September 18, 1997

Mr. J. V. Parrish
Chief Executive Officer
Washington Public Power Supply System
P.O. Box 968 (Mail Drop 1023)
Richland, Washington 99352-0968

SUBJECT: ISSUANCE OF AMENDMENT FOR THE WASHINGTON PUBLIC POWER SUPPLY SYSTEM (WPPSS) NUCLEAR PROJECT NO. 2 (WNP-2) (TAC NO. M99413)

Dear Mr. Parrish:

The Commission has issued the enclosed Amendment No. 152 to 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 August 14, 1997. The amendment revises inservice testing (IST) requirements specified in TS 5.5.6 for the inboard primary containment isolation valve (PCIV) on the transversing in-core probe (TIP) system nitrogen purge line. This amendment application was submitted following an August 12, 1997, licensee request for enforcement discretion which was granted on August 13, 1997, as documented by letter dated August 15, 1997.

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

Sincerely,
Original Signed By
Timothy G. Colburn, Senior Project Manager
Project Directorate IV-2
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Docket No. 50-397

Enclosures: 1. Amendment No. 152 to NPF-2
2. Safety Evaluation

cc w/encls: See next page

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

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cc w/encls: See next page

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

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

DOCKET NO. 50-397

NUCLEAR PROJECT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 152
License No. NPF-21

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by the Washington Public Power Supply System (licensee) dated August 14, 1997, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. NPF-21 is hereby amended to read as follows:

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(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 152 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This amendment is effective as of its date of issuance to be implemented within 30 days of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Timothy G. Colburn

Timothy G. Colburn, Senior Project Manager
Project Directorate IV-2
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: September 18, 1997

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 152 TO FACILITY OPERATING LICENSE NO. NPF-21

DOCKET NO. 50-397

Replace the following pages of the Appendix A Technical Specifications with the enclosed pages. The revised pages are identified by amendment number and contain vertical lines indicating the areas of change.

REMOVE	INSERT
5.0-11	5.0-11
5.0-12	5.0-12

5.5 Programs and Manuals (continued)

5.5.6 Inservice Testing Program

This program provides controls for inservice testing of ASME Code Class 1, 2, and 3 pumps and valves.*

a. Testing Frequencies specified in Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as follows:

ASME Boiler and Pressure Vessel Code and applicable Addenda terminology for inservice testing activities	Required Frequencies for performing inservice testing activities
Weekly	At least once per 7 days
Monthly	At least once per 31 days
Quarterly or every 3 months	At least once per 92 days
Semiannually or every 6 months	At least once per 184 days
Every 9 months	At least once per 276 days
Yearly or annually	At least once per 366 days
Biennially or every 2 years	At least once per 731 days

b. The provisions of SR 3.0.2 are applicable to the above required Frequencies for performing inservice testing activities;

c. The provisions of SR 3.0.3 are applicable to inservice testing activities; and

d. Nothing in the ASME Boiler and Pressure Vessel Code shall be construed to supersede the requirements of any TS.

5.5.7 Ventilation Filter Testing Program (VFTP)

The VFTP shall establish the required testing of Engineered Safety Feature (ESF) filter ventilation systems.

(continued)

* The Inservice Testing Program requirement for full stroke exercise testing at each refueling outage for TIP-V-6 shall not be required for the refueling outage conducted in the Spring, 1997. This exception shall expire upon reaching MODE 4 for a plant shutdown of sufficient duration to allow TIP-V-6 testing, or May 15, 1998, whichever occurs first.

5.5 Programs and Manuals

5.5.7 Ventilation Filter Testing Program (VFTP) (continued)

Tests described in Specification 5.5.7.a and 5.5.7.b shall be performed once per 24 months; after each complete or partial replacement of the HEPA filter train or charcoal adsorber filter; after any structural maintenance on the system housing; and, following significant painting, fire, or chemical release in any ventilation zone communicating with the system while it is in operation.

Tests described in Specification 5.5.7.c shall be performed once per 24 months; after 720 hours of system operation; after any structural maintenance on the system housing; and, following significant painting, fire, or chemical release in any ventilation zone communicating with the system while it is in operation.

Tests described in Specification 5.5.7.d and 5.5.7.e shall be performed once per 24 months.

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the VFTP test Frequencies.

a. Demonstrate for each of the ESF systems that an inplace test of the high efficiency particulate air (HEPA) filters shows a penetration and system bypass < 0.05% when tested in accordance with Regulatory Guide 1.52, Revision 2, and ASME N510-1989 at the system flowrate specified below:

ESF Ventilation System	Flowrate (cfm)
SGT System	4012 to 4902
CREF System	900 to 1100

b. Demonstrate for each of the ESF systems that an inplace test of the charcoal adsorber shows a penetration and system bypass < 0.05% when tested in accordance with Regulatory Guide 1.52, Revision 2, and ASME N510-1989 at the system flowrate specified below:

ESF Ventilation System	Flowrate (cfm)
SGT System	4012 to 4902
CREF System	900 to 1100

(continued)

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 152 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 August 14, 1997, Washington Public Power Supply System (WPPSS or licensee), requested under exigent circumstances an amendment to its Technical Specifications (TS) appended to Facility Operating License No. NPF-21 relating to inservice testing (IST). The proposed amendment would modify the inservice testing (IST) requirements specified in TS 5.5.6 for the inboard primary containment isolation valve (PCIV) on the transversing in-core probe (TIP) system nitrogen purge line (TIP-V-6). A note would be added that would extend the interval requirement to perform the full stroke exercise testing of TIP-V-6 until the 1998 refueling outage, scheduled to begin no later than May 15, 1998, or until a plant shutdown of sufficient duration occurs to allow TIP-V-6 testing, whichever occurs first. The proposed amendment is submitted to resolve a notice of enforcement discretion (NOED) which was issued to the licensee on August 13, 1997, related to the above identified TS surveillance requirements.

2.0 BACKGROUND

The proposed change would extend the interval for the TS required IST full stroke exercise test of PCIV TIP-V-6. The interval would be extended to the next shutdown of sufficient length to conduct the test or until May 15, 1998, whichever occurs first. The test is designed to demonstrate full stroke movement of check valve TIP-V-6 and is required to be performed during each refueling outage. The licensee discovered, following the refueling outage 12 (R12) startup, that during the testing of TIP-V-6, the full stroke exercising to the closed position had not been verified. Performance of this IST test requires containment de-inerting and entry. This test was last performed in June 1996. TIP-V-6 performs the accident mitigation function of the internal containment isolation of the transversing-incore-probe nitrogen purge supply line. The licensee stated during a teleconference to discuss the August 14, 1997, TS request that the nitrogen purge supply line is an approximately 3/8-inch line downstream of TIP-V-6 and approximately 1-1/2 inches between TIP-V-6 and the containment penetration. TIP-V-15 is an automatic PCIV serving as the external isolation for this line.

The TIP nitrogen purge line is designed to provide a continuous nitrogen blanket on TIP components and indexers to prevent high containment humidity from interacting with the lubricants in the TIP indexer lines and creating potential blockage. The blockage could affect the ability of the TIP system

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to perform calibrations of the local power range monitors, ultimately leading to a reactor shutdown. The system is not directly open to containment atmosphere, but is not leak tight, therefore the system is not classified as a closed system for containment penetration and isolation purposes.

3.0 EVALUATION

The licensee stated in its August 14, 1997, submittal that the full stroke exercising requirement of the IST program is to assure freedom of movement of the obturator of the TIP-V-6 valve. The licensee further stated that failure to stroke test TIP-V-6 does not decrease the reliability of the valve. The licensee's review of historical maintenance and test data has shown that the valve has had only one local leak rate test (LLRT) failure (due to debris on the valve seat), which occurred in 1989. The valve has passed all subsequent IST and LLRT tests. The licensee provided trend data to show that the leak rate is well below its administrative limit of 74 sccm (standard cubic centimeters). The good leak history of TIP-V-6 has qualified the valve for a 5-year LLRT interval in accordance with 10 CFR Part 50, Appendix J, Option B. The valve was also disassembled and inspected as part of the check valve reliability program during the 1996 refueling outage and found to be in satisfactory condition.

The licensee also performed a review of the TIP-V-15 (outboard PCIV for the nitrogen purge line) maintenance and IST history and stated there have been no failures since the valve replacement in 1988. The licensee provided LLRT and stroke time test data to demonstrate that they are well under the limits and action alert criteria.

The failure to perform the full stroke test of TIP-V-6 required the licensee to declare the limiting condition for operation for that PCIV not met and enter the action statement of TS 3.6.1.3 which required closing and deactivating TIP-V-15. The licensee could not perform the surveillance within the allowed 24 hours (per SR 3.0.3) of discovery of the missed surveillance because of the need to de-inert and enter containment in order to perform the surveillance.

A note to TS 3.6.1.3 states that penetration flow paths may be unisolated intermittently under administrative controls. The staff questioned the licensee during the August 13, 1997, teleconference to discuss the related NOED to determine if this provision would provide sufficient relief to the licensee to maintain the TIP system free of moisture and humidity which could interact with the lubricants and cause blockage. The licensee stated that it could not show that operation in this manner would not have a detrimental effect on the TIP system.

The NRC staff has determined, that unisolating the TIP nitrogen purge containment penetration does not constitute any adverse safety consequences. The small size of the line and good maintenance and leak testing history of the TIP-V-6 check valve and TIP-V-15 automatic isolation valve were considered. Other licensees routinely operate for 18-24 months between surveillances of this valve without adverse consequences. The WNP-2 interval

between surveillance would not exceed the maximum time allowed for plants with a 24-month refueling cycle. Additionally, the licensee's commitment to perform the surveillance on TIP-V-6 at the next plant shutdown of sufficient duration has been incorporated into the proposed TS change which may minimize the duration that the valve will not have been tested. Therefore, the proposed TS change is approved.

4.0 EXIGENT CIRCUMSTANCES

In its August 14, 1997, application, the licensee described the exigent circumstances associated with this license amendment request. The licensee stated:

> Approval of the proposed amendment on an exigent basis is warranted due to the 45 day enforcement discretion period ending on September 27, 1997 and due to the potential system degradation associated with isolating the nitrogen purge line to the TIP system for the duration of the current operating cycle.

The licensee, as stated earlier, could not determine that operation with intermittent opening of the purge line under administrative controls, as allowed by TS 3.6.1.3, would not have a detrimental effect on the TIP system. Additionally, the staff noted that the NRC enforcement policy contained in NUREG-1600, "General Statement of Policy and Procedures for NRC Enforcement Actions," dated July 1995, states that the issuance of enforcement discretion would be for the brief period of time necessary to process an emergency or exigent Technical Specification change. As this Technical Specification change was related to the August 13, 1997, enforcement discretion requested by the licensee, the staff determined that this amendment was further justified as meeting exigent circumstances in accordance with the Policy Statement.

5.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The Commission has made a final determination that the amendment involves no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92(c), this means that operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

The staff has evaluated the proposed changes against the above standards as required by 10 CFR 50.91(a) and has concluded that:

1. The proposed change does not involve a significant increase in the probability or consequences of any accident previously evaluated.

   The purpose of the proposed license amendment is to extend the full stroke testing requirement interval for TIP-V-6 to the next shutdown of sufficient duration to complete the testing. The test

requirement assures the freedom of movement of the obturator of the check valve. The probability of occurrence of an evaluated accident is not increased because extending the testing interval does not create a new precursor or effect an existing precursor to any design basis accident. The consequences of an evaluated accident are not significantly increased because of the reliable performance history of TIP-V-6 and an operable TIP-V-15. The ability of TIP-V-6 to provide containment isolation is maintained. Therefore, the proposed amendment request does not significantly increase the probability or consequences of an accident previously evaluated.

2. The proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

   The technical specification amendment would not create a new or different kind of accident because it does not involve modification of the plant configuration, result in any physical change to TIP-V-6, or its operation. As a result, no new failure modes are introduced. Therefore, no new or different kinds of accidents are created.

3. The proposed change does not involve a significant reduction in a margin of safety.

   The safety function of TIP-V-6 is to close to isolate the primary containment under accident conditions. The extension of this testing interval for TIP-V-6 will not decrease the reliability of the valve. The performance of TIP-V-6, as demonstrated through testing and inspection, has been good. However, should the check valve fail to close to isolate the purge line, the external automatic isolation valve (TIP-V-15) would provide the required containment penetration isolation. Plant and system response to an initiating event will remain unchanged. Therefore, the proposed change does not involve a significant reduction in the margin of safety.

Accordingly, the Commission has determined that this amendment involves no significant hazards consideration.

6.0 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.

7.0 ENVIRONMENTAL CONSIDERATION

This amendment changes surveillance requirements. 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 (62 FR 45280). 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.

8.0 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: T. Colburn

Date: September 18, 1997