UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

March 3, 2021

Mr. Bradley J. Sawatzke
Chief Executive Officer
Energy Northwest
76 North Power Plant Loop
P.O. Box 968 (Mail Drop 1023)
Richland, WA 99352

SUBJECT: COLUMBIA GENERATING STATION - ISSUANCE OF AMENDMENT NO. 264 RE: TO REVISE TECHNICAL SPECIFICATION TO ADOPT TECHNICAL SPECIFICATIONS TASK FORCE TRAVELER TSTF-582, REVISION 0, "RPV WIC ENHANCEMENTS" (EPID L-2020-LLA-0212)

Dear Mr. Sawatzke:

The U.S. Nuclear Regulatory Commission (NRC, the Commission) has issued the enclosed Amendment No. 264 to Renewed Facility Operating License No. NPF-21 for the Columbia Generating Station (Columbia). The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated September 24, 2020.

The amendment modifies the Columbia TSs related to reactor pressure vessel (RPV) water inventory control (WIC) based on Technical Specifications Task Force (TSTF) Traveler TSTF-582, Revision 0, "RPV WIC Enhancements," which was approved by the NRC on August 13, 2020, for adoption into the Columbia TSs.

A copy of the related Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's monthly *Federal Register* notice.

Sincerely,

/RA/

Mahesh L. Chawla, Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-397

Enclosures:
1. Amendment No. 264 to NPF-21
2. Safety Evaluation

cc: Listserv

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

ENERGY NORTHWEST

DOCKET NO. 50-397

COLUMBIA GENERATING STATION

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 264
License No. NPF-21

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

   A. The application for amendment by Energy Northwest (the licensee), dated September 24, 2020, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

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

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-21 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 264 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.

3. The license amendment is effective as of its date of issuance and shall be implemented at the beginning of the next refueling outage scheduled for May 2021.

FOR THE NUCLEAR REGULATORY COMMISSION

Jennifer L. Dixon-Herrity

Digitally signed by Jennifer L. Dixon-Herrity
Date: 2021.03.03 16:07:26 -05'00'

Jennifer L. Dixon-Herrity, Chief
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed Facility
Operating License No. NPF-21
and the Technical Specifications

Date of Issuance: March 3, 2021

ATTACHMENT TO LICENSE AMENDMENT NO. 264

COLUMBIA GENERATING STATION

RENEWED FACILITY OPERATING LICENSE NO. NPF-21

DOCKET NO. 50-397

Replace the following pages of Renewed Facility Operating License No. NPF-21 and the Appendix A, Technical Specifications, with the attached revised pages. The revised pages are identified by amendment number and contain vertical lines indicating the areas of change.

Renewed Facility Operating License

REMOVE	INSERT
-4-	-4-

Technical Specification

REMOVE	INSERT
1.1-3	1.1-3
3.3.5.2-1	3.3.5.2-1
3.3.5.2-2	3.3.5.2-2
3.3.5.2-3	3.3.5.2-3
3.3.5.2-4	---
3.3.5.2-5	---
3.3.6.1-3	3.3.6.1-3
3.3.8.1-1	3.3.8.1-1
3.5.1-1	3.5.1-1
3.5.2-2	3.5.2-2
3.5.2-3	3.5.2-3
3.5.2-5	3.5.2-5
3.5.2-6	---
3.8.2-3	3.8.2-3

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 264 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.

(3) Deleted.

(4) Deleted.

(5) Deleted.

(6) Deleted.

(7) Deleted.

(8) Deleted.

(9) Deleted.

(10) Deleted.

(11) Deleted.

(12) Deleted.

(13) Deleted.

1.1 Definitions

Drain Time (Continued)	b) The limiting drain rate is the larger of the drain rate through a single penetration flow path with the highest flow rate, or the sum of the drain rates through multiple penetration flow paths susceptible to a common mode failure, for all penetration flow paths below the TAF except: 1. Penetration flow paths connected to an intact closed system, or isolated by manual or automatic valves that are closed and administratively controlled in the closed position, blank flanges, or other devices that prevent flow of reactor coolant through the penetration flow paths; 2. Penetration flow paths capable of being isolated by valves that will close automatically without offsite power prior to the RPV water level being equal to the TAF when actuated by RPV water level isolation instrumentation; or 3. Penetration flow paths with isolation devices that can be closed prior to the RPV water level being equal to the TAF by a dedicated operator trained in the task, who is in continuous communication with the control room, is stationed at the controls, and is capable of closing the penetration flow path isolation devices without offsite power. c) The penetration flow paths required to be evaluated per paragraph b) are assumed to open instantaneously and are not subsequently isolated, and no water is assumed to be subsequently added to the RPV water inventory; d) No additional draining events occur; and e) Realistic cross-sectional areas and drain rates are used. A bounding DRAIN TIME may be used in lieu of a calculated value.
EMERGENCY CORE COOLING SYSTEM (ECCS) RESPONSE TIME	The ECCS RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its ECCS initiation setpoint at the channel sensor until the ECCS equipment is capable of performing its safety function (i.e., the valves travel to their required positions, pump discharge pressures reach their required values, etc.). Times shall include diesel generator starting and sequence loading delays, where

3.3 INSTRUMENTATION

3.3.5.2 Reactor Pressure Vessel (RPV) Water Inventory Control Instrumentation

LCO 3.3.5.2 The RPV Water Inventory Control instrumentation for each Function in Table 3.3.5.2-1 shall be OPERABLE.

APPLICABILITY: According to Table 3.3.5.2-1.

ACTIONS

----------NOTE----------
Separate Condition entry is allowed for each channel.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more channels inoperable.	A.1 Initiate action to place channel in trip.	Immediately
	OR	
	A.2.1 Declare associated penetration flow path(s) incapable of automatic isolation.	Immediately
	AND	
	A.2.2 Initiate action to calculate DRAIN TIME.	Immediately

SURVEILLANCE REQUIREMENTS

----------NOTE----------

These SRs apply to each Function in Table 3.3.5.2-1, except SR 3.3.5.2.1 is not applicable to Function 2.a.

SURVEILLANCE		FREQUENCY
SR 3.3.5.2.1	Perform CHANNEL CHECK.	In accordance with the Surveillance Frequency Control Program
SR 3.3.5.2.2	Perform CHANNEL FUNCTIONAL TEST.	In accordance with the Surveillance Frequency Control Program

Table 3.3.5.2-1 (page 1 of 1)
RPV Water Inventory Control Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	ALLOWABLE VALUE
1. Residual Heat Removal (RHR) Shutdown Cooling (SDC) System Isolation			
a. Reactor Vessel Water Level - Low, Level 3	(a)	2 in one trip system	≥ 9.5 inches
2. Reactor Water Cleanup (RWCU) System Isolation			
a. Reactor Vessel Water Level - Low Low, Level 2	(a)	2 in one trip system	≥ -58 inches

(a) When automatic isolation of the associated penetration flow path(s) is credited in calculating DRAIN TIME.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
I. As required by Required Action C.1 and referenced in Table 3.3.6.1-1.	I.1 Declare associated standby liquid control (SLC) subsystem inoperable. OR	1 hour
	I.2 Isolate the Reactor Water Cleanup (RWCU) System.	1 hour
J. As required by Required Action C.1 and referenced in Table 3.3.6.1-1.	J.1 Initiate action to restore channel to OPERABLE status.	Immediately

SURVEILLANCE REQUIREMENTS

----------NOTES----------

1. Refer to Table 3.3.6.1-1 to determine which SRs apply for each Primary Containment Isolation Function.

2. 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 associated Function maintains isolation capability.

SURVEILLANCE		FREQUENCY
SR 3.3.6.1.1	Perform CHANNEL CHECK.	In accordance with the Surveillance Frequency Control Program

3.3 INSTRUMENTATION

3.3.8.1 Loss of Power (LOP) Instrumentation

LCO 3.3.8.1 The LOP instrumentation for each Function in Table 3.3.8.1-1 shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3

ACTIONS

----------NOTE----------
Separate Condition entry is allowed for each channel.

CONDITION	REQUIRED ACTION		COMPLETION TIME
A. One or more required channels inoperable.	A.1	Enter the Condition referenced in Table 3.3.8.1-1 for the channel.	Immediately
B. As required by Required Action A.1 and referenced in Table 3.3.8.1-1.	B.1	Declare associated DG inoperable.	1 hour from discovery of loss of initiation capability for the associated DG
	AND		
	B.2	Restore channel to OPERABLE status.	24 hours
C. As required by Required Action A.1 and referenced in Table 3.3.8.1-1.	C.1	Place channel in trip.	1 hour

3.5 EMERGENCY CORE COOLING SYSTEMS (ECCS), RPV WATER INVENTORY CONTROL, AND REACTOR CORE ISOLATION COOLING (RCIC) SYSTEM

3.5.1 ECCS - Operating

LCO 3.5.1 Each ECCS injection/spray subsystem and the Automatic Depressurization System (ADS) function of six safety/relief valves shall be OPERABLE.

APPLICABILITY: MODE 1,
MODES 2 and 3, except ADS valves are not required to be OPERABLE with reactor steam dome pressure ≤ 150 psig.

ACTIONS

----------NOTE----------
LCO 3.0.4.b is not applicable to High Pressure Core Spray (HPCS).

CONDITION	REQUIRED ACTION		COMPLETION TIME
A. One low pressure ECCS injection/spray subsystem inoperable.	A.1	Restore low pressure ECCS injection/spray subsystem to OPERABLE status.	7 days
B HPCS System inoperable.	B.1	Verify by administrative means RCIC System is OPERABLE when RCIC System is required to be OPERABLE.	Immediately
	AND		
	B.2	Restore HPCS System to OPERABLE status.	14 days

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. DRAIN TIME < 36 hours and ≥ 8 hours.	C.1 Verify secondary containment boundary is capable of being established in less than the DRAIN TIME. AND	4 hours
	C.2 Verify each secondary containment penetration flow path is capable of being isolated in less than the DRAIN TIME. AND	4 hours
	C.3 Verify one standby gas treatment (SGT) subsystem is capable of being placed in operation in less than the DRAIN TIME.	4 hours

ACTIONS

CONDITION	REQUIRED ACTION		COMPLETION TIME
D. DRAIN TIME < 8 hours.	D.1	---------- NOTE ---------- Required ECCS injection/spray subsystem or additional method of water injection shall be capable of operating without offsite electrical power. ----------	
		Initiate action to establish an additional method of water injection with water sources capable of maintaining RPV water level > TAF for ≥ 36 hours.	Immediately
	AND		
	D.2	Initiate action to establish secondary containment boundary.	Immediately
	AND		
	D.3	Initiate action to isolate each secondary containment penetration flow path or verify it can be automatically or manually isolated from the control room.	Immediately
	AND		
	D.4	Initiate action to verify one SGT subsystem is capable of being placed in operation.	Immediately

SURVEILLANCE REQUIREMENTS

	SURVEILLANCE	FREQUENCY
SR 3.5.2.4	Verify, for the required ECCS injection/spray subsystem, locations susceptible to gas accumulation are sufficiently filled with water.	In accordance with the Surveillance Frequency Control Program
SR 3.5.2.5	----------NOTE---------- 1. Operation may be through the test return line. 2. Credit may be taken for normal system operation to satisfy this SR. ----------	
	Operate the required ECCS injection/spray subsystem for ≥ 10 minutes.	In accordance with the Surveillance Frequency Control Program
SR 3.5.2.6	Verify each valve credited for automatically isolating a penetration flow path actuates to the isolation position on an actual or simulated isolation signal.	In accordance with the Surveillance Frequency Control Program
SR 3.5.2.7	----------NOTE---------- Vessel injection/spray may be excluded. ----------	
	Verify the required ECCS injection/spray subsystem can be manually operated.	In accordance with the Surveillance Frequency Control Program

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.8.2.1	----------NOTE---------- The following SRs are not required to be performed: SR 3.8.1.3, SR 3.8.1.9, SR 3.8.1.10, SR 3.8.1.14 and SR 3.8.1.16. ---------- The following SRs are applicable for AC sources required to be OPERABLE: SR 3.8.1.1 SR 3.8.1.6 SR 3.8.1.2 SR 3.8.1.9 SR 3.8.1.3 SR 3.8.1.10 SR 3.8.1.4 SR 3.8.1.14 SR 3.8.1.5 SR 3.8.1.16	In accordance with applicable SRs

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 264 TO

RENEWED FACILITY OPERATING LICENSE NO. NPF-21

ENERGY NORTHWEST

COLUMBIA GENERATING STATION

DOCKET NO. 50-397

1.0 PROPOSED CHANGES

Energy Northwest (the licensee) requested changes to the technical specifications (TSs) for Columbia Generating Station (Columbia) by license amendment request (LAR, application) dated September 24, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20268B348). In its application, the licensee requested that the U.S. Nuclear Regulatory Commission (NRC, the Commission) process the proposed amendment under the consolidated line item improvement process (CLIIP). The proposed changes would revise the TSs related to reactor pressure vessel (RPV) water inventory control (WIC) based on Technical Specifications Task Force (TSTF) Traveler TSTF-582, Revision 0, "RPV WIC Enhancements" (TSTF-582) (ADAMS Accession No. ML19240A260), and the associated NRC staff safety evaluation (SE) of TSTF-582, dated August 13, 2020 (ADAMS Accession No. ML20219A333).

The boiling-water reactor (BWR) RPV design includes multiple penetrations located below the top of active fuel (TAF). These penetrations provide entry for control rods, recirculation flow, reactor water cleanup, and shutdown cooling. Since these penetrations are below the TAF, this creates a potential to drain the reactor vessel water inventory and lose effective core cooling. The loss of water inventory and effective core cooling can potentially lead to fuel cladding failure and radioactive release. Drain Time is the time it would take for the water inventory in and above the RPV to drain to the TAF.

1.1 Proposed TS Changes to Adopt TSTF-582

In accordance with NRC staff-approved TSTF-582, the licensee proposed changes that would revise the TSs related to RPV WIC to incorporate operating experience and to correct errors and omissions that the licensee incorporated into the Columbia TSs when adopting TSTF-542, Revision 2, "Reactor Pressure Vessel Water Inventory Control" (ADAMS Accession No. ML16074A448). Specifically, the licensee proposed the following changes to adopt TSTF-582:

- The Drain Time definition in Columbia TS 1.1 would be revised to move the examples of common mode failure mechanisms to the Bases and delete seismic events.

- In Columbia TS 1.1, Drain Time definition, the exception from considering the Drain Time for penetration flow paths isolated with manual or automatic valves that are that are “locked, sealed, or otherwise secured” would be revised to apply the exception for manual or automatic valves that are “closed and administratively controlled.”

- The Actions of Columbia TS 3.3.5.2, “Reactor Pressure Vessel (RPV) Water Inventory Control Instrumentation,” would be revised to permit placing an inoperable isolation channel in trip as an alternative to declaring the associated penetration flow path incapable of automatic isolation.

- Columbia TS 3.3.5.2, Required Action B.2, requires calculating Drain Time with a Completion Time of “immediately.” The Required Action would be renumbered as A.2.2 and revised to state, “Initiate action to calculate DRAIN TIME.”

- Columbia TS 3.3.6.1, “Primary Containment Isolation Instrumentation,” Required Action J.2 would be deleted. This action is no longer applicable after adoption of TSTF-542, Revision 2.

- A redundant definition of “HPCS” (high-pressure core spray) in Columbia TS 3.5.1, “ECCS [Emergency Core Cooling System] – Operating,” Condition B, would be deleted.

- The first use of the acronym “SGT” (standby gas treatment) would be defined in TS 3.5.2, “Reactor Pressure Vessel (RPV) Water Inventory Control,” Required Action C.3, and the acronym “SGT” would be used in TS 3.5.2, Required Action D.4.

- Columbia TSs 3.5.2 and 3.3.5.2 would be revised to eliminate the requirement for a manual ECCS initiation signal to start the required ECCS injection/spray subsystem, and to instead rely on manual valve alignment and pump start. TS 3.5.2 Surveillance Requirements (SRs) related to manual initiation using the ECCS signal (such as verifying automatic alignment of valves on an initiation signal) would be eliminated. Related to this change, the TS 3.3.5.2 functions, SRs, and Actions that only support manual initiation using an ECCS signal (including interlocks and minimum flow instruments) would be eliminated.

- Columbia SR 3.5.2.6, that requires operating the required ECCS injection/spray subsystem for at least 10 minutes through the recirculation line, would be modified by the addition of two notes. The first Note would replace the existing SR that the ECCS subsystem be run through the recirculation line with a Note that states that “Operation may be through the test return line.” The second Note would permit crediting normal operation of the low-pressure ECCS subsystem for performance of the SR.

- Columbia TS 3.8.2, “AC [Alternating Current] Sources - Shutdown,” SR 3.8.2.1, would be revised to not require SRs that test the ability of the automatic diesel generator to start in Modes 4 and 5. TSTF-542 eliminated the automatic ECCS initiation in Modes 4 and 5.

1.2 Additional Proposed TS Changes

1.2.1 Proposed TS Changes to Adopt TSTF-583-T

The licensee proposed to make the following changes to the Columbia TSs in accordance with TSTF-583-T, "TSTF-582 Diesel Generator Variation" (ADAMS Accession No. ML20248H330):

- The Applicability of Limiting Condition for Operation (LCO) 3.3.8.1, "Loss of Power (LOP) Instrumentation," would be revised to remove the specified condition "When the associated diesel generator (DG) is required to be OPERABLE by LCO 3.8.2, 'AC Sources – Shutdown.'"

- R 3.8.2.1 would be revised to add SR 3.8.1.7, SR 3.8.1.15, and SR 3.8.1.18 to the list of TS 3.8.1 SRs that are not applicable under SR 3.8.2.1. The format of SR 3.8.2.1 would also be restructured to list the SRs that are still applicable, instead of listing the SRs that are not applicable.

1.2.2 Editorial Variations

The licensee noted that Columbia TSs have different numbering and nomenclature than the Standard Technical Specifications (STS) for the RPV WIC related TSs.

Columbia TS 3.5.1 contains an expired note associated with Required Action A.1 Completion Time, which is being deleted.

1.2.3 Additional Variations

The licensee has listed differences between the Columbia TSs and the STSs in NUREG-1434, "Standard Technical Specifications, General Electric BWR/6 Plants," Volume 1, "Specifications," and Volume 2, "Bases," Revision 4.0, dated April 2012 (ADAMS Accession Nos. ML12104A195 and ML12104A196, respectively), which TSTF 582 was based on.

2.0 REGULATORY EVALUATION

The regulation at Title 10 of the *Code of Federal Regulations* (10 CFR) 50.36(c)(2) requires that TSs include LCOs. Per 10 CFR 50.36(c)(2)(i), LCOs "are the lowest functional capability or performance levels of equipment required for safe operation of the facility." The regulation also requires that when an LCO of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the TS until the condition can be met.

The regulation at 10 CFR 50.36(c)(3) requires that TSs include items in the category of SRs, which are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation will be met.

The NRC staff's guidance for the review of TSs is in Chapter 16.0, "Technical Specifications," of NUREG-0800, Revision 3, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR [Light-Water Reactor] Edition" (SRP), March 2010 (ADAMS Accession No. ML100351425). As described therein, as part of the regulatory standardization effort, the NRC staff has prepared STSs for each of the LWR nuclear designs. Accordingly, the NRC staff's review includes consideration of whether the proposed changes are consistent with

NUREG-1434, “Standard Technical Specifications, General Electric BWR/6 Plants,” Volume 1, “Specifications,” and Volume 2, “Bases,” Revision 4.0, April 2012 (ADAMS Accession Nos. ML12104A195 and ML12104A196, respectively), as modified by NRC-approved travelers.

Traveler TSTF-582 revised the STSs related to RPV WIC to incorporate operating experience and to correct editorial errors in TSTF-542, Revision 2. The NRC approved TSTF-542, Revision 2, on December 20, 2016 (ADAMS Package Accession No. ML16343B066). The NRC staff approved TSTF-582 under the CLIIP in its letter dated August 13, 2020. The TSTF-582 SE states that a licensee may adopt the STS changes approved in TSTF-582, if the licensee has already adopted the STS changes approved in TSTF-542, Revision 2.

3.0 TECHNICAL EVALUATION

3.1 Proposed TS Changes to Adopt TSTF-582

The NRC staff compared the licensee’s proposed TS changes in Section 1.1 of this SE against the changes approved in TSTF-582. In accordance with the SRP Chapter 16.0, the NRC staff determined that the STS changes approved in TSTF-582 are applicable to the Columbia TSs because Columbia is a BWR/5 design and the NRC staff approved the TSTF-582 changes for BWR/5 designs. The licensee meets the TSTF-582 SE provision for adoption of TSTF-582 since it adopted Traveler TSTF-542, Revision 2, on October 30, 2018 (ADAMS Accession No. ML18255A350). Therefore, the NRC staff concludes that the licensee’s proposed changes to the Columbia TSs in Section 1.1 of this SE are acceptable in that they are consistent with TSTF-582 and the terms for use stated in the NRC staff’s SE of TSTF-582.

The NRC staff finds that proposed changes to the TS 1.1, and LCOs 3.3.5.2, 3.3.6.1, and 3.5.2 correctly specify the lowest functional capability or performance levels of equipment required for safe operation of the facility in accordance with 10 CFR 50.36(c)(2)(i). In addition, the NRC staff finds that proposed changes to the Actions of LCOs 3.3.5.2 , 3.3.6.1, and 3.5.2 are adequate remedial actions to be taken until each LCO can be met provide protection to the health and safety of the public, thereby satisfying 10 CFR 50.36(c)(2)(i).

The NRC staff finds that the proposed revisions to the SRs in TSs 3.3.5.2, 3.5.2, and 3.8.2 continue to provide requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the LCOs will be met in accordance with 10 CFR 50.36(c)(3).

Thus, the proposed changes continue to meet the requirements of 10 CFR 50.36(c)(2)(i) and 10 CFR 50.36(c)(3) as discussed in Section 3.0 of the NRC staff’s SE of TSTF-582.

3.2 Additional Proposed TS Changes

3.2.1 Proposed TS Changes to Adopt TSTF-583-T

Refer to Section 1.2.1 of this SE for proposed changes.

3.2.1.1 TS 3.3.8.1, Applicability

The licensee stated that TS 3.8.2 does not require automatic start and loading of a DG within 15 seconds on an ECCS initiation signal or a loss of offsite power signal. Currently, TS 3.3.8.1, is applicable in Modes 1, 2, and 3, and when the associated DG is required to be operable by

TS 3.8.2. The NRC staff confirmed that TS 3.8.2 no longer requires automatic start and loading of a DG on an LOP signal. The NRC staff finds it acceptable to revise the Applicability of LCO 3.3.8.1 by deleting "When the associated diesel generator (DG) is required to be OPERABLE by LCO 3.8.2, 'AC Sources – Shutdown,'" because the LOP instrumentation that generates the LOP signal does not need to be operable when the DG is required to be operable by TS 3.8.2. Therefore, the NRC staff concludes that the LCO applicability changes will continue to provide for the lowest functional capability or performance levels of equipment required for safe operation of the facility and, therefore, meet the LCO requirements of 10 CFR 50.36(c)(2).

3.2.1.2 SR 3.8.2.1

LCO 3.8.2 requires one offsite circuit and one DG capable of supplying one division of the onsite Class 1E AC electrical power distribution subsystem(s) required by LCO 3.8.8, "Distribution Systems-Shutdown," to be operable in shutdown conditions. The existing SR 3.8.2.1 lists the TS 3.8.1 SRs that are applicable in shutdown conditions with some exceptions.

SRs 3.8.1.7 and 3.8.1.15 require that the DG starts from standby or hot conditions, respectively, and achieve required voltage and frequency within 15 seconds, within required steady-state voltage and frequency ranges. The 15-second start requirement associated with the DG automatic start supports the assumptions in the design basis loss-of-coolant accident analysis. The NRC staff confirmed that 15-second timing is not required during a manual DG start to respond to a draining event, which has a minimum Drain Time of 1 hour. In addition, SR 3.8.1.2, which requires the DG to start from standby conditions and achieve the required steady-state voltage and frequency ranges, is applicable under SR 3.8.2. The NRC staff finds that the SRs 3.8.1.7 and 3.8.1.15 testing for the DG's capability to achieve required steady-state voltage and frequency ranges will be performed in SR 3.8.1.2, since SR 3.8.1.2 provides the test for this DG capability. Therefore, the NRC staff finds it acceptable to add SRs 3.8.1.7 and 3.8.1.15 to the list of TS 3.8.1 SRs that are not applicable under SR 3.8.2.1.

TS SR 3.8.1.18 states, "Verify interval between each sequenced load block is within ± 10% of design interval for time delay relay." This SR verifies the 10 percent load sequence time interval tolerance between each sequenced load block when loads are sequentially connected to the engineered safety features bus by relay logic schemes that perform a function equivalent to a load sequencer while the DG is tied to the engineered safety features bus. TS 3.5.2 requires manual starting of the equipment for water injection to respond to a draining event so that the DG will be manually loaded during a draining event. No other postulated events require automatic loading of the DG during shutdown conditions. The NRC staff confirmed that with respect to SR 3.8.18, the relay logic schemes that perform a function equivalent to a load sequencer are used for the automatic loading of the DG and are not used during a manual loading of the DG. Therefore, the NRC staff finds it acceptable to add SR 3.8.1.18 to the list of TS 3.8.1 SRs that are not applicable under SR 3.8.2.1.

Additionally, the licensee proposed to recast SR 3.8.2.1 from a listing of exceptions (i.e., a list of TS 3.8.1 SRs that do not need to be performed) to a listing the SRs that need to be performed to demonstrate the operability of the offsite and onsite AC power sources during shutdown conditions. The NRC staff confirmed that the list of SRs that need to be performed during shutdown conditions are correctly listed in SR 3.8.2.1. The NRC staff finds that the proposed revision of SR 3.8.2.1 is acceptable because it is an editorial clarification and does not substantively change TS requirements.

The NRC staff finds that the proposed changes to revise SR 3.8.2.1 are acceptable because the remaining applicable SRs will continue to demonstrate the operability of the required AC power sources and, as such, ensure the availability of the AC power required to operate the plant in a safe manner and mitigate postulated events during shutdown conditions. Therefore, the NRC staff finds the proposed changes to SR 3.8.2.1 are acceptable because the changes continue to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the associated LCO will continue to be met in accordance with 10 CFR 50.36(c)(3).

3.2.2 Editorial

The licensee noted that Columbia TSs have different numbering and nomenclature than the STSs for the RPV WIC related TS. The NRC staff finds that the different TS numbering and nomenclature changes are acceptable because they are editorial clarifications and do not substantively change TS requirements.

The NRC staff agrees that removal of an expired note associated with the completion time of TS 3.5.1 Required Action A.1 is an editorial change and has no effect on the application of the TS.

The NRC staff reviewed the identified differences between the Columbia TS and NUREG-1434 which TSTF 582 was based on and finds that they do not have an effect on the applicability of TSTF 582.

Finally, the NRC staff reviewed the proposed TS changes for technical clarity and consistency with the existing requirements for customary terminology and formatting. The NRC staff finds that the proposed changes are consistent with Chapter 16.0 of the SRP and are therefore acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Washington State official was notified of the proposed issuance of the amendment on February 10, 2021. On February 16, 2021, the State official confirmed that the State of Washington had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes SRs. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration published in the *Federal Register* on December 1, 2020 (85 FR 77273), and there has been no public comment on such finding. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) there is reasonable assurance that such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: J.Wilson

Date: March 3, 2021

SUBJECT: COLUMBIA GENERATING STATION - ISSUANCE OF AMENDMENT NO. 264 RE: TO REVISE TECHNICAL SPECIFICATION TO ADOPT TECHNICAL SPECIFICATIONS TASK FORCE TRAVELER TSTF-582, REVISION 0, "RPV WIC ENHANCEMENTS" (EPID L-2020-LLA-0212) DATED MARCH 3, 2021

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