



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 78 TO FACILITY OPERATING 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 June 6, 1990 as supplemented by letter dated September 14, 1990, Public Service Company of Colorado (the licensee) requested an amendment to Facility Operating License No. DPR-34 for the Physical Security of the Fort St. Vrain Nuclear Generating Station (FSV). The supplemental letter did not change the original intent of the June 6, 1990 request. The proposed amendment would allow the revision of the Physical Security Plan, Guard Force Training and Qualification Plan, and the Safeguards Contingency Plan. The proposed changes to these plans reflect a reduction in scope to cover only the storage of spent fuel. These changes eliminate certain "Vital Areas" and "Vital Equipment" systems and procedures that are not consistent with the objectives of the revised security programs for storage of spent fuel.

2.0 EVALUATION

The general performance objectives and requirements of 10 CFR 73.55(a) specify that the physical protection program shall provide high assurance that activities involving special nuclear materials are not hazardous to the common defense and security and do not constitute an unreasonable risk to the public health and safety. The revision to the Physical Security Plan, and the Safeguards Contingency Plan for FSV continues to meet these performance objectives based on: (1) FSV being shutdown on August 18, 1989; (2) that on February 7, 1990, one-third of the fuel had been removed from the reactor and stored in the Fuel Element Storage Wells; and (3) the Commission's Confirmatory Order dated May 1, 1990 (55 FR 18995), that modified Facility Operating License No. DPR-34 to prohibit taking the FSV reactor to criticality or operating FSV at any power level.

Boron poisoned defueling elements (without fuel) have been inserted in all locations where fuel has been removed from the reactor. The Technical Specifications (TS) limit the number of control rods that can be unlocked and withdrawn such that the reactor cannot be made critical. The removal of one-third of the fuel combined with the additional boron in defueling elements and the TS restriction on control rod movement prevents accidental criticality and planned critical operations. The current status of the plant reduces the potential for an act of radiological sabotage that could cause a radiological effluent release and radiation doses in excess of 10 CFR Part 100 limits.

The elimination of certain portions of vital areas and vital equipment is based in part on a Defueling Safety Analysis Report (DSAR) which concluded that there is no credible accident which would result in a release of radioactive gaseous or solid fission products which could result in a release to the public in excess of 10 CFR Part 100 limits. Those areas no longer classified as vital contain no equipment required to mitigate the results of an incident associated with spent fuel. The access control requirements and record requirements for vital areas contained in 10 CFR 73.55(d) are being maintained.

The size of the security force is consistent with the objectives of the revised security plan, NUREG-0907, "Acceptance Criteria for Determining Armed Response Force Size at Nuclear Power Plants," and is in accordance with 10 CFR 73.55(h)(3). The number of armed responders remains within acceptable limits and does not reduce the ability to fulfill the response requirements. This level of security is acceptable because fewer areas require responses, the remaining vital areas are concentrated, fewer visitors enter the facility, and fewer alarms can be activated.

No changes were made to the Training and Qualification Plan, Appendix B to the Physical Security Plan. The Safeguards Contingency Plan, Appendix C to the Physical Security Plan was modified to reflect the new operating staff posture of the FSV security organization.

The licensee has retained all the necessary commitments in their proposed security plan to continue meeting the requirements of 10 CFR 73.55, Appendix B and Appendix C as applicable to the Operating License and the storage of spent fuel. These commitments include armed response, protected area security, access authorization program, fitness-for-duty, selected access controls, training requirements and contingency planning.

3.0 FINDING OF NO SIGNIFICANT IMPACT

An Environmental Assessment and Finding of No Significant Impact has been prepared as part of this action. The staff has determined that the proposed action will not have a significant effect on the quality of the human environment. Based on our environmental assessment we have determined that no environmental impact statement need be prepared in connection with the issuance of this amendment. (55FR53216 on December 27, 1990)

4.0 CONCLUSION

The staff 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, and (2) such activities will be conducted in compliance with the Commission's regulations, and 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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Dated: December 31, 1990