



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. 79
License No. DPR-34

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment filed by Public Service Company of Colorado (the licensee) dated September 14, 1990 as supplemented October 9, 1990, complies 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 application, as amended, 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 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.

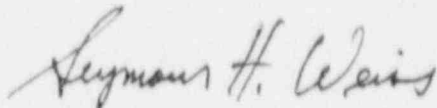
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.D.(2) of Facility Operating License No. DPR-34 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 79, 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



Seymour H. Weiss, Director
Non-Power Reactors, Decommissioning and
Environmental Project Directorate
Division of Advanced Reactors
and Special Projects
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: January 10, 1991

ATTACHMENT TO LICENSE AMENDMENT NO. 79

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. The revised pages are identified by amendment number and contain vertical lines indicating the areas of change.

Remove

6.1-1
6.1-2
6.1-5b

Insert

6.1-1
6.1-2
6.1-5b

6.1 REACTOR CORE - DESIGN FEATURES

Applicability

Applies to the general design features of the reactor core including fuel, moderator, reflector and reactivity control.

Objective

To define the vital design characteristics of the reactor core to control changes in the design features of the fuel, moderator, reflector and reactivity control.

Specification DF 6.1 - Reactor Core, Design Features

The following discussion describes the design features which shall be incorporated in the reactor core:

Reactor Assembly

The reactor core consists of: (1) removable fuel elements which contain the fuel (U & Th), the moderator (graphite) and burnable poison (boron), and (2) radial and axial reflectors which consist of removable reflector elements and permanent blocks which are made of graphite, and in some cases incorporating boron or structural steel. The reactor core assembly, including reflector, has an overall assembly height of about 23.9 feet and a diameter of about 27.3 feet. The approximate weight of the core assembly is 1,348,000 pounds. The preceding description includes the core support graphite blocks.

| The reactor reactivity control in regions containing fuel
| consists of pairs of control rods containing boron carbide,
| which are supplemented by burnable poison (boron) in selected
| fuel elements as required. A reserve shutdown system consisting

| of hoppers of boronated graphite balls is also provided.

| A variable orifice flow-control assembly is located at the inlet
| to each fueled region to provide adjustment of the coolant flow
| through the region.

Active Core

| The active core consists of hexagonal graphite fuel elements
| stacked in vertical columns. The fuel elements form the active
| core which is essentially a right circular cylinder. The active
| core is completely surrounded by a graphite reflector and
| defueling elements. Within the core array, the columns are
| grouped into regions containing seven columns each, except for
| outer corner regions which contain five columns each.

| The center column of each of the fueled regions is a control rod
| column. Each control rod column contains two control rod
| channels and one reserve shutdown absorber material channel.
| Each control rod channel has a diameter of 4.0 inches and the
| two channels have a centerline pitch spacing of 9.7 inches. The
| reserve absorber material shutdown channel has a diameter of
| 3-3/4 inches. The control rod channels are continuous from the
| top face of the top reflector and terminate in the bottom
| reflector at an elevation not greater than 27.0 inches above the
| top face of the core support block. The reserve shutdown
| absorber channel is continuous from the top face of the top
| reflector and terminates in the bottom fuel element at an
| elevation not greater than 47.5 inches above the top face of the
| core support block.

Basis for Specification DF 6.1

The above specifications form the general design bases and criteria for the overall design features of the reactor core which were used to evaluate its general performance. Further details concerning these design features are given in Section III of the FSAR, the Safety Analysis Report for Fort St. Vrain Reload 1 Test Elements FTE-1 through FTE-8, General Atomic Document GLP-5494, June 30, 1977, and the Safety Analysis Report For Reactor Defueling, General Atomics Document GA-C19694.

| With the reactor permanently shutdown, the Control Rod Drive and
| Orifice Assembly (CRDOA) may be permanently removed from regions
| which have been defueled. Defueling elements contain boronated
| graphite lumped poison rods, no fuel, no control rod channels or
| reserve shutdown channels. Regions loaded with defueling
| elements are less reactive than fueled regions whose control
| rods are fully inserted. Therefore, the reactivity control and
| reserve shutdown functions normally performed by the CRDOAs are
| neither utilized nor required in defueled regions. In addition,
| the flow control function of the orifice assembly is no longer
| required in defueled regions since flow through the remaining
| fueled regions will be sufficient following CRDOA removal from
| all defueled regions. The primary closure of the CRDOA is not
| required to be in place or operable at or below 100 psia per LCO
| 4.2.7.