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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO.106 TO FACILITY OPERATING LICENSE NO. NPF-21

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

NUCLEAR PROJECT NO. 2

DOCKET NO. 50-397

1.0 INTRODUCTION

By letter dated December 31, 1990, Washington Public Power Supply System submitted a request for changes to the Technical Specifications (TS) for Nuclear Project No. 2. The proposed changes would modify both the control rod block and reactor protection system instrumentation setpoints and allowable values associated with the scram discharge volume (SDV). This amendment request was supplemented by a letter dated May 20, 1992, to correct a calculational error noted in the bases of the TS being amended.

2.0 EVALUATION

The modifications requested to the SDV setpoints and allowable values associated with the control rod block and reactor protection system instrumentation are an effect of a recent plant modification that resulted in a more accurate assessment of elevation references. New calibration procedures and hardware installation eliminated subtle inaccuracies that previously existed in determining appropriate reference points. Now, the pertinent level switches cannot be calibrated to current Technical Specification setpoints as they have insufficient adjustment spans. The Supply System proposes slightly altering the applicable setpoints and allowable values to allow for satisfactory calibration of the instruments, including reasonable allowances for setpoint drift. The SDV Water Level-High trip setpoint listed in TS Table 2.2.1-1, "Reactor Protection System Instrumentation Setpoints," is approximately 1/2" below the lowest adjustment span of the 4 scram level switches installed on the SDV. These level switches are permanently mounted and taking into account the new reference, the lower to mid-adjustment span allows little room for adjustment. To ensure that the instruments are not set at the low adjustment stops and to permit satisfactory calibration of the instruments, the proposed change increases the current scram setpoint by 1" to 529' 7". The licensee has determined that this results in a 0.8% decrease in the free volume margin above the required 617.9 gallons of free volume required to accommodate a reactor scram.

The same situation exists for the rod block instrumentation setpoints listed in TS Table 3.3.6-2. The SDV Water Level-High trip setpoint is affected by

the same reference level error, and as with the reactor scram level switches, the setpoint needs to be adjusted upwards to permit for adequate calibration of the instruments. Therefore, the facility proposes increasing the setpoint 1" to 527' 3". The licensee has determined that this represents a 0.5% decrease in the previous margin.

Both of these setpoints are conservative relative to the listed allowable values in TS. The facility also proposes increasing the allowable values by 1" to allow for the same margin as currently exists to accommodate setpoint drift. The licensee has determined that these adjustments would decrease the existing margins by 0.8% for the scram function and by 0.5% for the rod block function.

The Supply System noted that the bases for these setpoints provided no method for determining the amount of remaining margin, nor did it state the significance of the various level setpoints relative to the system safety function. Therefore, the licensee proposes modifying TS Bases 2.2.1.8 to provide both elevation and safety margins as appropriate.

The Supply System has evaluated this amendment per 10 CFR 50.92 and determined that it does not represent a significant hazard because it does not:

1) Involve a significant increase in the probability or consequences of an accident previously evaluated because as discussed, the decrease in margin for the trip setpoints and allowable values is insignificant. In both cases it is less than 0.8%. Therefore the probability or consequences of an accident previously evaluated are not significantly increased by these changes.

2) Create the possibility of a new or different kind of accident from any accident previously evaluated because SDV operation, including the Scram and Rod Block functions, remains unaffected. No new modes of operation of any equipment result due to this change. Therefore this change will not result in, nor create, a new of different kind of accident from any accident previously evaluated.

3) Involve a significant reduction in a margin of safety because, as discussed above, the reduction in margins represented by these changes is insignificant, less than 0.8%. Therefore, this change will not involve a significant reduction in the margin of safety.

The staff finds acceptable the Supply System's request of December 31, 1990, as supplemented by its May 20, 1992, letter, to amend the license of WNP-2 for the proposed Technical Specification changes to the reactor scram system and control rod block instrumentation setpoints and allowable values. This determination is based on the minimal effect that the changes have on a margin of safety.

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 (56 FR 37591). 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.

Principal Contributor: William M. Dean

Date: June 15, 1992

Docket No. 50-397

Mr. G. C. Sorensen, Manager
Regulatory Programs
Washington Public Power Supply System
3000 George Washington Way
P. O. Box 968
Richland, Washington 99352

Dear Mr. Sorensen:

SUBJECT: ISSUANCE OF AMENDMENT FOR THE WASHINGTON PUBLIC POWER SUPPLY SYSTEM NUCLEAR PROJECT NO. 2 (TAC NO. M79393)

The Commission has issued the enclosed Amendment No. to the Facility Operating License No. NPF-21 for WPPSS Nuclear Project No. 2. The amendment consists of changes to the Technical Specifications (TS) in response to your application dated December 31, 1990.

The amendment revises Technical Specification (TS) 2.2.1, "Reactor Protection System Instrumentation Setpoints," and its bases, as well as TS 3.3.6, "Control Rod Block Instrumentation," to reflect minor adjustments to protection system instrumentation setpoints associated with the scram discharge volume (SDV).

A copy of the related Safety Evaluation is also enclosed. A notice of issuance will be included in the Commission's next regular biweekly Federal Register notice.

Sincerely,

William M. Dean, Project Manager
Project Directorate V
Division of Reactor Projects III/IV/V
Office of Nuclear Reactor Regulation

Enclosures:
1. Amendment No. to NPF-21
2. Safety Evaluation

cc w/enclosures:
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