



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMENDMENT NO. 43 TO FACILITY OPERATING LICENSE NO. NPF-21  
WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
WPPSS NUCLEAR PROJECT NO. 2  
DOCKET NO. 50-397

1.0 INTRODUCTION

By letter dated January 6, 1987 as clarified by letters dated March 3 and March 12, 1987, the Washington Public Power Supply System proposed certain changes to Section 3/4.1.5, Standby Liquid Control (SLC) system, and referenced Figures 3.1.5-1 and 3.1.5-2 of the Technical Specifications for WNP-2.

2.0 EVALUATION

The Standby Liquid Control system provides a backup capability for bringing the reactor from full power to a cold, Xenon-free shutdown assuming that none of the withdrawn control rods can be inserted. Applicable ATWS regulations require, as set forth in 10 CFR 50.62(c)(4), that the SLC system be capable of injecting at a minimum flow capacity and boron content equivalent in control capacity to 86 gpm of 13 weight percent sodium pentaborate solution. The licensee has proposed that this equivalency be achieved by simultaneous operation of two SLC pumps, each with a capacity of 41.2 gpm, and with sodium pentaborate decahydrate concentration increased to 13.6 weight percent.

Following the modification necessary to permit two pump operation, acceptance testing will be performed to demonstrate the capability to meet a flow rate of not less than 82.4 gpm. Subsequent periodic surveillance will include quarterly single pump flow rate testing and 18 month single loop system functional testing to assure continued SLC system capability.

The proposed changes have been reviewed against the ATWS rule and against Generic Letter 85-03, "Clarification of Equivalent Control Capacity for Standby Liquid Control Systems," dated January 28, 1985. The licensee's proposal to increase sodium pentaborate decahydrate concentration to 13.6 weight percent in conjunction with a flow rate of 82.4 gpm will provide a boron content equivalent in control capacity to 86 gpm of 13 weight percent sodium pentaborate. This is in compliance with 10 CFR 50.62 and is, therefore, acceptable.

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The licensee's plan to test periodically only one LCS system pump at a time instead of both pumps simultaneously is also acceptable. This is based on the licensee's plan to perform initial two-pump tests, correlate single pump data to the initial two-pump data, and then compare the periodic single pump test data to the initial test data for verification of system capability.

### 3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change in the installation and use of a facility component located within the restricted area as defined in 10 CFR Part 20. The staff has determined that this 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 this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this 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 this amendment.

### 4.0 CONTACT WITH STATE OFFICIAL

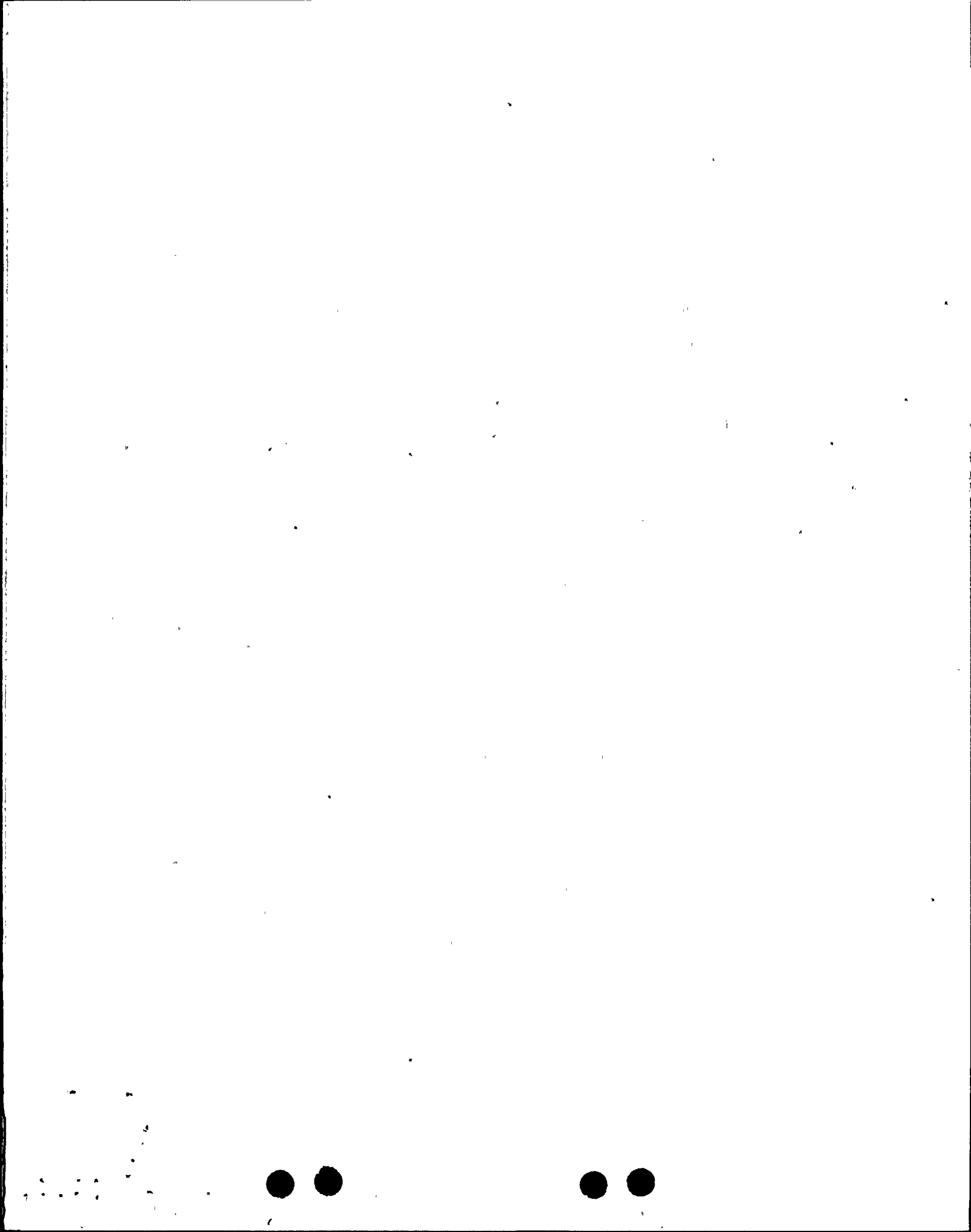
The Commission made a proposed determination that the amendment involves no significant hazards consideration which was published in the Federal Register (52 FR 13351) on April 22, 1987, and consulted with the State of Washington. No public comments were received, and the State of Washington did not have any comment.

### 5.0 CONCLUSION

We have 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 (3) the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: T. Collins, NRR

Dated: May 29, 1987



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