



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

October 31, 1986

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. 30 to Facility Operating
License NPF-21 - WPPSS Nuclear Project No. 2

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 30 to Facility Operating License No. 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 letters dated May 30, 1985, and September 30, 1985.

This amendment revises Section 3/4.6.4 (Vacuum Relief) of the WNP-2 Technical Specifications to permit plant operation with two sets of the nine sets of suppression chamber-to-drywell vacuum breakers inoperable.

A copy of the related safety evaluation supporting Amendment No. 30 to Facility Operating License No. NPF-21 is enclosed.

Sincerely,

Elinor G. Adensam

Elinor G. Adensam, Director
BWR Project Directorate No. 3
Division of BWR Licensing

Enclosures:

1. Amendment No. 30 to Facility
Operating License No. NPF-21
2. Safety Evaluation

cc w/enclosures:
See next page

DESIGNATED ORIGINAL

Certified By *gjh*

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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. 30
License No. NPF-21

1. The Nuclear Regulatory Commission (the Commission or the NRC) has found that:
 - A. The applications for amendment filed by the Washington Public Power Supply System (the Supply System, also the licensee), dated May 30, 1985, and September 30, 1985, comply 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 enclosure to this license amendment; and paragraph 2.C.(2) of the 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. 30, 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.

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3. This amendment is effective as of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Elinor G. Adensam

Elinor G. Adensam, Director
BWR Project Directorate No. 3
Division of BWR Licensing

Enclosure:
Changes to the Technical
Specifications

Date of Issuance: October 31, 1986

ENCLOSURE TO LICENSE AMENDMENT NO. 30

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

3/4 6-34
3/4 6-35
B 3/4 6-4

INSERT

3/4 6-34
3/4 6-35
B 3/4 6-4

CONTAINMENT SYSTEMS

3/4.6.4 VACUUM RELIEF

SUPPRESSION CHAMBER - DRYWELL VACUUM BREAKERS

LIMITING CONDITION FOR OPERATION

3.6.4.1 Seven of the nine pairs of suppression chamber - drywell vacuum breakers shall be OPERABLE and all nine pairs shall be closed.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

ACTION:

- a. With one or more vacuum breakers in up to two pairs of suppression chamber - drywell vacuum breakers inoperable for opening, verify both vacuum breakers of each pair to be closed within two (2) hours.
- b. With one or more vacuum breakers in three or more pairs of suppression chamber - drywell vacuum breakers inoperable for opening but known to be closed, restore the inoperable pairs of vacuum breakers such that a minimum of seven pairs are in an OPERABLE status within 72 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- c. With one suppression chamber - drywell vacuum breaker open, verify the other vacuum breaker in the pair to be closed within 2 hours; restore the open vacuum breaker to the closed position within 72 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- d. With one closed position indicator of any suppression chamber - drywell vacuum breaker inoperable:
 1. Verify the other vacuum breaker in the pair to be closed within 2 hours and at least once per 15 days thereafter, or
 2. Verify the vacuum breaker(s) with the inoperable position indicator to be closed by conducting a test which demonstrates that the ΔP is maintained at greater than or equal to 0.5 psi for 1 hour without makeup within 24 hours and at least once per 15 days thereafter.
 3. Otherwise, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS

4.6.4.1 Each suppression chamber - drywell vacuum breaker shall be:

- a. Verified closed at least once per 7 days (regardless of operability).
- b. Demonstrated OPERABLE:
 1. At least once per 31 days and within 2 hours after any discharge of steam to the suppression chamber from the safety/relief valves, by cycling each vacuum breaker through at least one complete cycle of full travel.
 2. At least once per 31 days by verifying both position indicators OPERABLE by observing expected valve movement during the cycling test.
 3. At least once per 18 months by;
 - a) Verifying the opening setpoint, from the closed position, to be less than or equal to 0.5 psid, and
 - b) Verifying both position indicators OPERABLE by performance of CHANNEL CALIBRATION.

CONTAINMENT SYSTEMS

BASES

DEPRESSURIZATION SYSTEMS (Continued)

Because of the large volume and thermal capacity of the suppression pool, the volume and temperature normally changes very slowly and monitoring these parameters daily is sufficient to establish any temperature trends. By requiring the suppression pool temperature to be frequently recorded during periods of significant heat addition, the temperature trends will be closely followed so that appropriate action can be taken. The requirement for an external visual examination following any event where potentially high loadings could occur provides assurance that no significant damage was encountered.

In addition to the limits on temperature of the suppression chamber pool water, operating procedures define the action to be taken in the event a safety/relief valve inadvertently opens or sticks open. As a minimum this action shall include: (1) use of all available means to close the valve, (2) initiate suppression pool water cooling, (3) initiate reactor shutdown, and (4) if other safety/relief valves are used to depressurize the reactor, their discharge shall be separated from that of the stuck-open safety/relief valve to assure mixing and uniformity of energy insertion to the pool.

3/4.6.3 PRIMARY CONTAINMENT ISOLATION VALVES

The OPERABILITY of the primary containment isolation valves ensures that the containment atmosphere will be isolated from the outside environment in the event of a release of radioactive material to the containment atmosphere or pressurization of the containment. Containment isolation within the time limits specified ensures for those isolation valves designed to close automatically that the release of radioactive material to the environment will be consistent with the assumptions used in the analyses for a LOCA.

3/4.6.4 VACUUM RELIEF

Vacuum relief breakers are provided to equalize the pressure between the suppression chamber and drywell and between the reactor building and suppression chamber. This system will maintain the structural integrity of the primary containment under conditions of large differential pressures.

The vacuum breakers between the suppression chamber and the drywell must not be inoperable in the open position since this would allow bypassing of the suppression pool in case of an accident. There are nine pairs of valves to provide redundancy and capacity so that operation may continue indefinitely with no more than two pairs of vacuum breakers inoperable in the closed position.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 30 TO FACILITY OPERATING LICENSE NO. NPF-21

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

WPPSS NUCLEAR PROJECT NO. 2

DOCKET NO. 50-397

1.0 INTRODUCTION

By letters dated May 30, 1985, and September 30, 1985, the Washington Public Power Supply System proposed certain changes to Section 3/4.6.4 of the Technical Specifications for WNP-2.

2.0 EVALUATION

One of the proposed changes will permit plant operation with two sets (each set consists of dual discs in series) of the nine sets of suppression chamber-to-drywell vacuum breakers inoperable. However, to allow continued operation, all nine pairs must be verified to be in the closed position. This added precaution is to preclude a potential bypass path.

To support this change, the licensee has redone the negative containment pressure calculations that were previously reviewed and found to be acceptable by the staff in the Safety Evaluation Report, NUREG-0892. The revised analysis assumes two sets of vacuum breakers are not available to relieve the vacuum condition instead of the one set assumed in the original analysis. The results of the new analysis indicate that the resulting pressure differentials (reactor building to drywell, reactor building to wetwell and wetwell to drywell) are all within the design values. Based on the staff's review of this analysis, the proposed Technical Specification change to permit plant operation with two sets of the nine sets of suppression chamber-to-drywell vacuum breakers inoperable is found to be acceptable.

The other requested change, a relaxation of the surveillance requirements for the vacuum breakers, continues under review by the NRC staff and is not granted by this amendment.

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 and changes in surveillance requirements. 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)(9). 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 CONCLUSION

The Commission made a proposed determination that the amendment involves no significant hazards consideration which was published in the Federal Register (51 FR 1881) on January 15, 1986, and consulted with the state of Washington. No public comments were received, and the state of Washington did not have any comments.

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 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: F. Eltawila, NRR

Dated: October 31, 1986

AMENDMENT NO. 30 TO FACILITY OPERATING LICENSE NO. NPF-21
WPPSS NUCLEAR PROJECT NO. 2

DISTRIBUTION:

Docket No. 50-397

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