

February 22, 1989

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. 65 TO FACILITY OPERATING LICENSE  
NO. NPF-21 - WPPSS NUCLEAR PROJECT NO. 2 (TAC NO. 66809)

The U.S. Nuclear Regulatory Commission has issued the enclosed amendment to Facility Operating License NPF-21 to the Washington Public Power Supply System for WPPSS Nuclear Project No. 2, located in Benton County near Richland, Washington. This amendment is in response to your letter dated

This amendment revises the statement of the number of channels per trip system for main steam line flow, main steam line tunnel temperature, and temperature gradient in Technical Specification Table 3.3.2-1, "Isolation Actuation Instrumentation."

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

Sincerely,

original signed by

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. 65 to Facility Operating License No. NPF-21
2. Safety Evaluation

cc: w/enclosures  
See next page  
\*See previous concurrence

DRSP/PD5  
JLee\*:rw  
02/14/89

DRSP/APM:PD5  
RSamworth\*  
02/08/89

OGC  
RBachmann\*  
02/15/89

DRSP/PD5  
GWKnighton  
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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

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Sincerely,

A handwritten signature in cursive script that reads "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. 65 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)

cc:

Nicholas S. Reynolds, Esq.  
Bishop, Cook, Purcell  
& Reynolds  
1400 L Street NW  
Washington, D.C. 20005-3502

Regional Administrator, Region V  
U.S. Nuclear Regulatory Commission  
1450 Maria Lane, Suite 210  
Walnut Creek, California 94596

Mr. G. E. Doupe, Esquire  
Washington Public Power Supply System  
P. O. Box 968  
3000 George Washington Way  
Richland, Washington 99532

Chairman  
Benton County Board of Commissioners  
Prosser, Washington 99350

Mr. Curtis Eschels, Chairman  
Energy Facility Site Evaluation Council  
Mail Stop PY-11  
Olympia, Washington 98504

Mr. Alan G. Hosler, Licensing Manager  
Washington Public Power Supply System  
P. O. Box 968, MD 956B  
Richland, Washington 99352

Mr. A. Lee Oxsen  
Assistant Managing Director for Operations  
Washington Public Power Supply System  
P. O. Box 968, MD 1023  
Richland, WA 99352

Mr. Gary D. Bouchey, Director  
Licensing and Assurance  
Washington Public Power Supply System  
P. O. Box 968, MD 280  
Richland, Washington 99352

Mr. C. M. Powers  
WNP-2 Plant Manager  
Washington Public Power Supply System  
P. O. Box MD 927M  
Richland, Washington 99352



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. 65  
License No. NPF-21

1. The Nuclear Regulatory Commission (the Commission or the NRC) has found that:
  - A. The application for amendment filed by the Washington Public Power Supply System (the licensee), dated November 19, 1987 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.

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F PIC

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. 65, 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

  
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: February 22, 1989

ENCLOSURE TO LICENSE AMENDMENT NO. 65

FACILITY OPERATING LICENSE NO. NPF-21

DOCKET NO. 50-397

Replace the following page of the Appendix "A" Technical Specifications with the enclosed page. The revised page is identified by Amendment number and contains a vertical line indicating the area of change. Also to be replaced is the overleaf page.

AMENDMENT PAGE

3/4 3-12

OVERLEAF PAGE

3/4 3-11

TABLE 3.3.2-1

ISOLATION ACTUATION INSTRUMENTATION

| <u>TRIP FUNCTION</u>                      | <u>VALVE GROUPS OPERATED BY SIGNAL</u> | <u>MINIMUM OPERABLE CHANNELS PER TRIP SYSTEM (a)</u> | <u>APPLICABLE OPERATIONAL CONDITION</u> | <u>ACTION</u> |
|---|--|--|---|---------------|
| <b>1. PRIMARY CONTAINMENT ISOLATION</b>   |  |  |   |               |
| a. Reactor Vessel Water Level             |  |  |   |               |
| 1) Low, Level 3                           | 5(g)                                   | 2  | 1, 2, 3                                 | 20            |
| 2) Low Low, Level 2                       | 1, 2, 4                                | 2  | 1, 2, 3                                 | 20            |
| b. Drywell Pressure - High                | 4, 5(b)(g)                             | 2  | 1, 2, 3                                 | 20            |
| c. Main Steam Line                        |  |  |   |               |
| 1) Radiation - High                       | 1(c)                                   | 2  | 1, 2, 3                                 | 21            |
|   | 2(c)                                   | 2  | 1, 2, 3                                 | 22            |
| 2) Pressure - Low                         | 1                                      | 2  | 1                                       | 23            |
| 3) Flow - High                            | 1                                      | 2(d)   | 1, 2, 3                                 | 21            |
| d. Main Steam Line Tunnel                 |  |  |   |               |
| Temperature - High                        | 1                                      | 2  | 1, 2, 3                                 | 21            |
| e. Main Steam Line Tunnel                 |  |  |   |               |
| Δ Temperature - High                      | 1                                      | 2  | 1, 2, 3                                 | 21            |
| f. Condenser Vacuum - Low                 | 1                                      | 2  | 1, 2*, 3*                               | 21            |
| g. Manual Initiation                      | 1                                      | 2/group  | 1, 2, 3                                 | 24            |
|   | 2                                      | 1/group  | 1, 2, 3                                 | 24            |
|   | 5(b)(g)                                | 1/group  | 1, 2, 3                                 | 24            |
| <b>2. SECONDARY CONTAINMENT ISOLATION</b> |  |  |   |               |
| a. Reactor Building Vent                  |  |  |   |               |
| Exhaust Plenum                            |  |  |   |               |
| Radiation - High                          | 3(b)(e)                                | 2  | 1, 2, 3, and **                         | 25            |
| b. Drywell Pressure - High                | 3(b)(e)                                | 2  | 1, 2, 3                                 | 25            |
| c. Reactor Vessel Water                   |  |  |   |               |
| Level - Low Low, Level 2                  | 3(b)(e)                                | 2  | 1, 2, 3, and #                          | 25            |
| d. Manual Initiation                      | 3(b)                                   | 1/group  | 1, 2, 3                                 | 24            |
|   | 3(b)                                   | 1/group  | **                                      | 24            |

## INSTRUMENTATION

### SURVEILLANCE REQUIREMENTS

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4.3.2.1 Each isolation actuation instrumentation channel shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL FUNCTIONAL TEST and CHANNEL CALIBRATION operations for the OPERATIONAL CONDITIONS and at the frequencies shown in Table 4.3.2.1-1.

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

4.3.2.3 The ISOLATION SYSTEM RESPONSE TIME of each isolation trip function shown in Table 3.3.2-3 shall be demonstrated to be within its limit at least once per 18 months. Each test shall include at least one channel per trip system such that all channels are tested at least once every N times 18 months, where N is the total number of redundant channels in a specific isolation trip system.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMMENDMENT NO. 65 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 November 19, 1987, Washington Public Power Supply System proposed changes to Technical Specification, Table 3.3.2-1 for the Washington Nuclear Plant No. 2 (WNP-2). The proposed changes are to eliminate inaccuracies and inconsistencies between the technical specifications and the actual system design that are misleading and do not reflect actual design conditions. Specifically on page 3/4 3-12, under Trip Function, item 1.d Main Steam Line Tunnel Temperature-High, item 1.c.3, Main Steam Line Flow - High, and item 1.e, Main Steam Line Tunnel Delta - Temperature - High, are not in accordance with the actual system design; i.e., number of the sensors and channels per trip system.

2.0 EVALUATION

Inside the steam tunnel, each of the four main steam lines is equipped with one temperature element (T/E) and one temperature switch (T/S), which provides the required indication, alarm for monitoring and isolation functions. The Technical Specifications with the present references depict a main steam line temperature measuring system that is of a different configuration (e.g., more than one sensor per line) from the system designed and installed at WNP-2. Our review of the WNP-2 licensing basis has revealed no requirements for a design that requires more than one sensor per main steam line. The plant was designed from the outset to have two channels per trip system with the two channels, one per line, used to develop a "one-out-of-two-twice" logic. As a result, the reference to note (d) in Table 3.3.2-1 is incorrect for item 1.d and 1.e. If the value of 2 represents the number of channels per trip system as the table heading indicates, the value 2 is correct. However, the body of the table indicates 2 (temperature element) per line (main steam line) and includes the note (d) which represents 4 channels per trip system. The note therefore suggests that more than two sensors per line are available. The reference to sensors per line is incorrect and if removed would present the number of channels per trip system consistent with the other signals. The proposed change of two sensors per line to two channels per trip (two sensors per trip) is consistent with the plant design configuration and therefore is acceptable.

Table 3.3.2-1, item 1.e also requires removal of note (d). The main steam line tunnel delta temperature - high trip system relies upon 2 channels per trip system as indicated. Therefore, removal of note (d) from item 1.e is acceptable with the same basis of the temperature element as evaluated above.

The main steam high flow trip system relies upon four sensors per line, each sensor providing an input to each of the "one-out-of-two-twice" trip systems such that any high flow condition in a single line will cause an isolation. Each trip system does have two channels; however, the reference to "line" conflicts with the table heading and the system design. For consistency the licensee has proposed the deletion of "line" from the table. The staff finds this deletion acceptable.

### 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)(10). 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 (53 FR 16604, May 10, 1988) 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 reviewed the licensee's trip systems configuration and found that the present Technical Specifications, Table 3.3.2-1, Isolation Actuation Instrumentation, item 1.c.(3), Flow - High; item 1.d, Main Steam Line Tunnel Temperature - High; and item 1.e, Main Steam Line Tunnel Delta Temperature - High are not in accordance with the trip system configuration. As discussed for each item in Section 2.0, the proposed changes to the Technical Specifications, Table 3.3.2-1 are justifiable and do not alter the plant's safety analysis.

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: Sang Rhow

Dated: February 22, 1989