April 21, 1987

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. 40 to Facility Operating License No. NPF-21 - WPPSS Nuclear Project No. 2 (TAC No. 64217)

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 40 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 letter dated December 12, 1986.

This amendment revises the WNP-2 Technical Specification 3/4.7.4 to permit the removal of snubbers for maintenance or testing (while in Operational Condition 4 or 5) without having to declare the associated system inoperable provided their removal is substantiated by engineering analysis. The amendment also reduces the minimum allowable time interval between inspections.

A copy of the related safety evaluation supporting Amendment No. 40 to Facility Operating License No. NPF-21 is enclosed.

Sincerely,

Original signed by

Robert B. Samworth, Sr. Project Manager
Project Directorate V
Division of Reactor Projects-III/IV/V and Special Projects

Enclosures:
1. Amendment No. 40 to Facility Operating License No. NPF-21
2. Safety Evaluation

cc w/enclosures:
See next page

*See Previous Concurrence

DRSP/PD5	DRSP/PD5	DRSP/PD5	*OGC	DRSP/PD5
JLee	RSamworth:cd	JBradfute		GWKnighton
04/20/87	04/21/87	04/21/87	4/15/87	04/21/87

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

Sincerely,

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

Enclosures:
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cc w/enclosures:
See next page

LA:BWD-3:DBL	~~BWD-3:DBL~~	BWD-3:DBL	D:BWD-3:DBL
~~EHylton/vag~~	DWagner	JBradfute	EAdensam
04/ /87	04/8/87	04/ /87	04/ /87
			4/15/87

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

WPPSS Nuclear Project No. 2
(WNP-2)

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1450 Maria Lane, Suite 210
Walnut Creek, California 94596

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. 40
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 Supply System, also the licensee), dated December 12, 1986 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 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. 40, 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

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

Enclosure:
Changes to the Technical
Specifications

Date of Issuance: April 21, 1987

April 21, 1987

ENCLOSURE TO LICENSE AMENDMENT NO. 40

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 7-10	3/4 7-10
3/4 7-11	3/4 7-11
B3/4 7-2	B3/4 7-2
- - - - -	B3/4 7-2a

3/4.7.4 SNUBBERS

LIMITING CONDITION FOR OPERATION

3.7.4 All hydraulic and mechanical snubbers shall be OPERABLE.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3. OPERATIONAL CONDITIONS 4 and 5 for snubbers located on systems required OPERABLE in those OPERATIONAL CONDITIONS#.

ACTION:

With one or more required snubbers inoperable on any system, within 72 hours replace or restore the inoperable snubber(s) to OPERABLE status and perform an engineering evaluation per Specification 4.7.4g on the attached component or declare the attached system inoperable and follow the appropriate ACTION statement for that system.

SURVEILLANCE REQUIREMENTS

4.7.4 Each snubber shall be demonstrated OPERABLE by performance of the following augmented inservice inspection program and the requirements of Specification 4.0.5.

a. Inspection Types

As used in this specification, type of snubber shall mean snubbers of the same design and manufacturer, irrespective of capacity.

b. Visual Inspections

Snubbers are categorized as inaccessible or accessible during reactor operation. Each of these groups (inaccessible and accessible) may be inspected independently according to the schedule below. The first inservice visual inspection of each type of snubber shall be performed after 4 months but within 10 months of commencing POWER OPERATION and shall include all hydraulic and mechanical snubbers. If all snubbers of each type on any system are found OPERABLE during the first inservice visual inspection, the second inservice visual inspection of that system shall be performed at the first refueling outage. Otherwise, subsequent visual inspections of a given system shall be performed in accordance with the following schedule:

#Unless the removal of snubber(s) for maintenance or testing is justified by engineering analysis.

SURVEILLANCE REQUIREMENTS (Continued)

No. Inoperable Snubbers of Each Type on Any System per Inspection Period	Subsequent Visual Inspection Period* #
0	18 months, +25%, -50%
1	12 months ± 25%
2	6 months ± 25%
3,4	124 days ± 25%
5,6,7	62 days ± 25%
8 or more	31 days ± 25%

c. Visual Inspection Acceptance Criteria

Visual inspections shall verify that: (1) there are no visible indications of damage or impaired OPERABILITY, (2) attachments to the foundation or supporting structure are secure, and (3) fasteners for attachment of the snubber to the component and to the snubber anchorage are secure. Snubbers which appear inoperable as a result of visual inspections may be determined OPERABLE for the purpose of establishing the next visual inspection interval, provided that: (1) the cause of the rejection is clearly established and remedied for that particular snubber and for other snubbers irrespective of type on that system that may be generically susceptible; and (2) the affected snubber is functionally tested in the as-found condition and determined OPERABLE per Specification 4.7.4f. All snubbers connected to an inoperable common hydraulic fluid reservoir shall be counted as inoperable snubbers. For those snubbers common to more than one system, the OPERABILITY of such snubbers shall be considered in assessing the surveillance schedule for each of the related systems.

d. Transient Event Inspection

An inspection shall be performed of all hydraulic and mechanical snubbers attached to sections of systems that have experienced unexpected, potentially damaging transients as determined from a review of operational data and a visual inspection of the systems within 6 months following such an event. In addition to satisfying the visual inspection acceptance criteria, freedom-of-motion of mechanical snubbers shall be verified using at least one of the following: (1) manually induced snubber movement; or (2) evaluation of in-place snubber piston setting; or (3) stroking the mechanical snubber through its full range of travel.

*The inspection interval for each type of snubber on a given system shall not be lengthened more than one step at a time unless a generic problem has been identified and corrected; in that event the inspection interval may be lengthened one step the first time and two steps thereafter if no inoperable snubbers of that type are found on that system.

#The provisions of Specification 4.0.2 are not applicable.

3/4.7.4 SNUBBERS

All snubbers are required OPERABLE to ensure that the structural integrity of the Reactor Coolant System and all other safety-related systems is maintained during and following a seismic or other event initiating dynamic loads. Snubbers excluded from this inspection program are those installed on nonsafety-related systems and then only if their failure or failure of the system on which they are installed would have no adverse effect on any safety-related system. During shutdown, snubbers which are redundant per engineering analysis can be removed for maintenance and/or testing and are excluded from the operability requirements.

Snubbers are classified and grouped by design and manufacturer but not by size. For example, mechanical snubbers utilizing the same design features of the 2-kip, 10-kip, and 100-kip capacity manufactured by Company "A" are of the same type. The same design mechanical snubbers manufactured by Company "B" for the purposes of this Technical Specification would be of a different type, as would hydraulic snubbers from either manufacturer.

A list of individual snubbers with detailed information of snubber location and size and of system affected shall be available at the plant in accordance with Section 50.71(c) of 10 CFR Part 50. The accessibility of each snubber shall be determined and approved by the Plant Operations Committee. The determination shall be based upon the existing radiation levels and the expected time to perform a visual inspection in each snubber location as well as other factors associated with accessibility during plant operations (e.g., temperature, atmosphere, location, etc.), and the recommendations of Regulatory Guides 8.8 and 8.10. The addition or deletion of any hydraulic or mechanical snubber shall be made in accordance with Section 50.59 of 10 CFR Part 50.

The visual inspection frequency is based upon maintaining a constant level of snubber protection to each safety-related system. Therefore, the required inspection interval varies inversely with the observed snubber failures on a given system and is determined by the number of inoperable snubbers found during an inspection. In order to establish the inspection frequency for each type of snubber on a safety-related system, it was assumed that the frequency of snubber failures and initiating events is constant with time and that the failure of any snubber on that system could cause the system to be unprotected and to result in failure during an assumed initiating event. Inspections performed before that interval has elapsed may be used as a new reference point to determine the next inspection. However, the results of such early inspections performed before the original required time interval has elapsed, (nominal time less 25%) may not be used to lengthen the required inspection interval. Any inspection whose results require a shorter inspection interval will override the previous schedule.

The acceptance criteria are to be used in the visual inspection to determine OPERABILITY of the snubbers. For example, if a fluid port of a hydraulic snubber is found to be uncovered, the snubber shall be declared inoperable and shall not be determined OPERABLE via functional testing.

3/4.7.4 SNUBBERS (Continued)

To provide assurance of snubber functional reliability, one of three functional testing methods are used with the stated acceptance criteria:

1. Functionally test 10% of a type of snubber with an additional 10% tested for each functional testing failure, or

2. Functionally test a sample size and determine sample acceptance or rejection using Figure 4.7-1, or

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 40 TO FACILITY OPERATING LICENSE NO. NPF-21

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

WPPSS NUCLEAR PROJECT NO. 2

DOCKET NO. 50-397

1.0 INTRODUCTION

In a letter dated December 12, 1986, the licensee requested changes to WNP-2 Technical Specification 3/4.7.4, "Snubbers". The Technical Specification currently requires that, if a snubber is removed from its associated system while that system is required to be operable, the system is to be declared inoperable, requiring entry into the applicable Action Statement. The licensee noted that during Operational Conditions 4 and 5, snubbers are removed periodically for (1) functional testing, and (2) eliminating interferences in the performance of maintenance activities on adjacent equipment. The requested change would permit the removal of snubber(s) for maintenance or testing (while in Operational Condition 4 or 5) without having to declare the associated system inoperable, provided its (their) removal is substantiated by engineering analysis.

Additionally, the current Technical Specification requires that visual inspection periods of a snubber type occur every 18 months, ± 25 percent, if no inoperable snubbers of each type on any system are discovered per inspection period. This specification requires that a visual inspection of a snubber type be performed between 13.5 months and 22.5 months following the previous inspection. At WNP-2, this visual inspection is done during refueling outages, which occur on 12-month cycles. The current visual inspection requirement does not recognize 12-month refueling cycles. Accordingly, the licensee requested that the visual inspection criteria be revised to 18 months, - 50 percent, + 25 percent. This would require a visual inspection of a snubber type between 9 months and 22.5 months following the previous inspection. Without such a change, the licensee could be required to shutdown between refueling outages for the purpose of snubber surveillance, even when the last inspection revealed no failures. The proposed change reduces the minimum interval between inspections; however, the maximum interval between inspections remains 22.5 months.

The Basis of the Technical Specification would be revised to be consistent with the proposed Technical Specification change.

2.0 EVALUATION

The WNP-2 Technical Specifications require functional testing for safety-related snubbers on an 18-month interval. This testing is usually conducted during Modes 4 and 5 to avoid interference with operation and maintenance activities on adjacent equipment. The same Technical Specifications also require all snubbers to be operable in all Modes. After 72 hours, if the snubber inoperability is not corrected, the attached

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system will be declared inoperable. Removal of snubbers for testing purposes will cause the system to be inoperable if they are not re-installed within 72 hours.

The Supply System performed an engineering analysis which demonstrated that structural integrity of the Reactor Coolant System (RCS) in Modes 4 and 5 and other safety related systems during a seismic or other dynamic event will be maintained by significantly fewer number of snubbers. The system loads will be materially lower in these two Modes because of the absence of pressure and thermal loadings.

The proposed amendment would add a footnote modifier stating that all snubbers must be operable in all Modes unless the removal of snubber(s) for maintenance and testing is justified by an engineering analysis. This proposal is based on an adequate analytic basis and, therefore, is acceptable.

The Supply System also requested a change in the visual inspection period table whereas for zero inoperable snubbers discovered, the next required inspection period will be 18 months, + 25 percent, -50 percent, instead of the original 18 months, ± 25%. This proposal would permit WNP-2 to perform its inspection on an annual basis coinciding with the peak hydraulic capacity of Bonneville Power Administration. Since the change would offer WNP-2 greater flexibility in outage time, yet would not cause any safety concern (it may result in more inspections) the proposal is acceptable.

3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change in the installation and use of facility components 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 (52 FR 5872) on February 26, 1987 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: Horace Shaw, NRR

Dated: April 21, 1987

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

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