



**ENERGY
NORTHWEST**

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July 30, 2012
GO2-12-104

10 CFR 50.90

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555-0001

Subject: **COLUMBIA GENERATING STATION, DOCKET NO. 50-397
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION FOR
LICENSE AMENDMENT REQUEST TO MAKE ADMINISTRATIVE AND
EDITORIAL CHANGES TO TECHNICAL SPECIFICATIONS AND THE
OPERATING LICENSE**

- References: 1) Letter, GO2-12-003, dated January 9, 2012, BJ Sawatzke (Energy Northwest) to NRC, "License Amendment Request to Make Administrative and Editorial Changes to the Technical Specifications and the Operating License"
- 2) Letter dated July 2, 2012, NRC to ME Reddemann (Energy Northwest), "Request for Additional Information Regarding License Amendment Request to Make Administrative and Editorial Changes to the Technical Specifications (TAC NO. ME7904)"

Dear Sir or Madam:

By Reference 1, Energy Northwest requested approval of a license amendment request to make administrative and editorial changes to the Columbia Generating Station Technical Specifications and Operating License. Via Reference 2, the Nuclear Regulatory Commission requested additional information related to the Energy Northwest submittal. Transmitted herewith in the enclosure is the Energy Northwest response to the request for additional information.

This letter and its enclosure contain no regulatory commitments. Should you have any questions or require additional information regarding this matter, please contact Mr. Z. K. Dunham, Licensing Supervisor, at (509) 377-4735.

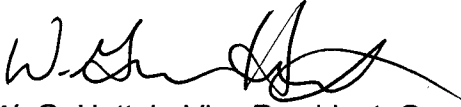
I declare under penalty of perjury that the foregoing is true and correct. Executed on the date of this letter.

A001
LRR

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Respectfully,

A handwritten signature in black ink, appearing to read 'W. G. Hettel', with a stylized flourish at the end.

W. G. Hettel - Vice President, Operations

Enclosure: As stated

cc: NRC Region IV Administrator
NRC NRR Project Manager
NRC Senior Resident Inspector/988C
AJ Rapacz – BPA/1399
WA Horin – Winston & Strawn
JO Luce – EFSEC
RR Cowley – WDOH

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NRC Request:

1. The licensee indicated that it would be adopting Technical Specifications Task Force (TSTF)-GG-05-01, "Writer's Guide for Plant-Specific Improved Technical Specifications," Revision 1, August 2010 (ADAMS Accession No. ML12046A089). The licensees' submittal does not appear to be consistent with TSTF-GG-05-01 with respect to the use of the word "continued". Please clarify. Specifically, was this intentional?

Energy Northwest Response:

The change in the use of the "(continued)" notation is not well illustrated in the marked up Technical Specification (TS) pages of the original submittal. The use of the "(continued)" notation was reviewed in the clean version of the TS that was included as Attachment 3 of the original submittal. The use of the "(continued)" notation was verified to be consistent with TSTF-GG-05-01 Rev. 1 with three exceptions. These exceptions were unintentional and occurred in LCO 3.7.4 and Tables 3.3.5.1-1 and 3.3.6.1-1. For these instances, the use of the "(continued)" notation was revised to ensure consistency with TSTF-GG-05-01. A mark-up of the changes (from what was included in Attachment 3 of the original submittal) are included in Attachment 1. Revised clean pages are included in Attachment 2.

The table below summarizes the use of the "(continued)" notation in the original submittal. The table identifies each instance of the use of the "(continued)" notation and the applicable section in TSTF-GG-05-01.

Affected Section	Specification	TSTF-GG-05-01
Table of Contents	3.3	2.2.2.d - If a list of Specifications for one Chapter is split across pages, the continued Chapter number and title are repeated one blank line below the single line at the top of the continued page. The term "(continued)" appears 2 spaces to the right of the Chapter title. The list of Specifications resumes under the repeated title as on the previous page
Definitions	Physics Testing	2.3.2.f - If a Definition is split across pages, the continued Definition title is repeated immediately below the single line at the top of the continued page. The term "(continued)" appears two spaces to the right of the Definition title.

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Affected Section	Specification	TSTF-GG-05-01
Logical Connectors, Completion Times, Frequency	1.2, 1.3, 1.4	2.3.3.e - If a subsection is split across pages, the continued subsection header is repeated one blank line below the single line at the top of the continued page. The term "(continued)" appears two spaces to the right of the subsection heading.
Design Features	4.3	2.4.2.a.5 - If a Section is split across pages, the number and heading for the broken Section are repeated one blank line below the single line at the top of the continued page. The term "(continued)" appears two spaces after the heading.
LCO and SR Applicability	3.0.4, SR 3.0.4	2.5.1.h - If a Specification is split across pages, the continued Specification heading is repeated one blank line below the single line at the top of the continued page. The term "(continued)" appears two spaces to the right of the Specification heading.
Required Action	3.1.1.D, 3.1.1.E, 3.1.3.A, 3.1.6.B, 3.3.2.1.C, 3.3.5.1.B, 3.3.6.2.C, 3.6.1.2.A, 3.6.1.2.B, 3.6.1.3.A, 3.6.1.3.C, 3.6.4.2.A, 3.8.1.A, 3.8.1.B, 3.8.2.A, 3.9.4.A, 3.9.8.B, 3.9.9.B, 3.10.2.A, 3.10.4.B, 3.10.6.A	2.5.7.f - If a Required Action is split across pages, the Condition letter is repeated on the following page one blank line below the single line below the column heading. The term "(continued)" appears two spaces to the right of the letter. The Required Action text will begin on the same line as the "(continued)."
Administrative Controls	5.2.2, 5.5.4, 5.5.7, 5.5.8, 5.5.9, 5.5.11, 5.5.12, 5.6.3, 5.7.1, 5.7.2	2.6.2.e - If a Specification is split across pages, the continued Specification number (and heading, if applicable) are repeated one blank line below the single line at the top of the continued page. The term "(continued)" appears two spaces to the right of the heading. If no heading exists, the Specification number is repeated as on the previous page, and the term "(continued)" appears next to it, indented 1.0 inch from the left margin. The continued Specification text follows one blank line below this.

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NRC Request:

2. The description for the proposed editorial change to the TS Limiting Condition for Operation (LCO) 3.3.4.1 refers to TSTF-GG-05-01 section 2.5.5.d.4. However, Section 2.5.6 of TSTF-GG-05-01 is entitled "Technical Specification Sections 3.1 through 3.9 (3.10) Surveillance Requirements Format." Should the reference for the change to LCO 3.3.4.1 be to Section 2.5.6.d?

Energy Northwest Response:

The reference should be to section 2.5.6.d of TSTF-GG-05-01 Rev. 1.

NRC Request:

3. The description of the editorial change for TS Table 3.3.5.2-1 refers to adding a header to page 3.3.5.2-3. However, this reference appears to be incorrect. Should it refer to page 3.3.5.2-4 instead?

Energy Northwest Response:

The reference should be to TS page 3.3.5.2-4.

NRC Request:

4. The mark-up page related to TS 5.7.1.e is not consistent with the description on page 5 of the "description and Evaluation of the Proposed TS Changes" in the LAR nor with the provided clean page. Please revise the mark-up page accordingly.

Energy Northwest Response:

The change to TS 5.7.1.e is incorrect. A revised page of the TS mark-up is provided in Attachment 1.

Additional Items:

1. In reviewing the clean TS, a typographical error was discovered on page 5.5-8. The Specification number for the Diesel Fuel Oil Testing Program, which was continued from the previous page, should be 5.5.9. This error was introduced during the software conversion and is not present in the existing TS. A mark-up of the change (from what was included in Attachment 3 of the original submittal) is included in Attachment 1. A revised clean page of the TS is provided in Attachment 2.

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2. In reviewing the clean Operating License, an editorial error was discovered in section 3.1 of Appendix B (page 3-1). The final paragraph in this section was unintentionally omitted. This error was introduced during the software conversion and is not present in the existing TS. A mark-up of the change (from what was included in Attachment 5 of the original submittal) is included in Attachment 3. A revised clean page is provided in Attachment 4.
3. Additionally, Energy Northwest has received Amendments 223, 224 and the Renewed Facility Operating License (FOL) for Columbia Generating Station (Columbia).
 - Amendment 223 deleted obsolete license conditions from the FOL and made other administrative changes. The renewed FOL for Columbia reformatted and added conditions to the license. A mark-up of the changes (from what was included in Attachment 5 of the original submittal) are included in Attachment 3. The revised clean pages are provided in Attachment 4.
 - Amendment 224 revised TS 3.4.7 to add a new Condition and re-number existing Conditions. A mark-up of the change (from what was included in Attachment 3 of the original submittal) is included in Attachment 1. A revised clean page of the TS is provided in Attachment 2.

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Attachment 1

REVISED TS MARK-UP PAGES

Table 3.3.5.1-1 (page 2 of 5)
Emergency Core Cooling System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1. LPCI and LPCS Subsystems (continued)					
g. LPCS Pump Discharge Flow - Low (Minimum Flow)	1, 2, 3, 4 ^(a) , 5 ^(a)	1	E	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 668 gpm and ≤ 1067 gpm
h. LPCI Pump A Discharge Flow - Low (Minimum Flow)	1, 2, 3, 4 ^(a) , 5 ^(a)	1	E	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 605 gpm and ≤ 984 gpm
i. Manual Initiation	1, 2, 3, 4 ^(a) , 5 ^(a)	2	C	SR 3.3.5.1.6	NA
2. LPCI B and LPCI C Subsystems					
a. Reactor Vessel Water Level - Low Low Low, Level 1	1, 2, 3, 4 ^(a) , 5 ^(a)	2 ^(b)	B	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ -142.3 inches
b. Drywell Pressure - High	1, 2, 3	2 ^(b)	B	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≤ 1.88 psig
c. LPCI Pump B Start - LOCA Time Delay Relay	1, 2, 3, 4 ^(a) , 5 ^(a)	1 ^(e)	C	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 17.24 seconds and ≤ 21.53 seconds
d. LPCI Pump C Start - LOCA Time Delay Relay	1, 2, 3, 4 ^(a) , 5 ^(a)	1 ^(e)	C	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 8.53 seconds and ≤ 10.64 seconds
e. LPCI Pump B Start - LOCA/LOOP Time Delay Relay	1, 2, 3, 4 ^(a) , 5 ^(a)	1	C	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.6	≥ 3.04 seconds and ≤ 6.00 seconds

(a) When associated subsystem(s) are required to be OPERABLE.

(b) Also required to initiate the associated DG.

(e) Also supports OPERABILITY of 230 kV offsite power circuit pursuant to LCO 3.8.1 and LCO 3.8.2.

Table 3.3.5.1-1 (page 3 of 5)
Emergency Core Cooling System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
2. LPCI B and C Subsystems	LPCI-C (continued)				
f. Reactor Vessel Pressure - Low (Injection Permissive)	1, 2, 3, 4 ^(a) , 5 ^(a)	1 per valve 1 per valve	C B	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6 SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 448 psig and ≤ 492 psig ≥ 448 psig and ≤ 492 psig
g. LPCI Pumps B & C Discharge Flow - Low (Minimum flow)	1, 2, 3, 4 ^(a) , 5 ^(a)	1 per pump	E	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 605 gpm and ≤ 984 gpm
h. Manual Initiation	1, 2, 3, 4 ^(a) , 5 ^(a)	2	C	SR 3.3.5.1.6	NA
3. High Pressure Core Spray (HPCS) System					
a. Reactor Vessel Water Level - Low Low, Level 2	1, 2, 3, 4 ^(a) , 5 ^(a)	4 ^(b)	B	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ -58 inches
b. Drywell Pressure - High	1, 2, 3	4 ^(b)	B	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≤ 1.88 psig
c. Reactor Vessel Water Level - High, Level 8	1, 2, 3, 4 ^(a) , 5 ^(a)	2	C	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≤ 56.0 inches
d. Condensate Storage Tank Level - Low	1, 2, 3, 4 ^(c) , 5 ^(c)	2	D	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 448 ft 1 inch elevation

(a) When associated subsystem(s) are required to be OPERABLE.

(b) Also required to initiate the associated DG.

(c) When HPCS is OPERABLE for compliance with LCO 3.5.2, "ECCS - Shutdown," and aligned to the condensate storage tank while tank water level is not within the limit of SR 3.5.2.2.

Table 3.3.5.1-1 (page 4 of 5)
Emergency Core Cooling System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
3. HPCS System (continued)					
e. Suppression Pool Water Level - High	1, 2, 3	2	D	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≤ 466 ft 11 inches elevation
f. HPCS System Flow Rate - Low (Minimum Flow)	1, 2, 3, 4 ^(a) , 5 ^(a)	1	E	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 1200 gpm and ≤ 1512 gpm
g. Manual Initiation	1, 2, 3, 4 ^(a) , 5 ^(a)	2	C	SR 3.3.5.1.6	NA
4. Automatic Depressurization System (ADS) Trip System A					
a. Reactor Vessel Water Level - Low Low Low, Level 1	1, 2 ^(d) , 3 ^(d)	2	F	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ -142.3 inches
b. ADS Initiation Timer	1, 2 ^(d) , 3 ^(d)	1	G	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.6	≤ 115.0 seconds
c. Reactor Vessel Water Level - Low, Level 3 (Permissive)	1, 2 ^(d) , 3 ^(d)	1	F	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 9.5 inches
d. LPCS Pump Discharge Pressure - High	1, 2 ^(d) , 3 ^(d)	2	G	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 119 psig and ≤ 171 psig
e. LPCI Pump A Discharge Pressure - High	1, 2 ^(d) , 3 ^(d)	2	G	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 116 psig and ≤ 134 psig

(a) When associated subsystem(s) are required to be OPERABLE.

(d) With reactor steam dome pressure > 150 psig.

Table 3.3.5.1-1 (page 5 of 5)
Emergency Core Cooling System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
4. ADS Trip System A (continued)					
f. Accumulator Backup Compressed Gas System Pressure - Low	1, 2 ^(d) , 3 ^(d)	3	F	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 151.4 psig
g. Manual Initiation	1, 2 ^(d) , 3 ^(d)	4	G	SR 3.3.5.1.6	NA
5. ADS Trip System B					
a. Reactor Vessel Water Level - Low Low Low, Level 1	1, 2 ^(d) , 3 ^(d)	2	F	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ -142.3 inches
b. ADS Initiation Timer	1, 2 ^(d) , 3 ^(d)	1	G	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.6	≤ 115.0 seconds
c. Reactor Vessel Water Level - Low, Level 3 (Permissive)	1, 2 ^(d) , 3 ^(d)	1	F	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 9.5 inches
d. LPCI Pumps B & C Discharge Pressure - High	1, 2 ^(d) , 3 ^(d)	2 per pump	G	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 116 psig and ≤ 134 psig
e. Accumulator Backup Compressed Gas System Pressure - Low	1, 2 ^(d) , 3 ^(d)	3	F	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 151.4 psig
f. Manual Initiation	1, 2 ^(d) , 3 ^(d)	4	G	SR 3.3.5.1.6	NA

(d) With reactor steam dome pressure > 150 psig.

Table 3.3.6.1-1 (page 2 of 6)
Primary Containment Isolation Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION C.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
2. Primary Containment Isolation (continued)					
b. Reactor Vessel Water Level - Low Low, Level 2	1, 2, 3	2 ^(e)	H	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.6	≥ -58 inches
c. Drywell Pressure - High	1, 2, 3	2 ^(e)	H	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 1.88 psig
d. Reactor Building Vent Exhaust Plenum Radiation - High	1, 2, 3	2	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 16.0 mR/hr
e. Manual Initiation	1, 2, 3	4	G	SR 3.3.6.1.6	NA
3. Reactor Core Isolation Cooling (RCIC) System Isolation					
a. RCIC Steam Line Flow - High	1, 2, 3	1	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 250 inches wg
b. RCIC Steam Line Flow - Time Delay	1, 2, 3	1	F	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 3.00 seconds
c. RCIC Steam Supply Pressure - Low	1, 2, 3	2	F	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.6	≥ 61 psig
d. RCIC Turbine Exhaust Diaphragm Pressure - High	1, 2, 3	2	F	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 20 psig

(e) Also required to initiate the associated LOCA Time Delay Relay Function pursuant to LCO 3.3.5.1.

Table 3.3.6.1-1 (page 3 of 6)
Primary Containment Isolation Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION C.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
3. RCIC System Isolation (continued)					
e. RCIC Equipment Room Area Temperature - High	1, 2, 3	1	F	SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 180°F
f. RCIC Equipment Room Area Differential Temperature - High	1, 2, 3	1	F	SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 60°F
g. RWCU/RCIC Steam Line Routing Area Temperature - High	1, 2, 3	1	F	SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 180°F
h. Manual Initiation	1, 2, 3	1 ^(b)	G	SR 3.3.6.1.6	NA
4. RWCU System Isolation					
a. Differential Flow - High	1, 2, 3	1	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≤ 67.4 gpm
b. Differential Flow - Time Delay	1, 2, 3	1	F	SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≤ 46.5 seconds
c. Blowdown Flow - High	1, 2, 3	1	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6 SR 3.3.6.1.7	≤ 271.7 gpm
d. Heat Exchanger Room Area Temperature - High	1, 2, 3	1	F	SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 160°F

(b) RCIC Manual Initiation only inputs into one of the two trip systems.

Table 3.3.6.1-1 (page 4 of 6)
Primary Containment Isolation Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION C.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
4. <u>RWCU System Isolation</u> (continued)					
e. Heat Exchanger Room Area Ventilation Differential Temperature - High	1, 2, 3	1	F	SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 70°F
f. Pump Room Area Temperature - High	1, 2, 3	1 per room	F	SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 180°F
g. Pump Room Area Ventilation Differential Temperature - High	1, 2, 3	1 per room	F	SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 100°F
h. RWCU/RCIC Line Routing Area Temperature - High	1, 2, 3	1	F	SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 180°F
i. RWCU Line Routing Area Temperature - High	1, 2, 3	1 per room	F	SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.6	
Room 409, 509 Areas					≤ 175°F
Room 408, 511 Areas					≤ 180°F
j. Reactor Vessel Water Level - Low Low, Level 2	1, 2, 3	2	F	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.6	≥ -58 inches
k. SLC System Initiation	1, 2, 3	2 ^(c)	I	SR 3.3.6.1.6	NA
l. Manual Initiation	1, 2, 3	2	G	SR 3.3.6.1.6	NA

(c) SLC System Initiation only inputs into one of the two trip systems.

ACTIONS		
CONDITION	REQUIRED ACTION	COMPLETION TIME
<div style="border: 1px solid black; padding: 2px; display: inline-block;">D C.</div> Required Action and associated Completion Time of Condition A or B not met. <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-top: 10px;">A, B, or C</div>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">D C.1</div> Be in MODE 3.	12 hours
	AND <div style="border: 1px solid black; padding: 2px; display: inline-block;">D C.2</div> Be in MODE 4.	36 hours
<div style="border: 1px solid black; padding: 2px; display: inline-block;">E D.</div> All required leakage detection systems inoperable.	<div style="border: 1px solid black; padding: 2px; display: inline-block;">E D.1</div> Enter LCO 3.0.3.	Immediately

SURVEILLANCE REQUIREMENTS

NOTE

When a channel is placed in an inoperable status solely for performance of required Surveillances, entry into associated Conditions and Required Actions may be delayed for up to 6 hours provided the other required leakage detection instrumentation is OPERABLE.

SURVEILLANCE		FREQUENCY
SR 3.4.7.1	Perform CHANNEL CHECK of required drywell atmospheric monitoring system.	12 hours
SR 3.4.7.2	Perform CHANNEL FUNCTIONAL TEST of required leakage detection instrumentation.	31 days
SR 3.4.7.3	Perform CHANNEL CALIBRATION of required leakage detection instrumentation.	18 months

Insert A

<p>-----NOTE----- Only applicable when the drywell atmospheric gaseous monitoring system is the only OPERABLE monitor.</p>	<p>C.1 Analyze grab samples of the drywell atmosphere.</p>	<p>Once per 12 hours</p>
	<p><u>AND</u></p>	
	<p>C.2 Monitor RCS LEAKAGE by administrative means.</p>	<p>Once per 12 hours</p>
	<p><u>AND</u></p>	
<p>C. Drywell floor drain sump flow monitoring system inoperable.</p>	<p>C.3 Restore the drywell floor drain sump flow monitoring system to OPERABLE status.</p>	<p>7 days</p>

ACTIONS (continued)		
CONDITION	REQUIRED ACTION	COMPLETION TIME
E. Two control room AC subsystems inoperable during OPDRVs.	E.1 Initiate action to suspend OPDRVs.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.4.1	Verify each control room AC subsystem has the capability to remove the assumed heat load.	24 months

5.5 Programs and Manuals

5.5.10 Diesel Fuel Oil Testing Program (continued)

9

- b. Other properties for ASTM 2-D fuel oil are within limits within 31 days following sampling and addition to storage tanks; and
- c. Total particulate concentration of the fuel oil in the storage tanks is ≤ 10 mg/l when tested every 31 days.

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Diesel Fuel Oil Testing Program test Frequencies.

5.5.10 Technical Specifications (TS) Bases Control Program

This program provides a means for processing changes to the Bases of these Technical Specifications.

- a. Changes to the Bases of the TS shall be made under appropriate administrative controls and reviews.
- b. Licensees may make changes to Bases without prior NRC approval provided the changes do not require either of the following:
 - 1. A change in the TS incorporated in the license; or
 - 2. A change to the updated FSAR or Bases that requires NRC approval pursuant to 10 CFR 50.59.
- c. The Bases Control Program shall contain provisions to ensure that the Bases are maintained consistent with the FSAR.
- d. Proposed changes that meet the criteria of Specification 5.5.10.b above shall be reviewed and approved by the NRC prior to implementation. Changes to the Bases implemented without prior NRC approval shall be provided to the NRC on a frequency consistent with 10 CFR 50.71(e).

5.5.11 Safety Function Determination Program (SFDP)

This program ensures loss of safety function is detected and appropriate actions taken. Upon entry into LCO 3.0.6, an evaluation shall be made to determine if loss of safety function exists. Additionally, other appropriate limitations and remedial or compensatory actions may be identified to be taken as a result of the support system inoperability and corresponding exception to entering supported system Condition and Required Actions. This program implements the requirements of LCO 3.0.6.

5.7 High Radiation Area

5.7.1 High Radiation Areas with Dose Rates not Exceeding 1.0 rem/hour (at 30 centimeters from the radiation sources or from any surface penetrated by the radiation) (continued)

3. A radiation monitoring device that continuously transmits dose rate and cumulative dose to a remote receiver monitored by radiation protection personnel responsible for controlling personnel radiation exposure within the area; or
4. A self-reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter) and,
 - (i) Be under the surveillance, as specified in the RWP or equivalent, while in the area, of an individual qualified in radiation protection procedures, equipped with a radiation monitoring device that continuously displays radiation dose rates in the area; who is responsible for controlling personnel radiation exposure within the area, or
 - (ii) Be under the surveillance, as specified in the RWP or equivalent, while in the area, by means of closed circuit television, of personnel qualified in radiation protection procedures, responsible for controlling personnel radiation exposure in the area, and with the means to communicate with individuals in the area who are covered by such surveillance.
- e. Except for individuals qualified in radiation protection procedures, or personnel continuously escorted by such individuals, entry into such areas shall be made only after dose rates in the area have been determined and entry personnel are knowledgeable of them. These continuously escorted personnel will receive a pre-job briefing prior to entry into such areas. This dose rate determination, knowledge, and pre-job briefing ~~do~~ not require documentation prior to initial entry.

(continued)

does

**RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION FOR LICENSE
AMENDMENT REQUEST TO MAKE ADMINISTRATIVE AND EDITORIAL CHANGES
TO TECHNICAL SPECIFICATIONS AND THE OPERATING LICENSE**

Attachment 2

REVISED TS PAGES (CLEAN)

Table 3.3.5.1-1 (page 2 of 5)
Emergency Core Cooling System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1. LPCI and LPCS Subsystems					
g. LPCS Pump Discharge Flow - Low (Minimum Flow)	1, 2, 3, 4 ^(a) , 5 ^(a)	1	E	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 668 gpm and ≤ 1067 gpm
h. LPCI Pump A Discharge Flow - Low (Minimum Flow)	1, 2, 3, 4 ^(a) , 5 ^(a)	1	E	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 605 gpm and ≤ 984 gpm
i. Manual Initiation	1, 2, 3, 4 ^(a) , 5 ^(a)	2	C	SR 3.3.5.1.6	NA
2. LPCI B and LPCI C Subsystems					
a. Reactor Vessel Water Level - Low Low Low, Level 1	1, 2, 3, 4 ^(a) , 5 ^(a)	2 ^(b)	B	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ -142.3 inches
b. Drywell Pressure - High	1, 2, 3	2 ^(b)	B	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≤ 1.88 psig
c. LPCI Pump B Start - LOCA Time Delay Relay	1, 2, 3, 4 ^(a) , 5 ^(a)	1 ^(a)	C	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 17.24 seconds and ≤ 21.53 seconds
d. LPCI Pump C Start - LOCA Time Delay Relay	1, 2, 3, 4 ^(a) , 5 ^(a)	1 ^(a)	C	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 8.53 seconds and ≤ 10.64 seconds
e. LPCI Pump B Start - LOCA/LOOP Time Delay Relay	1, 2, 3, 4 ^(a) , 5 ^(a)	1	C	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.6	≥ 3.04 seconds and ≤ 6.00 seconds

(a) When associated subsystem(s) are required to be OPERABLE.

(b) Also required to initiate the associated DG.

(e) Also supports OPERABILITY of 230 kV offsite power circuit pursuant to LCO 3.8.1 and LCO 3.8.2.

Table 3.3.5.1-1 (page 3 of 5)
Emergency Core Cooling System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
2. LPCI B and LPCI C Subsystems					
f. Reactor Vessel Pressure - Low (Injection Permissive)	1, 2, 3, 4 ^(a) , 5 ^(a)	1 per valve 1 per valve	C B	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6 SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 448 psig and ≤ 492 psig ≥ 448 psig and ≤ 492 psig
g. LPCI Pumps B & C Discharge Flow - Low (Minimum flow)	1, 2, 3, 4 ^(a) , 5 ^(a)	1 per pump	E	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 605 gpm and ≤ 984 gpm
h. Manual Initiation	1, 2, 3, 4 ^(a) , 5 ^(a)	2	C	SR 3.3.5.1.6	NA
3. High Pressure Core Spray (HPCS) System					
a. Reactor Vessel Water Level - Low Low, Level 2	1, 2, 3, 4 ^(a) , 5 ^(a)	4 ^(b)	B	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ -58 inches
b. Drywell Pressure - High	1, 2, 3	4 ^(b)	B	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≤ 1.88 psig
c. Reactor Vessel Water Level - High, Level 8	1, 2, 3, 4 ^(a) , 5 ^(a)	2	C	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≤ 56.0 inches
d. Condensate Storage Tank Level - Low	1, 2, 3, 4 ^(c) , 5 ^(c)	2	D	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 448 ft 1 inch elevation

(a) When associated subsystem(s) are required to be OPERABLE.

(b) Also required to initiate the associated DG.

(c) When HPCS is OPERABLE for compliance with LCO 3.5.2, "ECCS - Shutdown," and aligned to the condensate storage tank while tank water level is not within the limit of SR 3.5.2.2.

Table 3.3.5.1-1 (page 4 of 5)
Emergency Core Cooling System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
3. HPCS System					
e. Suppression Pool Water Level - High	1, 2, 3	2	D	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≤ 466 ft 11 inches elevation
f. HPCS System Flow Rate - Low (Minimum Flow)	1, 2, 3, 4 ^(a) , 5 ^(a)	1	E	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 1200 gpm and ≤ 1512 gpm
g. Manual Initiation	1, 2, 3, 4 ^(a) , 5 ^(a)	2	C	SR 3.3.5.1.6	NA
4. Automatic Depressurization System (ADS) Trip System A					
a. Reactor Vessel Water Level - Low Low Low, Level 1	1, 2 ^(d) , 3 ^(d)	2	F	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ -142.3 inches
b. ADS Initiation Timer	1, 2 ^(d) , 3 ^(d)	1	G	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.6	≤ 115.0 seconds
c. Reactor Vessel Water Level - Low, Level 3 (Permissive)	1, 2 ^(d) , 3 ^(d)	1	F	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 9.5 inches
d. LPCS Pump Discharge Pressure - High	1, 2 ^(d) , 3 ^(d)	2	G	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 119 psig and ≤ 171 psig
e. LPCI Pump A Discharge Pressure - High	1, 2 ^(d) , 3 ^(d)	2	G	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 116 psig and ≤ 134 psig

(a) When associated subsystem(s) are required to be OPERABLE.

(d) With reactor steam dome pressure > 150 psig.

Table 3.3.5.1-1 (page 5 of 5)
Emergency Core Cooling System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
4. ADS Trip System A					
f. Accumulator Backup Compressed Gas System Pressure - Low	1, 2 ^(d) , 3 ^(d)	3	F	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 151.4 psig
g. Manual Initiation	1, 2 ^(d) , 3 ^(d)	4	G	SR 3.3.5.1.6	NA
5. ADS Trip System B					
a. Reactor Vessel Water Level - Low Low Low, Level 1	1, 2 ^(d) , 3 ^(d)	2	F	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ -142.3 inches
b. ADS Initiation Timer	1, 2 ^(d) , 3 ^(d)	1	G	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.6	≤ 115.0 seconds
c. Reactor Vessel Water Level - Low, Level 3 (Permissive)	1, 2 ^(d) , 3 ^(d)	1	F	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 9.5 inches
d. LPCI Pumps B & C Discharge Pressure - High	1, 2 ^(d) , 3 ^(d)	2 per pump	G	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 116 psig and ≤ 134 psig
e. Accumulator Backup Compressed Gas System Pressure - Low	1, 2 ^(d) , 3 ^(d)	3	F	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 151.4 psig
f. Manual Initiation	1, 2 ^(d) , 3 ^(d)	4	G	SR 3.3.5.1.6	NA

(d) With reactor steam dome pressure > 150 psig.

Table 3.3.6.1-1 (page 2 of 6)
Primary Containment Isolation Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION C.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
2. Primary Containment Isolation					
b. Reactor Vessel Water Level - Low Low, Level 2	1, 2, 3	2 ^(e)	H	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.6	≥ -58 inches
c. Drywell Pressure - High	1, 2, 3	2 ^(e)	H	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 1.88 psig
d. Reactor Building Vent Exhaust Plenum Radiation - High	1, 2, 3	2	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 16.0 mR/hr
e. Manual Initiation	1, 2, 3	4	G	SR 3.3.6.1.6	NA
3. Reactor Core Isolation Cooling (RCIC) System Isolation					
a. RCIC Steam Line Flow - High	1, 2, 3	1	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 250 inches wg
b. RCIC Steam Line Flow - Time Delay	1, 2, 3	1	F	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 3.00 seconds
c. RCIC Steam Supply Pressure - Low	1, 2, 3	2	F	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.6	≥ 61 psig
d. RCIC Turbine Exhaust Diaphragm Pressure - High	1, 2, 3	2	F	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 20 psig

(e) Also required to initiate the associated LOCA Time Delay Relay Function pursuant to LCO 3.3.5.1.

Table 3.3.6.1-1 (page 3 of 6)
Primary Containment Isolation Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION C.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
3. RCIC System Isolation					
e. RCIC Equipment Room Area Temperature - High	1, 2, 3	1	F	SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 180°F
f. RCIC Equipment Room Area Differential Temperature - High	1, 2, 3	1	F	SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 60°F
g. RWCU/RCIC Steam Line Routing Area Temperature - High	1, 2, 3	1	F	SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 180°F
h. Manual Initiation	1, 2, 3	1 ^(b)	G	SR 3.3.6.1.6	NA
4. RWCU System Isolation					
a. Differential Flow - High	1, 2, 3	1	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≤ 67.4 gpm
b. Differential Flow - Time Delay	1, 2, 3	1	F	SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≤ 46.5 seconds
c. Blowdown Flow - High	1, 2, 3	1	F	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6 SR 3.3.6.1.7	≤ 271.7 gpm
d. Heat Exchanger Room Area Temperature - High	1, 2, 3	1	F	SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 160°F

(b) RCIC Manual Initiation only inputs into one of the two trip systems.

Table 3.3.6.1-1 (page 4 of 6)
Primary Containment Isolation Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION C.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
4. RWCU System Isolation					
e. Heat Exchanger Room Area Ventilation Differential Temperature - High	1, 2, 3	1	F	SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 70°F
f. Pump Room Area Temperature - High	1, 2, 3	1 per room	F	SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 180°F
g. Pump Room Area Ventilation Differential Temperature - High	1, 2, 3	1 per room	F	SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 100°F
h. RWCU/RCIC Line Routing Area Temperature - High	1, 2, 3	1	F	SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.6	≤ 180°F
i. RWCU Line Routing Area Temperature - High	1, 2, 3	1 per room	F	SR 3.3.6.1.3 SR 3.3.6.1.4 SR 3.3.6.1.6	
Room 409, 509 Areas					≤ 175°F
Room 408, 511 Areas					≤ 180°F
j. Reactor Vessel Water Level - Low Low, Level 2	1, 2, 3	2	F	SR 3.3.6.1.2 SR 3.3.6.1.4 SR 3.3.6.1.6	≥ -58 inches
k. SLC System Initiation	1, 2, 3	2 ^(c)	I	SR 3.3.6.1.6	NA
l. Manual Initiation	1, 2, 3	2	G	SR 3.3.6.1.6	NA

(c) SLC System Initiation only inputs into one of the two trip systems.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>-----NOTE----- Only applicable when the drywell atmospheric gaseous monitoring system is the only OPERABLE monitor. -----</p> <p>C. Drywell floor drain sump flow monitoring system inoperable.</p>	<p>C.1 Analyze grab samples of the drywell atmosphere.</p> <p><u>AND</u></p> <p>C.2 Monitor RCS LEAKAGE by administrative means.</p> <p><u>AND</u></p> <p>C.3 Restore drywell floor drain sump flow monitoring system to OPERABLE status.</p>	<p>Once per 12 hours</p> <p>Once per 12 hours</p> <p>7 days</p>
<p>D. Required Action and associated Completion Time of Condition A, B, or C not met.</p>	<p>D.1 Be in MODE 3.</p> <p><u>AND</u></p> <p>D.2 Be in MODE 4.</p>	<p>12 hours</p> <p>36 hours</p>
<p>E. All required leakage detection systems inoperable.</p>	<p>E.1 Enter LCO 3.0.3.</p>	<p>Immediately</p>

SURVEILLANCE REQUIREMENTS

NOTE

When a channel is placed in an inoperable status solely for performance of required Surveillances, entry into associated Conditions and Required Actions may be delayed for up to 6 hours provided the other required leakage detection instrumentation is OPERABLE.

SURVEILLANCE		FREQUENCY
SR 3.4.7.1	Perform CHANNEL CHECK of required drywell atmospheric monitoring system.	12 hours
SR 3.4.7.2	Perform CHANNEL FUNCTIONAL TEST of required leakage detection instrumentation.	31 days
SR 3.4.7.3	Perform CHANNEL CALIBRATION of required leakage detection instrumentation.	18 months

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
E. Two control room AC subsystems inoperable during OPDRVs.	E.1 Initiate action to suspend OPDRVs.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.4.1 Verify each control room AC subsystem has the capability to remove the assumed heat load.	24 months

5.5 Programs and Manuals

5.5.9 Diesel Fuel Oil Testing Program (continued)

- b. Other properties for ASTM 2-D fuel oil are within limits within 31 days following sampling and addition to storage tanks; and
- c. Total particulate concentration of the fuel oil in the storage tanks is ≤ 10 mg/l when tested every 31 days.

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Diesel Fuel Oil Testing Program test Frequencies.

5.5.10 Technical Specifications (TS) Bases Control Program

This program provides a means for processing changes to the Bases of these Technical Specifications.

- a. Changes to the Bases of the TS shall be made under appropriate administrative controls and reviews.
- b. Licensees may make changes to Bases without prior NRC approval provided the changes do not require either of the following:
 - 1. A change in the TS incorporated in the license; or
 - 2. A change to the updated FSAR or Bases that requires NRC approval pursuant to 10 CFR 50.59.
- c. The Bases Control Program shall contain provisions to ensure that the Bases are maintained consistent with the FSAR.
- d. Proposed changes that meet the criteria of Specification 5.5.10.b above shall be reviewed and approved by the NRC prior to implementation. Changes to the Bases implemented without prior NRC approval shall be provided to the NRC on a frequency consistent with 10 CFR 50.71(e).

5.5.11 Safety Function Determination Program (SFDP)

This program ensures loss of safety function is detected and appropriate actions taken. Upon entry into LCO 3.0.6, an evaluation shall be made to determine if loss of safety function exists. Additionally, other appropriate limitations and remedial or compensatory actions may be identified to be taken as a result of the support system inoperability and corresponding exception to entering supported system Condition and Required Actions. This program implements the requirements of LCO 3.0.6.

**RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION FOR LICENSE
AMENDMENT REQUEST TO MAKE ADMINISTRATIVE AND EDITORIAL CHANGES
TO TECHNICAL SPECIFICATIONS AND THE OPERATING LICENSE**
Attachment 3

REVISED OPERATING LICENSE MARK-UP PAGES

ENERGY NORTHWEST

DOCKET NO. 50-397

COLUMBIA GENERATING STATION

Renewed → FACILITY OPERATING LICENSE

Renewed → License No. NPF-21

renewed →

1. The Nuclear Regulatory Commission (the Commission or the NRC) has found that:

A. The application for license filed by Energy Northwest (also the licensee), 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, and all required notifications to other agencies or bodies have been duly made;

B. Construction of Energy Northwest, Columbia Generating Station (the facility) has been substantially completed in conformity with Construction Permit No. CPPR-93 and the application, as amended, the provisions of the Act, and the regulations of the Commission;

C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission (except as exempted from compliance in Section 2.D. below);

renewed →

D. There is reasonable assurance: (i) that the activities authorized by this operating license 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 (except as exempted from compliance in Section 2.D. below);

renewed →

E. Energy Northwest is technically qualified to engage in the activities authorized by this license in accordance with the Commission's regulations set forth in 10 CFR Chapter I;

F. Energy Northwest has satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements", of the Commission's regulations;

renewed →

G. The issuance of this license will not be inimical to the common defense and security or to the health and safety of the public;

Renewed →

H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of this Facility Operating License No. NPF-21, subject to the conditions for protection of the environment set forth in the Environmental Protection Plan attached as Appendix B, is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied; and

Renewed License No. NPF-21 →

Amendment No. 157-169

renewed

- I. The receipt, possession, and use of source, byproduct and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40 and 70.

Insert B

Renewed

2. Based on the foregoing findings regarding this facility, Facility Operating License NPF-21 is hereby issued to Energy Northwest (the licensee) to read as follows:

renewed
operating

This license applies to Columbia Generating Station, a boiling water nuclear reactor and associated equipment, owned by Energy Northwest. The facility is located on Hanford Reservation in Benton County near Richland, Washington, and is described in the licensee's "Final Safety Analysis Report", as supplemented and amended, and in the licensee's Environmental Report, as supplemented and amended.

- B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses Energy Northwest:

- (1) Pursuant to Section 103 of the Act and 10 CFR Part 50, to possess, use, and operate the facility at the designated location on Hanford Reservation, Benton County, Washington, in accordance with the procedures and limitations set forth in this license;

renewed

- (2) Pursuant to the Act and 10 CFR Part 70, to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;
- (3) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (4) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use in amounts as required any byproduct, source of special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
- (5) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
- (6) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to store byproduct, source and special nuclear materials not intended for use at Columbia Generating Station. The materials shall be no more than 9 sealed neutron radiation sources designed for insertion into pressurized water reactors and no more than 40 sealed beta radiation sources designed for use in area radiation monitors. The total inventory shall not exceed 24 microcuries of strontium-90, 20 microcuries of uranium-235, 30 curies of plutonium-238, and 3 curies of americium-241.

Renewed License No. NPF-21

→ Amendment No. 157-169

Insert B

- J. Actions have been identified and have been or will be taken with respect to (1) managing the effects of aging during the period of extended operation on the functionality of structures and components that have been identified to require review under 10 CFR 54.21 (a)(1), and (2) time-limited aging analyses that have been identified to require review under 10 CFR 54.21(c), such that there is reasonable assurance that the activities authorized by the renewed operating license will continue to be conducted in accordance with the current licensing basis, as defined in 10 CFR 54.3, for the facility, and that any changes made to the facility's current licensing basis in order to comply with 10 CFR 54.29(a) are in accordance with the Act and the Commission's regulations.**

renewed

- C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

The licensee is authorized to operate the facility at reactor core power levels not in excess of full power (3486 megawatts thermal). ~~Items in Attachment 1 shall be completed as specified. Attachment 1 is hereby incorporated into this license.~~

(2) Technical Specifications and Environmental Protection Plan

renewed

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The Technical Specifications contained in Appendix A, as revised through Amendment No. 222 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.

- a. For Surveillance Requirements (SRs) not previously performed by existing SRs or other plant tests, the requirement will be considered met on the implementation date and the next required test will be at the interval specified in the Technical Specifications as revised in Amendment No. 149.

(3) Initial Test Program (Section 14, SER)* Deleted.

~~The licensee shall conduct the initial test program (set forth in Section 14 of the licensee's Final Safety Analysis Report, as amended) without making any modifications of this program unless such modifications are in accordance with the provisions of 10 CFR Section 50.59. In addition, the licensee shall not make any major modifications to this program unless modifications have been identified and have received prior NRC approval. Major modifications are defined as:~~

- (a) ~~Elimination of any test identified in Section 14 of the licensee's Final Safety Analysis Report, as amended, as being essential;~~
- (b) ~~Modification of test objectives, methods or acceptance criteria for any test identified in Section 14 of the licensee's Final Safety Analysis Report, as amended, as being essential;~~
- (c) ~~Performance of any test at a power level different from that described in the program; and~~
- (d) ~~Failure to complete any tests included in the described program (planned or scheduled) for power levels up to the authorized power level.~~

*The parenthetical notation following the title of many license conditions denotes the section of the Safety Evaluation Report and/or its supplements wherein the license condition is discussed.

(4) Seismic Equipment Qualification (Section 3.10, SSER #4) Deleted.

Prior to startup following the first refueling outage, the licensee shall complete seismic qualifications for all equipment approved by the NRC staff for interim operation.

(5) Equipment Qualification (Sections 3.10.1, 3.11.3, SSER #4) Deleted.

Prior to exceeding five (5) percent of rated power, the licensee shall provide the staff for their review and approval:

- (a) assurance that all equipment listed in Appendix 3B is either environmentally qualified or provide justification for interim operation.
- (b) for all pipe-mounted safety-related equipment, provide assurance that the "g" values for the as-installed configuration do not exceed the "g" values established in the equipment qualification information documentation (QID) files or provide justification for interim operation.

(6) Ultimate Heat Sink (Section 2.4.5, SER) Deleted.

Prior to startup following the first refueling outage, the licensee shall perform operational testing of the ultimate heat sink spray ponds to verify analyzed parameters of drift loss, seepage and operational capacity. The licensee shall inform the NRC staff of scheduled testing at least 30 days in advance of such testing and shall provide the test results and conclusions for NRC review and approval.

(7) Turbine Missiles (Section 3.5.1.3, SSER #4) Deleted.

The licensee shall submit for NRC staff approval, within three years of date of issuance of this license, a turbine system maintenance program based on the manufacturer's calculations of missile generation probabilities acceptable to the NRC staff or volumetrically inspect all low pressure turbine rotors at the second refueling outage, and at every other refueling outage thereafter until a maintenance program is approved by the NRC staff.

(8) Fuel Coolability (Section 4.2.3.3(1), SER) Deleted.

Prior to startup following the first refueling outage, the licensee shall provide for NRC staff review and approval revised analyses showing the effects of high burnup fission gas release on loss of coolant accident.

(9) Inadequate Core Cooling (ICC) Instrumentation Analysis (Section 4.4.7, SER) Deleted.

The licensee shall implement staff's requirements regarding additional instrumentation for detection of inadequate core cooling which may result from the staff's review of the BWR Owner's Group Reports (SLI-8211 and SLI-8218) and the licensee's plant specific evaluation report addressing the subjects. Any required modifications shall be completed on a schedule acceptable to the NRC staff.

- (10) Thermal Hydraulic Stability (Section 4.4.4, SER) Deleted.

~~Prior to startup following the first refueling outage, the licensee shall provide for NRC staff review and approval a revised stability analysis.~~

- (11) Shield Wall Deferral (Section 12.3.2, SSER #4, Licensee Amendment #7)

The licensee shall complete construction of the deferred shield walls and window as identified in Attachment 3, as amended by this license amendment.

- (12) Alternate Remote Shutdown System (Section 7.4.2.3, SSER #1) Deleted.

~~Prior to startup following the first refueling outage, the licensee shall install, test, and have operable the alternate remote shutdown system.~~

- (13) Deleted.

- (14) Fire Protection Program (Generic Letter 86-10)

The licensee shall implement and maintain in effect all provisions of the approved fire protection program as described in Section 9.5.1 and Appendix F of the Final Safety Analysis Report (FSAR) for the facility thru Amendment #39 and as described in subsequent letters to the staff through November 30, 1988, referenced in the May 22, 1989 safety evaluation and in other pertinent sections of the FSAR referenced in either Section 9.5.1 or Appendix F and as approved in the Safety Evaluation Report issued in March 1982 (NUREG 0892) and in Supplements 3, issued in May 1983, and 4, issued in December 1983, and in safety evaluations issued with letters dated November 11, 1987 and May 22, 1989 subject to the following provision:

The license may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

- (15) BWR Startup or Operating Experience (Section 13.1.2.1(1), SER) Deleted.

~~During the startup test program, the licensee shall have on each shift a licensed individual with previous startup or operating experience on a comparable BWR, or an advisor who meets these experience requirements.~~

- (16) Emergency Response Capability (Section 18.0, SER, SSER#4, TMI Item I.D.1 and Section 13.5.2, SER, SSER #4) Deleted.

~~The licensee shall correct the design deficiencies for the control room and complete the other related emergency response capabilities as required by Attachment 2 to this license.~~

- (17) Operation with Partial Feedwater Heating (Section 15.1, SER) Deleted.

The licensee shall not operate with partial feedwater heating for the purpose of extending the normal fuel cycle unless acceptable justification is provided to and approved by NRC staff.

- (18) Modification of Automatic Depressurization System Logic Feasibility for Increased Diversity for Some Event Sequences (II.K.3.18, Section 6.3.5, SER, SSER #4) Deleted.

Prior to startup following the first refueling outage, the licensee shall:

- (a) Install modifications to the Automatic Depressurization System acceptable to the NRC;
- (b) Incorporate into the Plant Emergency Procedures the usage of the inhibit switch.

- (19) Relocation of Engine Mounted Controls (Section 9.5.4.1, SER, SSER #4) Deleted.

Prior to startup following the first refueling outage, the controls and monitoring instrumentation on the HPCS diesel engine skid shall be installed in a freestanding floor mounted panel separate from the engine skid. The controls and monitoring instrumentation shall be located in a vibration free floor area or shall be qualified for the vibrations that will occur during engine operation.

- (20) Emergency Diesel Engine Starting System (Section 9.5.6, SER, SSER #4) Deleted.

Prior to startup following the first refueling outage, air dryers shall be installed in the diesel engine air starting system.

- (21) Control Room Chillers Installation (Section 9.4.1, SER, SSER #4) Deleted.

The licensee shall have operable before May 31, 1984, redundant, seismic Category I environmentally qualified water chillers for control room HVAC.

(22) Control Systems Failures (Sections 7.7.2.1, 7.7.2.2, 7.5.2.3, SER, SSER #4) Deleted.

Prior to startup following the first refueling outage, the licensee shall provide to NRC staff for review and approval any analysis or modifications needed to resolve the following items:

- (a) capability to attain a safe shutdown condition following the loss of any Class 1E instrument bus
- (b) the impact of control systems failures resulting from high energy line breaks on the transient and accident analyses
- (c) the impact of control systems failures due to the failure of common power sources, sensors, or instrument sensing lines on the transient analyses.

(23) Hydrodynamic Loads (Section 3.9.3.1 SER, SSER #4) Deleted.

Prior to exceeding five (5) percent of rated thermal power, the licensee shall provide for NRC staff review and approval the results of the reconciliation of the hydrodynamic loads for all the safety related piping, equipment and their supports.

(24) Emergency Planning Program (Section 13.3, SER, SSER #4) Deleted.

Prior to exceeding five (5) percent of rated thermal power, functionally specific training in emergency response duties must be provided to the remaining members of the emergency organization staff who were not included in previous emergency preparedness training specified in the minimum staffing requirements of Table B-1 of NUREG-0654 (including on shift and 30 and 60 minute augmentation capability).

(25) Offsite Emergency Preparedness (Section 13.3, SSER #4) Deleted.

Prior to exceeding five (5) percent of rated thermal power, the licensee shall certify to the NRC that:

- (1) The distribution of tone alert radios, which are part of the alert and notification system, has been completed to residents within the plume exposure pathway Emergency Planning Zone (EPZ).
- (2) The distribution of public information brochures has been completed to the population within the plume exposure pathway EPZ.

(26) Progress of Offsite Emergency Preparedness (Appendix D, SER) Deleted.

~~In the event that the NRC finds that the lack of progress in completion of the procedures in the Federal Emergency Management Agency's final rule, 44 C.F.R. Part 350, is an indication that a major substantive problem exists in achieving or maintaining an adequate state of preparedness, the provisions of 10 C.F.R. Section 50.54(s)(2) will apply.~~

(27) Effluent Radiation Monitors (Section 11.5, SSER #4) Deleted.

~~Prior to July 1, 1984, the licensee shall provide the following information to the NRC staff for their review and approval:~~

- ~~1. Sensitivity of the effluent monitors.~~
- ~~2. Evaluation of response times of these instruments.~~
- ~~3. Evaluation of the instruments per criteria set forth in Section 5.4.7 of ANSI 13.10.~~
- ~~4. Compliance with Section 5.4.9 of ANSI 13.10.~~
- ~~5. Evaluation of capability to provide a calibrated electrical signal to verify circuit alignment and, if used, a commitment, that they be qualified.~~

(28) Environmental Qualifications (Section 3.11, SER, SSER #3, SSER #4) Deleted.

~~Prior to November 30, 1985, the licensee shall environmentally qualify all electrical equipment according to the provisions of 10 CFR 50.49.~~

(29) Protection of the Environment (FES)

Before engaging in additional construction or operational activities which may result in a significant adverse environmental impact that was not evaluated or that is significantly greater than the evaluation in the Final Environmental Statement the licensee shall provide a written notification to the Director of the Office of Nuclear Reactor Regulation and receive written approval from that office before proceeding with such activities.

(30) Additional Concerns Deleted.

~~The Additional Concerns contained in Appendix C, as revised through Amendment No. 153, are hereby incorporated into this license. Energy Northwest shall operate the facility in accordance with the Additional Concerns.~~

(31) Mitigation Strategy License Condition

Develop and maintain strategies for addressing large fires and explosions and that include the following key areas:

- (a) Fire fighting response strategy with the following elements:
 - 1. Pre-defined coordinated fire response strategy and guidance
 - 2. Assessment of mutual aid fire fighting assets
 - 3. Designated staging areas for equipment and materials
 - 4. Command and control
 - 5. Training of response personnel
- (b) Operations to mitigate fuel damage considering the following:
 - 1. Protection and use of personnel assets
 - 2. Communications
 - 3. Minimizing fire spread
 - 4. Procedures for implementing integrated fire response strategy
 - 5. Identification of readily-available pre-staged equipment
 - 6. Training on integrated fire response strategy
 - 7. Spent fuel pool mitigation measures
- (c) Actions to minimize release to include consideration of:
 - 1. Water spray scrubbing
 - 2. Dose to onsite responders

- (32) The licensee shall implement and maintain all Actions required by Attachment 2 to NRC Order EA-06-137, issued June 20, 2006, except the last action that requires incorporation of the strategies into the site security plan, contingency plan, emergency plan and/or guard training and qualification plan, as appropriate.

(33) Control Room Envelope Habitability Program (CRE)

Upon implementation of Amendment No. 207 adopting TSTF-448, Revision 3, the determination of CRE unfiltered air inleakage as required by SR 3.7.3.4, in accordance with TS 5.5.14.c.(i), the assessment of CRE habitability as required by Specification 5.5.14.c.(ii), and the measurement of CRE pressure as required by Specification 5.5.14.d, shall be considered met. Following implementation:

- (a) The first performance of SR 3.7.3.4, in accordance with Specification 5.5.14.c.(i), shall be within the specified Frequency of 6 years, plus the 18-month allowance of SR 3.0.2, as measured from November 6, 2003, the date of the most recent successful tracer gas test, or within the next 18 months if the time period since the most recent successful tracer gas test is greater than 6 years.

- (b) The first performance of the periodic assessment of CRE habitability, Specification 5.5.14.c.(ii), shall be within 3 years, plus the 9-month allowance of SR 3.0.2, as measured from November 6, 2003, the date of the most recent successful tracer gas test, or within the next 9 months if the time period since the most recent successful tracer gas test is greater than 3 years.
- (c) The first performance of the periodic measurement of CRE pressure, Specification 5.5.14.d, shall be within 24 months, plus the 184 days allowed by SR 3.0.2, as measured from March 23, 2006, the date of the most recent successful pressure measurement test, or within 184 days if not performed previously.

Insert C

- D. Exemptions from certain requirements of Appendices G, H and J to 10 CFR Part 50, are described in the Safety Evaluation Report. These exemptions are authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest. Therefore, these exemptions are hereby granted pursuant to 10 CFR 50.12. With the granting of this exemption the facility will operate, to the extent authorized herein, in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission.

- E. The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security plan, training and qualification plan, and safeguards contingency plan, including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plan, which contains Safeguards Information protected under 10 CFR 73.21, is entitled: Columbia Generating Station Physical Security Plan, Training and Qualification Plan, Safeguards Contingency Plan, and Independent Spent Fuel Storage Installation Plan". Energy Northwest shall fully implement and maintain in effect all provisions of the Commission-approved cyber security plan (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The Energy Northwest CSP was approved by License Amendment No. 222.

- F. Deleted.

- G. The licensee shall notify the Commission, as soon as possible but not later than one hour, of any accident at this facility which could result in an unplanned release of quantities of fission products in excess of allowable limits for normal operation established by the Commission.

- H. The licensee shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.

Insert C

- (34) The information in the FSAR supplement, submitted pursuant to 10 CFR 54.21(d), as supplemented by Commitment Nos. 1, 5, 13, 14, 17, 18, 23, 24, 26, 27, 28, 32, 36, 38, 40, 41, 42, 43, 48, 49, 50, 53, 55, 58, 59, 60, 61, 63, 64, 65, 66, 67, 68, 69, and 70 of Appendix A of NUREG-2123, "Safety Evaluation Report Related to the License Renewal of Columbia Generating Station" dated May 2012, is henceforth part of the FSAR which will be updated in accordance with 10 CFR 50.71(e). As such, the licensee may make changes to the programs and activities described in the UFSAR supplement and Commitment Nos. 1, 5, 13, 14, 17, 18, 23, 24, 26, 27, 28, 32, 36, 38, 40, 41, 42, 43, 48, 49, 50, 53, 55, 58, 59, 60, 61, 63, 64, 65, 66, 67, 68, 69, and 70 of Appendix A of NUREG-2123 provided the licensee evaluates such changes pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section.
- (35) The licensee's FSAR supplement submitted pursuant to 10 CFR 54.21(d), as revised during the license renewal application review process, and as supplemented by Commitment Nos. 1, 5, 13, 14, 17, 18, 23, 24, 26, 27, 28, 32, 36, 38, 40, 41, 42, 43, 48, 49, 50, 53, 55, 58, 59, 60, 61, 63, 64, 65, 66, 67, 68, 69, and 70 of Appendix A of NUREG-2123, describes certain future programs and activities to be completed before the period of extended operation. Energy Northwest shall complete these activities no later than June 20, 2023, and shall notify the NRC in writing when implementation of these activities is complete.
- (36) To prevent lateral motion of the core plate, the licensee shall install core plate wedges around the periphery of the core plate within the shroud on or before December 20, 2021. Upon completion of the core plate wedge installation, the licensee shall submit a written report to the NRC staff summarizing the results of the installation. The licensee shall also submit a written report regarding any corrective action taken related to core plate rim hold-down bolts or core plate wedges and the results of extent of condition reviews on or before December 20, 2021.

- I. This license is effective as of the date of issuance and shall expire at Midnight on December 20, 2023.

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FOR THE NUCLEAR REGULATORY COMMISSION

(Original Signed By)

Eric J. Leeds

~~Harold R. Denton~~, Director
Office of Nuclear Reactor Regulation

Enclosures

Attachments/Appendices:

1. Attachment 1 ← Appendix A Technical Specifications
2. Attachment 2 ← Appendix B Environmental Protection Plan
3. Attachment 3 ← Appendix C Additional Conditions
4. ~~Appendix A Technical Specifications (NUREG 1009)~~
5. ~~Appendix B Environmental Protection Plan~~
6. ~~Appendix C Additional Conditions~~

Date of Issuance: ~~December 20, 1983~~ ← May 22, 2012

ATTACHMENT 1 TO OPERATING LICENSE NPF-21

The licensee shall complete the following requirements within the schedule noted below:

1. ~~Preoperational/Acceptance Tests~~

Deleted

- a. ~~The licensee shall, prior to loading of fuel in the core, complete the System 36 preoperational testing to assure that those monitors required for fuel load fully meet the Technical Specification requirements without reliance on action statements:~~
- b. ~~The licensee shall successfully complete the following preoperational/acceptance tests before exceeding 5% power:~~

~~PT 33.0 B Chemical Waste Processing
PT 37.0 D Miscellaneous Radiation Monitoring Equipment
PT 40.0 A Off Gas System
AT 65.0 A Sealing Steam System
AT 66.0 A Condenser Air Removal
PT 69.0 A Condensate System
PT 70.0 A Condensate Storage Transfer
PT 71.0 A Condensate Filter Demineralizer System
PT 72.0 A Reactor Feedwater Turbine and Pumps
PT 72.0 B Reactor Feedwater Controls
AT 74.0 A Heater Vents and Drains
AT 82.0 A Turbine Building Heating and Ventilating
PT 92.0 A Off Gas Vault HVAC
AT 110.0 A Loose Parts Detection
PT 201.0 A Primary Containment Integrated Leakage Rate Test
AT 302.0 A Integrated Condenser In Leakage Test~~

- e. ~~The licensee shall complete PT 22.0 B, Nitrogen Inerting System prior to six months after initial criticality.~~

2. ~~Hangers Supports, and Restraints~~

~~All QI SI and QII SI hangers, supports, and restraints needing installation and/or modification will be completed prior to exceeding 5% power.~~

3. ~~Construction Completion (Master Completion List Schedule)~~

~~The licensee shall restrain fuel loading, primary system steam pressurization, exceeding 5% power, and commercial operation* by prerequisite completion of the associated categories of items in accordance with the schedule shown on the Project Master Completion List dated December 19, 1983. The licensee shall not extend the completion categories for individual items on the list without prior notification and individual concurrence by a representative of the NRC Regional Office.~~

~~*Commercial operation is defined as the 100% power warranty run or July 1, 1984, whichever occurs first.~~

ATTACHMENT 2

Deleted

The licensee shall complete the following requirements on the schedule noted below:

1. Detailed Control Room Design Review (DCRDR)

The licensee shall submit a program plan for DCRDR for NRC staff review within two (2) months after the issuance of this operating license and a summary report not later than six (6) months prior to the first refueling outage.

2. Control Room Design Improvements

The licensee shall correct and implement to the NRC staff's satisfaction, the following human engineering deficiencies prior to exceeding five (5) percent of rated thermal power:

- A-5.17* Inoperative System Status Panels
- A-7.15 Inoperative TDAS and GOS computer systems
- D-3.59 Multiple meaning abbreviations, lack of abbreviation control
- D-4.23 Hard to operate pushbuttons on controllers
- D-5.40 Non standard fuel zone monitor meter scale, P-601
- D-5.44 Identical push button/nonpush button status lights, P-820
- D-5.46 Identical push button/push button indicator lights, Red Worth Minimizer, Red Monitor control subpanels, P-603
- D-6.101 Inadequate labeling, Isolation Control, P-601
- D-8.38 Non identical RFW meter groupings for Systems A & B, P-840
- D-9.5 Inconsistent scales, CW Inlet Plenum Level Indicator and Controller, P-840
- E-5.61 Recorder pointers obscure scale numerals/graduation marks
- E-5.69 RPV depressurization procedures call for greater reading accuracy than is provided by pressure indicators
- F-4.37 Switch handles obscure pointers/labels, P-800

The licensee shall correct and implement to the NRC staff's satisfaction, the following human engineering deficiencies within four (4) months after the issuance of this operating license:

- A-3.4 Audio alarm signal detection and intensity levels
- D-4.22 Extension handles for throttlable valve controls, P-820
- D-5.49 Proper chart paper for Generator Monitor Temperature Recorder, P-820
- E-3.71 Inconsistent pushbutton color coding
- E-4.27 Extension handle for RPS reset switch, P-603
- F-6.115 Inconsistent fonts, switch escutcheon legends
- F-6.116 Inconsistent pushbutton color coding

*HED finding identification as given in NRC letter to D. W. Mazur dated 9/20/83.

Amendment No. 162 223

(strikeout amendment numbers)

3. Regulatory Guide 1.07, Revision 2 Compliance

- (a) The licensee shall implement (installation or upgrade) requirements of Regulatory Guide 1.07, Revision 2 with the exception of items (b) and (c) below prior to startup following the first refueling outage.
- (b) Deleted.
- (c) The licensee shall implement (install and have operational) a wide range suppression pool level monitoring system which satisfies the Category 1 equipment specifications in accordance with Regulatory Guide 1.07, Revision 2, prior to startup following the second refueling outage.

4. Upgrade Emergency Operating Procedures (EOPs)

The licensee shall provide within two(2) months after the issuance of this operating license, an addendum to the Procedures Generation Package describing the function and task analysis as identified in Supplement 1 to NUREG 0737.

5. Emergency Response Facilities

The licensee shall have fully functional emergency response facilities (Technical Support Center, Operational Support Center, and Emergency Operations Facility) prior to exceeding five (5) percent of rated power.

ATTACHMENT 3

LIST OF SHIELD WALLS

- *1. ~~FSAR Figure 12.3-32, Zone H-9 - The partial height wall outside the spent resin tank room.~~ Deleted.
- *2. ~~FSAR Figure 12.3-26, Zone G-12 - The tube access wall to the main condenser.~~ Deleted.
- **3. ~~FSAR Figure 12.3-27, Zone D-11 - Same as above, only other end of condenser.~~ Deleted.
- *4. ~~FSAR Figure 12.3-34, Zone H-8 - The access blackout to the spare demineralizer cubicle.~~ Deleted.
The access blackout to
- **5. ~~FSAR Figure 12.3-33, Zone G-9 - Same as above for~~ the duplicate centrifuge room.
- **6. ~~FSAR Figure 12.3-33, Zone F-9 - Same as above for the duplicate centrifuge.~~
- **7. ~~FSAR Figure 12.3-34, Zone J-5 - The blackout for one of the two decon concentrators.~~
- **8. ~~FSAR Figure 12.3-32, Zone D-8 - The two block walls at the north end of the truck loading bay.~~
- **9. ~~FSAR Figure 12.3-32, Zone E-8 - The leaded glass viewing window in the radwaste area.~~

* ~~Items 1, 2, and 4 will be installed prior to one year after the issuance of the WNP-2 Operating License.~~

** Shield walls and window identified in items 3, 5, 6, 7, 8, and 9 will be installed if the associated radiation levels at these locations exceed 2.5mR/hr as dictated by the ongoing ALARA reviews.

ENERGY NORTHWEST
COLUMBIA GENERATING STATION
ENVIRONMENTAL PROTECTION PLAN
(NON-RADIOLOGICAL)

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3.0 Consistency Requirements

3.1 Plant Design and Operation

The licensee may make changes in station design or operation or perform tests or experiments affecting the environment provided such activities do not involve an unreviewed environmental question and do not involve a change in the EPP. Changes in plant design or operation or performance of tests or experiments which do not affect the environment are not subject to the requirements of this EPP. Activities governed by Section 3.3 are not subject to the requirements of this Section.

Before engaging in unauthorized construction or operation activities which may significantly affect the environment, the licensee shall prepare and record an environmental evaluation of such activity. Activities are excluded from this requirement if all measurable nonradiological effects are confined to the on-site areas previously disturbed during site preparation and plant construction. When the evaluation indicates that such activity involves an unreviewed environmental question, the licensee shall provide a written evaluation of such activity and obtain prior NRC approval. When such activity involves a change in the EPP, such activity and change to the EPP may be implemented only in accordance with an appropriate license amendment as set forth in Section 5.3 of this EPP.

A proposed change, test or experiment shall be deemed to involve an unreviewed environmental question if it concerns: (1) a matter which may result in a significant increase in any adverse environmental impact previously evaluated in the FES-OL, environmental impact appraisals, or in any decisions of the Atomic Safety and Licensing Board; or (2) a significant change in effluents or power level ~~[in accordance with 10 CFR Part 51.5(b)(2)]~~ or (3) a matter, not previously reviewed and evaluated in the documents specified in (1) of this Subsection, which may have a significant adverse environmental impact.

Insert D



Insert D

The licensee shall maintain records of changes in facility design or operation and of tests and experiments carried out pursuant to this Subsection. These records shall include written evaluations which provide bases for the determination that the change, test, or experiment does not involve an unreviewed environmental question or constitute a decrease in the effectiveness of this EPP to meet the objectives specified in Section 1.0. The licensee shall include as part of its Annual Environmental Operating Report (per Subsection 5.4.1) brief descriptions, analyses, interpretations, and evaluations of such changes, tests and experiments.

APPENDIX C
 Deleted →
ADDITIONAL CONDITIONS

FACILITY OPERATING LICENSE NO. NPF-21

Energy Northwest shall comply with the following conditions on the schedules noted below:

<u>Amendment Number</u>	<u>Additional Condition</u>	<u>Implementation Date</u>
149	<p>The licensee shall relocate certain technical specification requirements to licensee-controlled documents as described below. The location of these requirements shall be retained by the licensee.</p> <p>a. This license condition approves the relocation of certain technical specification requirements to licensee-controlled documents (e.g., UFSAR, LCS, etc.), as described in Attachment 1 to the licensee's letter dated January 14, 1997. The approval is documented in the staff's safety evaluation dated March 4, 1997.</p>	<p>Implementation shall be completed by June 30, 1997.</p>
149	<p>Regulatory Guide 1.160 commitments as described in Attachment 1 to the licensee's letter dated January 14, 1997.</p>	<p>Implementation shall be completed 90 days from the date of issuance of Amendment 149.</p>
151	<p>To ensure sufficiently conservative SPC 9X9-9 OLMCPRs, the calculation of ΔCPR will include a conservative adder based on the variability observed in the US96A7 comparison with the ANFB correlation. This adder will be at a minimum, the greater of two times the standard deviation in the mean error of the predictions relative to the calculated matrix values, or a factor of 0.975 applied to the ΔCPR calculation, and will be independent of the 0.975 factor included in the US96A7 correlation as a conservative bias to the US96A7 predictions of CPR for the SPC fuel.</p>	<p>Implementation shall be completed prior to exceeding 25% power for Cycle 13.</p>

<u>Amendment Number</u>	<u>Additional Condition</u>	<u>Implementation Date</u>
153	This amendment authorizes the licensee to incorporate in the Final Safety Analysis Report (FSAR) certain changes to the description of the facility. Implementation of this amendment is the incorporation of these changes as described in the licensee's application dated April 14, 1998, as supplemented by letters dated April 28, 1998, and May 8, 1998, and evaluated in the staff's Safety Evaluation dated May 21, 1998.	90 days from the date of issuance.
153	This amendment is conditioned on the licensee completing the commitments regarding inspection of ECCS suppression pool screen material coupons as described in the licensee's supplemental letter dated April 28, 1998, and evaluated in the staff's Safety Evaluation dated May 21, 1998.	Refueling Outage R-14.

**RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION FOR LICENSE
AMENDMENT REQUEST TO MAKE ADMINISTRATIVE AND EDITORIAL CHANGES
TO TECHNICAL SPECIFICATIONS AND THE OPERATING LICENSE**

Attachment 4

REVISED OPERATING LICENSE (CLEAN)

ENERGY NORTHWEST
DOCKET NO. 50-397
COLUMBIA GENERATING STATION
RENEWED FACILITY OPERATING LICENSE

Renewed License No. NPF-21

1. The Nuclear Regulatory Commission (the Commission or the NRC) has found that:
 - A. The application for renewed license filed by Energy Northwest (also the licensee), 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, and all required notifications to other agencies or bodies have been duly made;
 - B. Construction of Energy Northwest, Columbia Generating Station (the facility) has been substantially completed in conformity with Construction Permit No. CPPR-93 and the application, as amended, the provisions of the Act, and the regulations of the Commission;
 - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission (except as exempted from compliance in Section 2.D. below);
 - D. There is reasonable assurance: (i) that the activities authorized by this renewed operating license 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 (except as exempted from compliance in Section 2.D. below);
 - E. Energy Northwest is technically qualified to engage in the activities authorized by this renewed license in accordance with the Commission's regulations set forth in 10 CFR Chapter I;
 - F. Energy Northwest has satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements", of the Commission's regulations;

Renewed License No. NPF-21

- G. The issuance of this renewed license will not be inimical to the common defense and security or to the health and safety of the public;
 - H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of this Renewed Facility Operating License No. NPF-21, subject to the conditions for protection of the environment set forth in the Environmental Protection Plan attached as Appendix B, is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied; and
 - I. The receipt, possession, and use of source, byproduct and special nuclear material as authorized by this renewed license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40 and 70.
 - J. Actions have been identified and have been or will be taken with respect to (1) managing the effects of aging during the period of extended operation on the functionality of structures and components that have been identified to require review under 10 CFR 54.21 (a)(1), and (2) time-limited aging analyses that have been identified to require review under 10 CFR 54.21(c), such that there is reasonable assurance that the activities authorized by the renewed operating license will continue to be conducted in accordance with the current licensing basis, as defined in 10 CFR 54.3, for the facility, and that any changes made to the facility's current licensing basis in order to comply with 10 CFR 54.29(a) are in accordance with the Act and the Commission's regulations.
2. Based on the foregoing findings regarding this facility, Renewed Facility Operating License NPF-21 is hereby issued to Energy Northwest (the licensee) to read as follows:
- A. This renewed operating license applies to Columbia Generating Station, a boiling water nuclear reactor and associated equipment, owned by Energy Northwest. The facility is located on Hanford Reservation in Benton County near Richland, Washington, and is described in the licensee's "Final Safety Analysis Report", as supplemented and amended, and in the licensee's Environmental Report, as supplemented and amended.
 - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses Energy Northwest:
 - (1) Pursuant to Section 103 of the Act and 10 CFR Part 50, to possess, use, and operate the facility at the designated location on Hanford Reservation, Benton County, Washington, in accordance with the procedures and limitations set forth in this renewed license;

- (2) Pursuant to the Act and 10 CFR Part 70, to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;
 - (3) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
 - (4) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use in amounts as required any byproduct, source of special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
 - (5) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
 - (6) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to store byproduct, source and special nuclear materials not intended for use at Columbia Generating Station. The materials shall be no more than 9 sealed neutron radiation sources designed for insertion into pressurized water reactors and no more than 40 sealed beta radiation sources designed for use in area radiation monitors. The total inventory shall not exceed 24 microcuries of strontium-90, 20 microcuries of uranium-235, 30 curies of plutonium-238, and 3 curies of americium-241.
- C. This renewed license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:
- (1) Maximum Power Level

The licensee is authorized to operate the facility at reactor core power levels not in excess of full power (3486 megawatts thermal).

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 224 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the renewed license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

- a. For Surveillance Requirements (SRs) not previously performed by existing SRs or other plant tests, the requirement will be considered met on the implementation date and the next required test will be at the interval specified in the Technical Specifications as revised in Amendment No. 149.

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(4) Deleted.

(5) Deleted.

(6) Deleted.

(7) Deleted.

(8) Deleted.

(9) Deleted.

(10) Deleted.

(11) Shield Wall Deferral (Section 12.3.2, SSER #4, License Amendment #7)

The licensee shall complete construction of the deferred shield walls and window as identified in Attachment 3, as amended by this license amendment.

(12) Deleted.

(13) Deleted.

*The parenthetical notation following the title of many license conditions denotes the section of the Safety Evaluation Report and/or its supplements wherein the license condition is discussed.

(14) Fire Protection Program (Generic Letter 86-10)

The licensee shall implement and maintain in effect all provisions of the approved fire protection program as described in Section 9.5.1 and Appendix F of the Final Safety Analysis Report (FSAR) for the facility thru Amendment #39 and as described in subsequent letters to the staff through November 30, 1988, referenced in the May 22, 1989 safety evaluation and in other pertinent sections of the FSAR referenced in either Section 9.5.1 or Appendix F and as approved in the Safety Evaluation Report issued in March 1982 (NUREG 0892) and in Supplements 3, issued in May 1983, and 4, issued in December 1983, and in safety evaluations issued with letters dated November 11, 1987 and May 22, 1989 subject to the following provision:

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

- (15) Deleted.
- (16) Deleted.
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- (21) Deleted.
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- (24) Deleted.
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- (28) Deleted.

(29) Protection of the Environment (FES)

Before engaging in additional construction or operational activities which may result in a significant adverse environmental impact that was not evaluated or that is significantly greater than the evaluation in the Final Environmental Statement the licensee shall provide a written notification to the Director of the Office of Nuclear Reactor Regulation and receive written approval from that office before proceeding with such activities.

(30) Deleted.

(31) Mitigation Strategy License Condition

Develop and maintain strategies for addressing large fires and explosions and that include the following key areas:

- (a) Fire fighting response strategy with the following elements:
 - 1. Pre-defined coordinated fire response strategy and guidance
 - 2. Assessment of mutual aid fire fighting assets
 - 3. Designated staging areas for equipment and materials
 - 4. Command and control
 - 5. Training of response personnel
- (b) Operations to mitigate fuel damage considering the following:
 - 1. Protection and use of personnel assets
 - 2. Communications
 - 3. Minimizing fire spread
 - 4. Procedures for implementing integrated fire response strategy
 - 5. Identification of readily-available pre-staged equipment
 - 6. Training on integrated fire response strategy
 - 7. Spent fuel pool mitigation measures
- (c) Actions to minimize release to include consideration of:
 - 1. Water spray scrubbing
 - 2. Dose to onsite responders

(32) The licensee shall implement and maintain all Actions required by Attachment 2 to NRC Order EA-06-137, issued June 20, 2006, except the last action that requires incorporation of the strategies into the site security plan, contingency plan, emergency plan and/or guard training and qualification plan, as appropriate.

(33) Control Room Envelope Habitability Program (CRE)

Upon implementation of Amendment No. 207 adopting TSTF-448, Revision 3, the determination of CRE unfiltered air leakage as required by SR 3.7.3.4, in accordance with TS 5.5.14.c.(i), the assessment of CRE habitability as required by Specification 5.5.14.c.(ii), and the measurement of CRE pressure as required by Specification 5.5.14.d, shall be considered met. Following implementation:

- (a) The first performance of SR 3.7.3.4, in accordance with Specification 5.5.14.c.(i), shall be within the specified Frequency of 6 years, plus the 18-month allowance of SR 3.0.2, as measured from November 6, 2003, the date of the most recent successful tracer gas test, or within the next 18 months if the time period since the most recent successful tracer gas test is greater than 6 years.
- (b) The first performance of the periodic assessment of CRE habitability, Specification 5.5.14.c.(ii), shall be within 3 years, plus the 9-month allowance of SR 3.0.2, as measured from November 6, 2003, the date of the most recent successful tracer gas test, or within the next 9 months if the time period since the most recent successful tracer gas test is greater than 3 years.
- (c) The first performance of the periodic measurement of CRE pressure, Specification 5.5.14.d, shall be within 24 months, plus the 184 days allowed by SR 3.0.2, as measured from March 23, 2006, the date of the most recent successful pressure measurement test, or within 184 days if not performed previously.

- (34) The information in the FSAR supplement, submitted pursuant to 10 CFR 54.21(d), as supplemented by Commitment Nos. 1, 5, 13, 14, 17, 18, 23, 24, 26, 27, 28, 32, 36, 38, 40, 41, 42, 43, 48, 49, 50, 53, 55, 58, 59, 60, 61, 63, 64, 65, 66, 67, 68, 69, and 70 of Appendix A of NUREG-2123, "Safety Evaluation Report Related to the License Renewal of Columbia Generating Station" dated May 2012, is henceforth part of the FSAR which will be updated in accordance with 10 CFR 50.71(e). As such, the licensee may make changes to the programs and activities described in the UFSAR supplement and Commitment Nos. 1, 5, 13, 14, 17, 18, 23, 24, 26, 27, 28, 32, 36, 38, 40, 41, 42, 43, 48, 49, 50, 53, 55, 58, 59, 60, 61, 63, 64, 65, 66, 67, 68, 69, and 70 of Appendix A of NUREG-2123 provided the licensee evaluates such changes pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section.
- (35) The licensee's FSAR supplement submitted pursuant to 10 CFR 54.21(d), as revised during the license renewal application review process, and as supplemented by Commitment Nos. 1, 5, 13, 14, 17, 18, 23, 24, 26, 27, 28, 32, 36, 38, 40, 41, 42, 43, 48, 49, 50, 53, 55, 58, 59, 60, 61, 63, 64, 65, 66, 67, 68, 69, and 70 of Appendix A of NUREG-2123, describes certain future programs and activities to be completed before the period of extended operation. Energy Northwest shall complete these activities no later than June 20, 2023, and shall notify the NRC in writing when implementation of these activities is complete.
- (36) To prevent lateral motion of the core plate, the licensee shall install core plate wedges around the periphery of the core plate within the shroud on or before December 20, 2021. Upon completion of the core plate wedge installation, the licensee shall submit a written report to the NRC staff summarizing the results of the installation. The licensee shall also submit a written report regarding any corrective action taken related to core plate rim hold-down bolts or core plate wedges and the results of extent of condition reviews on or before December 20, 2021.

- D. Exemptions from certain requirements of Appendices G, H and J to 10 CFR Part 50, are described in the Safety Evaluation Report. These exemptions are authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest. Therefore, these exemptions are hereby granted pursuant to 10 CFR 50.12. With the granting of this exemption the facility will operate, to the extent authorized herein, in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission.
- E. The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plan, which contains Safeguards Information protected under 10 CFR 73.21, is entitled: "Columbia Generating Station Physical Security Plan, Training and Qualification Plan, Safeguards Contingency Plan, and Independent Spent Fuel Storage Installation Plan." Energy Northwest shall fully implement and maintain in effect all provisions of the Commission-approved cyber security plan (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The Energy Northwest CSP was approved by License Amendment No. 222.
- F. Deleted.
- G. The licensee shall notify the Commission, as soon as possible but not later than one hour, of any accident at this facility which could result in an unplanned release of quantities of fission products in excess of allowable limits for normal operation established by the Commission.
- H. The licensee shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.

- I. This renewed license is effective as of the date of issuance and shall expire at midnight on December 20, 2043.

FOR THE NUCLEAR REGULATORY COMMISSION

(Original Signed By)

Eric J. Leeds, Director
Office of Nuclear Reactor Regulation

Enclosures:

1. Appendix A Technical Specifications
2. Appendix B Environmental Protection Plan
3. Appendix C Additional Conditions

Date of Issuance: May 22, 2012

ATTACHMENT 1 TO OPERATING LICENSE NPF-21

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ATTACHMENT 2

Deleted

ATTACHMENT 3

LIST OF SHIELD WALLS

1. Deleted.
2. Deleted.
3. Deleted.
4. Deleted.
- **5. FSAR Figure 12.3-12, Zone G-9 - The access blackout to the duplicate centrifuge room.
- **6. FSAR Figure 12.3-12, Zone F-9 - Same as above for the duplicate centrifuge.
- **7. FSAR Figure 12.3-13, Zone J-5 - The blackout for one of the two decon concentrators.
- **8. FSAR Figure 12.3-11, Zone D-8 - The two block walls at the north end of the truck loading bay.
- **9. FSAR Figure 12.3-11, Zone E-8 - The leaded glass viewing window in the radwaste area.

** Shield walls and window identified in items 5, 6, 7, 8, and 9 will be installed if the associated radiation levels at these locations exceed 2.5mR/hr as dictated by the ongoing ALARA reviews.

ENERGY NORTHWEST
COLUMBIA GENERATING STATION
ENVIRONMENTAL PROTECTION PLAN
(NON-RADIOLOGICAL)

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3.0 Consistency Requirements

3.1 Plant Design and Operation

The licensee may make changes in station design or operation or perform tests or experiments affecting the environment provided such activities do not involve an unreviewed environmental question and do not involve a change in the EPP. Changes in plant design or operation or performance of tests or experiments which do not affect the environment are not subject to the requirements of this EPP. Activities governed by Section 3.3 are not subject to the requirements of this Section.

Before engaging in unauthorized construction or operation activities which may significantly affect the environment, the licensee shall prepare and record an environmental evaluation of such activity. Activities are excluded from this requirement if all measurable nonradiological effects are confined to the on-site areas previously disturbed during site preparation and plant construction. When the evaluation indicates that such activity involves an unreviewed environmental question, the licensee shall provide a written evaluation of such activity and obtain prior NRC approval. When such activity involves a change in the EPP, such activity and change to the EPP may be implemented only in accordance with an appropriate license amendment as set forth in Section 5.3 of this EPP.

A proposed change, test or experiment shall be deemed to involve an unreviewed environmental question if it concerns: (1) a matter which may result in a significant increase in any adverse environmental impact previously evaluated in the FES-OL, environmental impact appraisals, or in any decisions of the Atomic Safety and Licensing Board; or (2) a significant change in effluents or power level or (3) a matter, not previously reviewed and evaluated in the documents specified in (1) of this Subsection, which may have a significant adverse environmental impact.

The licensee shall maintain records of changes in facility design or operation and of tests and experiments carried out pursuant to this Subsection. These records shall include written evaluations which provide bases for the determination that the change, test, or experiment does not involve an unreviewed environmental question or constitute a decrease in the effectiveness of this EPP to meet the objectives specified in Section 1.0. The licensee shall include as part of its Annual Environmental Operating Report (per Subsection 5.4.1) brief descriptions, analyses, interpretations, and evaluations of such changes, tests and experiments.

APPENDIX C

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