



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 84 TO POSSESSION ONLY LICENSE NO. DPR-34
PUBLIC SERVICE COMPANY OF COLORADO
FORT ST. VRAIN NUCLEAR GENERATING STATION
DOCKET NO. 50-267

1.0 INTRODUCTION

By letter dated December 24, 1991, as supplemented April 14, 1992, Public Service Company of Colorado (PSC) submitted a request for changes to the Fort St. Vrain Nuclear Generating Station (FSV) Technical Specifications (TSs). The requested changes would revise the license and TS to be consistent with present FSV status. The changes would also allow an additional reduction in TS requirements when all nuclear fuel has been removed from the reactor protected area.

The supplemental submittal withdrew some of the proposed changes, but did not alter the initial determination.

2.0 EVALUATION

FSV was shut down on August 18, 1989, because of control rod failures. The shutdown was made permanent because of a subsequent discovery of degradation of steam generator ring headers. PSC began defueling FSV on November 27, 1989, and completed the removal of one-third of the core (the maximum capacity of the spent fuel storage wells) on February 7, 1990.

PSC submitted a Decommissioning Plan for FSV on November 5, 1990, and a Possession Only license was issued for FSV on May 21, 1991. PSC has now completed transferring all of the spent fuel from the reactor core to its recently completed Independent Spent Fuel Storage Installation (ISFSI). Transfer of the remaining fuel from the spent fuel storage wells to the ISFSI is continuing. The proposed amendment revises License Condition No. 3 to allow the physical security plan, guard training and qualification plan, and the safeguards contingency plan to be terminated following the removal of all spent fuel from the reactor protected area. The proposed amendment also changes the TSs to:

- 1) Revise management titles to reflect current PSC organization;
- 2) Delete requirements that are not necessary after all spent fuel is removed from the reactor and spent fuel storage wells, and transferred to the ISFSI or the DOE Idaho site;

- 3) Delete requirements for Technical Advisors;
- 4) Delete requirement for Monthly Operating Report and
- 5) Add controls for High Radiation Areas.

2.1 Security Plan

The proposed revision to License Condition No. 3 allows the termination of the physical security plan, the guard training and qualifications plan and the safeguards contingency plan after all fuel has been removed from the FSV reactor protected area. The staff has reviewed this proposed amendment and has determined that it is acceptable since without fuel there is no safeguards issue at the FSV reactor and control of persons entering the site becomes an access control matter, not security. Also, 10 CFR Part 73 requires physical security protection only when special nuclear material is present. The access control requirements of 10 CFR Part 20 prevail when there is radioactive material but no fuel is on a site.

2.2 Management Title Changes

All TS references to the Vice President, Nuclear Operations have been replaced with the Vice President responsible for nuclear activities. All references to the Manager Nuclear Production and Station Manager have been replaced with the Defueling and Decommissioning Program Director and Station Manager. All references to Nuclear Training and Support Manager have been replaced with the Facility Support Manager. The plant Operations Review Committee and Nuclear Facility Safety Committee have been changed to reflect these new titles and to add other members with major responsibility in defueling or decommissioning. The changes in titles and committee membership better reflect the present activities at FSV, facilitate the transition into early dismantlement and do not result in any loss in needed expertise or diversification for the committees.

2.3 Delete TS Requirements After All Spent Fuel Is Removed

The proposed TS are written to delete the following requirements after all fuel has been removed from the reactor protected area:

- 1) Licensed reactor operators and senior reactor operators;
- 2) Minimum shift crew composition; and
- 3) Training programs for the Fire Brigade.

2.3.1 Deletion of requirements for reactor operators and senior reactor operators is acceptable and consistent with 10 CFR Part 55 in that an operator license is only required for an individual who manipulates the controls of a

reactor that directly affect its reactivity. With no fuel in the reactor, or at the reactor facility, there is no possibility of any nuclear reaction or criticality and no need for licensed operators. This change is acceptable.

2.3.2 Minimum shift crew composition requirements are not needed after all spent fuel has been removed from the reactor and spent fuel storage wells since these requirements relate only to reactor operation or the safety of spent fuel. Therefore the NRC staff agrees that these requirements can be deleted from the TS.

2.3.3 After all the fuel has been removed, the elimination of the fire brigade and its required training is acceptable. PSC will rely on the offsite Platteville Voluntary Fire Department for primary fire protection. This fire department is trained with fire fighting exercises and orientation tours at FSV. Orientation tours include in-plant electrical and fire fighting systems, plant layout and precautions for radiological and other hazardous materials. With no spent fuel in the reactor protected area there is no possibility of reactor accidents or significant releases of fission products due to a fire. Also, the remaining activated graphite blocks would require a significant source of combustion, that is not present, for a fire in blocks to occur. The Platteville Fire Department is adequately staffed and able to respond to FSV fires with 20 to 25 personnel within about 20 minutes of notification. This change is acceptable.

2.4 Deletion of Requirements for Technical Advisors

The Technical Advisor position is needed during reactor operations, but not when FSV is permanently shut down. There is sufficient time for any plant concerns to be resolved by available staff, such as Operations, Systems Engineering and PSC management personnel. Transfer of spent fuel and component removal operations can be stopped at any time to wait for further analysis and advice. Therefore, the NRC staff has determined that the TS requirements for a Technical Advisor can be deleted.

2.5 Deletion of Requirements for Monthly Operating Report

Since FSV is permanently shut down with all fuel removed from the reactor core, most of the information required by these TSs is not applicable or needed. Also, any useful information now in these reports is available from other sources. Therefore, the NRC staff has determined that this requirement may be deleted.

2.6 Addition of Controls for High Radiation Areas

Requirements are needed for conducting activities in a high radiation area under Radiation Work Permit controls. The addition of such procedures is consistent with 10 CFR 20.203 in that each high radiation area shall be conspicuously posted as a high radiation area. The controlled access to the high radiation area is also consistent with the requirements of 10 CFR Part 20. Therefore, the NRC staff has determined that the TS requirements of controls for high radiation areas may be added.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Colorado State official was notified of the proposed issuance of the amendment. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendment relates to changes in recordkeeping or administrative procedures, and changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure.

The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration (February 5, 1992, 57 FR 4494), and there has been no public comment on such finding. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) and (10). Pursuant to 10 CFR 51.22(b), no environmental statement or environmental assessment need be prepared in connection with the issuance of the amendment.

5. CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

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