



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. 69
License No. DPR-34

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Public Service Company of Colorado (the licensee) dated October 14, 1988, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, as amended, 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 license amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.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. 69, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. The license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Jose A. Calvo

Jose A. Calvo, Director
Project Directorate - IV
Division of Reactor Projects - III,
IV, V and Special Projects
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: March 31, 1989

ATTACHMENT TO LICENSE AMENDMENT NO. 69
TO FACILITY OPERATING LICENSE NO. DPR-34
DOCKET NO. 50-267

Replace the following pages of the Appendix A Technical Specifications with the attached pages as indicated. The revised pages are identified by amendment number and contain vertical lines indicating the areas of change.

<u>Remove</u>	<u>Insert</u>
7.1-1	7.1-1
7.1-2	7.1-2
7.1-3	7.1-3
7.1-4	7.1-4
7.1-5	7.1-5
7.1-6	7.1-6
7.1-7	7.1-7
7.1-8	7.1-8
-	7.1-8a
-	7.1-8b
-	7.1-8c
7.1-9	7.1-9
7.1-10	7.1-10
7.1-11	7.1-11
-	7.1-11a
7.1-12	7.1-12
7.1-13	7.1-13
7.1-14	7.1-14
7.1-18	7.1-18
7.1-19	7.1-19
7.1-20	-
7.1-21	-
7.1-22	-
7.1-23	-
7.2-1	7.2-1

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. RESPONSIBILITY

- a. The Manager, Nuclear Production and Station Manager shall be responsible for overall unit operation and shall delegate in writing the succession to this responsibility during his absence.
- b. The Shift Supervisor (or during his absence from the control room and Shift Supervisor's office, a designated individual) shall be responsible for the control room command function. A management directive to this effect, signed by the Senior Vice President, Nuclear Operations shall be reissued to all station personnel on an annual basis.

2. ORGANIZATION

a. Onsite and Offsite Organizations

Onsite and offsite organizations shall be established for unit operation and corporate management, respectively. The onsite and offsite organizations shall include the positions for activities affecting the safety of the nuclear power plant.

(1) Lines of authority, responsibility, and communication shall be established and defined for the highest management levels through intermediate levels, including all operating organization positions. These relationships shall be documented and updated, as appropriate, in the form of organization charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements shall be documented in the FSAR.

(2) The Manager, Nuclear Production and Station Manager shall be responsible for overall unit safe operation and shall have control over those onsite activities necessary for safe operation and maintenance of the plant.

(3) The Senior Vice President, Nuclear Operations shall have corporate responsibility for overall plant nuclear safety and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support to the plant to ensure nuclear safety.

(4) The individuals who train the operating staff and those who carry out health physics and quality assurance functions may report to the appropriate onsite manager; however, they shall have sufficient organizational freedom to ensure their independence from operating pressures.

b. Unit Staff

(1) Each on-duty shift shall be composed of at least the minimum shift crew composition shown in Table 7.1-1.

(2) A licensed operator must be in the control room at all times when fuel is in the reactor.

(3) During shutdown and refueling conditions, an individual (other than the Technical Advisor) with a valid RO (or SRO) license shall be present in the control room. During all other conditions, an individual (other than the Technical Advisor) with a valid SRO license shall be present in the control room.

- (4) During the performance of reactor startup, reactor shutdown, and recovery from reactor trip, two licensed operators must be in the control room.
- (5) 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.
- (6) An operator or technician qualified in radiation protection procedures shall be present at the facility at all times that there is fuel on site.
- (7) A site Fire Brigade of at least five 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.

* 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.

(8) Members of the plant staff who perform safety related functions (e.g., Senior Reactor Operators, Reactor Operators, Auxiliary Operators, Health Physics Technicians, and key maintenance personnel) should, to the extent practicable, work an eight-hour day, 40-hour week, while the plant is operating. In the event that unforeseen problems require substantial amounts of overtime to be used, or during extended periods of shutdown or refueling, major maintenance or major plant modifications, on a temporary basis, the following guidelines shall be followed:

- (a) An individual should not be permitted to work more than 16 hours straight (excluding shift turnover time).
- (b) An individual should not be permitted to work more than 16 hours in any 24-hour period, nor more than 24 hours in any 48-hour period, nor more than 72 hours in any seven-day period (all excluding shift turnover time).
- (c) A break of at least 8 hours should be allowed between work periods (including shift turnover time).

(d) Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on shift.

(9) If unusual circumstances arise requiring deviation from the above guidelines, such deviation shall be authorized by the Manager, Nuclear Production and Station Manager, his designee, or higher levels of management, and with documentation of the basis for granting the deviation. Controls shall be established such that excessive individual overtime hours have not been assigned. The paramount consideration in overtime assignment shall be that significant reductions in the effectiveness of operating personnel would be highly unlikely. Routine deviation from the above guidelines is not authorized.

Authorized deviations to the working hour guidelines shall be documented and available for review by the Nuclear Regulatory Commission.

(10) The Shift Supervisors, and either the Operations Manager or at least one Superintendent of Operations shall hold a Senior Reactor Operator's license. The Reactor Operators shall hold a Reactor Operator's license.

(11) Except for the Shift Supervisor, the Shift Crew Composition may be one less than the minimum requirements of Table 7.1-1 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 7.1-1. 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. This provision also does not exclude the requirement for an SRO licensed individual to be in the control room at all times other than the shutdown conditions specified in Table 7.1-1.

(12) During any absence of the Shift Supervisor from the control room or Shift Supervisor's office while the unit is in Hot, Cold, or Refueling Shutdown, an individual with a valid SRO license or RD license shall be designated to assume the control room command function. During any absence of the Shift Supervisor from the control room or Shift Supervisor's office during all other conditions, an individual (other than the Technical Advisor) with a valid SRO license shall be designated to assume the control room command function.

TABLE 7.1-1
MINIMUM SHIFT CREW COMPOSITION

Position	Number of Individuals Required to Fill Position	
	During Hot, Cold, or Refueling Shutdown (a)	All Other Conditions
SS (SRO)	1	1
SRO	Not Required	1
RO	1	2 (b)
EO	1	1
AT	Not Required	1
TA (c)	1	1

SS - Shift Supervisor with a Senior Reactor Operator's License
 SRO - Individual with a Senior Reactor Operator's License
 RO - Individual with a Reactor Operator's License
 EO - Equipment Operator
 AT - Auxiliary Tender
 TA - Technical Advisor (on 1-hour call)

NOTES

- Per Technical Specification definitions, Section 2.0.
- One of the two Reactor Operators may be an Equipment Operator with a valid RO license provided that the staffing requirement for Equipment Operators is being met by another individual qualified as an Equipment Operator.
- The Technical Advisor shall be scheduled as required by Specification 7.1.1.3.b.(5).

3. TECHNICAL ADVISORS

The function, responsibilities and authority of the Technical Advisors shall be as follows:

a. Function

The Technical Advisors shall function to make objective evaluations of plant conditions and to advise or assist plant management in correcting conditions that may compromise safety of operations.

b. Responsibilities

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 Operations Manager or the Superintendents of Operations,
- (2) Reviewing abnormal and emergency procedures,
- (3) Assisting the operations staff in applying the requirements of the Technical Specifications,
- (4) Providing evaluation of Licensee Event Reports from other plants as assigned, and

(5) Being in the control room within one hour after an emergency call. The Technical Advisors shall work on a normal day work schedule, but will be placed "on call" after normal working hours.

c. Authority

The Technical Advisors shall report to, and be directly responsible to, the Systems Engineering Manager. The Technical Advisors shall maintain independence from normal plant operations to be objective in their evaluations.

4. UNIT STAFF QUALIFICATIONS

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

5. TRAINING

- a. A retraining and replacement training program for the facility staff shall be maintained under the direction of the Nuclear Training Manager and shall meet or exceed the requirements and recommendations of Section 5.5 of ANSI N18.1-1971 and Appendix "A" of 10 CFR 55.
- b. A training program for the Fire Brigade shall be maintained under the direction of the Nuclear Training Manager 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. The Technical Advisors 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. An initial training and retraining program for the Technical Advisors shall be maintained under the direction of the Nuclear Training Manager. 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: Manager, Nuclear Production and Station
Manager
Nuclear Support Manager
Superintendent of Chemistry and Radiation Protection
(Radiation Protection Manager)
Superintendent of Operations
Maintenance Department Manager
Systems Engineering Manager
Superintendent of I&C Maintenance
Operations Manager
Nuclear Training Manager

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 as voting members 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 or his designated alternate.

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), (c), (d) and changes thereto, and any other proposed procedure or changes to approved procedures as determined by the Manager, Nuclear Production and 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 Station Manager and to the Chairman of the Nuclear Facility Safety Committee.
- f. Review of all Reportable Events.
- 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.
- j. Review of the plant Radiological Emergency Response Plan and implementing procedures.

6. Authority

The PORC shall:

- a. Function to advise the Manager, Nuclear Production and Station Manager on all matters that affect nuclear safety.
- b. Recommend to the Manager, Nuclear Production and Station Manager 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 Station Manager, and the Chairman of NFSC of disagreement between the PORC and the Manager, Nuclear Production and Station Manager; however, the Manager, Nuclear Production and 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 Station Manager, 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 collectively have the competence required to review problems in the following areas:

- 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 (As appointed - See Step 4)

Manager, Nuclear Licensing and Resource Management Division

Manager, Nuclear Production and Station Manager

Manager, Nuclear Engineering Division

Manager, Quality Assurance Division

Safety and Security Director

Consultants, as required, shall be appointed in writing by the Senior Vice President, Nuclear Operations.

3. Alternates

Alternate members, if required, shall be appointed in writing by the Senior Vice President, Nuclear Operations; however, no more than two alternate members shall participate as voting members in NFSC activities at any one time.

4. Chairman

The Chairman and Alternate Chairman of the NFSC shall be appointed in writing by the Senior Vice President, Nuclear Operations and shall serve as members of the NFSC.

5. Consultants

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

6. 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.

7. 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.

8. Responsibilities

a. The Nuclear Facility Safety Committee shall review:

- (1) The safety evaluations for safety significant changes to procedures, equipment, or systems

personnel or an outside fire protection firm;

- (b) a biennial audit of the fire protection program and implementing procedures;
 - (c) a triennial fire protection and loss prevention inspection and audit utilizing an outside qualified fire consultant.
- (9) The Offsite Dose Calculation Manual and Process Control Program and implementing procedures at least once per 24 months.
 - (10) The Radiological Environmental Monitoring Program and the results thereof at least once per 12 months.
 - (11) The performance of activities required by the Quality Assurance Program to meet the provisions of Regulatory Guide 1.21 Revision 1, June 1974 and Regulatory Guide 4.1 Revision 1, April 1975, at least once per 12 months.

9. Authority

The NFSC shall report to and advise the Senior Vice President, Nuclear Operations on those areas of responsibility specified in 8.a, 8.b and 8.c above.

10. Records

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

- a. Minutes of each NFSC meeting shall be prepared and forwarded to the Senior Vice President, Nuclear Operations within 30 days following each meeting.

- b. After preliminary approval by the Senior Vice President, Nuclear Operations, the minutes shall be distributed to all NFSC members, and approved at the next NFSC meeting.
- c. Reports of reviews encompassed by Section 8.a, above shall be forwarded to the Senior Vice President, Nuclear Operations, within 30 days following completion of the review.
- d. Audit reports encompassed by Section 8.c, above shall be forwarded to the Senior Vice President, Nuclear Operations, and to the management positions responsible for the areas audited within 30 days after completion of the audit.

7.2 SAFETY LIMITS, ADMINISTRATIVE CONTROLS

Applicability

Applies to the administrative procedures to be followed in the event that a safety limit is exceeded.

Objectives

To define the administrative procedures which will be followed in the event that a safety limit is exceeded.

Specification AC 7.2 - Action to be Taken if a Safety Limit is Exceeded, Administrative Controls

If a safety limit is exceeded, as defined in Specification SL 3.1 and 3.2, the following action shall be taken:

- a. The reactor will be shut down immediately and reactor operations shall not be resumed until approval is received from the NRC.
- b. The safety limit violation shall be reported to the Commission, the Manager, Nuclear Production and Station Manager, and to the Chairman, NFSC immediately.
- c. A Safety Limit Violation Report shall be prepared. The report shall be reviewed by the PORC. 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 Chairman, NFSC and the Manager, Nuclear Production and Station Manager within ten days of the violation.