

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of
PUBLIC SERVICE COMPANY OF COLORADO
(Fort St. Vrain)

Docket No. 50-267

EXEMPTION

I

Public Service Company of Colorado (PSC or the licensee) is the holder of Facility Operating License No. DPR-34, which authorizes the possession of the Fort St. Vrain Nuclear Generating Station (FSV or the facility) but does not allow operation at any reactor power level. The license provides, among other things, that it is subject to all rules, regulations, and orders of the Nuclear Regulatory Commission (the Commission or NRC) now or hereafter in effect. The facility consists of a high temperature gas cooled reactor located at the licensee's site in Weld County, Colorado, and is permanently shut down and partially defueled.

II

By letter dated November 9, 1990, PSC requested an exemption concerning 10 CFR 55.45(b) pertaining to the use of a simulation facility and various portions of 10 CFR Part 55, "Operators' Licenses," to the extent that these regulations require a simulation facility to grant or maintain operators' licenses. FSV was permanently shut down on August 18, 1989. Amendment No. 82, converting Facility Operating License No. DPR-34 to a possession only license, was issued May 21, 1991. This license amendment provides, among other things, that FSV is not to be operated at any reactor power level.

III

The licensee's proposed action includes an exemption from 10 CFR 55.45(b), 55.33(a)(2), 55.59(a)(2), and 55.59(c)(3) to the extent that these regulations require the use of a simulation facility in implementing operating tests and on-the-job training. Additionally, the Nuclear Regulatory Commission proposes related action that includes an exemption from 10 CFR 55.59(a)(2), (c)(2), (c)(3), and (c)(4) to the extent that these regulations pertain to granting and maintaining operators' licenses for operating power reactors.

An exemption from 10 CFR Part 55 is proposed because Part 55 delineates the operator training and requalification requirements that the Part 50 licensee must follow in the course of obtaining and maintaining operators' licenses.

The request for an exemption from the requirements for a simulation facility and the requirements for requalification training related to operating power reactors is based on (1) the permanent cessation of power operations at FSV, and (2) the issuance of the possession only license amendment dated May 21, 1991, prohibiting operation of the FSV reactor.

The requirements of 10 CFR Part 55 for a simulation facility are designed for operating power reactors. There are no plant-referenced simulator devices that reflect the current defueled condition of FSV. Likewise, the requalification requirements of 10 CFR 55.59 are designed for the complex operations associated with an operating plant from start-up through full-power operation. With FSV in a partially defueled condition and not authorized to operate, the

facility is in a static condition with little or no change in day-to-day operating activities. The knowledge required of operators in the shutdown condition is far less than that required for an operating facility.

One-third of the spent fuel has been removed from the core and placed in the spent fuel storage wells. Boron poisoned defueling elements (without fuel) have been inserted in locations where fueled elements have been removed. The removal of one-third of the fuel, the additional boron in the defueling elements, and the technical specification restriction on control rod removal adequately protect the reactor from accidental criticality and prevent planned critical operations. Therefore, design basis accidents associated with an operating plant from start-up through full-power operation are no longer credible. Credible accidents for a nuclear facility in the permanently shutdown and partially defueled condition at Fort St. Vrain are all associated with a loss of spent fuel well cooling or with fuel handling. In the partially defueled and permanently shutdown condition, the principal operator activity will be to complete the defueling of the reactor and to monitor the spent fuel storage well to assure the continued safe storage of special nuclear material so that the public health and safety is not compromised. This exemption would enable the licensee to continue to train its operators for their principal activities without using a simulation facility and without expending excessive resources and time training personnel for unrelated power activities. The remaining

requalification training to be accomplished without a simulation facility ensures protection of the public health and safety and is appropriate to the partially defueled condition of the plant.

The NRC staff has determined that requiring a simulation facility at FSV and requiring the licensee to adhere to requalification standards geared to an operating power reactor while FSV is in a partially defueled and permanently shutdown status is not needed to serve the underlying purpose of the regulations. Additionally, it would result in undue hardship to PSC and costs significantly in excess of others similarly situated. Therefore, special circumstances as defined in 10 CFR 50.12(a)(2)(ii) and (iii) exist.

For these reasons, the Commission finds the licensee has provided an acceptable basis to authorize the granting of an exemption in accordance with the provision of 10 CFR 55.11.

IV

Accordingly, the Commission has determined that pursuant to 10 CFR 55.11, this exemption is authorized by law and will not endanger life or property and is otherwise in the public interest. The Commission further determines that special circumstances as provided in 10 CFR 50.12(a)(2)(ii) and (iii) are present to justify the exemption. The referenced special circumstances pertain to exemptions to regulations that do not alter the underlying purpose of the regulations and without which would cause an undue hardship and costs significantly in excess of others similarly situated.


Based on the foregoing, the Commission hereby grants the following exemption:

"The Fort St. Vrain Nuclear Generating Station is exempt from the requirements of 10 CFR 55.45(b), 55.33(a)(2), 55.59(a)(2), and 55.59(c)(3) to the extent that these regulations require the use of a simulation facility. Additionally, the Fort St. Vrain Nuclear Generating Station is exempt from the requirements of 10 CFR 55.59 (a)(2), (c)(2), (c)(3), and (c)(4) only to the extent that these regulations pertain to power operations of operating power reactors."

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of this exemption will have no significant impact on the quality of the human environment (56 FR 60112, November 27, 1991).

This exemption is effective upon issuance.

THE NUCLEAR REGULATORY COMMISSION


Dennis M. Crutchfield, Director
Division of Advanced Reactors
and Special Projects
Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland
this 27th day of November 1991