



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

June 10, 2022

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 –  
SUMMARY OF REGULATORY AUDIT REGARDING A LICENSE AMENDMENT  
REQUEST TO REVISE TECHNICAL SPECIFICATIONS TO ADOPT TSTF-505,  
REVISION 2, “PROVIDE RISK-INFORMED EXTENDED COMPLETION  
TIMES - RITSTF INITIATIVE 4B” (EPID L-2021-LLA-0085)

Dear Mr. Peters:

By application dated May 11, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21131A233), as supplemented letters dated July 13, 2021; February 17, 2022; March 29, 2022; and May 12, 2022 (ML21194A078, ML22048B490, ML22088A299, and ML22132A119, respectively); Vistra Operations Company, LLC (the licensee) submitted a license amendment request (LAR) for Comanche Peak Nuclear Power Plant Unit Nos. 1 and 2. The amendments would revise technical specification requirements to permit the use of risk informed completion times for actions to be taken when limiting conditions for operation are not met. The proposed changes are based on Technical Specifications Task Force (TSTF) Traveler TSTF-505, Revision 2, “Provide Risk Informed Extended Completion Times – RITSTF [Risk Informed TSTF] Initiative 4b,” dated July 2, 2018 (ML18183A493). The U.S. Nuclear Regulatory Commission (NRC) issued a final model safety evaluation approving TSTF 505, Revision 2, dated November 21, 2018 (ML18269A041).

To support its review, the NRC staff conducted a regulatory audit via the use of an online reference portal set up by the licensee, and a webinar. The NRC staff reviewed documents and held discussions with the licensee’s staff concerning the LAR. The audit summary is enclosed.

K. Peters

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If you have any questions, please contact me at 301-415-6256 or via email at [Dennis.Galvin@nrc.gov](mailto:Dennis.Galvin@nrc.gov).

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

Enclosure:  
Audit Summary

cc: Listserv

OFFICE OF NUCLEAR REACTOR REGULATION

REGULATORY AUDIT SUMMARY

IN SUPPORT OF LICENSE AMENDMENT REQUEST TO ADOPT TSTF-505

VISTRA OPERATIONS COMPANY LLC

COMANCHE PEAK NUCLEAR POWER PLANT, UNITS 1 AND 2

DOCKET NOS. 50-445 AND 50-446

1.0 BACKGROUND

By application dated May 11, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21131A233), as supplemented letters dated July 13, 2021; February 17, 2022; March 29, 2022; and May 12, 2022 (ML21194A078, ML22048B490, ML22088A299, and ML22132A119, respectively); Vistra Operations Company, LLC (the licensee) submitted a license amendment request (LAR) for Comanche Peak Nuclear Power Plant Unit Nos. 1 and 2 (Comanche Peak). The amendments would revise technical specification (TS) requirements to permit the use of risk-informed completion times for actions to be taken when limiting conditions for operation are not met. The proposed changes are based on TS Task Force (TSTF) Traveler TSTF-505, Revision 2, "Provide Risk-Informed Extended Completion Times – RITSTF [Risk-Informed TSTF] Initiative 4b," dated July 2, 2018 (ML18183A493). The U.S. Nuclear Regulatory Commission (NRC) issued a final model safety evaluation approving TSTF-505, Revision 2, dated November 21, 2018 (ML18269A041).

The NRC staff reviewed the licensee's submittal and determined that a regulatory audit would support its review of the proposed license amendment. The audit was conducted in accordance with the audit plan dated August 9, 2021 (ML21222A033), as supplemented by email dated October 27, 2021 (ML21300A134).

2.0 AUDIT ACTIVITIES

The purpose of the audit was to review the documentation related to the subject of its application (e.g., calculations and reports) that were not submitted on the Comanche Peak docket, to acquire additional understanding about the amendment request, and to determine whether additional information is needed to be docketed to complete the NRC staff's safety evaluation.

The audit was conducted via the use of an online reference portal set up by the licensee and webinars. Through the online reference portal, the NRC staff reviewed the licensee's documents made available in response to section IV of the August 9, 2021, audit plan. The NRC staff also reviewed the licensee's responses to the audit questions contained in the October 27, 2021, supplement to the audit plan. The licensee also included responses to the audit questions in the February 17, 2022, supplement to the LAR.

The NRC staff and the licensee conducted webinars on November 30 and December 1 and 6 - 8, 2021. The webinar discussions were focused on the following major technical areas: probabilistic risk assessment, external hazards, fire protection, TSs, electrical engineering, and instrumentation and controls. The NRC staff and the licensee discussed each of the audit

questions and proposed responses and identified if and how the responses could be modified to address the audit questions and the aspects of the responses to the audit questions that should be submitted on the docket. The discussions facilitated the NRC staff understanding of the request and identified information that should be provided on the docket. The list of non-docketed documents made available by the licensee during the audit is attached to this audit summary. There were no deviations from the audit plan beyond minor schedule changes and finishing a day early each week.

On December 1 and 8, the NRC staff and licensee held closing sessions to summarize the disposition of each audit question covered that week and the information that should be submitted on the docket, either through a licensee supplement or in response to requests for additional information (RAIs). The NRC staff informed the licensee that the RAIs would essentially be the portion of the audit questions that required a supplement. As part of the closing of the December 8 webinar, the licensee informed the NRC staff that it would supplement the LAR to provide documentation of certain audit discussion points on the docket. The licensee also indicated that the supplement would include the responses to audit questions for information purposes and provide pointers to where LAR sections were supplemented. The NRC staff agreed with this closure path to the audit questions and did not identify any open items beyond providing a supplement.

### 3.0 RESULTS OF THE AUDIT

The audit identified information to be provided on the docket, which the licensee agreed to provide through a supplement to the LAR. The licensee provided the supplement on February 17, 2022. As agreed to at the audit, the supplement provided responses to each of the audit questions and supplemented certain LAR sections as discussed in the audit. Thus, those details are not included in this audit summary.

### 4.0 AUDIT PARTICIPANTS

#### NRC

Jeff Circle  
Fred Forsaty  
Dennis Galvin  
Daniel Ju  
Ming Li  
Khoi Nguyen  
Robert Pascarelli  
Jigar Patel  
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#### Pacific Northwest National Laboratory

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#### Comanche Peak

Kris Brigman  
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Westinghouse Electric Company, LLC

James Boatwright

Matt Degonish

Kyle Hope

Andrea Maioli

Michele Reed

Steven Satter

Dan Tirsun

Carroll Trull

Attachment:

List of Documents Reviewed During Audit

### **List of Documents Reviewed During Audit**

The licensee provided an extensive list of supporting documents (e.g., analyses, calculations, reports, drawings, and procedures) on the Comanche Peak Nuclear Power Plant, Unit Nos. 1 and 2 (Comanche Peak or CPNPP), document portal available during the audit period. The list of documents available on the portal is provided below.

- CN-RAM-13-031, Revision 3, “Plant Response Model for Comanche Peak Nuclear Power Plant Fire PRA [Probabilistic Risk Assessment]”
- CN-RAM-13-032, Revision 3, “Ignition Frequencies for Comanche Peak Nuclear Power Plant Fire PRA”
- CN-RAM-13-034, Revision 3, “Fire Scenario Selection from the Comanche Peak Nuclear Power Plant Fire PRA”
- CN-RAM-13-035, Revision 1, “Main Control Room Analysis for the Comanche Peak Nuclear Power Plant Fire PRA”
- CN-RAM-13-036, Revision 4, “Human Reliability Analysis for Comanche Peak Nuclear Power Plant Fire PRA”
- CN-RAM-13-038, Revision 3, “Qualitative Screening, Quantitative Screening, Quantification, and Uncertainty Analysis for CPNPP Fire PRA,” December 2019.
- CN-RAM-17-011, Revision 1, “Quantitative Uncertainty Evaluation for Fire PRA”
- CN-RAM-20-002, Revision 0, “Comanche Peak High Winds PRA Hazard Analysis”
- CN-RAM-20-003, Revision 0, “Comanche Peak High Winds PRA Hazard Analysis,” October 2020.
- CN-RAM-20-016, Revision 0, “Comanche Peak Nuclear Power Plant PRA Model Integration for TSTF-505 [Technical Specifications Task Force-505],” January 2021.
- LTR-RAM-II-11-038, “RG [Regulatory Guide] 1.200 PRA Peer Review Against the ASME/ANS [American Society of Mechanical Engineers/American Nuclear Society] PRA Standard Requirements for the Comanche Peak Nuclear Power Plant Probabilistic Risk Assessment,” Westinghouse Electric Co., April 2011
- LTR-RAM-15-48, Revision 0, “Review of SRs [Supporting Requirements] not Met at Capability Category II and Resolution of Peer Review F&Os [Facts and Observations] from the 2011 Internal Events and Internal Flooding PRA Peer Review for the Comanche Peak Nuclear Power Plant,” Westinghouse Electric Co., September 2015
- LTR-RAM-15-71, Revision 0, “Independent Review and Resolution of Inconsistencies in the 2011 Internal Events and Internal Flooding PRA Peer Review Report for the Comanche Peak Nuclear Power Plant,” Westinghouse Electric Co., February 2016

- LTR-RAM-20-45, Revision 0, "Seismic Hazard Analysis to Support Comanche Peak RICT [Risk-Informed Completion Times] LAR [License Amendment Request]," May 2020.
- LTR-RAM-20-99, Revision 0, "High Wind Hazard Analysis to Support Comanche Peak RICT LAR," November 2020.
- PWROG-14001-P-A, Revision 1, "PRA Model for the Generation III Westinghouse Shutdown Seal," December 2017.
- PWROG-15103-P, Revision 0, "Peer Review of the Comanche Peak Internal Fire Probabilistic Risk Assessment," Pressurized Water Reactors Owners Group (PWROG), June 2016.
- PWROG-18060-P, Revision 0, "Independent Assessment of Facts & Observations Closures of the Comanche Peak Probabilistic Risk Assessment," Pressurized Water Reactors Owners Group, January 2019.
- R&R-PN-008A, Revision 5, "Internal Initiating Events Data Analysis," Comanche Peak Nuclear Power Plant," November 2016.
- R&R-PN-020, Revision 5, "Human Reliability Analysis," October 2016
- R&R-PN-021, Revision 5, "Internal Flooding Analysis," May 2019.
- R&R-PN-022, Revision 5, "Level 1 Internal Events Quantification," October 2016.
- R&R-PN-035, Revision 5, "Level 2 Internal Events Quantification," November 2016
- R&R-PN-041, Revision 5, "Sensitivity and Uncertainty," January 2019
- R&R-PN-46, Revision 5, "Configuration Risk Monitor for Risk-Informed Completion Time (RICT)," February 2021.
- R&R-PN-205, Revision 5, "Screening and Conservative Analysis for Other External Hazards," October 2020.
- R&R-PN-027, Revision 5, "RCP [Reactor Coolant Pump] Seal LOCA [Loss-of-Coolant Accident] Model," October 2016
- STA-604.01, Revision 6, "Integrated Risk Management," May 20, 2021
- STA-604.02, Revision 1, "Maintenance Risk Assessment," December 17, 2019
- STA-604.03, Revision 9, "Weekly Surveillances / Work Scheduling," May 20, 2021
- STA-604.04, Revision 2, "Outage Safety Function Guide," September 4, 2019
- STA-604.05, Revision 0, "On-line Fire Risk Management," March 2, 2017

- STA-604, Revision 12, "Configuration Risk Management and Work Scheduling," May 10, 2021
- STA-762, Revision 0, "Risk Informed Completion Time Program"
- STI-762.01, Revision 0, "Risk-Informed Completion Time Implementation"
- STI-762.02, Revision 0, "Risk-Informed Completion Times – PRA model Configuration Control"
- RXE-LA-CPX/0-104, Revision 0, "Core Uncovery Times for the WOG [Westinghouse Owners Group] 2000 Reactor Coolant Pump Seal LOCA Leak Rates for CPNPP"
- RXE-LA-CPX/0-103, Revision 1, "Thermal-hydraulic Bases for the Success Criteria & Accident Sequence Event Tree for the CPNPP PRA"
- R&R-PN-013, Revision 5, "Accident Sequences and Success Criteria"
- EV-TR-2019-006419-6, Revision 0, "CPNPP Plant Response to an Open Phase Condition," October 2019
- AI-TR-2021-000006-35, "CPNPP RICT Calculation Summary"



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**ADAMS Accession No.: ML22152A041**

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