



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

August 19, 2019

Mr. Adam C. Heflin  
President and Chief Executive Officer,  
Wolf Creek Nuclear Operating Corporation  
P.O. Box 411  
Burlington, KS 66839

SUBJECT: WOLF CREEK GENERATING STATION, UNIT 1 - ISSUANCE OF  
AMENDMENT NO. 222 TO ADOPT TECHNICAL SPECIFICATIONS TASK  
FORCE (TSTF) TRAVELER TSTF-529, "CLARIFY USE AND APPLICATION  
RULES" (EPID L-2019-LLA-0014)

Dear Mr. Heflin:

The U.S. Nuclear Regulatory Commission (NRC, the Commission) has issued the enclosed Amendment No. 222 to Renewed Facility Operating License No. NPF-42 for the Wolf Creek Generating Station, Unit 1 (Wolf Creek). The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated January 23, 2019, as supplemented by letters dated March 11 and August 8, 2019.

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

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

Sincerely,

A handwritten signature in black ink, reading "Balwant K. Singal".

Balwant K. Singal, Senior Project Manager  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-482

Enclosures:

1. Amendment No. 222 to NPF-42
2. Safety Evaluation

cc: Listserv



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

**WOLF CREEK NUCLEAR OPERATING CORPORATION**

**WOLF CREEK GENERATING STATION, UNIT 1**

**DOCKET NO. 50-482**

**AMENDMENT TO RENEWED FACILITY OPERATING LICENSE**

Amendment No. 222  
License No. NPF-42

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment to the Wolf Creek Generating Station, Unit 1 (the facility) Renewed Facility Operating License No. NPF-42 filed by the Wolf Creek Nuclear Operating Corporation (the Corporation), dated January 23, 2019, as supplemented by letters dated March 11 and August 8, 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, as amended, 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 license 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-42 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. 222, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated in the license. The Corporation 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 of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert J. Pascarelli, Chief  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Renewed Facility  
Operating License and  
Technical Specifications

Date of Issuance: August 19, 2019

ATTACHMENT TO LICENSE AMENDMENT NO. 222 TO  
RENEWED FACILITY OPERATING LICENSE NO. NPF-42  
WOLF CREEK GENERATING STATION, UNIT 1  
DOCKET NO. 50-482

Replace the following pages of the Renewed Facility Operating License No. NPF-42 and Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Renewed Facility Operating License

REMOVE

4

INSERT

4

Technical Specifications

REMOVE

1.3-1

1.3-2

3.0-2

3.0-4

INSERT

1.3-1

1.3-2

3.0-2

3.0-4

- (5) The Operating Corporation, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
  - (6) The Operating Corporation, 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.
- C. This renewed operating license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations 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 Operating Corporation is authorized to operate the facility at reactor core power levels not in excess of 3565 megawatts thermal (100% power) in accordance with the conditions specified herein.
  - (2) Technical Specifications and Environmental Protection Plan  
  
The Technical Specifications contained in Appendix A, as revised through Amendment No. 222, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated in the license. The Corporation shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.
  - (3) Antitrust Conditions  
  
Kansas Gas & Electric Company and Kansas City Power & Light Company shall comply with the antitrust conditions delineated in Appendix C to this license.
  - (4) Environmental Qualification (Section 3.11, SSER #4, Section 3.11, SSER #5)\*  
  
Deleted per Amendment No. 141.

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

## 1.0 USE AND APPLICATION

### 1.3 Completion Times

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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) is 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 discovery of the situation that</p>

(continued)

### 1.3 Completion Time

DESCRIPTION (continued)	<p>required entry into the Condition, unless otherwise specified.</p> <p>Once a Condition has been entered, subsequent trains, subsystems, components, or variables expressed in the Condition, discovered to be inoperable or not within limits, will <u>not</u> 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.</p> <p>However, when a <u>subsequent</u> train, 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:</p> <ol style="list-style-type: none"> <li>Must exist concurrent with the <u>first</u> inoperability; and</li> <li>Must remain inoperable or not within limits after the first inoperability is resolved.</li> </ol> <p>The total Completion Time allowed for completing a Required Action to address the subsequent inoperability shall be limited to the more restrictive of either:</p> <ol style="list-style-type: none"> <li>The stated Completion Time, as measured from the initial entry into the Condition, plus an additional 24 hours; or</li> <li>The stated Completion Time as measured from discovery of the subsequent inoperability.</li> </ol> <p>The above Completion Time extensions do not apply to those Specifications that have exceptions that allow completely separate re-entry into the Condition (for each train, 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.</p> <p>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 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.</p>
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### 3.0 LCO Applicability

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LCO 3.0.4  
(continued)

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.

This Specification shall not prevent changes in MODES or other specified conditions in the Applicability that are required to comply with ACTIONS or that are part of a shutdown of the unit.

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LCO 3.0.5

Equipment removed from service or declared inoperable to comply with ACTIONS may be returned to service under administrative control solely to perform testing required to demonstrate its OPERABILITY or the OPERABILITY of other equipment. This is an exception to LCO 3.0.2 for the system returned to service under administrative control to perform the testing required to demonstrate OPERABILITY.

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LCO 3.0.6

When a supported system LCO is not met solely due to a support system LCO not being met, the Conditions and Required Actions associated with this supported system are not required to be entered. Only the support system LCO ACTIONS are required to be entered. This is an exception to LCO 3.0.2 for the supported system. In this event, an evaluation shall be performed in accordance with Specification 5.5.15, "Safety Function Determination Program (SFDP)." If a loss of safety function is determined to exist by this program, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered.

When a support system's Required Action directs a supported system to be declared inoperable or directs entry into Conditions and Required Actions for a supported system, the applicable Conditions and Required Actions shall be entered in accordance with LCO 3.0.2.

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LCO 3.0.7

Test Exception LCO 3.1.8, allows specified Technical Specification (TS) requirements to be changed to permit performance of special tests and operations. Unless otherwise specified, all other TS requirements remain unchanged. Compliance with Test Exception LCOs is optional. When a Test Exception LCO is desired to be met but is not met, the ACTIONS of the Test Exception LCO shall be met. When a Test Exception LCO is not desired to be met, entry into a MODE or other specified condition in the Applicability shall be made in accordance with the other applicable Specifications.

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### **3.0 SURVEILLANCE REQUIREMENT (SR) APPLICABILITY**

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**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.

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**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.

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**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.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 222 TO

RENEWED FACILITY OPERATING LICENSE NO. NPF-42

WOLF CREEK NUCLEAR OPERATING CORPORATION

WOLF CREEK GENERATING STATION, UNIT 1

DOCKET NO. 50-482

1.0 INTRODUCTION

By application dated January 23, 2019 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML19036A772), as supplemented by letters dated March 11 and August 8, 2019 (ADAMS Accession Nos. ML19078A131 and ML19227A300, respectively), Wolf Creek Nuclear Operating Corporation (the licensee) requested changes to the Technical Specifications (TSs) for Wolf Creek Generating Station, Unit 1 (Wolf Creek).

The amendment proposes changes to TS requirements in Section 1.3, "Completion Times," and Section 3.0, "Limiting Condition for Operation (LCO) Applicability" and "Surveillance Requirement (SR) Applicability." Specifically, these changes clarify and expand the use and application of the Wolf Creek TS usage rules and are consistent with U.S. Nuclear Regulatory Commission (NRC)-approved Technical Specifications Task Force (TSTF) Traveler TSTF-529, Revision 4, "Clarify Use and Application Rules" (ADAMS Accession Package No. ML16060A441), as described below:

- Section 1.3 is being revised to clarify, "discovery time" and to discuss exceptions to start the completion time at condition entry.
- LCO 3.0.4.b is being revised to clarify that LCO 3.0.4.a, 3.0.4.b, and 3.0.4.c are independent options.
- SR 3.0.3 is being revised to allow application of SR 3.0.3 when an SR has not been previously performed and to clarify the application of SR 3.0.3.

The supplemental letter dated August 8, 2019, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the NRC staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on April 9, 2019 (84 FR 14154).

## 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).

Wolf Creek, TS Section 1.3, "Completion Times," currently describes completion times 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 trains, 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.

Wolf Creek's LCO 3.0.1 through LCO 3.0.8 establish the general requirements applicable to all specifications and apply at all times, unless otherwise stated. Similarly, Wolf Creek's SR 3.0.1 through SR 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 changes will revise Wolf Creek, TS Section 1.3, "Completion Times," and Section 3.0, "Limiting Condition for Operation (LCO) Applicability" and "Surveillance Requirement (SR) Applicability." The proposed changes are described in more detail below.

### 2.2.1 Proposed Changes to "Time of Discovery"

Wolf Creek TS Section 1.3, "Description," currently states, in part (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.

Wolf Creek TS Section 1.3, "Description," also currently states, in part (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 Wolf Creek TS Section 1.3 would delete "time of" from the previous statements and read as follow:

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 "Completion Times"

The licensee proposed to add the following paragraph to Wolf Creek 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 proposed change 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 adequacy of this change is discussed in Section 3.1.1.2 of this SE.

#### 2.2.3 Proposed Addition of "Unless Otherwise Specified"

Wolf Creek TS Section 1.3, "Description," currently states, in part (with emphasis added on "unless otherwise specified"):

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.

The licensee proposed to add the following sentence right after the above statement to Wolf Creek TS Section 1.3, which contains the phrase "unless otherwise specified":

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.

In addition, the licensee proposed adding the phrase "unless otherwise specified" to the following two statements to Wolf Creek TS Section 1.3:

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

Wolf Creek LCO 3.0.4 currently states, in part:

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. In the supplement to the request, the licensee also proposed to remove the semicolon after the word "appropriate." TSTF-529, Revision 4, also proposed to replace the ending comma with a semicolon; however, the Wolf Creek LCO 3.0.4.b statement regarding exceptions already ends with a semicolon before "or" instead of a comma before "or." The proposed Wolf Creek LCO 3.0.4 would state 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 TS SR 3.0.3

Wolf Creek 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 Wolf Creek SR 3.0.3 states 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 these changes 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 *Code of Federal Regulations* (10 CFR) Section 50.36(c) requires TSs to include the following categories: (1) safety limits, limiting safety systems settings, and 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 “[l]imiting 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. When a limiting condition for operation of any process step in the system of a fuel reprocessing plant is not met, the licensee shall shut down that part of the operation 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 “[s]urveillance 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 review of the TSs is in NUREG-0800, “Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR [Light-Water Reactor] Edition,” Chapter 16, Revision 3, “Technical Specifications,” dated March 2010 (ADAMS Accession No. ML100351425). As described therein, as part of the regulatory standardization effort, the 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 STSs. The 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 STSs, 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 regulatory requirements and guidance described in Section 2.3 of this SE, and, in particular, the acceptance criteria in Chapter 16, Revision 3, of NUREG-0800. The staff's evaluations of the proposed changes to Wolf Creek's TS Section 1.3, LCO 3.0.4 and SR 3.0.3 are discussed below.

#### 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 Wolf Creek's TS Section 1.3 (quoted in Section 2.2.1 of this SE). Throughout Wolf Creek's 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 requires in part that “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.”



The proposed change to Wolf Creek's TS Section 1.3 would delete "time of" from the previous statements. The NRC staff finds the proposed change acceptable because it makes Section 1.3, consistent with the language used throughout the rest of TSs. This provides clarity to the term "discovery," and therefore provides a clear and objective application of the TS required actions and associated completion times. The change is editorial since it does not change requirements currently in TSs. Therefore, the NRC staff finds the proposed change acceptable.

#### 3.1.1.2 Proposed Addition to "Completion Times"

The licensee also proposed to add the following paragraph to Section 1.3 of Wolf Creek's TS 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 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 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 (SSCs). This includes status of degraded or nonconforming conditions that may affect plant operation. Therefore, the proposed change simply augments 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 to illustrate the clarified requisite.

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 Wolf Creek's TS required actions and associated completion times.

### 3.1.1.3 Proposed Addition of "Unless Otherwise Specified"

The phrase, "unless otherwise specified," in Wolf Creek's 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, Wolf Creek, 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.

As discussed in Section 2.2.3 of this SE, the licensee proposed to add the following sentence to Wolf Creek's TS Section 1.3, which contains the phrase "unless otherwise specified:"

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.

In addition, the licensee proposed adding the phrase "unless otherwise specified" to the following two statements in Wolf Creek TS Section 1.3:

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 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 finds the proposed change acceptable since it clarifies that there are exceptions and, therefore, provides a clear and objective application of the Wolf Creek TS required actions and associated completion times.

### 3.1.2 Proposed Changes to LCO 3.0.4

As stated in Section 2.2.4 of this SE, the current Wolf Creek 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 semicolon 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 LCO 3.0.4.b by placing the statement regarding exceptions in parenthesis and removing the semicolon after the word “appropriate.” The proposed TS LCO 3.0.4.b would state, in part, 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 finds the proposed change acceptable since it removes the potential for misapplication of LCO 3.0.4 allowances, and therefore, provides a clear and objective application of Wolf Creek’s TS required actions.

### 3.1.3 Proposed Changes to SR 3.0.3

The NRC has typically interpreted SR 3.0.3, which is quoted in Section 2.2.5 of this SE, as inapplicable to SRs that had 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 may require testing of a relay contact. A licensee may find the relay contact has never been tested as required in accordance with a particular SR. The licensee, however, may find there is a reasonable expectation the SR will be met when performed because the subject relay contact has been tested by another SR or because historical operation of the subject relay contact has been successful.

The delay period allowed by Wolf Creek 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 Wolf Creek 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’s proposed changes to Wolf Creek SR 3.0.3, states the following (the new sentence reflecting the inclusion of SRs that have never been performed 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.

When making a determination of whether a reasonable expectation exists 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; 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 the Wolf Creek's TS SR 3.0.3 to SRs that have never been performed, is acceptable because it requires 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.

#### 4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the State official was notified of the proposed issuance of the amendment on June 28, 2019. The State official had no comments.

#### 5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes requirements with respect to the installation or use of facility components 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 April 9, 2019 (84 FR 14154), 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: C. Tilton

Date: August 19, 2019

SUBJECT: WOLF CREEK GENERATING STATION, UNIT 1 - ISSUANCE OF AMENDMENT NO. 222 TO ADOPT TECHNICAL SPECIFICATIONS TASK FORCE (TSTF) TRAVELER TSTF-529, "CLARIFY USE AND APPLICATION RULES" (EPID L-2019-LLA-0014) DATED AUGUST 19, 2019

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ADAMS Accession No. ML19182A345

\*via memo dated 6/28/19

\*\* via e-mail dated 8/5/19

OFFICE	NRR/DORL/LPL4/PM	NRR/DORL/LPL4/LA	NRR/DSS/STSB/BC(A)*
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