

August 9, 1991

Docket No. 50-397

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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 NO. 93 TO FACILITY OPERATING LICENSE
 NO. NPF-21 FOR THE WPPSS NUCLEAR PROJECT NO. 2 (TAC NO. 77923)

The Commission has issued the enclosed Amendment No. 93 to the Facility Operating License for the WPPSS Nuclear Project No. 2. The amendment consists of changes to the Technical Specifications (TS) in response to your application dated October 4, 1990 (G02-90-168).

The amendment revises the technical specification action statement 3.3.4.1.b to acknowledge a modification to the anticipated transient without scram (ATWS) recirculation pump trip (RPT) logic circuit by (1) providing that pump trip logic channels determined to be inoperable be placed in the tripped condition; (2) requiring that with the number of operable channels per trip function less than the minimum allowed, the remaining channels be verified operable within 1 hour; (3) reducing the time from 8 hours to 6 hours allowed for power operation with less than the minimum number of operable channels; and (4) revising the minimum number of ATWS RPT channels from 1 to 2 per trip function required to be operable.

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,

ORIGINAL SIGNED BY

Patricia L. Eng, Project Manager
 Project Directorate V
 Division of Reactor Projects III/IV/V
 Office of Nuclear Reactor Regulation

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Enclosures:

- Amendment No.93 to NPF-21
- Safety Evaluation

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cc w/enclosures:
 See next page

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NAME	: RCesaro	: PEng	: SNewberry	: JDyer	: S. Utter	:
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Sincerely,

ORIGINAL SIGNED BY

Patricia L. Eng, Project Manager
 Project Directorate V
 Division of Reactor Projects III/IV/V
 Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No.93 to NPF-21
2. Safety Evaluation

cc w/enclosures:
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OFC	: LA/PD5/DRPW	: PM/PD5/DRPW	: NRR/SICB	: D/PD5/DRPW	: OGC SW	:
NAME	: RCesaro	: PEng/sg	: SNewberry	: JDyer	: S. Utter	:
DATE	: 7/8/91	: 7/9/91	: 7/23/91	: 8/9/91	: 7/13/91	:

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

August 9, 1991

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

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Sincerely,

A handwritten signature in cursive script, appearing to read "Patricia L. Eng".

Patricia L. Eng, Project Manager
Project Directorate V
Division of Reactor Projects III/IV/V
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No.93 to NPF-21
2. Safety Evaluation

cc w/enclosures:
See next page

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

WPPSS Nuclear Project No. 2
(WNP-2)

cc:

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

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

DOCKET NO. 50-397

NUCLEAR PROJECT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 93
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 (licensees) dated October 4, 1990, 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:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 93 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 the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



James E. Dyer, Director
Project Directorate V
Division of Reactor Projects III/IV/V
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: August 9, 1991

ATTACHMENT TO LICENSE AMENDMENT NO. 93

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. The corresponding overleaf pages are also provided to maintain document completeness.

Remove Pages

3/4 3-37

3/4 3-38

Insert Pages

3/4 3-37

3/4 3-38

INSTRUMENTATION

3/4.3.4 RECIRCULATION PUMP TRIP ACTUATION INSTRUMENTATION

ATWS RECIRCULATION PUMP TRIP SYSTEM INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.4.1 The anticipated transient without scram recirculation pump trip (ATWS-RPT) system instrumentation channels shown in Table 3.3.4.1-1 shall be OPERABLE with their trip setpoints set consistent with values shown in the Trip Setpoint column of Table 3.3.4.1-2.

APPLICABILITY: OPERATIONAL CONDITION 1.

ACTION:

- a. With an ATWS-RPT system instrumentation channel trip setpoint less conservative than the value shown in the Allowable Values column of Table 3.3.4.1-2, declare the channel inoperable until the channel is restored to OPERABLE status with the channel trip setpoint adjusted consistent with the Trip Setpoint value.
- b. With the number of OPERABLE channels per Trip Function less than required by the Minimum OPERABLE Channels per Trip System requirement verify operability of one trip system within one hour and, restore the inoperable channel(s) to OPERABLE status or place the inoperable channel(s) in the tripped condition* within 14 days. Otherwise be in at least STARTUP within the next 6 hours.

SURVEILLANCE REQUIREMENTS

4.3.4.1.1. Each ATWS-RPT system instrumentation channel shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL FUNCTIONAL TEST and CHANNEL CALIBRATION operations at the frequencies shown in Table 4.3.4.1-1.

4.3.4.1.2 LOGIC SYSTEM FUNCTIONAL TESTS and simulated automatic operation of all channels shall be performed at least once per 18 months.

*Only applicable if placing the inoperable channel(s) in trip would not result in a recirculation pump trip.

TABLE 3.3.4.1-1

ATWS RECIRCULATION PUMP TRIP SYSTEM INSTRUMENTATION

<u>TRIP FUNCTION</u>	<u>MINIMUM OPERABLE CHANNELS PER TRIP SYSTEM(a)</u>
1. Reactor Vessel Water Level - Low Low, Level 2	2
2. Reactor Vessel Pressure - High	2

(a) One channel may be placed in an inoperable status for up to 2 hours for required surveillance provided the other channel is OPERABLE.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 93 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 October 4, 1990, Washington Public Power Supply System proposed certain changes to the Technical Specifications for Nuclear Project No. 2 (WNP-2). These changes were to accommodate new design features implemented during 1990 in compliance with the ATWS Rule (10 CFR 50.62). Four changes are proposed to the TS Section 3/4.3.4 RECIRCULATION PUMP TRIP ACTUATION INSTRUMENTATION.

1. Action statement b is clarified to recognize the design change to allow channels to be placed in the trip condition without causing an ATWS-RPT actuation.
2. An additional action is required to verify that one trip system is operable within 1 hour when one or more channels are inoperable.
3. The completion time for reaching Mode 2 is reduced from 8 hours to 6 hours.
4. The "Minimum Operable Channels Per Trip System" is revised in Table 3.3.4.1-1 from 1 to 2.

2.0 EVALUATION

In the NRC's safety evaluation report on WNP-2 compliance with ATWS rule, the staff requested that the plant Technical Specification on "ATWS Recirculation Pump Trip System Instrumentation" be changed to reflect the design modification. The modified system uses coincident logic to trip both recirculation pumps and both recirculation pump Low Frequency Motor Generator (LFMG) sets during an ATWS event. Channel A low vessel water level or high vessel pressure coincident with Channel C low vessel water level or high vessel pressure will trip the recirculation pump breaker A and LFMG-A. Channel B low vessel water level or high vessel pressure coincident with Channel D low vessel water level or high vessel pressure will trip the recirculation pump breaker B and LFMG-B. The proposed TS change recognizes that, in the modified design, a channel can be placed in the trip condition without causing an ATWS Recirculation Pump Trip actuation. Action statement b states that, "with the number of OPERABLE channel per trip function less than required by the minimum OPERABLE channels per trip system requirement, verify operability of one trip system within one hour and restore the inoperable channel(s) to OPERABLE status or place the inoperable channel(s) in the tripped condition * within 14 days. Otherwise be in at least STARTUP with the next 6 hours."

* Only applicable if placing the inoperable channel(s) in trip would not result in a recirculation pump trip.

On Table 3.3.4.1-1 "ATWS RECIRCULATION PUMP TRIP SYSTEM INSTRUMENTATION," the "MINIMUM OPERABLE CHANNELS PER TRIP SYSTEM" will be revised from "1" to "2" to reflect the modified design.

The staff finds that with the one-out-of-two-twice logic, tripping a channel will satisfy half of the logic and a valid signal on one of the other two channels will cause a recirculation pump trip. Therefore, placing an inoperable channel in the tripped condition will not inhibit an ATWS-RPT should an ATWS event occur.

In conclusion, the staff finds that the proposed TS changes to the WNP-2 TS Section 3/4.3.4 "RECIRCULATION PUMP TRIP ACTUATION INSTRUMENTATION" are consistent with the modified design which enhances the system's ability to respond to and mitigate the consequences of an ATWS event.

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. 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: H. Li

Date: August 9, 1991