



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

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 26 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 January 17, and February 18, 1986.

This amendment revises the WNP-2 Technical Specification Table 3.6.3-1, (Primary Containment Isolation Valves) to: (1) reflect corrections and additions to and deletions from the Excess Flow Check Valve listings, Traversing Incore Probe System valve listings, Residual Heat Removal System valve listings and equipment qualification limits; (2) reidentify certain valves in accordance with current Supply System practices; (3) add valves previously omitted; (4) provide clarification to notes in the table; (5) correct typographical errors; and (6) delete maximum isolation time listings for valves not performing an automatic containment isolation function.

A copy of the related safety evaluation supporting Amendment No. 26 to Facility Operating License No. NPF-21 is enclosed.

Sincerely,

8605300351 860523
PDR ADDCK 05000397
P PDR

A handwritten signature in cursive script, reading "Elinor G. Adensam".

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

Enclosures:

1. Amendment No. 26 to Facility
Operating License No. NPF-21
2. Safety Evaluation

DESIGNATED ORIGINAL

cc w/enclosures:
See next page

Certified By A handwritten signature in cursive script, likely of the certifying official.

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. 26
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, and supplemented on February 18, 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:

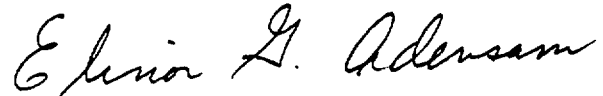
(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 26, 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.

8605300359 860523
PDR ADOCK 05000397
P PDR

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

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in cursive script, reading "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. 26

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

viii
3/4 6-22
3/4 6-23
3/4 6-24
3/4 6-25
3/4 6-26
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3/4 6-31
3/4 6-32
3/4 6-33
3/4 6-34
3/4 6-35
3/4 6-36
3/4 6-37
3/4 6-38
3/4 6-39
3/4 6-40
3/4 6-41
3/4 6-42
3/4 6-43
3/4 6-44

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viii
3/4 6-22
3/4 6-23
3/4 6-24
3/4 6-25
3/4 6-26
3/4 6-27
3/4 6-28
3/4 6-29
3/4 6-30
3/4 6-31
3/4 6-32
3/4 6-33
3/4 6-34
3/4 6-35
3/4 6-36
3/4 6-37
3/4 6-38
3/4 6-39
3/4 6-40
3/4 6-41
3/4 6-42
3/4 6-43
3/4 6-44
3/4 6-45

INDEX

LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

<u>SECTION</u>	<u>PAGE</u>
<u>3/4.6 CONTAINMENT SYSTEMS</u>	
3/4.6.1 PRIMARY CONTAINMENT	
Primary Containment Integrity.....	3/4 6-1
Primary Containment Leakage.....	3/4 6-2
Primary Containment Air Locks.....	3/4 6-5
MSIV Leakage Control System.....	3/4 6-7
Primary Containment Structural Integrity.....	3/4 6-8
Drywell and Suppression Chamber Internal Pressure.....	3/4 6-9
Drywell Average Air Temperature.....	3/4 6-10
Drywell and Suppression Chamber Purge System.....	3/4 6-11
3/4.6.2 DEPRESSURIZATION SYSTEMS	
Suppression Chamber.....	3/4 6-13
Suppression Pool and Drywell Spray.....	3/4 6-17
Suppression Pool Cooling.....	3/4 6-18
3/4.6.3 PRIMARY CONTAINMENT ISOLATION VALVES.....	3/4 6-19
3/4.6.4 VACUUM RELIEF	
Suppression Chamber - Drywell Vacuum Breakers.....	3/4 6-34
Reactor Building - Suppression Chamber Vacuum Breakers.....	3/4 6-36
3/4.6.5 SECONDARY CONTAINMENT	
Secondary Containment Integrity.....	3/4 6-38
Secondary Containment Automatic Isolation Valves.....	3/4 6-39
Standby Gas Treatment System.....	3/4 6-41
3/4.6.6 PRIMARY CONTAINMENT ATMOSPHERE CONTROL	
Drywell and Suppression Chamber Hydrogen Recombiner Systems.....	3/4 6-44
Drywell and Suppression Chamber Oxygen Concentration..	3/4 6-45

TABLE 3.6.3-1 (Continued)
PRIMARY CONTAINMENT ISOLATION VALVES

<u>VALVE FUNCTION AND NUMBER</u>	<u>VALVE GROUP(a)</u>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>
a. <u>Automatic Isolation Valves (Continued)</u>		
Equipment Drain (Radioactive)	4	15
EDR-V-19		
EDR-V-20		
Floor Drain (Radioactive)	4	15
FDR-V-3		
FDR-V-4		
Fuel Pool Cooling/Suppression Pool Cleanup	4	35
FPC-V-149		
FPC-V-153(f)		
FPC-V-154(f)		
FPC-V-156		
Reactor Recirculation Hydraulic Control(e)	4	15
HY-V-17A,B		
HY-V-18A,B		
HY-V-19A,B		
HY-V-20A,B		
HY-V-33A,B		
HY-V-34A,B		
HY-V-35A,B		
HY-V-36A,B		
Traversing Incore Probe	4	5
TIP-V-1,2,3,4,5		

TABLE 3.6.3-1 (Continued)
PRIMARY CONTAINMENT ISOLATION VALVES

<u>VALVE FUNCTION AND NUMBER</u>	<u>VALVE GROUP(a)</u>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>
a. <u>Automatic Isolation Valves (Continued)</u>		
Reactor Closed Cooling	4	60
RCC-V-5		
RCC-V-21		
RCC-V-40		
RCC-V-104		
Radiation Monitoring Supply & Return	4	5
PI-VX-250		
PI-VX-251		
PI-VX-253		
PI-VX-256		
PI-VX-257		
PI-VX-259		
Residual Heat Removal		
RHR-V-123A,B(g)	5	15
RHR-V-8(g)	6	40
RHR-V-9(g)	6	40
RHR-V-23(g)	6	90
RHR-V-53A,B(g)	6	40
RHR-V-24A,B(c)	10	270
RHR-V-21	10	270
RHR-V-27A,B(c)	10	36
Reactor Water Cleanup System	7	
RWCU-V-1(d)		30(j)
RWCU-V-4		21(j)

TABLE 3.6.3-1 (Continued)
PRIMARY CONTAINMENT ISOLATION VALVES

<u>VALVE FUNCTION AND NUMBER</u>	<u>VALVE GROUP(a)</u>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>
a. <u>Automatic Isolation Valves (Continued)</u>		
Reactor Core Isolation Cooling		
RCIC-V-8	8	13(j)
RCIC-V-63	8	16(j)
RCIC-V-76	8	22
Low Pressure Core Spray		
LPCS-V-12	10	180
High Pressure Core Spray		
HPCS-V-23	11	180
b. <u>Excess Flow Check Valves(e)</u>		
Containment Atmosphere		N.A.
PI-EFC-X29d		
PI-EFC-X29f		
PI-EFC-X30a		
PI-EFC-X30f		
PI-EFC-X42c		
PI-EFC-X42f		
PI-EFC-X61c		
PI-EFC-X62b		
PI-EFC-X69f		
PI-EFC-X78a		

TABLE 3.6.3-1 (Continued)

PRIMARY CONTAINMENT ISOLATION VALVES

<u>VALVE FUNCTION AND NUMBER</u>	<u>VALVE GROUP(a)</u>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>
b. <u>Excess Flow Check Valves (e) (Continued)</u>		
Containment Atmosphere (Continued)		N.A.
PI-EFC-X66		
PI-EFC-X67		
PI-EFC-X82b		
PI-EFC-X84a		
PI-EFC-X86A,B		
PI-EFC-X87A,B		
PI-EFC-X119		
Reactor Pressure Vessel		N.A.
PI-EFC-X18A,B,C,D		
PI-EFC-X37e,f		
PI-EFC-X38a,b,c,d,e,f		
PI-EFC-X39a,b,d,e		
PI-EFC-X40c,d		
PI-EFC-X41c,d		
PI-EFC-X42a,b		
PI-EFC-X44Aa,Ab,Ac,Ad,Ae,Af,Ag,Ah,Aj, Ak,Al,Am		
PI-EFC-X44Ba,Bb,Bc,Bd,Be,Bf,Bg,Bh,Bj, Bk,Bl,Bm		
PI-EFC-X61a,b		
PI-EFC-X62c,d		
PI-EFC-X69a,b,e		
PI-EFC-X70a,b,c,d,e,f		
PI-EFC-X71a,b,c,d,e,f		
PI-EFC-X72a		
PI-EFC-X73a		
PI-EFC-X74a,b,e,f		

TABLE 3.6.3-1 (Continued)
PRIMARY CONTAINMENT ISOLATION VALVES

<u>VALVE FUNCTION AND NUMBER</u>	<u>VALVE GROUP(a)</u>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>
b. <u>Excess Flow Check Valves (e) (Continued)</u>		
Reactor Pressure Vessel (Continued)		N.A.
PI-EFC-X75a,b,c,d,e,f		
PI-EFC-X78b,c,f		
PI-EFC-X79a,b		
PI-EFC-X106		
PI-EFC-X107		
PI-EFC-X108		
PI-EFC-X109		
PI-EFC-X110		
PI-EFC-X111		
PI-EFC-X112		
PI-EFC-X113		
PI-EFC-X114		
PI-EFC-X115		
Other		N.A.
PI-EFC-X40e,f		
PI-EFC-X41e,f		
c. <u>Manual Containment Isolation Valves</u>		
Demineralized Water		N.A.
DW-V-156		
DW-V-157		
Containment Air System		N.A.
CAS-VX-82e		
CAS-V-730		

TABLE 3.6.3-1 (Continued)
PRIMARY CONTAINMENT ISOLATION VALVES

<u>VALVE FUNCTION AND NUMBER</u>	<u>VALVE GROUP(a)</u>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>
c. <u>Manual Containment Isolation Valves (Continued)</u>		
Service Air		N.A.
SA-V-109		
Residual Heat Removal		N.A.
RHR-V-11A,B		
RHR-V-120		
RHR-V-121		
RHR-V-124A,B		
RHR-V-125A,B		
Reactor Core Isolation Cooling		N.A.
RCIC-V-64		
RCIC-V-742(g)(b)		
Air Supply to Testable Check Valves		N.A.
<u>Air Supply</u>	<u>Check Valve</u>	
PI-VX-42d	RHR-V-50A	
PI-VX-216		
PI-VX-69c	RHR-V-50B	
PI-VX-221		
PI-VX-61f	RHR-V-41A	
PI-VX-219		
PI-VX-54Bf	RHR-V-41B	
PI-VX-218		

TABLE 3.6.3-1 (Continued)
PRIMARY CONTAINMENT ISOLATION VALVES

<u>VALVE FUNCTION AND NUMBER</u>	<u>VALVE GROUP(a)</u>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>
c. <u>Manual Containment Isolation Valves (Continued)</u>		
Air Supply to Testable Check Valves (Continued)		N.A.
PI-VX-62f RHR-V-41C		
PI-VX-220		
LPCS-V-66 LPCS-V-6		
LPCS-V-67		
HPCS-V-65 HPCS-V-5		
HPCS-V-68		
RCIC-V-184 RCIC-V-66		
RCIC-V-740		
d. <u>Other Containment Isolation Valves</u>		
Main Steam Leakage Control(b)		N.A.
MSLC-V-3A,B,C,D		
Reactor Feedwater/RWCU Return		N.A.
RFW-V-10A,B		
RFW-V-32A,B		
RFW-V-65A,B		
RWCU-V-40		
High Pressure Core Spray		N.A.
HPCS-V-4(g)(b)		
HPCS-V-5(g)(b)		
HPCS-V-12		
HPCS-V-15(f)(b)		

TABLE 3.6.3-1 (Continued)PRIMARY CONTAINMENT ISOLATION VALVES

<u>VALVE FUNCTION AND NUMBER</u>	<u>VALVE GROUP(a)</u>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>
d. <u>Other Containment Isolation Valves (Continued)</u>		
High Pressure Core Spray (Continued)		N.A.
HPCS-RV-14(e)(h)		
HPCS-RV-35(e)(h)		
Low Pressure Core Spray		N.A.
LPCS-V-1(f)(b)		
LPCS-V-5(g)(b)		
LPCS-V-6(g)(b)		
LPCS-RV-18(e)(h)		
LPCS-RV-31(e)(h)		
LPCS-FCV-11		
Standby Liquid Control		N.A.
SLC-V-7		
SLC-V-4A,B		
Reactor Core Isolation Cooling		N.A.
RCIC-V-13(g)(b)		
RCIC-V-19		
RCIC-V-28		
RCIC-V-31(f)(b)		
RCIC-V-40		
RCIC-V-66(g)(b)		
RCIC-V-68		
RCIC-V-69		

TABLE 3.6.3-1 (Continued)

PRIMARY CONTAINMENT ISOLATION VALVES

<u>VALVE FUNCTION AND NUMBER</u>	<u>VALVE GROUP(a)</u>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>
d. <u>Other Containment Isolation Valves (Continued)</u>		
Residual Heat Removal/Low Pressure Injection		N.A.
RHR-V-4A,B,C(f)(b)		
RHR-V-16A,B		
RHR-V-17A,B		
RHR-V-41A,B(g)(b)		
RHR-V-42A,B,C(g)(b)		
RHR-V-50A,B(g)(b)		
RHR-V-73A,B		
RHR-V-134A,B(c)		
RHR-V-209(g)(b)		
RHR-RV-1A,B(e)(h)		
RHR-RV-5(e)(h)		
RHR-RV-25A,B,C(e)(h)		
RHR-RV-30(e)(h)		
RHR-RV-36(e)(h)		
RHR-RV-88A,B,C(e)(h)		
RHR-FCV-64A,B,C		
Containment Atmosphere Control(c)(i) (H ₂ Recombiner)		N.A.
CAC-V-2		
CAC-FCV-2A,B		
CAC-V-15		
CAC-FCV-1A,B		
CAC-V-11		

TABLE 3.6.3-1 (Continued)
PRIMARY CONTAINMENT ISOLATION VALVES

<u>VALVE FUNCTION AND NUMBER</u>	<u>VALVE GROUP(a)</u>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>
d. <u>Other Containment Isolation Valves (Continued)</u>		
Containment Atmosphere Control(c)(i) (H ₂ Recombiner) (Continued)		N.A.
CAC-V-6		
CAC-V-4		
CAC-FCV-4A,B		
CAC-V-13		
CAC-V-17		
CAC-FCV-3A,B		
CAC-V-8		
CSP-V-5		
CSP-V-6		
CSP-V-7		
Containment Purge System		N.A.
CSP-V-8		
CSP-V-9		
CSP-V-10		
Reactor Recirculation (Seal Injection)		N.A.
RRC-V-13A,B		
RRC-V-16A,B		
Containment Instrument Air		N.A.
CIA-V-20		
CIA-V-21		

TABLE 3.6.3-1 (Continued)
PRIMARY CONTAINMENT ISOLATION VALVES

<u>VALVE FUNCTION AND NUMBER</u>	<u>VALVE GROUP(a)</u>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>
d. <u>Other Containment Isolation Valves (Continued)</u>		
Containment Instrument Air (Continued)		N.A.
CIA-V-30A,B		
CIA-V-31A,B		
Post-Accident Sampling System(c)		N.A.
PSR-V-X73-1		
PSR-V-X73-2		
PSR-V-X77A1		
PSR-V-X77A2		
PSR-V-X77A3		
PSR-V-X77A4		
PSR-V-X80-1		
PSR-V-X80-2		
PSR-V-X82-1		
PSR-V-X82-2		
PSR-V-X82-7		
PSR-V-X82-8		
PSR-V-X83-1		
PSR-V-X83-2		
PSR-V-X84-1		
PSR-V-X84-2		
PSR-V-X88-1		
PSR-V-X88-2		

TABLE 3.6.3-1 (Continued)
PRIMARY CONTAINMENT ISOLATION VALVES

<u>VALVE FUNCTION AND NUMBER</u>	<u>VALVE GROUP(a)</u>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>
d. <u>Other Containment Isolation Valves (Continued)</u>		
Radiation Monitoring		N.A.
PI-EFCX-72f		
PI-EFCX-73e		
Transversing Incore Probe System		N.A.
TIP-V-6		
TIP-V-7,8,9,10,11(e)		

TABLE NOTATIONS

*But greater than 3 seconds.

#Provisions of Technical Specification 3.0.4 are not applicable.

- (a) See Technical Specification 3.3.2 for the isolation signal(s) which operate each group.
- (b) Valve leakage not included in sum of Type B and C tests.
- (c) May be opened on an intermittent basis under administrative control.
- (d) Not closed by SLC actuation signal.
- (e) Not subject to Type C Leak Rate Test.
- (f) Hydraulic leak test at 38.2 psig.
- (g) Not subject to Type C test. Test per Technical Specification 4.4.3.2.2
- (h) Tested as part of Type A test.
- (i) May be tested as part of Type A test. If so tested, Type C test results may be excluded from sum of other Type B and C tests.
- (j) Reflects closure times for containment isolation only.

CONTAINMENT SYSTEMS

3/4.6.4 VACUUM RELIEF

SUPPRESSION CHAMBER - DRYWELL VACUUM BREAKERS

LIMITING CONDITION FOR OPERATION

3.6.4.1 Each pair of suppression chamber - drywell vacuum breakers shall be OPERABLE and closed.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

ACTION:

- a. With one or more vacuum breakers in one pair of suppression chamber - drywell vacuum breakers inoperable for opening but known to be closed, restore the inoperable pair of vacuum breakers to 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.
- b. 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.
- c. With one 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.
- 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

REACTOR BUILDING - SUPPRESSION CHAMBER VACUUM BREAKERS

LIMITING CONDITION FOR OPERATION

3.6.4.2 All reactor building - suppression chamber vacuum breakers shall be OPERABLE and closed.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3

ACTION:

- a. With one reactor building - suppression chamber vacuum breaker inoperable for opening but known to be closed, restore the inoperable vacuum breaker to OPERABLE status with 72 hours or be in at least HOT SHUTDOWN with the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- b. With one reactor building - suppression chamber vacuum breaker open, verify the other vacuum breaker in the line 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 with the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- c. With one position indicator of any reactor building - suppression chamber vacuum breaker inoperable, restore the inoperable position indicator to OPERABLE status within 14 days or verify the vacuum breaker to be closed at least once per 24 hours by visual inspection. Otherwise, declare the vacuum breaker inoperable or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

SURVEILLANCE REQUIREMENTS

4.6.4.2 Each reactor building - suppression chamber vacuum breaker shall be:

- a. Verified closed at least once per 7 days.
- b. Demonstrated OPERABLE:
 1. At least once per 31 days by:
 - a) Cycling each vacuum breaker through at least one test cycle.
 - b) Verifying both position indicators OPERABLE by observing expected valve movement during the cycling test.
 2. At least once per 18 months by:
 - a) Demonstrating that the force required to open each vacuum breaker relying upon differential pressure to open does not exceed the equivalent of 0.5 psid.
 - b) Visual inspection.
 - c) Verifying both position indicators OPERABLE by performance of a CHANNEL CALIBRATION

CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

3. By demonstrating the vacuum breaker actuation instrumentation OPERABLE by performance of a:
 - a) CHANNEL FUNCTIONAL TEST at least once per 31 days.
 - b) CHANNEL CALIBRATION at least once per 18 months.

CONTAINMENT SYSTEMS

3/4.6.5 SECONDARY CONTAINMENT

SECONDARY CONTAINMENT INTEGRITY

LIMITING CONDITION FOR OPERATION

3.6.5.1 SECONDARY CONTAINMENT INTEGRITY shall be maintained.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, 3, and *.

ACTION:

Without SECONDARY CONTAINMENT INTEGRITY:

- a. In OPERATIONAL CONDITION 1, 2, or 3, restore SECONDARY CONTAINMENT INTEGRITY within 4 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- b. In OPERATIONAL CONDITION *, suspend handling of irradiated fuel in the secondary containment, CORE ALTERATIONS and operations with a potential for draining the reactor vessel. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.6.5.1 SECONDARY CONTAINMENT INTEGRITY shall be demonstrated by:

- a. Verifying at least once per 24 hours that the pressure within the secondary containment is less than or equal to 0.25 inch of vacuum water gauge.
- b. Verifying at least once per 31 days that:
 1. All secondary containment equipment hatches and blowout panels are closed and sealed.
 2. At least one door in each access to the secondary containment is closed.
 3. All secondary containment penetrations not capable of being closed by OPERABLE secondary containment automatic isolation dampers/valves and required to be closed during accident conditions are closed by valves, blind flanges, or deactivated automatic dampers/valves secured in position.
- c. At least once per 18 months:
 1. Verifying that one standby gas treatment subsystem will draw down the secondary containment to greater than or equal to 0.25 inch of vacuum water gauge in less than or equal to 120 seconds, and
 2. Operating one standby gas treatment subsystem for 1 hour and maintaining greater than or equal to 0.25 inch of vacuum water gauge in the secondary containment at a flow rate not exceeding 2240 cfm.

*When irradiated fuel is being handled in the secondary containment and during CORE ALTERATIONS and operations with a potential for draining the reactor vessel.

CONTAINMENT SYSTEMS

SECONDARY CONTAINMENT AUTOMATIC ISOLATION VALVES

LIMITING CONDITION FOR OPERATION

3.6.5.2 The secondary containment ventilation system automatic isolation valves shown in Table 3.6.5.2-1 shall be OPERABLE with isolation times less than or equal to the times shown in Table 3.6.5.2-1.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, 3 and *.

ACTION:

With one or more of the secondary containment ventilation system automatic isolation valves shown in Table 3.6.5.2-1 inoperable, maintain at least one isolation valve OPERABLE in each affected penetration that is open and within 8 hours either:

- a. Restore the inoperable valves to OPERABLE status, or
- b. Isolate each affected penetration by use of at least one deactivated valve secured in the isolation position, or
- c. Isolate each affected penetration by use of at least one closed manual valve or blind flange.

Otherwise, in OPERATIONAL CONDITION 1, 2, or 3, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

Otherwise, in OPERATIONAL CONDITION *, suspend handling of irradiated fuel in the secondary containment, CORE ALTERATIONS and operations with a potential for draining the reactor vessel. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.6.5.2 Each secondary containment ventilation system automatic isolation valve shown in Table 3.6.5.2-1 shall be demonstrated OPERABLE:

- a. Prior to returning the valve to service after maintenance, repair, replacement work is performed on the valve or its associated actuator, control, or power circuit by cycling the valve through at least one complete cycle of full travel and verifying the specified isolation time.
- b. During COLD SHUTDOWN or REFUELING at least once per 18 months by verifying that on a containment isolation test signal each isolation valve actuates to its isolation position.
- c. By verifying the isolation time to be within its limit when tested pursuant to Specification 4.0.5

*When irradiated fuel is being handled in the secondary containment and during CORE ALTERATIONS and operations with a potential for draining the reactor vessel.

TABLE 3.6.5.2-1

SECONDARY CONTAINMENT VENTILATION SYSTEM AUTOMATIC ISOLATION VALVES

<u>VALVE FUNCTION</u>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>
1. Reactor Building Ventilation Supply Valve ROA-V-1	10
2. Reactor Building Ventilation Supply Valve ROA-V-2	10
3. Reactor Building Ventilation Exhaust Valve REA-V-1	8
4. Reactor Building Ventilation Exhaust Valve REA-V-2	8

CONTAINMENT SYSTEMS

STANDBY GAS TREATMENT SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.5.3 Two independent standby gas treatment subsystems shall be OPERABLE.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, 3 and *.

ACTION:

- a. With one standby gas treatment subsystem inoperable, restore the inoperable subsystem to OPERABLE status within 7 days, or:
 1. In OPERATIONAL CONDITION 1, 2, or 3, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
 2. In OPERATIONAL CONDITION *, suspend handling of irradiated fuel in the secondary containment, CORE ALTERATIONS and operations with a potential for draining the reactor vessel. The provisions of Specification 3.0.3 are not applicable.
- b. With both standby gas treatment subsystems inoperable in OPERATIONAL CONDITION *, suspend handling of irradiated fuel in the secondary containment, CORE ALTERATIONS or operations with a potential for draining the reactor vessel. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.6.5.3 Each standby gas treatment subsystem shall be demonstrated OPERABLE:

- a. At least once per 31 days by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the subsystem operates for a least 10 hours with the heaters OPERABLE.

*When irradiated fuel is being handled in the secondary containment and during CORE ALTERATIONS and operations with a potential for draining the reactor vessel.

CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- b. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire, or chemical release in any ventilation zone communicating with the subsystem by:
 - 1. Verifying that the subsystem satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 0.05% and uses the test procedure guidance in Regulatory Positions C.5.a, C.5.c, and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, at a system flow rate of 4457 cfm \pm 10%.
 - 2. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978, for a methyl iodide penetration of less than 0.175%; and
 - 3. Verifying a subsystem flow rate of 4457 cfm \pm 10% during system operation when tested in accordance with ANSI N510-1980.
- c. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978, for a methyl iodide penetration of less than 0.175%.
- d. At least once per 18 months by:
 - 1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 8 inches water gauge while operating the filter train at a flow rate of 4457 cfm \pm 10%.
 - 2. Verifying that the filter train starts and isolation dampers open on each of the following test signals.
 - a. Manual initiation from the control room, and
 - b. Simulated automatic initiation signal.
 - 3. Verifying that the filter cooling bypass dampers can be manually opened and the fan can be manually started.
 - 4. Verifying that the heaters dissipate 20.7 ± 2.1 kW when tested in accordance with ANSI N510-1980.

CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- e. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter bank satisfies the inplace penetration and bypass leakage testing acceptance criteria of less than 0.05% in accordance with ANSI N510-1980 while operating the system at a flow rate of 4457 cfm \pm 10%.
- f. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorber bank satisfies the inplace penetration and bypass leakage testing acceptance criteria of less than 0.05% in accordance with ANSI N510-1980 for a halogenated hydrocarbon refrigerant test gas while operating the system at a flow rate of 4457 cfm \pm 10%.

CONTAINMENT SYSTEMS

3/4.6.6 PRIMARY CONTAINMENT ATMOSPHERE CONTROL

DRYWELL AND SUPPRESSION CHAMBER HYDROGEN RECOMBINER SYSTEMS

LIMITING CONDITION FOR OPERATION

3.6.6.1 Two independent drywell and suppression chamber hydrogen recombiner systems shall be OPERABLE.

APPLICABILITY: OPERATIONAL CONDITIONS 1 and 2.

ACTION: With one drywell and suppression chamber hydrogen recombiner system inoperable, restore the inoperable system to OPERABLE status within 30 days or be in at least HOT SHUTDOWN within the next 12 hours.

SURVEILLANCE REQUIREMENTS

4.6.6.1 Each drywell and suppression chamber hydrogen recombiner system shall be demonstrated OPERABLE:

- a. At least once per 6 months by verifying during a recombiner system warmup test that the minimum recombiner heater outlet temperature increases to greater than or equal to 500°F within 90 minutes.
- b. At least once per 18 months by:
 1. Performing a CHANNEL CALIBRATION of all recombiner operating instrumentation and control circuits.
 2. Verifying the integrity of all heater electrical circuits by performing a resistance to ground test within 30 minutes following the above required functional test. The resistance to ground for any heater phase shall be greater than or equal to 10,000 ohms.
 3. Verifying during a recombiner system functional test that, upon introduction of 1% by volume hydrogen in a 140-180 scfm stream containing at least 1% by volume oxygen, that the catalyst bed temperature rises in excess of 120°F within 20 minutes.
 4. Verifying through a visual examination that there is no evidence of abnormal conditions within the recombiner enclosure; i.e., loose wiring or structural connections, deposits of foreign materials, etc.
- c. By measuring the system leakage rate:
 1. As a part of the overall integrated leakage rate test required by Specification 3.6.1.2, or
 2. By measuring the leakage rate of the system outside of the containment isolation valves at P_a, 34.7 psig, on the schedule required by Specification 4.6.1.2,^a and including the measured leakage as a part of the leakage determined in accordance with Specification 4.6.1.2.

CONTAINMENT SYSTEMS

DRYWELL AND SUPPRESSION CHAMBER OXYGEN CONCENTRATION

LIMITING CONDITION FOR OPERATION

3.6.6.2 The drywell and suppression chamber atmosphere oxygen concentration shall be less than 3.5% by volume.

APPLICABILITY: OPERATIONAL CONDITION 1*, during the time period:

- a. Within 24 hours after THERMAL POWER is greater than 15% of RATED THERMAL POWER, following startup, to
- b. Within 24 hours prior to reducing THERMAL POWER to less than 15% of RATED THERMAL POWER, preliminary to a scheduled reactor shutdown.

ACTION:

With the oxygen concentration in the drywell and/or suppression chamber exceeding the limit, restore the oxygen concentration to within the limit within 24 hours or be in at least STARTUP within the next 8 hours.

SURVEILLANCE REQUIREMENTS

4.6.6.2 The oxygen concentration in the drywell and suppression chamber shall be verified to be within the limit within 24 hours after THERMAL POWER is greater than 15% of RATED THERMAL POWER and at least once per 7 days thereafter.

*See Special Test Exception 3.10.5.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 26 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 January 17, 1986, and February 18, 1986, the Washington Public Power Supply System (WPPSS, the Supply System or the licensee) requested a number of revisions to Table 3.6.3-1 (Primary Containment Isolation Valves) of the WNP-2 Technical Specifications. One of the revisions involves a manual isolation valve in the Fuel Pool Cooling system that was converted to an automatic isolation valve. That request was granted in a previous amendment to the WNP-2 Technical Specifications. The remaining requests are the subject of this safety evaluation.

2.0 EVALUATION

The WNP-2 license revisions addressed in this evaluation involve changes to the Technical Specifications for one or more of the following reasons:

- a. System modification(*) that eliminated the need for a valve previously used, with FSAR updates reflecting change;
- b. System modification(*) that added a valve;
- c. System modification(*) that changed the function or operation of a valve;
- d. Changes in the scheme used to name valves so that the Table 3.6.3-1 names are consistent with the names used by Supply System plant and engineering personnel;
- e. Correction of errors originally included in the Table and not previously found;
- f. Explanation footnote added; and
- g. Ordering of valves within the Table to reflect a more appropriate system name or designation.

(*) System modifications were accomplished on the basis of 10 CFR 50.59 reviews performed by the Supply System.

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Following is a list of the valves for which changes were requested. The list includes: 1) the new or current name for each valve; 2) the old name for those valves where the name has changed; 3) a brief description of the change; 4) a letter designation from the list above indicating the reason for the change; and 5) a remark, if appropriate. Valves that have been removed from the system or from the table are listed in the Column 2.

REQUESTED CHANGES TO WNP-2 TECHNICAL SPECIFICATIONS
Table 3.6.3-1 Primary Containment Isolation Valves

<u>1</u> <u>Valve Name</u> <u>NEW</u>	<u>2</u> <u>Valve Name</u> <u>OLD</u>	<u>3</u> <u>Change</u>	<u>4</u> <u>Reason</u>	<u>5</u> <u>Remarks</u>
TIP-V-1	TIP-V-6	New name	d	
TIP-V-2	TIP-V-7	New name	d	
TIP-V-3	TIP-V-8	New name	d	
TIP-V-4	TIP-V-9	New name	d	
TIP-V-5	TIP-V-10	New name	d	
TIP-V-6	TIP-V-12	New name	d	
TIP-V-7	TIP-V-1	New name	d,f	
TIP-V-8	TIP-V-2	New name	d,f	
TIP-V-9	TIP-V-3	New name	d,f	
TIP-V-10	TIP-V-4	New name	d,f	
TIP-V-11	TIP-V-5	New name	d,f	
	TIP-V-11	Valve removed from Table	e	Originally included in error. The valve is not a Containment Isolation Valve.
RWCU-V-1		Footnote (j) added to Maximum Isolation Time	f	Closure time required to meet 10 CFR 100 limits. Also subject to other closure time limits that could be more restrictive.
RWCU-V-4		Footnote (j) added to Maximum Isolation Time	f	Closure time required to meet 10 CFR 100 limits. Also subject to other closure time limits that could be more restrictive.
RCIC-V-8		Footnote (j) added to Maximum Isolation Time	f	Closure time required to meet 10 CFR 100 limits. Also subject to other closure time limits that could be more restrictive.
RCIC-V-63		Footnote (j) added to Maximum Isolation Time	f	Closure time required to meet 10 CFR 100 limits. Also subject to other closure time limits that could be more restrictive.

<u>Valve Name</u> <u>NEW</u>	<u>Valve Name</u> <u>OLD</u>	<u>Change</u>	<u>Reason</u>	<u>Remarks</u>
RCIC-V-64		Changed to manual, locked closed operation	c	Automatic actuation not needed because operational mode of its system is not used or needed. Safety function of containment isolation remains unchanged.
PI-EFC-X29d	PI-EFC-X29b/d	New name	d	
PI-EFC-X29f	PI-EFC-X29e/f	New name	d	
PI-EFC-X30a	PI-EFC-X30a/c	New name	d	
PI-EFC-X30f	PI-EFC-X30d/f	New name	d	
PI-EFC-X42c	PI-EFC-X73c	Moved	d	
PI-EFC-X42f	PI-EFC-X42e/f	New name	d	
PI-EFC-X69f	PI-EFC-X69d/f	New name	d	
PI-EFC-X66		Moved	g	
PI-EFC-X67		Moved	g	
PI-EFC-X78a	PI-EFC-X72b	Moved	d	
PI-EFC-X82b		Moved	g	
PI-EFC-X84a		Moved	g	
PI-EFC-X86A		Moved	g	
PI-EFC-X86B		Moved	g	
PI-EFC-X87A		Moved	g	
PI-EFC-X87B		Moved	g	
PI-EFC-X119		Moved	g	
CAS-V-730		Valve added	b	Manual, locked closed valve replaces check valve CAS-CVX-82e. Safety function of containment isolation remains unchanged.
	CAS-V-453	Removed from Table	a	Replaced by CAS-V-730; no longer needed for containment isolation.
RHR-V-124A		Moved	g	Previous Table location in error.
RHR-V-124B		Moved	g	Previous Table location in error.
RHR-V-125A		Moved	g	Previous Table location in error.
RHR-V-125B		Moved	g	Previous Table location in error.
RCIC-V-742		Footnotes added	f	No change in requirement; information only.

<u>Valve Name</u> <u>NEW</u>	<u>Valve Name</u> <u>OLD</u>	<u>Change</u>	<u>Reason</u>	<u>Remarks</u>
RCIC-V-68	RCIC-B-68	Typographical error	e	
	RHR-RV-55A	Removed from system	a	Replaced with blind flange.
	RHR-RV-55B	Removed from system	a	Replaced with blind flange.
	RHR-RV-95A	Removed from system	a	Replaced with blind flange.
	RHR-RV-95B	Removed from system	a	Replaced with blind flange.
PI-EFCX-72f		Added to table	e	Previously omitted from Table in error.
PI-EFCX-73e		Added to table	e	Previously omitted from Table in error.

In addition, the licensee proposed to eliminate the "Maximum Isolation Times" for the valves identified in Sections b, c, and d of Table 3.6.3-1. These valves are remote manual valves and are either normally closed, or have one or more check valves in the line between the valve and the reactor. A review of other plants' Technical Specifications indicate that similar valves do not have maximum allowable closure times identified in their Technical Specifications. Furthermore, the valves are part of the ASME Section XI inservice testing program. As part of this program, there is a maximum closure time limit as part of the testing. Thus, we conclude that the elimination of the maximum closure times for these valves in the Technical Specifications are acceptable.

On the basis of this evaluation and the evaluations indicated in the "Reason" and "Remarks" columns of the above table, the staff finds that the changes indicated in the above table as well as the removal of time limits for valves that do not receive automatic isolation signals are 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 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 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.

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.

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Dated: May 23, 1986

AMENDMENT NO. 26 TO FACILITY OPERATING LICENSE NO. NPF-21
WPPSS NUCLEAR PROJECT NO. 2

DISTRIBUTION:

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