 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 change to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.D(2) of Facility Operating License No. DPR-34 is hereby amended to read as follows:

(2) Technical Specifications

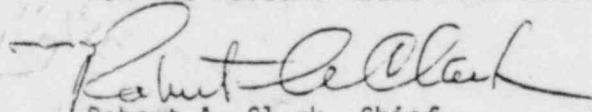
The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 24, are hereby incorporated in the license. The license shall operate the facility in accordance with the Technical Specifications.

3. The license amendment is effective as follows:

Part 1: PCRV Pressurization - October 28, 1981

Part 2: Administrative Controls - as of date of issuance.

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: November 9, 1981

ATTACHMENT TO AMENDMENT NO. 24 TO  
FACILITY OPERATING LICENSE NO. DPR-34  
DOCKET NO. 50-267

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.

Remove

v  
vi  
4.2.4a  
7.1-1 through 7.1-13

Insert

v  
vi  
4.2.4a  
7.1-1 through 7.1-13

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5.5	CONFINEMENT SYSTEM - SURVEILLANCE REQUIREMENTS ..... 5.5-1
	Specification SR 5.5.1 - Reactor Building ..... 5.5-1
	Specification SR 5.5.2 - Reactor Building Pressure Relief Device ..... 5.5-1
	Specification SR 5.5.3 - Reactor Building Exhaust Filters . 5.5-2(a)
5.6	EMERGENCY POWER SYSTEMS - SURVEILLANCE REQUIREMENTS ..... 5.6-1
	Specification SR 5.6.1 - Standby Diesel Generator ..... 5.6-1
	Specification SR 5.6.2 - Station Battery ..... 5.6-2
5.7	FUEL HANDLING AND STORAGE SYSTEMS - SURVEILLANCE REQUIREMENTS ..... 5.7-1
	Specification SR 5.7.1 - Fuel Handling Machine ..... 5.7-1
	Specification SR 5.7.2 - Fuel Storage Facility ..... 5.7-2
5.8	RADIOACTIVE EFFLUENT DISPOSAL SYSTEMS - SURVEILLANCE REQUIREMENTS ..... 5.8-1
	Specification SR 5.8.1 - Radioactive Gaseous Effluent System ..... 5.8-1
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5.9	ENVIRONMENTAL SURVEILLANCE - SURVEILLANCE REQUIREMENTS .... 5.9-1
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5.10	FIRE SUPPRESSION SYSTEMS - SURVEILLANCE REQUIREMENTS ..... 5.10-1
	Specification SR 5.10.1 - Three Room Control Complex HVAC System ..... 5.10-1
	Specification SR 5.10.2 - Halon Fire Suppression System ..... 5.10-1
	Specification SR 5.10.3 - Smoke Detectors and Alarm ..... 5.10-2
	Specification SR 5.10.4 - Fire Barrier Penetration Seal ... 5.10-3
	Specification SR 5.10.5 - Breathing Air System ..... 5.10-3
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	Specification SR 5.10.7 - Carbon Dioxide Fire Suppression System ..... 5.10-4
	Specification SR 5.10.8 - Fire Hose Stations ..... 5.10-5
	Specification SR 5.10.9 - Yard Fire Hydrants and Hydrant Hose Houses ..... 5.10-5
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6.1	REACTOR CORE - DESIGN FEATURES..... 6.1-1
	Specification OF 6.1 - Reactor Core ..... 6.1-1

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Specification DF 6.2.3 - Steam Safety Valves .....	6.2-3
6.3 SITE - DESIGN FEATURES .....	6.3-1
Specification DF 6.3 - Site .....	6.3-1
7.0 ADMINISTRATIVE CONTROLS .....	7.0-1
7.1 ORGANIZATION, REVIEW AND AUDIT - ADMINISTRATIVE CONTROLS ..	7.1-1
Specification AC 7.1.1 - Organization .....	7.1-1
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Basis for Specification LCO 4.2.6 (continued)

In addition to the fire suppression function either of the fire pumps operating in conjunction with either fire water booster pump provides adequate capacity to operate a circulator water turbine and supply emergency cooling water for safe shutdown cooling. With the 325 gallons of fuel in storage, the engine driven fire pump can operate at rated conditions for 24 hours which is adequate time to have more fuel delivered to the site. For further explanation, see Final Safety Analysis Report, Sections 1.4, 10.3, and 14.4.

Specification LCO 4.2.7 - PCRV Pressurization Limiting Conditions for Operation

The PCRV shall not be pressurized to more than 100 psia unless:

- a) The PCRV safety valve installation is operable, and there is less than 5 psig between the rupture disc and relief valve, and both inlet block valves are locked open.
- \*b) All primary and secondary penetration closures and hold down plates are in place and operable, per Specification LCO 4.2.9.
- \*c) The interspaces between the primary and secondary penetration closures are maintained at a pressure greater than primary system pressure with purified helium gas.\*\*

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\* During the initial low power physics testing ( $\leq 0.1\%$  of rated thermal power) with the PCRV pressurized and when helium circulators C and D are in the pre-nuclear Pelton wheel configuration, exceptions to provisions b) and c) of this LCO will be the installation of the secondary closures and pressurization of the primary secondary closure interspace of C and D helium circulator penetrations.

\*\* except for module B-2-3 interspace pressure which will be slightly above cold reheat steam pressure for the period October 28, 1981 to November 27, 1981, only. At the end of this time, the original Technical Specification will again be effective.

7.1 ORGANIZATION, REVIEW AND AUDIT-ADMINISTRATIVE CONTROLS

Applicability

Applies to the lines of authority and responsibility for the operational safety of the facility, and the organization for periodic review and audit of facility operation.

Objectives

To define the principal lines of authority and responsibility for providing continuing review, evaluation and improvement of the plant operational safety.

SPECIFICATION AC 7.1.1 - ORGANIZATION, ADMINISTRATIVE CONTROLS

1. ORGANIZATION

The organization and lines of responsibility which govern plant operation shall be as follows:

- a. In all matters pertaining to operation and maintenance of the plant and to these Technical Specifications, the Station Manager shall report to, and be directly responsible to, the Manager, Nuclear Production. The Administrative and Departmental Management Organization is shown in Figure 7.1-1.

b. The Station Manager is directly responsible for overall facility operation and in all matters concerning the Plant Operations Review Committee (PORC). He shall delegate in writing this responsibility during his absence.

c. The Technical Advisors shall report to, and be directly responsible to, the Technical/Administrative Services Manager. The Technical Advisors shall maintain independence from normal plant operations as necessary to make objective evaluations of plant conditions and to advise or assist plant management in correcting conditions that may compromise safety of operations. The Technical Advisors are responsible for:

(1) Maximizing plant safety during and after accidents, transients and emergencies by independently assessing plant conditions and by providing technical assistance to mitigate and minimize the effects of such incidents and make recommendations to the Superintendent of Operations.

(2) Review abnormal and emergency procedures.



- (3) Assist the operations staff in applying the requirements of the Technical Specifications.
  - (4) Provide evaluation of Licensee Event Reports from other plants as assigned.
- d. Organization for conduct of operations of the plant is shown in Figure 7.1-2.

2. UNIT STAFF

- a. A licensed senior operator shall be present on site at all times when there is fuel in the reactor.
- b. A licensed operator must be in the control room at all times when fuel is in the reactor. During reactor startup, shutdown, and recovery from reactor trip, two licensed operators must be in the control room.
- c. ALL CORE ALTERATIONS after the initial fuel loading shall be 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.
- d. An operator or technician qualified in radiation protection procedures shall be present at the facility at all times that there is fuel on site.

- e. A site Fire Brigade of at least 5 members shall be maintained on site at all times\*. The Fire Brigade shall not include (3) members of the minimum shift crew necessary for safe shutdown of the unit and any personnel required for other essential functions during a fire emergency.

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\*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 of Fire Brigade members provided immediate action is taken to restore the Fire Brigade to within the minimum requirements.

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- f. The Technical Advisor shall be in the control room within one hour after an emergency call. The Technical Advisors shall work a normal day work schedule but will be placed "on call" after normal working hours.

- g. Upon commencement of commercial operation the staffing of the plant shall be in accordance with American National Standards Institute N18.1-1971, "Selection and Training of Personnel for Nuclear Power Plants."
- h. Each member of the facility staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable position, except for the Radiation Protection Manager who shall meet or exceed the qualifications of Regulatory Guide 1.8, September, 1975.

3. TRAINING

- a. A retraining and replacement training program for the facility staff shall be maintained under the direction of the Training Supervisor and shall meet or exceed the requirements and recommendations of Section 5.5 of ANSI N18.1-1971 and Appendix "A" of 10CFR Part 55. Compliance with Section 5.5 of ANSI N18.1-1971 shall be achieved no later than six months following commencement of commercial operation.

- b. A training program for the Fire Brigade shall be maintained under the direction of the Training Supervisor and shall meet or exceed the requirements of Section 27 of the NFPA Code-1975, except for Fire Brigade training/drill sessions which shall be held at least once per calendar quarter.
  
- c. An initial training and retraining program for the Technical Advisors shall be maintained under the direction of the Training Supervisor. The Technical Advisors shall receive specific training in the response and analysis of the plant for transients and accidents. The Technical Advisors shall also receive training in plant design and layout, including the capabilities of instrumentation and controls in the control room.

SPECIFICATION AC 7.1.2 - PLANT OPERATIONS REVIEW COMMITTEE (PORC). ADMINISTRATIVE CONTROLS

The organization, responsibilities, and authority of the PORC shall be as follows:

1. MEMBERSHIP

The Plant Operations Review Committee shall be composed of the following:

Chairman: Station Manager

Technical/Administrative Services Manager

Radiation Protection Manager

Superintendent of Operations

Superintendent of Maintenance

Health Physics Supervisor

Results Engineering Supervisor

Shift Supervisor

Training Supervisor

Scheduling/QC/Stores Supervisor

Technical Services Engineering Supervisor

Senior Maintenance Supervisor

Maintenance Supervisor

Security Supervisor

Reactor Engineer

Technical Services Engineer

Technical Advisors

Training Instructor

2. ALTERNATES

An alternate chairman and alternate members, if required, shall be appointed in writing by the PORC Chairman to serve in the absence of a chairman or a member; however, no more than two alternate members shall participate in PORC activities at any one time.

3. MEETING FREQUENCY

The PORC shall meet at least once per calendar month and as convened by the Chairman.

4. QUORUM

A quorum shall consist of the Chairman or alternate Chairman, and four members including alternates.

5. RESPONSIBILITIES

The PORC shall be responsible for:

- a. Review of all procedures required by Technical Specification 7.4(a), (b) and (c) and changes thereto, and any other proposed procedure or changes to approved procedures 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 to the 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 the evaluation and recommendations to prevent recurrence to the Manager, Nuclear Production and to the Chairman of the Nuclear Facility Safety Committee.

- f. Review of events requiring 24-hour notification to the Commission.
- g. Review of facility operations to detect potential nuclear safety hazards.
- h. Performance of special reviews, investigations and reports thereon as requested by the Chairman of the Nuclear Facility Safety Committee.
- i. Review of the Plant Security Plan and implementing procedures and submittal of recommended changes to the Chairman of the Fort St. Vrain Security Committee.

6. AUTHORITY

The PORC shall:

- a. Function to advise the Manager, Nuclear Production on all matters that affect nuclear safety.
- b. Recommend to the Manager, Nuclear Production in writing, approval or disapproval of items considered under 5.a through 5.d, above.



- c. Render determinations in writing with regard to whether or not each item considered under 5.a through 5.e above constitutes an unreviewed safety question.
- d. Provide immediate written notification to the Manager, Nuclear Production and the Chairman of NFSC of disagreement between the PORC and the Station Manager; however, the Station Manager shall have responsibility for resolution of such disagreements pursuant to 6.a above.

7. RECORDS

The PORC shall maintain written minutes of each meeting and copies shall be provided to the Manager, Nuclear Production and Chairman of the Fort St. Vrain Nuclear Facility Safety Committee.

SPECIFICATION AC 7.1.3 - NUCLEAR FACILITY SAFETY COMMITTEE (NFSC), ADMINISTRATIVE CONTROLS

The organization, responsibilities, and authority of the NFSC shall be as follows:

1. FUNCTION

The Nuclear Facility Safety Committee shall function to provide independent review and audit 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. Quality Assurance Practices
- i. (Other appropriate fields associated with the unique characteristics of the nuclear power plant.)

2. MEMBERSHIP

The NFSC shall be composed of the following:

Chairman: Vice President, Electric Production

Manager, Nuclear Production Division

Manager, Nuclear Engineering Division

Quality Assurance Manager

Manager, Claims, Safety and Security Division

Consultants, as required and appointed by the  
Chairman

3. ALTERNATES

An alternate chairman and alternate members, if required, shall be appointed in writing by the Chairman; however, no more than two alternate members shall participate in NFSC activities at any one time.

4. CONSULTANTS

Consultants shall be utilized as determined by the Chairman, NFSC, to provide expert advice to the NFSC.

5. MEETING FREQUENCY

The NFSC shall meet at least once per calendar quarter during the initial year of facility operation following fuel loading and at least once per six months thereafter.

6. QUORUM

A quorum of the NFSC shall consist of the Chairman or his designated alternate and a majority of the NFSC members including alternates. No more than a minority of the quorum shall have line responsibilities for operation of the facility.

7. RESPONSIBILITIES

a. The Nuclear Facility Safety Committee shall review:

(1) The safety evaluations for changes to procedures, equipment or systems affecting nuclear safety and tests or experiments affecting nuclear safety completed under the provision of Section 50.59, 10CFR, to verify that such actions did not constitute an unreviewed safety question.

(2) Proposed changes to procedures, equipment or systems which involve an unreviewed safety question as defined in Section 50.59, 10CFR.

- (3) Proposed tests or experiments which involve an unreviewed safety question, as defined in Section 50.59, 10CFR.
- (4) Proposed changes in Technical Specifications or licenses.
- (5) Violation of applicable statutes, codes, regulations, orders, Technical Specifications, license requirements, or of internal procedures or instructions affecting nuclear safety.
- (6) Significant operating abnormalities or deviations from normal and expected performance of plant equipment that affect nuclear safety.
- (7) All events which are required by regulations or Technical Specifications to be reported to the NRC in writing within 24 hours.
- (8) Any indication that there may be a deficiency in some aspect of design or operation of structures, systems, or components, that affect nuclear safety.
- (9) Reports and meeting minutes of the PORC.

b. Audits of facility activities shall be performed under the cognizance of the Nuclear Facility safety Committee. These audits shall encompass:

- (1) The conformance of facility operation to all provisions contained within the Technical Specifications and applicable license conditions at least once per year.
- (2) The performance, training, and qualifications, of the facility staff at least once per year.
- (3) 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 six months.
- (4) The performance of activities required by the Quality Assurance Program to meet the criteria of Appendix "B", 10CFR50, at least once per two years.
- (5) The facility Emergency Plan and implementing procedures at least once per two years.
- (6) The facility Security Plan and implementing procedures at least once per two years.

- (7) Any other area of facility operation considered appropriate by the NFSC.
- (8) An audit of the Fire Protection Program including a fire protection and loss prevention inspection shall be performed annually, utilizing qualified off site licensee personnel, an outside fire protection firm, or an outside qualified fire consultant. This audit must be performed by an outside qualified fire consultant at intervals no greater than 3 years.

8. AUTHORITY

The NFSC shall report to and advise the Vice President, Electric Production on those areas of responsibility specified in b.(7) above.

9. RECORDS

Records of NFSC activities shall be prepared, approved and distributed as indicated below:

- a. Minutes of each NFSC meeting shall be prepared, approved and forwarded to the Vice President, Electric Production within 30 days following each meeting.

- b. Reports of reviews encompassed by Section 7.a, above shall be forwarded to the Vice President, Electric Production within 30 days following completion of the review.
  
- c. Audit reports encompassed by Section 7.b, above shall be forwarded to the Vice President, Electric Production and to the management positions responsible for the areas audited within 30 days after completion of the audit.



FORT ST. VRAIN NUCLEAR GENERATING STATION  
 ADMINISTRATIVE AND DEPARTMENTAL MANAGEMENT ORGANIZATION CHART

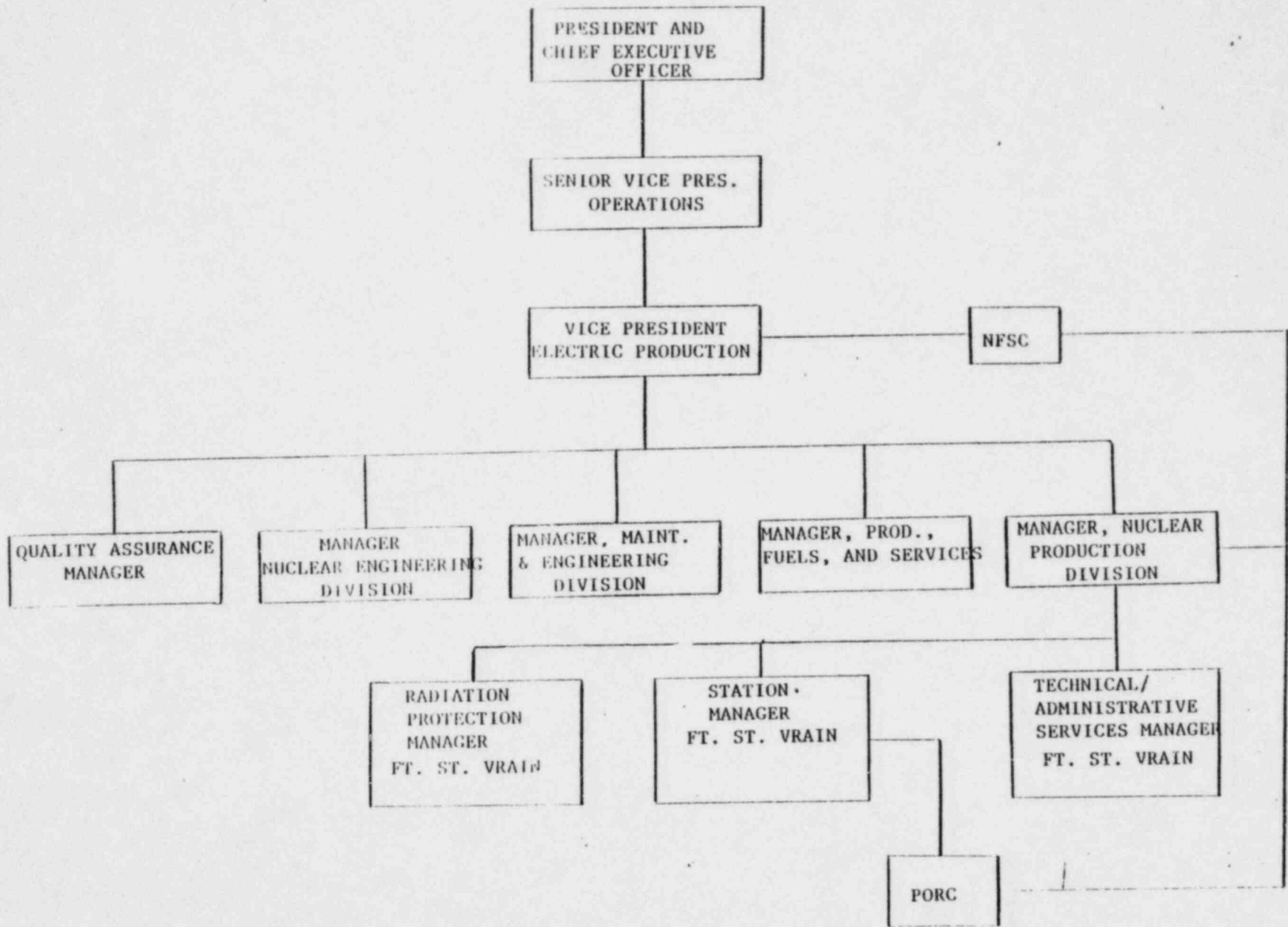
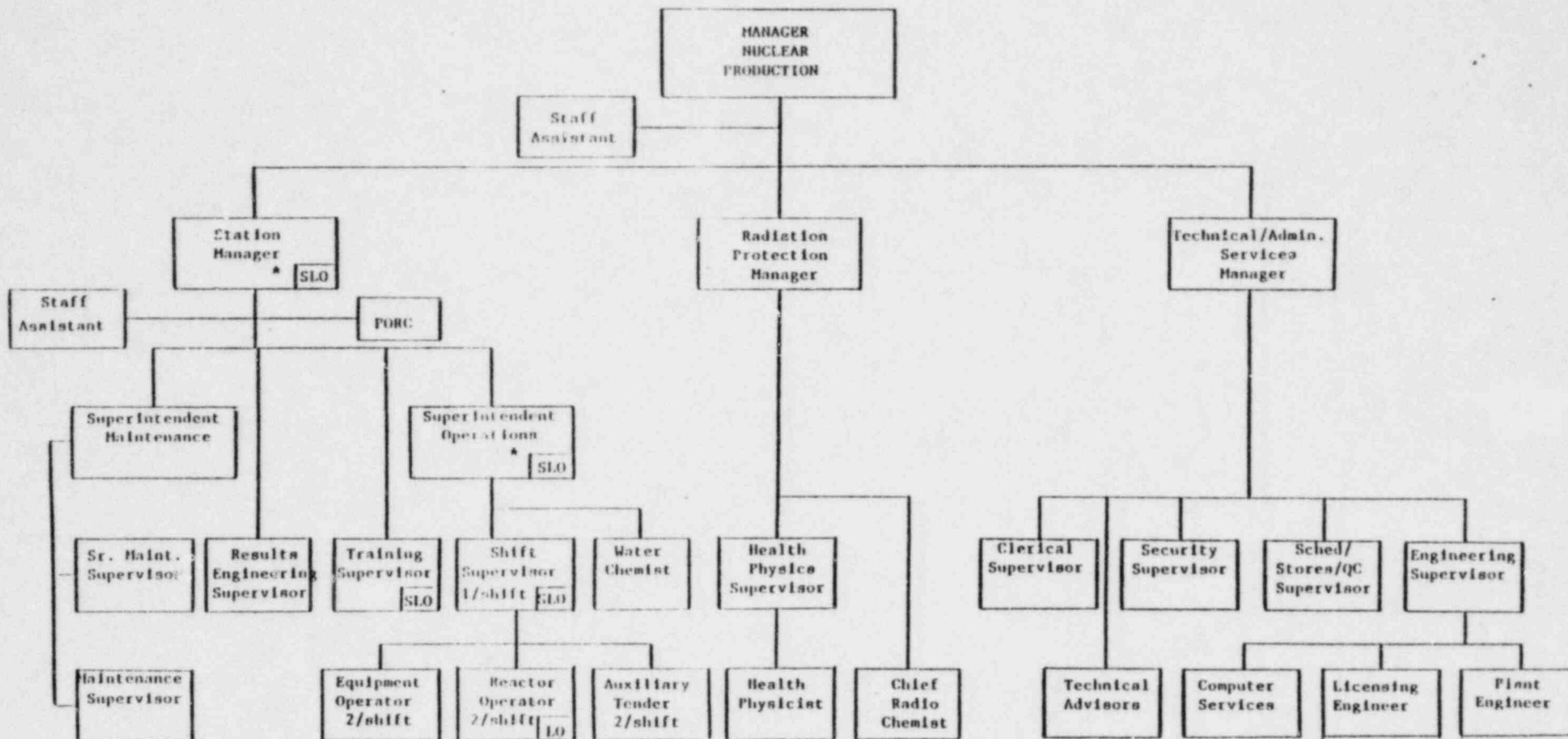


FIGURE 7.1-1

Ft. St. Vrain

Amendment No. 24

FORT ST. VRAIN NUCLEAR GENERATING STATION  
CONDUCT OF OPERATIONS CHART



\* Either the Station Manager or the Superintendent of Operations shall possess a senior license.

FORC - Plant Operations Review Committee  
SLO - Senior Licensed Operator  
LO - Licensed Operator

FIGURE 7.1-2