May 5, 1988

Docket No.: 50-397

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

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Dear Mr. Sorensen:

SUBJECT: ISSUANCE OF AMENDMENT NO. 56 TO FACILITY OPERATING LICENSE NPF-21 - WPPSS NUCLEAR PROJECT NO. 2 (TAC NO. 67181)

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment to the Washington Public Power Supply System for WPPSS Nuclear Project No. 2, located in Benton County near Richland, Washington. This amendment, in response to your letter dated February 5, 1988 (GO2-88-034), revises the WNP-2 Technical Specification 3/4.6.1.8 "Drywell and Suppression Chamber Purge System." This revision allows up to a total of 100 hours of purging in the 365 day period which ended on April 10, 1988. The amendment was authorized on an emergency basis as documented by letter to you dated February 10, 1988.

A copy of the related safety evaluation supporting this amendment is enclosed. Notice of Issuance will be included in the Commission's bi-weekly Federal Register notice.

Sincerely,

/S/

Robert B. Samworth, Senior Project Manager
Project Directorate V
Division of Reactor Projects - III,
IV, V and Special Projects
Office of Nuclear Reactor Regulation

Enclosures:
1. Amendment No.56 to Facility Operating License No. NPF-21
2. Safety Evaluation

cc: w/enclosures
See next page

*See previous concurrence

DRSP/PDV	*DRSP/PDV	*NRR/SPLB	*OGC	DRSP/PDV
JLee	RBSamworth:dr	JCraig	SLewis	GWKnighton
04/ /88	03/16/88	03/18/88	04/25/88	05/5/88

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

May 6, 1988

Docket No.: 50-397

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

Dear Mr. Sorensen:

SUBJECT: ISSUANCE OF AMENDMENT NO. 56 TO FACILITY OPERATING LICENSE NPF-21 - WPPSS NUCLEAR PROJECT NO. 2 (TAC NO. 67082)

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment to the Washington Public Power Supply System for WPPSS Nuclear Project No. 2, located in Benton County near Richland, Washington. This amendment, in response to your letter dated February 5, 1988 (G02-88-034), revises the WNP-2 Technical Specification 3/4.6.1.8 "Drywell and Suppression Chamber Purge System." This revision allows up to a total of 100 hours of purging in the 365 day period which ended on April 10, 1988. The amendment was authorized on an emergency basis as documented by letter to you dated February 10, 1988.

A copy of the related safety evaluation supporting this amendment is enclosed. Notice of Issuance will be included in the Commission's bi-weekly Federal Register notice.

Sincerely,

Robert B. Samworth

Robert B. Samworth, Senior Project Manager
Project Directorate V
Division of Reactor Projects - III,
IV, V and Special Projects
Office of Nuclear Reactor Regulation

Enclosures:
1. Amendment No. 56 to Facility Operating License No. NPF-21
2. Safety Evaluation

cc: w/enclosures
See next page

Mr. G. C. Sorensen, Manager
Washington Public Power Supply System

WPPSS Nuclear Project No. 2
(WNP-2)

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

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

DOCKET NO. 50-397

WPPSS NUCLEAR PROJECT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 56
License No. DPR-21

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

   A. The application for amendment by Washington Public Power Supply System (the Supply System, also the licensee), dated February 5, 1988 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 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 set forth in 10 CFR Chapter I;

   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. DPR-21 is hereby amended to read as follows:

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(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 56, 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 license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

George W. Knighton, Director
Project Directorate V
Division of Reactor Projects - III,
IV, V and Special Projects

Attachment:
Changes to the Technical
Specifications

Date of Issuance: May 5, 1988

May 5, 1988

ENCLOSURE TO LICENSE AMENDMENT NO. 56

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 a vertical line indicating the area of change.

REMOVE	INSERT
3/4 6-11	3/4 6-11
3/4 6-12	3/4 6-12

DRYWELL AND SUPPRESSION CHAMBER PURGE SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.1.8 The drywell and suppression chamber purge system may be in operation with the drywell and/or suppression chamber purge supply and exhaust butterfly isolation valves open for inerting, deinerting, or pressure control, provided that each butterfly valve is blocked so as not to open more than 70°. PURGING through the Standby Gas Treatment System shall be restricted to less than or equal to 90 hours per 365 days (SEE NOTE 1).

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

ACTION:

a. With a drywell and/or suppression chamber purge supply and/or exhaust butterfly isolation valve open for other than inerting, deinerting, or pressure control, or not blocked to less than or equal to 70° open, close the butterfly valve(s) within 1 hour or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

b. With a drywell and suppression chamber purge supply and/or exhaust isolation valve(s) with resilient material seals having a measured leakage rate exceeding the limit of Surveillance Requirement 4.6.1.8.2, restore the inoperable valve(s) to OPERABLE status within 24 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.8.1 When being opened, the drywell and suppression chamber purge supply and exhaust butterfly isolation valves shall be verified to be blocked so as to open to less than or equal to 70° open, unless so verified within the previous 31 days.

4.6.1.8.2 At least once per 6 months, on a STAGGERED TEST BASIS, each 24- and 30-inch drywell and suppression chamber purge supply and exhaust isolation valve with resilient material shall be demonstrated OPERABLE by verifying that the measured leakage is:

a. Less than or equal to 0.05 L_a per valve test or,

b. Greater than 4.6.1.8.2.a. provided that: 1) the valves are secured closed and maintenance performed at the next plant cold shutdown to reduce the leakage to within 4.6.1.8.2.a; 2) the leakage added to the previously determined total for all valves and penetrations subject to Type B and C tests per LCO 3/4.6.1.2 shall be less than 0.6 L_a,

c. In the event the valves are to be operated, and 4.6.1.8.2.a. has been exceeded, a leakage test must be performed within 24 hours following operation, to ensure compliance with 0.6 L_a.

SURVEILLANCE REQUIREMENTS (Continued)

4.6.1.8.3 The cumulative time that the drywell and suppression chamber purge system has been in operation PURGING through the Standby Gas Treatment System shall be verified to be less than or equal to 90 hours per 365 days prior to use in this mode of operation (SEE NOTE 1).

NOTE 1: For the period of time ending April 10, 1988 this value shall be 100 hours per 365 days.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 56 TO FACILITY OPERATING LICENSEE NO. NPF-21

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

WASHINGTON NUCLEAR PROJECT NO. 2

DOCKET NO. 50-397

1.0 INTRODUCTION

By letter dated February 5, 1988, the Washington Public Power Supply System (licensee) requested, on an emergency basis, an amendment to the Technical Specifications for Washington Nuclear Project No. 2 (WNP-2). Specifically, the Supply System requested that the limit for purging of the containment through the Standby Gas Treatment System be increased from 90 hours to 100 hours.

The Limiting Condition for Operation in Technical Specification 3.6.1.8 requires that purging through the Standby Gas Treatment System shall be restricted to less than or equal to 90 hours per 365 days (while in Operational Conditions 1, 2 and 3).

On February 4, 1988, a shutdown occurred providing an opportunity to identify and fix leakage within the drywell. Prior to the February 4 shutdown and leakage repair activities, 70 hours of purging had been accumulated. At that time it was felt that the 90 hours would not be exceeded. However, to allow drywell access for identification and repair of leakage, approximately 16 additional hours of purging were performed increasing the total to date to 86 hours.

Since the leakage was felt to be a steam leak a decision was made to remain in hot shutdown to provide a higher pressure to more readily identify the leakage. Additionally remaining in hot shutdown avoided an additional thermal cycle on the vessel. The decision to stay in hot shutdown resulted in accumulating more purge hours during the maintenance activities than would have been accumulated had the activities been accomplished in cold shutdown.

As a result, 86 hours have been accumulated for the current period and there is certainty that the 90 hour limit will be exceeded. Present plans include a drywell entry at higher pressures to ensure that the steam leak repair has been adequate. In order to ensure personnel safety during this follow-up entry, purging will again be required and the 90 hour limit challenged. The reinerting prior to power operation will require four hours. Furthermore, the purge system is used approximately two hours per month while the unit is at power to control containment oxygen. Additionally about 5 to 7 hours of purging will be required to bring the unit to cold shutdown if necessary again. For those reasons it was requested that the LCO be changed to allow 100 hours of purging during the current period. This request is submitted for the current period only. It is not to be permanent.

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The licensee requested that this change be made on an emergency basis, arguing that the need for additional purging could not have been foreseen and that denial of the request would result in hardship.

The licensee closely monitors the total hours purged and had recently, prior to the shutdown, made a determination that the remaining 20 hours (90-70) would be sufficient. The drywell leakage increase and prudent action to repair it during the shutdown could not be anticipated, hence the 20 hour margin is no longer sufficient. The licensee had no way of anticipating the increased drywell leakage necessitating extended drywell entries in hot shutdown hence the submittal of this request under emergency circumstances.

The licensee advised that absent this request undue hardship in plant maneuvering limits would be encountered. Greater restrictions in power operation would be imposed. Cold shutdown would be required to be entered prior to any purging activities thereby causing plant shutdown more frequently and sooner than would normally occur and increased unnecessary thermal cycles. This, the licensee contends, would constitute an effective derating over the remainder of the operating period.

Oral authorization for the requested change was given on February 5, 1988 and confirmed by letter from NRC on February 10, 1988.

2.0 EVALUATION

The basis for the inclusion of the limits on use of the purging system is to reduce the likelihood that the system would be open at the time of a LOCA since the supply and exhaust isolation valves have not been demonstrated capable of closing during a LOCA or steam line break accident. The Standard Review Plan (SRP) 6.2.4 and Branch Technical Position CSB 6-4 recognized and made allowances for the potential need for intermittent purging at facilities not having qualified valves on the purging system. Purging for 90 hours per year, which is approximately one percent of the time, while the plant is in the startup, power, hot standby, and hot shutdown modes of operation is accepted in the SRP in lieu of specified analyses to justify the containment purge system design.

The licensee's request for an amendment would allow a total of 14 hours of venting and purging for the 62 days which remained in the current time period at the time the amendment application was filed. This is equivalent to about 1% of the remaining time. Therefore, the probability of the LOCA event occurring simultaneously with venting and purging remains the same and the basis for accepting intermittent venting and purging is met.

The staff, therefore, finds there is no reduction in safety resulting from this change for the current time period and the change is acceptable.

3.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The Commission has provided standards for determining whether a significant hazards consideration exists as stated in 10 CFR 50.92. A proposed amendment to an operating license for a facility involves no significant hazards consideration if operation of the facility in accordance with a proposed amendment would not: (1) Involve a significant increase in the probability or consequences of an accident previously evaluated; (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.

A discussion of these standards as they relate to the amendment request follows:

Standard 1 - Involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated. No physical changes are being made to the plant. Primary containment integrity is maintained by the operable isolation function of the valves and is not affected by this amendment. The probability of the postulated accident (a LOCA while purging through Standby Gas Treatment) occurring during the time period that these additional ten (10) hours are granted for is slightly less than the probability implicit in the current Technical Specification purging frequency rate. The specified rate is 90 hours in 365 days which equates to 15 hours for the remaining 62 days before the clock is reset on April 10, 1988. The additional 10 hours plus the remaining 4 hours would provide a total of 14 hours of venting and purging during this 62 day period. Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

Standard 2 - Create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed amendment will not create the possibility of a new or different kind of accident from any accident previously evaluated because the proposed amendment does not authorize any physical changes to the facility, nor any changes to station operating procedures. No other relief from constraints on venting and purging is granted by this amendment. Therefore, this amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated.

Standard 3 - Involve a significant reduction in a margin of safety.

The requested amendment does not involve a significant reduction in a margin of safety because the proposed change does not affect the design basis of the plant. Adherence to the same relative rate of purging (1%) during the remainder of the current time period will maintain the margin of safety at the same level.

The staff, therefore, concludes that operation of the facility in accordance with the proposed change does not represent a significant hazards consideration.

4.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change in the installation or 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. As found in paragraph 3, this amendment involves no significant hazards consideration. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Part 51.22(c)(9). Pursuant to 10 CFR Part 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

5.0 CONTACT WITH STATE OFFICIAL

The State of Washington's Energy Facility Site Evaluation Council advised by letter dated February 25, 1988 that they had no comment on the proposed amendment.

6.0 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, (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: R. Samworth, NRR

Dated: May 5, 1988