



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

June 22, 2020

Mr. Bradley J. Sawatzke
Chief Executive Officer
Energy Northwest
76 North Power Plant Loop
P.O. Box 968 (Mail Drop 1023)
Richland, WA 99352-0968

**SUBJECT: COLUMBIA GENERATING STATION - ISSUANCE OF AMENDMENT NO. 259
TO REVISE TECHNICAL SPECIFICATIONS TO ADOPT TECHNICAL
SPECIFICATIONS TASK FORCE (TSTF) TRAVELER TSTF-529, REVISION 4,
"CLARIFY USE AND APPLICATION RULES" (EPID L-2019-LLA-0198)**

Dear Mr. Sawatzke:

The U.S. Nuclear Regulatory Commission (NRC, the Commission) has issued the enclosed Amendment No. 259 to Renewed Facility Operating License No. NPF-21 for the Columbia Generating Station. The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated September 12, 2019.

The amendment revises TS requirements in Sections 1.3, "Completion Times," and 3.0, "Limiting Conditions for Operation (LCO) Applicability," and "Surveillance Requirement (SR) Applicability." Specifically, these changes clarify and expand the use and application of the Columbia TS usage rules and are consistent with NRC-approved Technical Specifications Task Force (TSTF) Traveler TSTF-529, Revision 4, "Clarify Use and Application Rules." TSTF-529, Revision 4, was approved by the NRC on April 21, 2016.

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

Sincerely,

/RA Siva P. Lingam for/

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. 259 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. 259
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 12, 2019, 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. 259 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 within 90 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

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

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

Date of Issuance: June 22, 2020

ATTACHMENT TO LICENSE AMENDMENT NO. 259 TO
RENEWED FACILITY OPERATING LICENSE NO. NPF-21
COLUMBIA GENERATING STATION
DOCKET NO. 50-397

Replace the following pages of the Renewed Facility Operating License No. NPF-21 and 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

<u>REMOVE</u>	<u>INSERT</u>
-4-	-4-

Technical Specification

<u>REMOVE</u>	<u>INSERT</u>
1.3-1	1.3-1
1.3-2	1.3-2
1.3-3	1.3-3
1.3-4	1.3-4
1.3-5	1.3-5
1.3-6	1.3-6
1.3-7	1.3-7
1.3-8	1.3-8
1.3-9	1.3-9
1.3-10	1.3-10
---	1.3-11
3.0-1	3.0-1
3.0-4	3.0-4

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 259 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.

1.0 USE AND APPLICATION

1.3 Completion Times

PURPOSE	The purpose of this section is to establish the Completion Time convention and to provide guidance for its use.
BACKGROUND	Limiting Conditions for Operation (LCOs) specify minimum requirements for ensuring safe operation of the unit. The ACTIONS associated with an LCO state Conditions that typically describe the ways in which the requirements of the LCO can fail to be met. Specified with each stated Condition are Required Action(s) and Completion Time(s).
DESCRIPTION	<p>The Completion Time is the amount of time allowed for completing a Required Action. It is referenced to the discovery of a situation (e.g., inoperable equipment or variable not within limits) that requires entering an ACTIONS Condition unless otherwise specified, providing the unit is in a MODE or specified condition stated in the Applicability of the LCO.</p> <p>Unless otherwise specified, the Completion Time begins when a senior licensed operator on the operating shift crew with responsibility for plant operations makes the determination that an LCO is not met and an ACTIONS Condition is entered. The "otherwise specified" exceptions are varied, such as a Required Action Note or Surveillance Requirement Note that provides an alternative time to perform specific tasks, such as testing, without starting the Completion Time. While utilizing the Note, should a Condition be applicable for any reason not addressed by the Note, the Completion Time begins. Should the time allowance in the Note be exceeded, the Completion Time begins at that point. The exceptions may also be incorporated into the Completion Time. For example, LCO 3.8.1, "AC Sources - Operating," Required Action B.2, requires declaring required feature(s) supported by an inoperable diesel generator, inoperable when the redundant required feature(s) are inoperable. The Completion Time states, "4 hours from discovery of Condition B concurrent with inoperability of redundant required feature(s)." In this case the Completion Time does not begin until the conditions in the Completion Time are satisfied.</p> <p>Required Actions must be completed prior to the expiration of the specified Completion Time. An ACTIONS Condition remains in effect and the Required Actions apply until the Condition no longer exists or the unit is not within the LCO Applicability.</p> <p>If situations are discovered that require entry into more than one Condition at a time within a single LCO (multiple Conditions), the Required Actions for each Condition must be performed within the associated Completion Time. When in multiple Conditions, separate Completion Times are tracked for each Condition starting from the</p>

1.3 Completion Times

DESCRIPTION (continued)

discovery of the situation that required entry into the Condition, unless otherwise specified.

Once a Condition has been entered, subsequent divisions, subsystems, components, or variables expressed in the Condition, discovered to be inoperable or not within limits, will not result in separate entry into the Condition unless specifically stated. The Required Actions of the Condition continue to apply to each additional failure, with Completion Times based on initial entry into the Condition, unless otherwise specified.

However, when a subsequent division, subsystem, component, or variable expressed in the Condition is discovered to be inoperable or not within limits, the Completion Time(s) may be extended. To apply this Completion Time extension, two criteria must first be met. The subsequent inoperability:

- a. Must exist concurrent with the first inoperability; and
- b. Must remain inoperable or not within limits after the first inoperability is resolved.

The total Completion Time allowed for completing a Required Action to address the subsequent inoperability shall be limited to the more restrictive of either:

- a. The stated Completion Time, as measured from the initial entry into the Condition, plus an additional 24 hours; or
- b. The stated Completion Time as measured from discovery of the subsequent inoperability.

The above Completion Time extension does not apply to those Specifications that have exceptions that allow completely separate re-entry into the Condition (for each division, subsystem, component, or variable expressed in the Condition) and separate tracking of Completion Times based on this re-entry. These exceptions are stated in individual Specifications.

The above Completion Time extension does not apply to a Completion Time with a modified "time zero." This modified "time zero" may be expressed as a repetitive time (i.e., "once per 8 hours," where the Completion Time is referenced from a previous completion of the Required Action versus the time of Condition entry) or as a time modified by the phrase "from discovery. . ." Example 1.3-3 illustrates one use of

1.3 Completion Times

DESCRIPTION (continued)

this type of Completion Time. The 10 day Completion Time specified for Conditions A and B in Example 1.3-3 may not be extended.

EXAMPLES

The following examples illustrate the use of Completion Times with different types of Conditions and changing Conditions.

EXAMPLE 1.3-1

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3.	12 hours
	<u>AND</u> B.2 Be in MODE 4.	36 hours

Condition B has two Required Actions. Each Required Action has its own separate Completion Time. Each Completion Time is referenced to the time that Condition B is entered.

The Required Actions of Condition B are to be in MODE 3 within 12 hours AND in MODE 4 within 36 hours. A total of 12 hours is allowed for reaching MODE 3 and a total of 36 hours (not 48 hours) is allowed for reaching MODE 4 from the time that Condition B was entered. If MODE 3 is reached within 6 hours, the time allowed for reaching MODE 4 is the next 30 hours because the total time allowed for reaching MODE 4 is 36 hours.

If Condition B is entered while in MODE 3, the time allowed for reaching MODE 4 is the next 36 hours.

1.3 Completion Times

EXAMPLES (continued)

EXAMPLE 1.3-2

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One pump inoperable.	A.1 Restore pump to OPERABLE status.	7 days
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3.	12 hours
	<u>AND</u> B.2 Be in MODE 4.	36 hours

When a pump is declared inoperable, Condition A is entered. If the pump is not restored to OPERABLE status within 7 days, Condition B is also entered and the Completion Time clocks for Required Actions B.1 and B.2 start. If the inoperable pump is restored to OPERABLE status after Condition B is entered, Conditions A and B are exited, and therefore, the Required Actions of Condition B may be terminated.

When a second pump is declared inoperable while the first pump is still inoperable, Condition A is not re-entered for the second pump. LCO 3.0.3 is entered, since the ACTIONS do not include a Condition for more than one inoperable pump. The Completion Time clock for Condition A does not stop after LCO 3.0.3 is entered, but continues to be tracked from the time Condition A was initially entered.

While in LCO 3.0.3, if one of the inoperable pumps is restored to OPERABLE status and the Completion Time for Condition A has not expired, LCO 3.0.3 may be exited and operation continued in accordance with Condition A.

While in LCO 3.0.3, if one of the inoperable pumps is restored to OPERABLE status and the Completion Time for Condition A has expired, LCO 3.0.3 may be exited and operation continued in accordance with Condition B. The Completion Time for Condition B is tracked from the time the Condition A Completion Time expired.

1.3 Completion Times

EXAMPLES (continued)

On restoring one of the pumps to OPERABLE status, the Condition A Completion Time is not reset, but continues from the time the first pump was declared inoperable. This Completion Time may be extended if the pump restored to OPERABLE status was the first inoperable pump. A 24 hour extension to the stated 7 days is allowed, provided this does not result in the second pump being inoperable for > 7 days.

1.3 Completion Times

EXAMPLES (continued)

EXAMPLE 1.3-3

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One Function X subsystem inoperable.	A.1 Restore Function X subsystem to OPERABLE status.	7 days <u>AND</u> 10 days from discovery of failure to meet the LCO
B. One Function Y subsystem inoperable.	B.1 Restore Function Y subsystem to OPERABLE status.	72 hours <u>AND</u> 10 days from discovery of failure to meet the LCO
C. One Function X subsystem inoperable. <u>AND</u> One Function Y subsystem inoperable.	C.1 Restore Function X subsystem to OPERABLE status. <u>OR</u> C.2 Restore Function Y subsystem to OPERABLE status.	72 hours 72 hours

When one Function X subsystem and one Function Y subsystem are inoperable, Condition A and Condition B are concurrently applicable. The Completion Times for Condition A and Condition B are tracked separately for each subsystem, starting from the time each subsystem was declared inoperable and the Condition was entered. A separate Completion Time is established for Condition C and tracked from the time the second subsystem was declared inoperable (i.e., the time the situation described in Condition C was discovered).

1.3 Completion Times

EXAMPLES (continued)

If Required Action C.2 is completed within the specified Completion Time, Conditions B and C are exited. If the Completion Time for Required Action A.1 has not expired, operation may continue in accordance with Condition A. The remaining Completion Time in Condition A is measured from the time the affected subsystem was declared inoperable (i.e., initial entry into Condition A).

The Completion Times of Conditions A and B are modified by a logical connector, with a separate 10 day Completion Time measured from the time it was discovered the LCO was not met. In this example, without the separate Completion Time, it would be possible to alternate between Conditions A, B, and C in such a manner that operation could continue indefinitely without ever restoring systems to meet the LCO. The separate Completion Time modified by the phrase "from discovery of failure to meet the LCO" is designed to prevent indefinite continued operation while not meeting the LCO. This Completion Time allows for an exception to the normal "time zero" for beginning the Completion Time "clock". In this instance, the Completion Time "time zero" is specified as commencing at the time the LCO was initially not met, instead of at the time the associated Condition was entered.

EXAMPLE 1.3-4

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more valves inoperable.	A.1 Restore valve(s) to OPERABLE status.	4 hours
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3.	12 hours
	<u>AND</u> B.2 Be in MODE 4.	36 hours

A single Completion Time is used for any number of valves inoperable at the same time. The Completion Time associated with Condition A is based on the initial entry into Condition A and is not tracked on a per valve basis. Declaring subsequent valves inoperable, while Condition A is still in effect, does not trigger the tracking of separate Completion Times.

1.3 Completion Times

EXAMPLES (continued)

Once one of the valves has been restored to OPERABLE status, the Condition A Completion Time is not reset, but continues from the time the first valve was declared inoperable. The Completion Time may be extended if the valve restored to OPERABLE status was the first inoperable valve. The Condition A Completion Time may be extended for up to 4 hours provided this does not result in any subsequent valve being inoperable for > 4 hours.

If the Completion Time of 4 hours (plus the extension) expires while one or more valves are still inoperable, Condition B is entered.

EXAMPLE 1.3-5

ACTIONS

-----NOTE-----
Separate Condition entry is allowed for each inoperable valve.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more valves inoperable.	A.1 Restore valve to OPERABLE status.	4 hours
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3. <u>AND</u> B.2 Be in MODE 4.	12 hours 36 hours

The Note above the ACTIONS Table is a method of modifying how the Completion Time is tracked. If this method of modifying how the Completion Time is tracked was applicable only to a specific Condition, the Note would appear in that Condition rather than at the top of the ACTIONS Table.

1.3 Completion Times

EXAMPLES (continued)

The Note allows Condition A to be entered separately for each inoperable valve, and Completion Times tracked on a per valve basis. When a valve is declared inoperable, Condition A is entered and its Completion Time starts. If subsequent valves are declared inoperable, Condition A is entered for each valve and separate Completion Times start and are tracked for each valve.

If the Completion Time associated with a valve in Condition A expires, Condition B is entered for that valve. If the Completion Times associated with subsequent valves in Condition A expire, Condition B is entered separately for each valve and separate Completion Times start and are tracked for each valve. If a valve that caused entry into Condition B is restored to OPERABLE status, Condition B is exited for that valve.

Since the Note in this example allows multiple Condition entry and tracking of separate Completion Times, Completion Time extensions do not apply.

EXAMPLE 1.3-6

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One channel inoperable.	A.1 Perform SR 3.x.x.x.	Once per 8 hours
	<u>OR</u> A.2 Reduce THERMAL POWER to ≤ 50% RTP.	8 hours
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3.	12 hours

1.3 Completion Times

EXAMPLES (continued)

Entry into Condition A offers a choice between Required Action A.1 or A.2. Required Action A.1 has a "once per" Completion Time, which qualifies for the 25% extension, per SR 3.0.2, to each performance after the initial performance. The initial 8 hour interval of Required Action A.1 begins when Condition A is entered and the initial performance of Required Action A.1 must be completed within the first 8 hour interval. If Required Action A.1 is followed and the Required Action is not met within the Completion Time (plus the extension allowed by SR 3.0.2), Condition B is entered. If Required Action A.2 is followed and the Completion Time of 8 hours is not met, Condition B is entered.

If after entry into Condition B, Required Action A.1 or A.2 is met, Condition B is exited and operation may then continue in Condition A.

EXAMPLE 1.3-7

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One subsystem inoperable.	A.1 Verify affected subsystem isolated.	1 hour <u>AND</u> Once per 8 hours thereafter
	<u>AND</u> A.2 Restore subsystem to OPERABLE status.	72 hours
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3.	12 hours
	<u>AND</u> B.2 Be in MODE 4.	36 hours

1.3 Completion Times

EXAMPLES (continued)

Required Action A.1 has two Completion Times. The 1 hour Completion Time begins at the time the Condition is entered and each "Once per 8 hours thereafter" interval begins upon performance of Required Action A.1.

If after Condition A is entered, Required Action A.1 is not met within either the initial 1 hour or any subsequent 8 hour interval from the previous performance (plus the extension allowed by SR 3.0.2), Condition B is entered. The Completion Time clock for Condition A does not stop after Condition B is entered, but continues from the time Condition A was initially entered. If Required Action A.1 is met after Condition B is entered, Condition B is exited and operation may continue in accordance with Condition A, provided the Completion Time for Required Action A.2 has not expired.

IMMEDIATE COMPLETION TIME	When "Immediately" is used as a Completion Time, the Required Action should be pursued without delay and in a controlled manner.
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3.0 LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY

LCO 3.0.1	LCOs shall be met during the MODES or other specified conditions in the Applicability, except as provided in LCO 3.0.2, LCO 3.0.7, LCO 3.0.8, and LCO 3.0.9.
LCO 3.0.2	<p>Upon discovery of a failure to meet an LCO, the Required Actions of the associated Conditions shall be met, except as provided in LCO 3.0.5 and LCO 3.0.6.</p> <p>If the LCO is met or is no longer applicable prior to expiration of the specified Completion Time(s), completion of the Required Action(s) is not required, unless otherwise stated.</p>
LCO 3.0.3	<p>When an LCO is not met and the associated ACTIONS are not met, an associated ACTION is not provided, or if directed by the associated ACTIONS, the unit shall be placed in a MODE or other specified condition in which the LCO is not applicable. Action shall be initiated within 1 hour to place the unit, as applicable, in:</p> <ul style="list-style-type: none"> a. MODE 2 within 7 hours; b. MODE 3 within 13 hours; and c. MODE 4 within 37 hours. <p>Exceptions to this Specification are stated in the individual Specifications.</p> <p>Where corrective measures are completed that permit operation in accordance with the LCO or ACTIONS, completion of the actions required by LCO 3.0.3 is not required.</p> <p>LCO 3.0.3 is only applicable in MODES 1, 2, and 3.</p>
LCO 3.0.4	<p>When an LCO is not met, entry into a MODE or other specified condition in the Applicability shall only be made:</p> <ul style="list-style-type: none"> a. When the associated ACTIONS to be entered permit continued operation in the MODE or other specified condition in the Applicability for an unlimited period of time; b. After performance of a risk assessment addressing inoperable systems and components, consideration of the results, determination of the acceptability of entering the MODE or other specified condition in the Applicability, and establishment of risk management actions, if appropriate (exceptions to this Specification are stated in the individual Specifications); or

3.0 SURVEILLANCE REQUIREMENT (SR) APPLICABILITY

SR 3.0.1 SRs shall be met during the MODES or other specified conditions in the Applicability for individual LCOs, unless otherwise stated in the SR. Failure to meet a Surveillance, whether such failure is experienced during the performance of the Surveillance or between performances of the Surveillance, shall be failure to meet the LCO. Failure to perform a Surveillance within the specified Frequency shall be failure to meet the LCO except as provided in SR 3.0.3. Surveillances do not have to be performed on inoperable equipment or variables outside specified limits.

SR 3.0.2 The specified Frequency for each SR is met if the Surveillance is performed within 1.25 times the interval specified in the Frequency, as measured from the previous performance or as measured from the time a specified condition of the Frequency is met.

For Frequencies specified as "once," the above interval extension does not apply.

If a Completion Time requires periodic performance on a "once per . . ." basis, the above Frequency extension applies to each performance after the initial performance.

Exceptions to this Specification are stated in the individual Specifications.

SR 3.0.3 If it is discovered that a Surveillance was not performed within its specified Frequency, then compliance with the requirement to declare the LCO not met may be delayed, from the time of discovery, up to 24 hours or up to the limit of the specified Frequency, whichever is greater. This delay period is permitted to allow performance of the Surveillance. The delay period is only applicable when there is a reasonable expectation the surveillance will be met when performed. A risk evaluation shall be performed for any Surveillance delayed greater than 24 hours and the risk impact shall be managed.

If the Surveillance is not performed within the delay period, the LCO must immediately be declared not met, and the applicable Condition(s) must be entered.

When the Surveillance is performed within the delay period and the Surveillance is not met, the LCO must immediately be declared not met, and the applicable Condition(s) must be entered.

SR 3.0.4 Entry into a MODE or other specified condition in the Applicability of an LCO shall only be made when the LCO's Surveillances have been met within their specified Frequency, except as provided by SR 3.0.3. When an LCO is not met due to Surveillances not having been met, entry into a MODE or other specified condition in the Applicability shall only be made in accordance with LCO 3.0.4.



UNITED STATES
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WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 259 TO

RENEWED FACILITY OPERATING LICENSE NO. NPF-21

ENERGY NORTHWEST

COLUMBIA GENERATING STATION

DOCKET NO. 50-397

1.0 INTRODUCTION

By letter dated September 12, 2019 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML19255K007), Energy Northwest (the licensee) requested changes to the Technical Specifications (TSs) for Columbia Generating Station (Columbia).

The proposed changes would revise Columbia TS Sections 1.3, "Completion Times," and 3.0, "Limiting Conditions for Operation (LCO) Applicability," and "Surveillance Requirement (SR) Applicability." Specifically, these changes would clarify and expand the use and application of the Columbia TS usage rules and are consistent with U.S. Nuclear Regulatory Commission (NRC)-approved Technical Specifications Task Force (TSTF) Traveler TSTF-529, "Clarify Use and Application Rules." TSTF-529, Revision 4 was approved by the NRC by letter dated April 21, 2016 (ADAMS Accession No. ML16060A441).

2.0 REGULATORY EVALUATION

2.1 Description of Subject TS Sections

LCOs specify minimum requirements for ensuring safe operation of the unit. The actions associated with an LCO state conditions that typically describe the ways in which the requirements of the LCO can fail to be met. Specified with each stated condition are required action(s) and completion time(s).

Columbia TS Section 1.3, currently describes completion times, in part, as follows:

The Completion Time is the amount of time allowed for completing a Required Action. It is referenced to the time of discovery of a situation (e.g., inoperable equipment or variable not within limits) that requires entering an ACTIONS Condition unless otherwise specified, providing the unit is in a MODE or specified condition stated in the Applicability of the LCO. Required Actions must be completed prior to the expiration of the specified Completion Time. An ACTIONS

Condition remains in effect and the Required Actions apply until the Condition no longer exists or the unit is not within the LCO Applicability.

If situations are discovered that require entry into more than one Condition at a time within a single LCO (multiple Conditions), the Required Actions for each Condition must be performed within the associated Completion Time. When in multiple Conditions, separate Completion Times are tracked for each Condition starting from the time of discovery of the situation that required entry into the Condition.

Once a Condition has been entered, subsequent divisions, subsystems, components, or variables expressed in the Condition, discovered to be inoperable or not within limits, will not result in separate entry into the Condition, unless specifically stated. The Required Actions of the Condition continue to apply to each additional failure, with Completion Times based on initial entry into the Condition.

Columbia TS LCOs 3.0.1 through 3.0.9 establish the general requirements applicable to all specifications and apply at all times, unless otherwise stated. Similarly, SRs 3.0.1 through 3.0.4 establish the general requirements for surveillances that are applicable to all specifications and apply at all times, unless otherwise stated.

2.2 Description of TS Changes

The proposed change will revise the Columbia TS Sections 1.3 and 3.0. The proposed changes are described in more detail below.

2.2.1 Proposed Changes to "Time of Discovery"

Columbia TS Section 1.3, "Description," currently states, in part, the following (with emphasis added on "time of"):

The Completion Time is the amount of time allowed for completing a Required Action. It is referenced to the time of discovery of a situation (e.g., inoperable equipment or variable not within limits) that requires entering an ACTIONS Condition unless otherwise specified, providing the unit is in a MODE or specified condition stated in the Applicability of the LCO.

TS Section 1.3, "Description," also currently states, in part, the following (with emphasis added on "time of"):

If situations are discovered that require entry into more than one Condition at a time within a single LCO (multiple Conditions), the Required Actions for each Condition must be performed within the associated Completion Time. When in multiple Conditions, separate Completion Times are tracked for each Condition starting from the time of discovery of the situation that required entry into the Condition.

The licensee's proposed changes to Columbia TS Section 1.3 would delete "time of" from the previous statements and read as follows:

The Completion Time is the amount of time allowed for completing a Required Action. It is referenced to the discovery of a situation (e.g., inoperable equipment or variable not within limits) that requires entering an ACTIONS Condition unless otherwise specified, providing the unit is in a MODE or specified condition stated in the Applicability of the LCO.

[...]

If situations are discovered that require entry into more than one Condition at a time within a single LCO (multiple Conditions), the Required Actions for each Condition must be performed within the associated Completion Time. When in multiple Conditions, separate Completion Times are tracked for each Condition starting from the discovery of the situation that required entry into the Condition.

The adequacy of this change is discussed in Section 3.1.1.1 of this safety evaluation (SE).

2.2.2 Proposed Addition to "Time of Discovery"

The licensee proposed to add the following paragraph to Columbia TS Section 1.3 under Description:

Unless otherwise specified, the Completion Time begins when a senior licensed operator on the operating shift crew with responsibility for plant operations makes the determination that an LCO is not met and an ACTIONS Condition is entered. The "otherwise specified" exceptions are varied, such as a Required Action Note or Surveillance Requirement Note that provides an alternative time to perform specific tasks, such as testing, without starting the Completion Time. While utilizing the Note, should a Condition be applicable for any reason not addressed by the Note, the Completion Time begins. Should the time allowance in the Note be exceeded, the Completion Time begins at that point. The exceptions may also be incorporated into the Completion Time. For example, LCO 3.8.1, "AC [Alternating Current] Sources - Operating," Required Action B.2, requires declaring required feature(s) supported by an inoperable diesel generator, inoperable when the redundant required feature(s) are inoperable. The Completion Time states, "4 hours from discovery of Condition B concurrent with inoperability of redundant required feature(s)." In this case the Completion Time does not begin until the conditions in the Completion Time are satisfied.

The adequacy of this change is discussed in Section 3.1.1.2 of this SE.

2.2.3 Proposed Addition of "Unless Otherwise Specified"

The licensee proposed adding the phrase "unless otherwise specified" to the following two statements to Columbia TS Section 1.3 (with emphasis added):

When in multiple Conditions, separate Completion Times are tracked for each Condition starting from the discovery of the situation that required entry into the Condition, unless otherwise specified.

and

The Required Actions of the Condition continue to apply to each additional failure, with Completion Times based on initial entry into the Condition, unless otherwise specified.

The adequacy of this change is discussed in Section 3.1.1.3 of this SE.

2.2.4 Proposed Changes to LCO 3.0.4

Columbia TS LCO 3.0.4 currently states:

When an LCO is not met, entry into a MODE or other specified condition in the Applicability shall only be made:

- a. When the associated ACTIONS to be entered permit continued operation in the MODE or other specified condition in the Applicability for an unlimited period of time;
- b. After performance of a risk assessment addressing inoperable systems and components, consideration of the results, determination of the acceptability of entering the MODE or other specified condition in the Applicability, and establishment of risk management actions, if appropriate; exceptions to this Specification are stated in the individual Specifications, or
- c. When an allowance is stated in the individual value, parameter, or other Specification.

The licensee proposed to clarify LCO 3.0.4.b. by placing the statement regarding exceptions in parenthesis and replacing the ending comma with a semicolon. The proposed TS LCO 3.0.4 would state, in part, the following:

When an LCO is not met, entry into a MODE or other specified condition in the Applicability shall only be made:

- a. When the associated ACTIONS to be entered permit continued operation in the MODE or other specified condition in the Applicability for an unlimited period of time;
- b. After performance of a risk assessment addressing inoperable systems and components, consideration of the results, determination of the acceptability of entering the MODE or other specified condition in the Applicability, and establishment of risk management actions, if appropriate (exceptions to this Specification are stated in the individual Specifications); or
- c. When an allowance is stated in the individual value, parameter, or other Specification.

The adequacy of this change is discussed in Section 3.1.2 of this SE.

2.2.5 Proposed Changes to Columbia TS SR 3.0.3

Columbia SR 3.0.3 currently states the following:

If it is discovered that a Surveillance was not performed within its specified Frequency, then compliance with the requirement to declare the LCO not met may be delayed, from the time of discovery, up to 24 hours or up to the limit of the specified Frequency, whichever is greater. This delay period is permitted to allow performance of the Surveillance. A risk evaluation shall be performed for any Surveillance delayed greater than 24 hours and the risk impact shall be managed.

If the Surveillance is not performed within the delay period, the LCO must immediately be declared not met, and the applicable Condition(s) must be entered.

When the Surveillance is performed within the delay period and the Surveillance is not met, the LCO must immediately be declared not met, and the applicable Condition(s) must be entered.

The licensee's proposed changes to Columbia SR 3.0.3 would state the following (the additional sentence is underlined):

If it is discovered that a Surveillance was not performed within its specified Frequency, then compliance with the requirement to declare the LCO not met may be delayed, from the time of discovery, up to 24 hours or up to the limit of the specified Frequency, whichever is greater. This delay period is permitted to allow performance of the Surveillance. The delay period is only applicable when there is a reasonable expectation the surveillance will be met when performed. A risk evaluation shall be performed for any Surveillance delayed greater than 24 hours and the risk impact shall be managed.

If the Surveillance is not performed within the delay period, the LCO must immediately be declared not met, and the applicable Condition(s) must be entered.

When the Surveillance is performed within the delay period and the Surveillance is not met, the LCO must immediately be declared not met, and the applicable Condition(s) must be entered.

The adequacy of this change is discussed in Section 3.1.3 of this SE.

2.3 Regulatory Requirements, Licensing Information, Guidance Documents

The NRC staff considered the following regulatory requirements, guidance, and licensing information during its review of the proposed changes:

Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.36(c), requires TSs to include the following categories: (1) safety limits, limiting safety system settings, and limiting control

settings; (2) LCOs; (3) SRs; (4) design features; (5) administrative controls; (6) decommissioning; (7) initial notification; and (8) written reports.

Section 50.36(c)(2) of 10 CFR states, in part, that:

Limiting conditions for operation are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When a limiting condition for operation of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the technical specifications until the condition can be met.

Section 50.36(c)(3) of 10 CFR states that:

Surveillance requirements 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 the TSs is in NUREG-0800, "Standard Review Plan [SRP] for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR [Light-Water Reactor] Edition," Chapter 16, "Technical Specifications," Revision 3, dated March 2010 (ADAMS Accession No. ML100351425). As described therein, as part of the regulatory standardization effort, the NRC staff has prepared improved standard technical specifications (STs) for each of the LWR nuclear steam supply systems and associated balance-of-plant equipment systems. The licensee's proposed amendment is based on TSTF-529, Revision 4, which is an NRC-approved change to the improved STs. The NRC staff's review includes consideration of whether the proposed changes are consistent with TSTF-529, Revision 4. Special attention is given to TS provisions that depart from the improved STs, as modified by NRC-approved TSTF travelers, to determine whether proposed differences are justified by uniqueness in plant design or other considerations so that 10 CFR 50.36 is met. In addition, the guidance states that comparing the change to previous STs can help clarify the TS intent.

3.0 TECHNICAL EVALUATION

During the review of TSTF-529, Revision 4, the NRC staff considered generally the guidance on acceptance criteria of the SRP guidance described in Section 2.3 of this SE, and, in particular, the acceptance criteria in Chapter 16 of NUREG-0800, Revision 3. Additionally, the NRC staff evaluated the proposed changes to the Columbia TSs against the STS, as modified by approved TSTF-529, Revision 4 changes, as well as the requirements of 10 CFR 50.36(c).

3.1 Requested Changes

3.1.1 Proposed Changes to Section 1.3, "Completion Times"

3.1.1.1 Proposed Changes to "Time of Discovery"

The only mention of the term "time of discovery" in relation to completion times is in Columbia TS Section 1.3 (quoted in Section 2.2.1 of this SE). Throughout the Columbia TSs, the term "discovery" is used to describe the point in time that it is recognized that the requirements of an LCO are not met. For example, TS LCO 3.0.2 states in part, "Upon discovery of a failure to meet an LCO, the Required Actions of the associated Conditions shall be met, except as

provided in LCO 3.0.5 and LCO 3.0.6.” In addition, the Bases to LCO 3.0.2, state, in part, “LCO 3.0.2 establishes that upon discovery of a failure to meet an LCO, the associated ACTIONS shall be met.”

The proposed change to Columbia TS Section 1.3 would delete “time of” from the previous statements. This deletion was approved for the STS in TSTF-529. The NRC staff finds the proposed change acceptable because it makes Section 1.3 consistent with the language used throughout the rest of the TSs. This provides clarity to the term “discovery,” and therefore provides a clear and objective application of the technical specification required actions and associated completion times. The change is editorial and has no effect on the requirements currently in the TSs. The change also adopts an approved TSTF-529 change to the Columbia TSs. Therefore, the NRC staff finds the proposed change acceptable.

3.1.1.2 Proposed Addition to “Time of Discovery”

The proposed addition of the paragraph quoted in Section 2.2.2 of this SE is a TSTF-529 approved change.

The operating shift crew is responsible for overall control of facility operation. As part of that responsibility, the operating shift crew must be aware of the status of the plant and condition of structures, systems and components. This includes status of degraded or nonconforming conditions that may affect plant operation. Therefore, the proposed change simply augments the NRC staff’s expectation that a senior licensed operator on the operating shift crew, with responsibility for plant operations, makes the determination that an LCO is not met and a condition is entered. The phrase “and an ACTIONS Condition is entered” in the above proposed insertion is necessary to accommodate circumstances in which LCO 3.0.6 allows an LCO to not be met without entry into the Conditions. In those circumstances, a completion time does not begin. In addition, an example is added to the proposed insertion in order to explain the concept presented.

The NRC staff finds the proposed change acceptable since it clarifies senior reactor operators’ responsibilities and the allowances of LCO 3.0.6, and therefore, provides a clear and objective application of Columbia’s TS required actions and associated completion times and it adopts an approved TSTF-529 change to the Columbia TSs.

3.1.1.3 Proposed Addition of “Unless Otherwise Specified”

The phrase, “unless otherwise specified,” in Columbia TS Section 1.3, refers to those instances in which TS LCOs define the start of the completion time as different from “discovery.” For example, Columbia TS 3.8.1, “AC Sources - Operating,” Required Action B.2, calls for declaring required feature(s) supported by an inoperable diesel generator inoperable when the redundant required feature(s) are inoperable. The Completion Time states, “4 hours from discovery of Condition B concurrent with inoperability of redundant required feature(s).” In this case, the completion time does not begin until the conditions in the completion time are satisfied.

The licensee proposed adding the phrase “unless otherwise specified,” to the paragraphs described in Section 2.2.3 of this SE. The addition of the phrase “unless otherwise specified” acknowledges that there are instances, as indicated in the individual TSs, when the completion time does not start at discovery. These exceptions are varied, such as when a required action Note or SR Note provides an alternative time to perform specific tasks, such as testing, without starting the completion time. While utilizing the Note, should a condition be applicable for any

reason not addressed by the Note, the completion time begins. Should the time allowance in the Note be exceeded, the completion time begins at that point as well.

The NRC staff approved the addition of the phrase to the STS in TSTF-529. The NRC staff finds the proposed change acceptable since it clarifies that there are exceptions, and therefore, provides a clear and objective application of the Columbia TS Required Actions and associated Completion Times and it adopts an approved TSTF-529 change to the Columbia TSs.

3.1.2 Proposed Changes to LCO 3.0.4

As stated in Section 2.2.4 of this SE, the current Columbia TS LCO 3.0.4 contains three options, (LCO 3.0.4.a, b, and c). LCO 3.0.4.a ends with a semicolon and LCO 3.0.4.b ends with a comma followed by the word "or."

LCO 3.0.4.b states, in part, "After performance of a risk assessment ... stated in the individual Specifications, or," could lead to operator misinterpretation. Operators could misapply this statement by believing the "or" applies to the phrase regarding exceptions and that LCO 3.0.4.a, b, and c apply concurrently.

The licensee proposed to clarify this sentence by placing the statement regarding exceptions in parenthesis and replacing the ending comma with a semicolon. The proposed TS LCO 3.0.4 would state the following: "After performance of a risk assessment ... if appropriate (exceptions to this specification are stated in the individual specifications); or."

The NRC staff finds that the change is editorial since it does not change the requirements currently in the TSs. The NRC staff approved placing the statement regarding exceptions in parenthesis and replacing the ending comma with a semicolon in the STS in TSTF-529. The NRC staff finds the proposed change is acceptable since it removes potential for misapplication of LCO 3.0.4 allowances, and therefore, provides a clear and objective application of the TS Required Actions and it adopts an approved TSTF-529 change to the Columbia TSs.

3.1.3 Proposed Changes to SR 3.0.3

The NRC staff has typically interpreted SR 3.0.3, which is quoted in Section 2.2.5 of this SE, as inapplicable to SRs that have never been performed previously. This is because the allowance provided by SR 3.0.3 is based on the fact that the SR was satisfactorily met in the past and the most probable result of performing the SR is the verification of conformance with the requirements. Therefore, there is reasonable expectation the SR will be met when performed.

However, the NRC staff recognizes that there are instances in which an SR may not have been performed in the past, but there is still a reasonable expectation the SR will be met when performed. For example, an SR requires testing of a relay contact. A licensee identifies that the relay contact has never been tested as required in accordance with a particular SR. The licensee, however, finds there is a reasonable expectation the SR will be met when performed because the subject relay contact has been tested by another SR or historical operation of the subject relay contact has been successful.

The delay period allowed by Columbia TS SR 3.0.3 offers adequate time to complete SRs that have been missed. In addition, this delay period permits the completion of an SR before complying with required actions or other remedial measures that might preclude completion of the SR. The NRC staff finds the application of the delay period provided by Columbia TS

SR 3.0.3 acceptable for use on SRs that have never been performed so as long as licensees can provide an adequate determination of reasonable expectation the SR will be met when performed.

The licensee proposed adding a sentence to Columbia SR 3.0.3 as described in Section 2.2.5 of this SE. The NRC staff approved adding the sentence to STS SR 3.0.3 in TSTF-529. When making a determination of reasonable expectation that the SR will be met when performed, licensees should consider many factors. These factors include, but are not limited to, things such as the period of time since the SR was last performed, or whether the SR, or a portion thereof, has ever been performed, and many other indications, tests, or activities that might support the expectation that the SR will be met when performed. It is not sufficient to infer the behavior of the associated equipment from the performance of similar equipment. The rigor of determining whether there is a reasonable expectation an SR will be met when performed should increase based on the length of time since the last performance of the SR. If the SR has been performed recently, a review of the SR history and equipment performance may be sufficient to support a reasonable expectation that the SR will be met when performed. For SRs that have not been performed for a long period or that have never been performed, a rigorous evaluation based on objective evidence should provide a high degree of confidence that the equipment is capable of performing its specified safety function(s). The evaluation should be documented in sufficient detail to allow a knowledgeable individual to understand the basis for the determination.

The proposed change, which expands the scope of SR 3.0.3 to SRs that have never been performed, is acceptable because it requires there to be an adequate determination of a reasonable expectation the SR will be met when performed. In addition, the proposed change augments plant safety since it could prevent unnecessary shutdowns by providing adequate time to complete SRs that have never been performed but are likely to achieve satisfactory results. Finally, addition of the sentence adopts an approved TSTF-529 change to the Columbia TSs.

3.2 Summary

As described in Section 2.3 of this SE, the regulations contained in 10 CFR 50.36 require that TSs include items in specified categories, including LCOs and SRs. The proposed changes modify the LCOs, conditions, required actions, completion times, and SRs applicable to their usage and application by adopting changes approved by the NRC staff in TSTF-529, Revision 4. The Columbia TSs continue to specify the LCOs and specify the remedial measures to be taken if one of these requirements is not satisfied. The TSs continue to specify the appropriate SRs to ensure the necessary quality of affected structures, systems and components are maintained. Therefore, the NRC staff finds that the proposed changes to the LCOs and SRs are acceptable because the TSs, as amended, will continue to meet 10 CFR 50.36(c)(2) and 10 CFR 50.36(c)(3), respectively.

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 May 13, 2020. The State official 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 as published in the *Federal Register* on November 19, 2019 (84 FR 63898), 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: M. Hamm, NRR

Date: June 22, 2020

SUBJECT: COLUMBIA GENERATING STATION - ISSUANCE OF AMENDMENT NO. 259 TO REVISE TECHNICAL SPECIFICATIONS TO ADOPT TECHNICAL SPECIFICATIONS TASK FORCE (TSTF) TRAVELER TSTF-529, REVISION 4, "CLARIFY USE AND APPLICATION RULES" (EPID L-2019-LLA-0198) DATED JUNE 22, 2020

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