



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

August 31, 2020

Mr. Ken J. Peters
Senior Vice President and
Chief Nuclear Officer
Attention: Regulatory Affairs
Vistra Operations Company LLC
Comanche Peak Nuclear Power Plant
6322 N FM 56
P.O. Box 1002
Glen Rose, TX 76043

SUBJECT: COMANCHE PEAK NUCLEAR POWER PLANT, UNIT NOS. 1 AND 2 -
ISSUANCE OF AMENDMENT NOS. 175 AND 175 REGARDING ONE-TIME
REVISION TO TECHNICAL SPECIFICATION 3.7.19, "SAFETY CHILLED
WATER" (EPID L-2020-LLA-0137)

Dear Mr. Peters:

The U.S. Nuclear Regulatory Commission (NRC, the Commission) has issued the enclosed Amendment No. 175 to Facility Operating License No. NPF-87 and Amendment No. 175 to Facility Operating License No. NPF-89 for Comanche Peak Nuclear Power Plant (Comanche Peak), Unit Nos. 1 and 2, respectively. The amendments consist of changes to the technical specifications (TSs) in response to your application dated June 24, 2020, as supplemented by letters dated July 16, 2020, and July 28, 2020.

The amendments revise Comanche Peak TS 3.7.19, "Safety Chilled Water," to extend the completion time for one safety chilled water train inoperable from 72 hours to 7 days on a one-time basis to allow the replacement of Comanche Peak Unit 2 Safety Chiller 2-06 (Train B) compressor during Unit 2 Cycle 19. The revised TS 3.7.19 includes a regulatory commitment that identifies compensatory measures to be implemented during the extended completion time.

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/

Dennis J. Galvin, Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-445 and 50-446

Enclosures:

1. Amendment No. 175 to NPF-87
2. Amendment No. 175 to NPF-89
3. Safety Evaluation

cc: Listserv



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

COMANCHE PEAK POWER COMPANY LLC
AND VISTRA OPERATIONS COMPANY LLC
COMANCHE PEAK NUCLEAR POWER PLANT, UNIT NO. 1
DOCKET NO. 50-445
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 175
License No. NPF-87

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Vistra Operations Company LLC (Vistra OpCo) dated June 24, 2020, as supplemented by letters dated July 16, 2020, and July 28, 2020, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this 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 Facility Operating License No. NPF-87 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. 175 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated into this license. Vistra OpCo 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 30 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 Facility
Operating License and
Technical Specifications

Date of Issuance: August 31, 2020



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

COMANCHE PEAK POWER COMPANY LLC
AND VISTRA OPERATIONS COMPANY LLC
COMANCHE PEAK NUCLEAR POWER PLANT, UNIT NO. 2
DOCKET NO. 50-446
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 175
License No. NPF-89

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Vistra Operations Company LLC (Vistra OpCo) dated June 24, 2020, as supplemented by letters dated July 16, 2020, and July 28, 2020, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this 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 Facility Operating License No. NPF-89 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. 175 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated into this license. Vistra OpCo shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance and shall be implemented within 30 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 Facility
Operating License and
Technical Specifications

Date of Issuance: August 31, 2020

ATTACHMENT TO LICENSE AMENDMENT NO. 175
TO FACILITY OPERATING LICENSE NO. NPF-87
AND AMENDMENT NO. 175
TO FACILITY OPERATING LICENSE NO. NPF-89
COMANCHE PEAK NUCLEAR POWER PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-445 AND 50-446

Replace the following pages of the Facility Operating License Nos. NPF-87 and NPF-89, 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.

Facility Operating License No. NPF-87

<u>REMOVE</u>	<u>INSERT</u>
3	3

Facility Operating License No. NPF-89

<u>REMOVE</u>	<u>INSERT</u>
3	3

Technical Specifications

<u>REMOVE</u>	<u>INSERT</u>
3.7-45	3.7-45

- (3) Vistra OpCo, pursuant to the Act and 10 CFR Part 70, to receive, possess, and use at any time, special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, and described in the Final Safety Analysis Report, as supplemented and amended;
- (4) Vistra OpCo, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use, at any time, any byproduct, source, and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (5) Vistra OpCo, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use in amounts as required, any byproduct, source, and 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) Vistra OpCo, 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 license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

Vistra OpCo is authorized to operate the facility at reactor core power levels not in excess of 3458 megawatts thermal through Cycle 13 and 3612 megawatts thermal starting with Cycle 14 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. 175 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated into this license. Vistra OpCo shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

- (3) Vistra OpCo, pursuant to the Act and 10 CFR Part 70, to receive, possess, and use at any time, special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, and described in the Final Safety Analysis Report, as supplemented and amended;
- (4) Vistra OpCo, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use, at any time, any byproduct, source, and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (5) Vistra OpCo, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use in amounts as required, any byproduct, source, and 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) Vistra OpCo, 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 license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

Vistra OpCo is authorized to operate the facility at reactor core power levels not in excess of 3458 megawatts thermal through Cycle 11 and 3612 megawatts thermal starting with Cycle 12 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. 175 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated into this license. Vistra OpCo shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

(3) Antitrust Conditions

DELETED



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 175 TO

FACILITY OPERATING LICENSE NO. NPF-87

AND AMENDMENT NO. 175 TO

FACILITY OPERATING LICENSE NO. NPF-89

COMANCHE PEAK POWER COMPANY LLC

AND VISTRA OPERATIONS COMPANY LLC

COMANCHE PEAK NUCLEAR POWER PLANT, UNIT NOS. 1 AND 2

DOCKET NOS. 50-445 AND 50-446

1.0 INTRODUCTION

By application dated June 24, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20176A281), as supplemented by letters dated July 16, 2020 (ADAMS Accession No. ML20198M635), and July 28, 2020 (ADAMS Accession No. ML20210M089), Vistra Operations Company LLC (the licensee) submitted a license amendment request (LAR) to request changes to the Technical Specifications (TSs) for Comanche Peak Nuclear Power Plant (Comanche Peak), Unit Nos. 1 and 2. The licensee proposed to revise TS 3.7.19, "Safety Chilled Water," to extend the completion time (CT) for one safety chilled water train inoperable from 72 hours to 7 days on a one-time basis to allow the replacement of Comanche Peak Unit 2 Safety Chiller 2-06 (Train B) compressor during Unit 2 Cycle 19. The proposed revision to TS 3.7.19 includes a regulatory commitment to implement certain compensatory measures during the extended CT as delineated in Attachment 2 to the letter dated July 28, 2020.

Pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.91(a)(6), the licensee requested that the proposed amendments be issued under exigent circumstances. As the Nuclear Regulatory Commission (NRC, the Commission) staff was able to publish a *Federal Register* notice allowing for the normal 30-day period for public comment on the proposed no significant hazards consideration determination, the NRC staff determined that exigent circumstances do not apply to this LAR.

The supplements dated July 16 and 28, 2020, 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 July 28, 2020 (85 FR 45449).

2.0 REGULATORY EVALUATION

2.1 Description of Safety Chilled Water System

The safety chilled water system is designed to remove heat rejected by engineered safety features pump motors, uninterruptable power supply (UPS) equipment, and electrical switchgear to maintain ambient temperatures below design limits within the rooms served. The chilled water from the system is supplied to the safety-related emergency fan coil cooling units (EFCUs). The safety chilled water system is used during normal operations and post-design-basis accidents to aid in heat removal. The heat sink for the safety chilled water system is the safety-related component cooling water (CCW) system.

Each unit is provided with two 100 percent capacity chilled water systems, each of which are powered from independent Class 1E buses. Thus, the system will sustain a single active component failure without loss of function during all modes of plant operation. The safety chilled water system flow diagram is shown in Figure 1 of Attachment 4 to the letter dated July 16, 2020 (the figure is for information only).

The two safety chilled water systems for each unit consist of a hermetic centrifugal chiller, a 100 percent capacity chilled water recirculation pump, chilled water fan coil units, and associated piping, valves, and instrumentation. A surge tank is provided to accommodate expansion and contraction within the system volume and to permit monitoring of the system for leakage. The partition in the surge tank provides separate surge volumes for each safety train. A leak in one train will not affect the other train. Each chiller is rated for 101 tons of refrigeration at design conditions.

Safety chilled water is supplied to the following cooling units:

1. CCW pump room EFCUs
2. Centrifugal charging pump room EFCUs
3. Spent fuel pool heat exchanger and pump EFCUs
4. Safety injection pump room EFCUs
5. Containment spray pump room EFCUs
6. Residual heat removal (RHR) pump room EFCUs
7. Motor-driven auxiliary feedwater pump) room EFCUs
8. Electric area EFCUs
9. UPS room EFCUs

The fan coil units for the spent fuel pool heat exchanger and pump room are common for both units, and the piping arrangement will allow chilled water to be supplied from either the Comanche Peak Unit 1 or the Unit 2 chilled water system. Except for the electrical area and UPS room EFCUs, all other EFCUs are interlocked with respective equipment to start. The EFCUs for the electrical area start on a safety injection or station blackout (SBO) signal. The chilled water recirculation pumps start on a safety injection, SBO signal or the start of a CCW pump. The UPS fan coil units have no automatic start feature. The EFCUs also remove heat during abnormal conditions, including during post-design-basis accident conditions. During loss of offsite power (LOOP), the chilled water system is powered by the diesel generators.

2.2 Proposed Technical Specification Changes

The licensee’s proposed changes to TS 3.7.19, Condition A, would add one new Required Action A.2 and associated CT, with a new Note. The proposed changes are illustrated in **bold** below:

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One safety chilled water train inoperable.	<p>A.1 Restore safety chilled water train to OPERABLE status.</p> <p>OR</p> <p>A.2 -----NOTE----- Required Action A.2 is applicable on a one time basis to replace Safety Chiller 2-06 (Train B) compressor during Unit 2 Cycle 19. If Train A safety chilled water becomes inoperable, immediately enter LCO 3.0.3. Regulatory Commitment 5900444 (Attachment 2 to TXX-20056) will be implemented during the 7 day COMPLETION TIME. ----- Restore safety chilled water train to OPERABLE status.</p>	<p>72 hours</p> <p>7 days</p>

The proposed changes also include compensatory measures through a reference to Regulatory Commitment 5900444, which are described and evaluated in Section 3.3 of this safety evaluation (SE).

2.3 Reason for the Proposed Changes

The licensee addressed the need for the proposed changes in Section 2.3, “Reason for the Proposed Change,” of the enclosure to the LAR and is summarized as follows.

The licensee has been tracking a slow degradation of compressor oil pressure for Comanche Peak Unit 2 Safety Chiller 2-06. While short-term actions were successful within the time permitted in the action statements of TS 3.7.19, longer term corrective actions in the form of compressor replacement for Safety Chiller 2-06 are planned. The TS amendments would enable the licensee to replace the compressor on Safety Chiller 2-06 and thus avoid the need for either an unnecessary plant transient or a shutdown.

At elevated ambient temperatures there is more load on Safety Chiller 2-06, which has slowed the compressor oil pressure degradation. As fall and winter arrive, it is likely that the compressor oil pressure degradation will proceed once again. Due to the COVID-19 virus, the licensee adjusted the scope of the spring 2020 Unit 2 refueling outage to be shut down for the minimum time possible while maintaining safety. In addition, safety chilled water system work during a refueling outage has a limited window because much of the outage requires two trains

of RHR, thus requiring chilled water to cool the RHR pump rooms. In addition, the licensee limits the time that an RHR train is not operable or available due to core cooling risk. The licensee stated that if these license amendments are approved, the current schedule is to replace the compressor on Safety Chiller 2-06 in September 2020 to allow for Unit 2 to take the one-time 7-day CT to perform the compressor replacement. Without these license amendments, the licensee could be forced to shut down Comanche Peak Unit 2.

2.4 Regulatory Requirements and Guidance

The regulations in 10 CFR 50.36, "Technical specifications," establish the requirements related to the content of the TSs. Pursuant to 10 CFR 50.36(c), TSs are required to include items in five specific categories related to station operation: (1) safety limits, limiting safety system settings, and limiting control settings; (2) limiting conditions for operation; (3) surveillance requirements; (4) design features; and (5) administrative controls. The proposed changes in this LAR relate to the limiting condition for operation category.

The regulation in 10 CFR 50.36(c)(2)(i) 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.

The following general design criteria (GDC) in 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," Appendix A, "General Design Criteria for Nuclear Power Plants," are applicable to this review.

- GDC 44, "Cooling water," which states:

A system to transfer heat from structures, systems, and components important to safety, to an ultimate heat sink shall be provided. The system safety function shall be to transfer the combined heat load of these structures, systems, and components under normal operating and accident conditions. Suitable redundancy in components and features, and suitable interconnections, leak detection, and isolation capabilities shall be provided to assure that for onsite electric power system operation (assuming offsite power is not available) and for offsite electric power system operation (assuming onsite power is not available) the system safety function can be accomplished, assuming a single failure.

Generic Letter (GL) 80-30, "Clarification of the Term 'Operable' as it Applies to Single Failure Criterion for Safety Systems Required by TS," dated April 10, 1980 (Legacy Library Accession No. 8401200196), allows a plant to temporarily depart from the single-failure design criterion when the plant is operating within a TS action requirement. However, the plant must remain capable to mitigate any postulated accident and safely shutdown.

3.0 TECHNICAL EVALUATION

The NRC staff evaluated the licensee's proposed changes to determine whether the proposed TS changes are consistent with the regulatory requirements discussed in Section 2.4 of this SE and the licensing and design basis information.

3.1 One-Time Change to Safety Chilled Water System CT

The licensee proposed the one-time extension to the CT for the Comanche Peak Unit 2 safety chilled water system Train B from 72 hours to 7 days in order to replace the compressor in Train B (Safety Chiller 2-06). Consistent with GL 80-30, since Comanche Peak Unit 2 has two 100 percent capacity safety chilled water system trains as previously described, the safety function of the safety chilled water system remains unchanged and Unit 2 remains capable of mitigating any postulated accident and can safely shutdown with safety chilled water system Train B unavailable during the extended CT.

The proposed changes will not allow plant operation in a configuration outside the design basis. The licensee has identified compensatory measures in Attachment 2 to the letter dated July 28, 2020, as a regulatory commitment included in the one-time TS change. These actions are intended to reduce the risk of any potentially risk-significant configurations during the proposed CT and are further evaluated in Section 3.3 of this SE.

Based on the above, the NRC staff concludes that with an extension of the CT, the safety chilled water system and all supported safety systems will remain capable of performing their safety functions to safely shutdown the plant and mitigate the effects of a design-basis accident.

3.2 Defense-in-Depth and Safety Margin

Although one train of the safety chilled water system will be out of service longer than the current TS allows, the NRC staff finds that the capability to fulfill the function of that system will be retained when the redundant chilled water system functions as designed. The licensee stated that the potential for common-cause failures would not increase because there is no change in failure mechanisms associated with the safety chilled water CT change from 72 hours to 7 days. The licensee stated that the plant design will not be modified with the proposed extension of the CT. Further, in Section 3.6, "Assumptions and Compensatory Measures," of the enclosure to the letter dated July 16, 2020, the licensee stated that Comanche Peak will not enter the proposed one-time extended CT if Train A (opposite train) structures, systems, and components (SSCs) to be relied upon becomes inoperable. The decrease in redundancy of the safety chilled water system is addressed by existing mitigation and safe shutdown capability as well as the compensatory measures discussed in Section 3.3 of this SE. Based on its review, including the conclusions in Section 3.3 of this SE, the NRC staff finds that the defense-in-depth is preserved commensurate with the expected frequency and consequence of challenges from the proposed changes.

The safety analysis acceptance criteria stated in the Comanche Peak Final Safety Analysis Report are not impacted by these changes. The proposed changes will not allow plant operation in a configuration outside the design basis. The requirements regarding the safety chilled water system credited in the accident analysis will remain the same. The design and operation of the safety chilled water system is not modified by this LAR. No codes or standards approved for use by the NRC relevant to the safety chilled water system and associated systems are

modified or affected. Based on its review, the NRC staff finds that safety margins continue to be maintained during the proposed CT extension.

3.3 Risk Insights

In Section 3.5, “Supplemental Risk Information,” of the enclosure to the LAR dated June 24, 2020, the licensee stated that the risk information and insights were considered in the overall decisionmaking process and were useful in the development of effective risk management strategies. The risk insights were used to determine the compensatory measures listed in Attachment 2 of the letter dated July 28, 2020, which were provided as a regulatory commitment included in the one-time TS change. As mentioned by the licensee in Section 3.5 of the enclosure to the LAR, this is not a risk-informed LAR, and therefore, the NRC staff did not review the licensee’s probabilistic risk assessment models to determine their technical acceptability. Therefore, the NRC staff did not rely on the quantitative risk information provided by the licensee in Attachments 5 and 6 to the LAR. However, the NRC staff considered the licensee-provided qualitative risk insights and associated compensatory measures in its decision on the proposed changes.

The NRC staff determined that “special circumstances,” as discussed in NUREG-0800, Standard Review Plan for Review of Safety analysis Reports for Nuclear Power Plants: LWR [Light-Water Reactor] Edition, Section 19.2, “Review of Risk Information Used to Support Permanent Plant-Specific Changes to the Licensing Basis: General Guidance,” dated June 2007 (ADAMS Accession No. ML071700658), which would have necessitated additional risk information to be provided, did not exist for the proposed changes.

In Section 3.5.3, “Avoidance of Risk Significant Plant Configurations,” of the enclosure to the LAR dated June 24, 2020, the licensee stated that the dominant risk scenarios associated with loss of safety chilled water system include LOOP, transient events leading to a plant trip, and fires in the unaffected safety-related switchgear rooms, UPS and distribution rooms, cable spreading rooms and main control room leading to abandonment. The main impact of the above scenarios on critical safety functions is the loss of heat removal from the steam generators due to failure of all the auxiliary feedwater pumps (random or induced) or loss of room cooling to the motor-driven pumps.

In order to manage the dominant risk scenarios, the licensee proposed compensatory measures in Attachment 2 to the letter dated July 28, 2020, for the duration of the proposed one-time CT extension, in addition to the site procedures for those scenarios. The licensee has identified Attachment 2 to the letter dated July 28, 2020, as a regulatory commitment included in the one-time TS change. The compensatory measures include control of access as well as suspension of all planned maintenance in both switchyards, ensuring grid stability prior to entering the action with the proposed extended CT, and not scheduling entry into the action with the proposed extended CT if severe weather conditions are anticipated. The NRC staff’s review noted that the licensee did not propose any changes to its mitigation capabilities for SBO and that the licensee has installed low-leakage reactor coolant pump seals, which further manage the risk from an SBO. In Section 3.5.3, “Avoidance of Risk Significant Plant Configurations,” of the enclosure to the letter dated July 16, 2020, the licensee explained that diverse and flexible coping strategies (FLEX) equipment also remains available for use in accordance with the licensee’s FLEX procedures.

The licensee also proposed suspension of all testing and maintenance activities, except for those required to restore equipment from any ongoing maintenance activity, for several

Comanche Peak Unit 2 SSCs important for mitigating the dominant risk scenarios. These Unit 2 SSCs include both trains of the emergency diesel generator, the turbine-driven auxiliary feedwater pump, CCW pumps, and the service water pumps. In addition, the licensee also proposed restrictions on testing and maintenance of SSCs supported by Train A of the safety chilled water system.

Further, the licensee evaluated the impact of the proposed changes on fire protection and proposed compensatory measures to address those impacts on fire protection in Attachment 2 to the letter dated July 28, 2020. The fire safe shutdown analysis assumes that there is a LOOP in conjunction with a fire and any equipment requiring power can be fed from onsite power sources. In Section 3.5.5, "Fire Protection Program Considerations," of the enclosure to the LAR, the licensee proposed restrictions on combustible storage, suspension of "hot work," and an hourly roving fire watch for the areas that credit the unavailable safety chiller in the fire safe shutdown analysis. These areas are listed in Section 3.6 of the enclosure to the letter dated July 16, 2020. The restrictions on the storage of combustibles during the extended CT includes both Units 1 and 2 transient combustible safe zones identified in the fire assessment as well as in the main control room, the cable spreading rooms, and the cable routing paths for the inservice startup transformers. The hourly roving fire watch protects areas credited by the fire assessment, specifically, the main control room and cable spreading rooms, and areas containing power and control cabling of the inservice startup transformers.

In Section 3.3, "Equipment Response to Loss of Room Cooling," of the enclosure to the letter dated July 16, 2020, the licensee stated that it will stage alternate cooling equipment (blowers and ducting) outside the supported pump rooms to address the impact of the loss of room cooling upon failure of Train A of the safety chilled water system. The licensee included this compensatory measure in Attachment 2 of the letter dated July 28, 2020, as a regulatory commitment attached to the one-time extension entry in the TS. This compensatory measure provides additional assurance that safe shutdown can be achieved in the event of a total loss of the safety chilled water system. The NRC staff notes that the turbine-driven auxiliary feedwater pump does not rely on the safety chilled water system and therefore, its availability and safe shutdown function remain unaffected by a loss of both trains of safety chilled water system.

In addition to reviewing the licensee-provided risk insights, the NRC staff also reviewed the NRC's Standardized Plant Analysis Risk (SPAR) model for Comanche Peak. The NRC staff's review of the SPAR model was used to assess the proposed changes, including identifying the dominant risk contributors for the proposed changes, and the adequacy of the compensatory measures proposed by the licensee to manage the risk from the proposed changes. This review increases the NRC staff's confidence in the appropriateness of the licensee-provided risk insights. The NRC staff's review of the SPAR model did not identify the need for any additional compensatory measures. The NRC staff's review also noted that the risk due to external hazards such as high winds and tornadoes, seismic events, and external flooding does not significantly change the risk from the proposed changes because the licensee's compensatory measures include consideration of severe weather; the licensee has addressed LOOP, which is the dominant impact of the external hazards; and any additional impacts from an external hazard are independent of the CT.

The NRC staff's review of the licensee's risk insights and proposed compensatory measures finds that (1) the licensee appropriately identified the dominant risk scenarios for the proposed changes, and (2) the licensee's compensatory measures, proposed as a regulatory commitment included in the one-time TS change, appropriately manage the risk from the dominant risk

scenarios. Therefore, the NRC staff concludes that the licensee's risk insights support the proposed changes and finds the compensatory measures acceptable for the proposed changes.

3.4 Technical Evaluation Conclusion

The NRC staff reviewed the proposed changes for a one-time modification to the Comanche Peak TSs to permit one train of the safety chilled water system to be inoperable for up to 7 days from the currently allowed 72 hours for replacement of the Safety Chiller 2-06 compressor.

Based on its review, the NRC staff concludes that the Comanche Peak Unit 2 safety chilled water system and all supported safety systems will remain capable of performing their safety functions to safely shutdown the plant and mitigate the effects of a design-basis accident. The NRC staff further concludes that the compensatory measures, proposed as a regulatory commitment included in the one-time TS change, acceptably manage the risk from the proposed changes. Accordingly, the NRC staff concludes that there is reasonable assurance that the proposed TS changes will have minimal impact on the licensee's ability to continue to comply with the requirements of 10 CFR 50.36 and GDC 44, and therefore, is acceptable.

4.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION

The NRC proposed to find that the requested amendments involve no significant hazards consideration in its *Federal Register* notice on July 28, 2020 (85 FR 45449). The NRC's regulation in 10 CFR 50.92(c) states that the NRC may make a final determination, under the procedures in 10 CFR 50.91, that a license amendment involves no significant hazards consideration if operation of the facility, in accordance with the amendment, would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

As required by 10 CFR 50.91(a), in its application dated June 24, 2020, the licensee provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. Do the proposed changes involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The proposed changes add provisions to increase the COMPLETION TIME (CT) from 72 hours to 7 days, on a one-time basis for Comanche Peak Nuclear Power Plant Safety Chilled Water System Train B (Safety Chiller 2-06). This one-time increase will be used once during Unit 2 Cycle 19. An additional REQUIRED ACTION, new Note, and associated COMPLETION TIME is specified when Safety Chiller 2-06 is declared inoperable to replace the compressor. The proposed changes do not physically alter any plant structures, systems, or components, and are not an accident initiator[:]; therefore, there is no effect on the probability of accidents previously evaluated. As part of the single failure design feature, loss of one safety chilled water train does not prevent the minimum safety function from being performed. Also, the proposed changes do not affect the type or amounts of radionuclides released following an accident, or affect the initiation and duration of their release.

Therefore, the consequences of accidents previously evaluated, which rely on safety chilled water to mitigate, are not significantly increased.

Therefore, the proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Do the proposed changes create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The proposed changes do not involve a change in design, configuration, or method of operation of the plant. The proposed changes will not alter the manner in which equipment is operated, nor will the functional demands on credited equipment be changed. The proposed changes do not impact the interaction of any systems whose failure or malfunction can initiate an accident. There are no identified redundant components affected by these changes and thus there are no new common cause failures or any existing common cause failures that are affected by extending the CT. The proposed changes do not create any new failure modes.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any previously evaluated.

3. Do the proposed changes involve a significant reduction in a margin of safety?

Response: No.

The proposed changes are based upon a deterministic evaluation. This evaluation is supplemented by risk insights.

The deterministic evaluation concluded with one inoperable safety chilled water train, the redundant OPERABLE safety chilled water train will be able to perform the safety function as described in the accident analysis. Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Supplemental risk information supporting this license amendment request concluded that the additional REQUIRED ACTION, new Note, and associated COMPLETION TIME have a small impact on overall plant risk and is consistent with the NRC Safety Goal Policy statement and the thresholds in Regulatory Guide (RG) 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis," and RG 1.177, "An Approach for Plant-Specific, Risk-Informed Decisionmaking: Technical Specifications."

The deterministic evaluation and the supplemental risk information provide assurance that the safety chilled water system will be able to

perform its design function with a longer COMPLETION TIME for inoperable Safety Chiller 2-06 during Unit 2 Cycle 19, and risk is not significantly impacted by the change.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

The NRC staff reviewed the licensee's no significant hazards consideration analysis. Based on this review and on the NRC staff's evaluation of the underlying LAR as discussed above, the NRC staff concludes that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff makes a final determination that no significant hazards consideration is involved for the proposed amendments and that the amendments should be issued as allowed by the criteria contained in 10 CFR 50.91.

5.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Texas State official was notified of the proposed issuance of the amendments on August 12, 2020. The State official had no comments.

6.0 ENVIRONMENTAL CONSIDERATION

The amendments change requirements with respect to the installation or use of facility components located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendments involve 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 amendments involve no significant hazards consideration, published in *Federal Register* on July 28, 2020 (85 FR 45449), and there has been no public comment on such finding. Additionally, the Commission has made a final determination that no significant hazards consideration is involved for the proposed amendments as discussed above in Section 4.0 of this SE. Accordingly, the amendments meet 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 amendments.

7.0 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 amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributors: N. Chien, NRR
N. Karipineni, NRR
S. Vasavada, NRR
A. Neuhausen, NRR

Date: August 31, 2020

SUBJECT: COMANCHE PEAK NUCLEAR POWER PLANT, UNIT NOS. 1 AND 2 -
ISSUANCE OF AMENDMENT NOS. 175 AND 175 REGARDING ONE-TIME
REVISION TO TECHNICAL SPECIFICATION 3.7.19, "SAFETY CHILLED
WATER" (EPID L-2020-LLA-0137) AUGUST 31, 2020

DISTRIBUTION:

PUBLIC	RidsRgn4MailCenter Resource
PM File Copy	NChien, NRR
RidsACRS_MailCTR Resource	NKaripineni, NRR
RidsNrrDorlLpl4 Resource	SVasavada, NRR
RidsNrrDssScpb Resource	ANeuhausen, NRR
RidsNrrDssSnsb Resource	CPigg, NRR
RidsNrrDssStsb Resource	CTilton, NRR
RidsNrrDraAplc Resource	RBeaton, NRR
RidsNrrLAPBlechman Resource	

ADAMS Accession No. ML20223A349***by e-mail**

OFFICE	NRR/DORL/LPL4/PM*	NRR/DORL/LPL4/LA*	NRR/DSS/SCP/BC*
NAME	DGalvin	PBlechman	BWittick
DATE	8/ /20	08/12/2020	08/03/2020
OFFICE	NRR/DRA/APLC/BC*	NRR/DSS/SNSB/BC*	NRR/DSS/STSB/BC*
NAME	SRosenberg	SKrepel	VCusumano
DATE	08/10/2020	8/3/20	8/6/20
OFFICE	OGC*	NRR/DORL/LPL4/BC*	NRR/DORL/LPL4/PM*
NAME	Sturk	JDixon-Herrity	DGalvin
DATE	08/25/2020	08/31/2020	08/31/2020

OFFICIAL RECORD COPY