



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

May 23, 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. 27 to Facility Operating
License No. NPF-21 - WPPSS Nuclear Project No. 2

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 27 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 January 17, 1986.

This amendment revises the WNP-2 Technical Specifications by changing Technical Specification Table 3.8.4.3-1, "Motor Operated Valves Thermal Overload Protection" to add valves previously omitted, add valves as a result of system upgrades, and remove valves having no safety related function.

A copy of the related safety evaluation supporting Amendment No. 27 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. 27 to Facility
Operating License No. NPF-21
2. Safety Evaluation

cc w/enclosures:
See next page

DESIGNATED ORIGINAL

Certified By *[Signature]*

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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. 27
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 January 17, 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. 27, 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: May 23, 1986

ENCLOSURE TO LICENSE AMENDMENT NO. 27

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 area of change.

REMOVE

3/4 8-26
3/4 8-27
3/4 8-28

INSERT

3/4 8-26
3/4 8-27
3/4 8-28

TABLE 3.8.4.3-1

MOTOR OPERATED VALVES THERMAL OVERLOAD PROTECTION

<u>VALVE NUMBER</u>	<u>SYSTEM(S) AFFECTED</u>	<u>SYSTEM(S) VALVE NUMBER</u>	<u>AFFECTED</u>
a. CAC-V-2 CAC-V-4 CAC-V-6 CAC-V-8 CAC-V-11 CAC-V-13 CAC-V-15 CAC-V-17	Containment Atmospheric Control System	g. MSLC-V-1A MSLC-V-1B MSLC-V-1C MSLC-V-1D MSLC-V-2A MSLC-V-2B MSLC-V-2C MSLC-V-2D MSLC-V-3A MSLC-V-3B MSLC-V-3C MSLC-V-3D MSLC-V-4 MSLC-V-5 MSLC-V-9 MSLC-V-10	Main Steam Isolation Valve Leakage Control System
b. CIA-V-20 CIA-V-30A CIA-V-30B	Containment Instrument Air System		
c. FPC-V-149 FPC-V-153 FPC-V-154 FPC-V-156 FPC-V-172 FPC-V-173 FPC-V-175 FPC-V-181A FPC-V-181B FPC-V-184	Fuel Pool Cooling System		
d. HPCS-V-1 HPCS-V-4 HPCS-V-10 HPCS-V-11 HPCS-V-12 HPCS-V-15 HPCS-V-23	High Pressure Core Spray System	h. RCC-V-5 RCC-V-21 RCC-V-40 RCC-V-104 RCC-V-129 RCC-V-130 RCC-V-131	Reactor Closed Cooling Water System
e. LPCS-V-1 LPCS-V-5 LPCS-FCV-11 LPCS-V-12	Low Pressure Core Spray System	i. RCIC-V-1 RCIC-V-8 RCIC-V-10 RCIC-V-13 RCIC-V-19 RCIC-V-22 RCIC-V-31	Reactor Core Isolation Cooling System
f. MS-V-1 MS-V-2 MS-V-5 MS-V-16 MS-V-19 MS-V-20 MS-V-67A MS-V-67B MS-V-67C MS-V-67D MS-V-146	Main Steam System		

TABLE 3.8.4.3-1 (Continued)

MOTOR OPERATED VALVES THERMAL OVERLOAD PROTECTION

	<u>VALVE NUMBER</u>	<u>SYSTEM(S) AFFECTED</u>	<u>VALVE NUMBER</u>	<u>SYSTEM(S) AFFECTED</u>	
i.	RCIC-V-45	Reactor Core Isolation Cooling System	RHR-V-42C		
	RCIC-V-46		RHR-V-47A		
	RCIC-V-59		RHR-V-47B		
	RCIC-V-63		RHR-V-48A		
	RCIC-V-68		RHR-V-48B		
	RCIC-V-69		RHR-V-49		
	RCIC-V-76		RHR-V-53A		
	RCIC-V-110		RHR-V-53B		
	RCIC-V-113		RHR-V-64A		
			RHR-V-64B		
			RHR-V-64C		
			RHR-V-68A		
	j.		RFW-V-65A		Reactor Feedwater System
RFW-V-65B		RHR-V-73A			
k.	RHR-V-3A	Residual Heat Removal System	RHR-V-73B		
	RHR-V-3B		RHR-V-74A		
	RHR-V-4A		RHR-V-74B		
	RHR-V-4B		RHR-V-115		
	RHR-V-4C		RHR-V-116		
	RHR-V-6A		RHR-V-123A		
	RHR-V-6B		RHR-V-123B		
	RHR-V-8		RHR-V-134A		
	RHR-V-9		RHR-V-134B		
	RHR-V-16A		l. RRC-V-16A		Reactor Recirculation System
	RHR-V-16B		RRC-V-16B		
	RHR-V-17A		m. RWCU-V-1		Reactor Water Cleanup System
	RHR-V-17B				
	RHR-V-21				
	RHR-V-23				
	RHR-V-24A				
	RHR-V-24B				
	RHR-V-27A				
	RHR-V-27B				
	RHR-V-40				
RHR-V-42A					
RHR-V-42B					

TABLE 3.8.4.3-1 (Continued)

MOTOR OPERATED VALVES THERMAL OVERLOAD PROTECTION

	<u>VALVE NUMBER</u>	<u>SYSTEM(S) AFFECTED</u>		<u>VALVE NUMBER</u>	<u>SYSTEM(S) AFFECTED</u>
n.	SGT-V-1A	Standby Gas Treatment System	o.	AS-V-68A	Auxiliary Steam System
	SGT-V-1B			AS-V-68B	
	SGT-V-3A1		p.	SW-V-2A	Standby Service Water System
	SGT-V-3A2			SW-V-2B	
	SGT-V-3B1			SW-V-4A	
	SGT-V-3B2			SW-V-4B	
	SGT-V-4A1			SW-V-4C	
	SGT-V-4A2			SW-V-12A	
	SGT-V-4B1			SW-V-12B	
	SGT-V-4B2			SW-V-24A	
	SGT-V-5A1			SW-V-24B	
	SGT-V-5A2			SW-V-24C	
	SGT-V-5B1			SW-V-29	
	SGT-V-5B2			SW-V-44	
				SW-V-54	
			SW-V-75A		
			SW-V-75B		
			SW-V-90		
			SW-V-187A		
			SW-V-187B		
			SW-V-188A		
			SW-V-188B		



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 27 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 letter dated January 17, 1986, Washington Public Power Supply System requested an amendment to the Technical Specifications, Table 3.8.4.3-1, Motor Operated Valves Thermal Overload Protection, for WPPSS Nuclear Project No. 2 (WNP-2). The following revisions were requested:

1. Modification of Table 3.8.4.3-1, Motor Operated Valves Thermal Overload Protection.
2. Addition of various Auxiliary Steam and Fuel Pool Cooling System valves to Table 3.8.4.3-1.

Motor-operated valves equipped with thermal overload protection devices are used in valve motors for safety systems and their auxiliary supporting systems. Regulatory Guide 1.106, "Thermal Overload Protection for Electric Motors on Motor-Operated Valves", recommends bypassing thermal overload devices during accident conditions, or selecting the setpoints for the thermal overload in a manner that precludes spurious trips. In the WNP-2 design, motor thermal overloads for Class 1E motor-operated valves are selected two sizes larger than the normally selected thermal overload. This approximates 140% of motor full load current.

2.0 DISCUSSION AND REVIEW

- 1) The licensee proposed a change to update and correct Table 3.8.4.3-1, Motor Operated Valves Thermal Overload Protection. The current Table contains listings for valves that are not safety related; therefore, their listing is not necessary according to requirements of Regulatory Guide 1.106. Also the licensee found that two valves that should have been included in the Table were omitted. The "B" valves for each of two pairs of valves were inadvertently omitted although the "A" valves for each pair were included. Thus, the proposed changes, deletion of non-safety related valves from Table 3.8.4.3-1 and addition of two safety related valves to the Table, are acceptable.

Further with respect to the omitted "B" valves the licensee asserts, and the staff agrees, that the omission does not impact a Limiting Condition for Operation (LCO) because the Surveillance Requirements specify that performance of Channel Calibrations must be performed on a representative

sample of at least 25% of all thermal overloads for the valves listed in Table 3.8.4.3-1. The licensee assures that, despite the omission, such calibrations have been performed and that the surveillance requirement has been satisfied. Therefore, the omission of the two "B" valves did not compromise safety requirements.

- 2) Because of Equipment Qualification concerns, the licensee proposed a change to add valves AS-V-68A and AS-V-68B to Table 3.8.4.3-1. This isolation valve installation was made to reduce the possibility of Reactor Building area temperature exceeding equipment qualification temperature limits. The auxiliary steam line leak detection system consists of redundant temperature sensors, temperature switches, and isolation valves AS-V-68A and AS-V-68B. When any one of the temperature elements detects abnormally high temperatures, the logic circuit actuates the closure of auxiliary steam line isolation valves AS-V-68 A and B and provides an audible alarm in the main control room. Because the two valves, AS-V-68A and AS-V-68B, perform this safety function, their addition to the table is acceptable.
- 3) The Fuel Pool Cooling (FPC) system valves are added to the table as a result of the system upgrade to safety-related as required by commitments made regarding 10 CFR 50.55(e) Reportable Deficiency - Condition No. 44 (1). Valves FPC-V-172, - 173 and - 184 provide auto-isolation (closing) between the Seismic Category I portion of the FPC system and its Seismic Category II filter-demineralizers. Valves FPC-V-181A and 181B provide suction isolation for the FPC system's main circulation pumps. Valve FPC-V-175 provides a Class 1 auto-bypass to the FPC system's flow control valve FPC- FCV-1. The licensee has stated that the thermal overload protection system for these valves is designed in accordance with the approved WNP-2 design criteria for motor-operated safety related valves. Thus, the addition of these motor operated valves to the FPC system is 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 and changes to 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 15416) on April 23, 1986, and consulted with the state of Washington. No public comments were received, and the state of Washington did not have any comments.

The staff 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, 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: Sang C. Rhow, NRR

Dated: May 23, 1986

AMENDMENT NO. 27 TO FACILITY OPERATING LICENSE NO. NPF-21
WPPSS NUCLEAR PROJECT NO. 2

DISTRIBUTION:

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