



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 138 TO FACILITY OPERATING LICENSE NO. NPF-21
WASHINGTON PUBLIC POWER SUPPLY SYSTEM

NUCLEAR PROJECT NO. 2

DOCKET NO. 50-397

1.0 INTRODUCTION

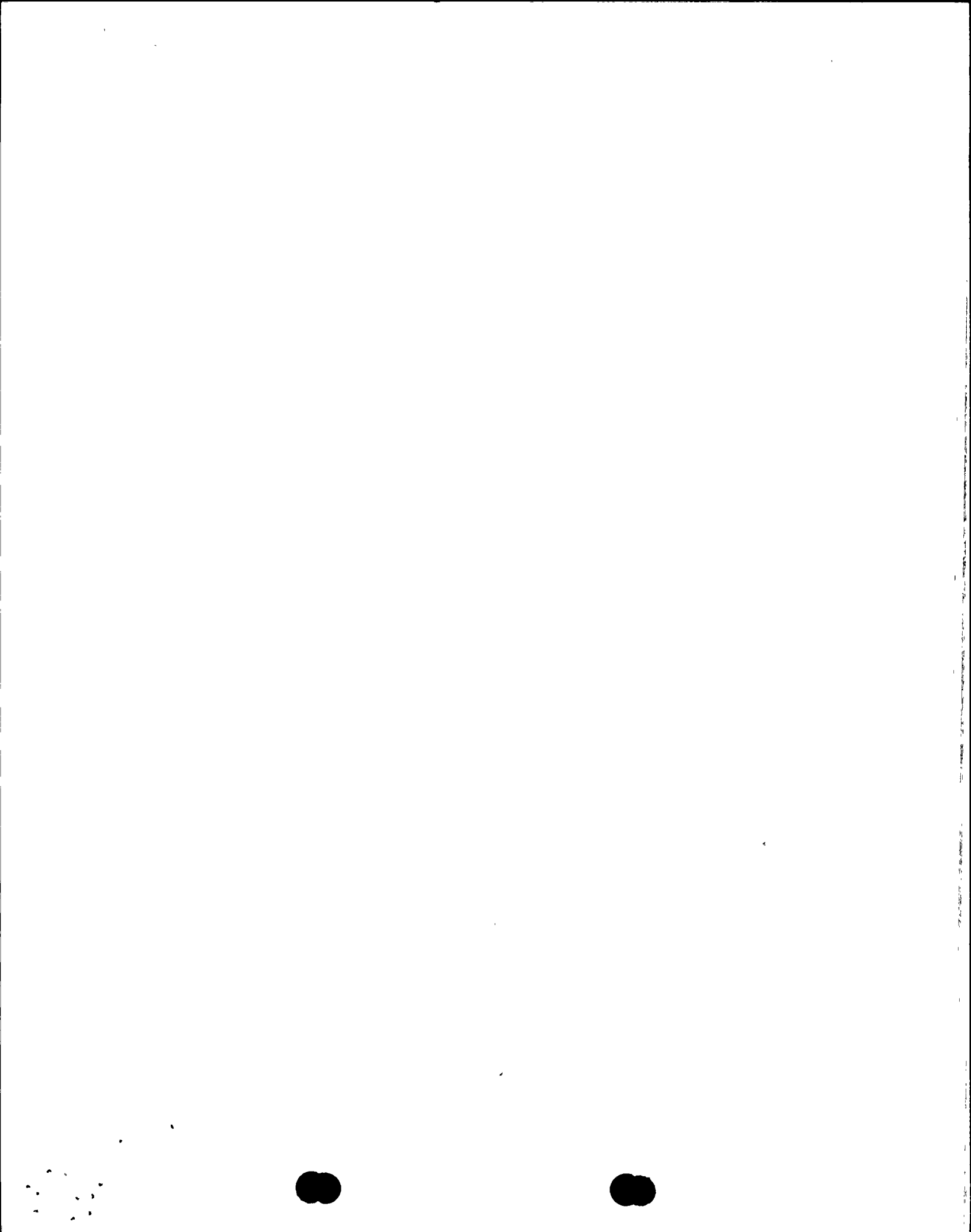
In its letter dated September 2, 1992, the Washington Public Power Supply System (WPPSS or the licensee) proposed that Appendix A of Facility Operating License NPF-21 be amended to revise the WPPSS Nuclear Project No. 2 Technical Specifications (TS). The proposed change would revise Figure 3.1.5-2, "Sodium Pentaborate Tank, Volume Vs. Concentration Requirements," to reflect the actual low-volume-alarm and low-limit values for the standby liquid control (SLC) tank.

2.0 EVALUATION

The SLC system is designed to provide shutdown capability without control rod movement. The SLC system consists of the sodium pentaborate solution storage tank, two pumps, and piping and valves to transfer borated water from the tank to the reactor pressure vessel. Figure 3.1.5-2 provides the limits of solution and volume necessary to ensure that the SLC system is capable of fulfilling the system design function. The current figure indicates a low-level alarm at 4587 gallons, which is also the low limit for the tank volume. The licensee has determined that an alarm at the low limit is not a prudent design, as receiving an alarm at that level would not allow for corrective actions before violating the TS. The level at which the alarm is actually set for is 4682 gallons. Therefore, the licensee proposes to revise the figure to indicate a low-level alarm at 4682 gallons.

Section 50.62 of Title 10 of the Code of Federal Regulations specifies that for anticipated transients without scram mitigation, the SLC system shall have the capability in flowrate, B¹⁰ enrichment, and boron concentration such that, when accounting for reactor pressure vessel volume, an equivalent injection rate of 86 gallons per minute of 13 weight sodium pentaborate decahydrate solution at the natural B¹⁰ enrichment can be attained. Operation within the limits of Figure 3.1.5-2 ensures compliance with these requirements. The revised low-level alarm provides adequate margin to take corrective action before the low-level limit of 4587 gallons is exceeded.

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This change does not affect the operation of the SLC system, but simply revises the TS to be consistent with the current operating practice and design basis. This change is conservative in that the low-level alarm point has been increased. Therefore, the change is acceptable.

3.0 STATE CONSULTATION

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

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to the 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, and there has been no public comment on such finding (59 FR 60388). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

5.0 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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Date: May 17, 1995