



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
1600 EAST LAMAR BOULEVARD  
ARLINGTON, TEXAS 76011-4511

November 10, 2020

Mr. Ken Peters  
Senior Vice President and Chief Nuclear Officer  
Attention: Regulatory Affairs  
Vistra Operations Company LLC  
P.O. Box 1002  
Glen Rose, TX 76043

SUBJECT: COMANCHE PEAK NUCLEAR POWER PLANT – INTEGRATED INSPECTION  
REPORT 05000445/2020003 AND 05000446/2020003

Dear Mr. Peters:

On September 30, 2020, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Comanche Peak Nuclear Power Plant. On October 1, 2020, the NRC inspectors discussed the results of this inspection with you and other members of your staff. The results of this inspection are documented in the enclosed report.

No findings or violations of more than minor significance were identified during this inspection.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at <http://www.nrc.gov/reading-rm/adams.html> and at the NRC Public Document Room in accordance with Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

Neil F. O'Keefe, Chief  
Reactor Projects Branch B  
Division of Reactor Projects

Docket Nos. 05000445 and 05000446  
License Nos. NPF-87 and NPF-89

Enclosure:  
As stated

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COMANCHE PEAK NUCLEAR POWER PLANT – INTEGRATED INSPECTION  
REPORT 05000445/2020003 AND 05000446/2020003 – November 10, 2020

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**U.S. NUCLEAR REGULATORY COMMISSION**  
**Inspection Report**

Docket Numbers: 05000445 and 05000446

License Numbers: NPF-87 and NPF-89

Report Numbers: 05000445/2020003 and 05000446/2020003

Enterprise Identifier: I-2020-003-0010

Licensee: VISTRA Operations Company, LLC

Facility: Comanche Peak Nuclear Power Plant

Location: Glen Rose, TX 76043

Inspection Dates: July 1, 2020 to September 30, 2020

Inspectors: N. Brown, Project Engineer  
N. Day, Resident Inspector  
J. Ellegood, Senior Resident Inspector  
S. Hedger, Emergency Preparedness Inspector  
J. Melfi, Project Engineer

Approved By: Neil F. O'Keefe, Chief  
Reactor Projects Branch B  
Division of Reactor Projects

Enclosure

## **SUMMARY**

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting an integrated inspection at Comanche Peak Nuclear Power Plant, in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC's program for overseeing the safe operation of commercial nuclear power reactors. Refer to <https://www.nrc.gov/reactors/operating/oversight.html> for more information.

### **List of Findings and Violations**

No findings or violations of more than minor significance were identified.

### **Additional Tracking Items**

None.

## PLANT STATUS

Unit 1 began the inspection period at rated thermal power and remained at or near rated thermal power until September 29, 2020. From September 29, 2020, until the end of the inspection period, Unit 1 was in maximum achievable coast down operations for their upcoming refueling outage.

Unit 2 began the inspection period at rated thermal power and remained at or near rated thermal power for the entire inspection period.

## INSPECTION SCOPES

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

Starting on March 20, 2020, in response to the National Emergency declared by the President of the United States on the public health risks of the coronavirus (COVID-19), resident and regional inspectors were directed to begin telework and to remotely access licensee information using available technology. During this time the resident inspectors performed periodic site visits each week, increasing the amount of time on site as local COVID-19 conditions permitted. As part of their onsite activities, resident inspectors conducted plant status activities as described in IMC 2515, Appendix D; observed risk significant activities; and completed on site portions of IPs. In addition, resident and regional baseline inspections were evaluated to determine if all or portion of the objectives and requirements stated in the IP could be performed remotely. If the inspections could be performed remotely, they were conducted per the applicable IP. In some cases, portions of an IP were completed remotely and on site. The inspections documented below met the objectives and requirements for completion of the IP.

## REACTOR SAFETY

### 71111.04 - Equipment Alignment

#### Partial Walkdown Sample (IP Section 03.01) (4 Samples)

The inspectors evaluated system configurations during partial walkdowns of the following systems/trains:

- (1) Unit 1, train B motor-driven auxiliary feedwater pump on July 6, 2020
- (2) Unit 2, train B safety injection on July 28, 2020
- (3) Unit 1, train A instrument air dryer on August 13, 2020
- (4) Unit 2, train B safety chiller on September 14, 2020

## Complete Walkdown Sample (IP Section 03.02)

Ultimate Heat Sink

### 71111.05 - Fire Protection

#### Fire Area Walkdown and Inspection Sample (IP Section 03.01) (4 Samples)

The inspectors evaluated the implementation of the fire protection program by conducting a walkdown and performing a review to verify program compliance, equipment functionality, material condition, and operational readiness of the following fire areas:

- (1) Unit 2, safety chillers area 2AA on September 11, 2020
- (2) Unit 2, safety bus 2EA1 area 2SD on September 25, 2020
- (3) Unit 2, safety bus 2EA2 area 2SE on September 25, 2020
- (4) Unit 1, safety chillers area 1AA on September 30, 2020

### 71111.06 - Flood Protection Measures

#### Inspection Activities - Internal Flooding (IP Section 03.01) (1 Sample)

The inspectors evaluated internal flooding mitigation protections in the:

- (1) Units 1 and 2, uninterruptable power supply rooms

### 71111.11Q - Licensed Operator Regualification Program and Licensed Operator Performance

#### Licensed Operator Performance in the Actual Plant/Main Control Room (IP Section 03.01) (1 Sample)

- (1) Unit 2, licensed operator performance during motor-driven auxiliary feedwater post maintenance testing per Work Order 5717924 on September 23, 2020

#### Licensed Operator Regualification Training/Examinations (IP Section 03.02) (1 Sample)

- (1) The inspectors observed and evaluated a licensed operator exam in the simulator on September 2, 2020.

### 71111.12 - Maintenance Effectiveness

#### Maintenance Effectiveness (IP Section 03.01) (1 Sample 1 Partial)

The inspectors evaluated the effectiveness of maintenance to ensure the following structures, systems, and components (SSCs) remain capable of performing their intended function:

- (1) (Partial)-Electronic power supplies for safety-related systems on Units 1 and 2
- (2) Overall maintenance effectiveness of Unit 1 auxiliary feedwater

### 71111.13 - Maintenance Risk Assessments and Emergent Work Control

#### Risk Assessment and Management Sample (IP Section 03.01) (4 Samples)

The inspectors evaluated the accuracy and completeness of risk assessments for the following planned and emergent work activities to ensure configuration changes and appropriate work controls were addressed:

- (1) Unit 1, elevated risk due to fire main leak and Unit 1 main generator thyristor AC unit failure during the week of August 31, 2020
- (2) Unit 2, elevated risk due to safety chiller 2-06 maintenance outage from September 8 through 13, 2020
- (3) Unit 1, elevated risk due to main generator thyristor voltage regulator failure on September 9, 2020.
- (4) Unit 1, auxiliary feedwater pump availability while crediting a dedicated operator actions on July 7, 2020

### 71111.15 - Operability Determinations and Functionality Assessments

#### Operability Determination or Functionality Assessment (IP Section 03.01) (5 Samples)

The inspectors evaluated the licensee's justifications and actions associated with the following operability determinations and functionality assessments:

- (1) Safety chiller 1-06 operability based on small Freon leak on July 25, 2020
- (2) Safety injection pump 2-01 following inability to meet test conditions on July 28, 2020
- (3) Containment radiation monitor with incorrect setpoint on August 31, 2020
- (4) Fire suppression system with X-06 diesel fire pump not functional on September 15, 2020
- (5) Component cooling water system due to piping indication in Condition Report CR-2020-006675 on September 22, 2020

### 71111.19 - Post-Maintenance Testing

#### Post-Maintenance Test Sample (IP Section 03.01) (3 Samples)

The inspectors evaluated the following post maintenance test activities to verify system operability and functionality:

- (1) Unit 2, safety chiller 2-05 repairs on July 23, 2020
- (2) Diesel fire pump X-06 on September 10, 2020
- (3) Emergency diesel generator 2-02 on September 16, 2020

### 71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

#### Surveillance Tests (other) (IP Section 03.01) (2 Samples)

- (1) Safe shutdown impoundment silt measurement on August 25, 2020
- (2) Unit 2, safety injection pump A on September 29, 2020

#### 71114.04 - Emergency Action Level and Emergency Plan Changes

##### Inspection Review (IP Section 02.01-02.03) (1 Sample)

- (1) The licensee submitted a summary of emergency plan changes (Revision 43) to the NRC on May 12, 2020. The inspectors conducted an in-office review of the changes from July 1 to September 23, 2020. This evaluation does not constitute NRC approval.

#### 71114.06 - Drill Evaluation

##### Select Emergency Preparedness Drills and/or Training for Observation (IP Section 03.01) (1 Sample)

- (1) Tabletop emergency preparedness drill on August 3, 2020

#### **OTHER ACTIVITIES – BASELINE**

##### 71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

##### MS06: Emergency AC Power Systems (IP Section 02.05) (2 Samples)

- (1) Unit 1, July 1, 2019, through June 30, 2020
- (2) Unit 2, July 1, 2019, through June 30, 2020

##### MS07: High Pressure Injection Systems (IP Section 02.06) (2 Samples)

- (1) Unit 1, July 1, 2019, through June 30, 2020
- (2) Unit 2, July 1, 2019, through June 30, 2020

##### MS08: Heat Removal Systems (IP Section 02.07) (2 Samples)

- (1) Unit 1, July 1, 2019, through June 30, 2020
- (2) Unit 2, July 1, 2019, through June 30, 2020

#### **INSPECTION RESULTS**

No findings were identified.

#### **EXIT MEETINGS AND DEBRIEFS**

The inspectors verified no proprietary information was retained or documented in this report.

- On September 23, 2020, the inspectors presented the Emergency Plan In-Office Review Exit Meeting inspection results to Mr. J. Dreyfuss, Director of Organizational Effectiveness, and other members of the licensee staff.
- On October 1, 2020, the inspectors presented the integrated inspection results to Ken Peters, Senior Vice President and Chief Nuclear Office, and other members of the licensee staff.



## DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.04	Corrective Action Documents		IR-2020-006659	
	Miscellaneous	CP20-0739	Instrument Air Dryer Clearance	08/11/2020
		DBD-ME-225	Fire Suppression System	27
		TX04912	Safe Shutdown Impoundment Inspection Report	September, 2020
	Procedures	ODA-403	Operations Department Locked Component Control	8
		SOP-201B-SI-V09	Safeguards Bldg Train B Valve Lineup	1
		SOP-304B-AF-V02	Train B MDAFW Pump Lineup	3
		SOP-509A	Instrument Air System	22
	Work Orders		5772340, 5805115, 5834490, 5863391	
71111.05	Fire Plans	FPI-103B	Unit 2 Safeguards Building 810'-6" Radiation Pen Area and Electrical Equipment Room	3
		FPI-107B	Unit 2 Safeguards Elevation 852' Electrical Equipment Area and Feedwater Penetration Area	4
		FPI-510	Electrical and Control Building Chiller Pump Rooms Elevation 778'-0"	3
71111.06	Calculations	SI-CA-0803-3381	UPS Room Flooding Analysis	1
71111.11Q	Miscellaneous	LO49C20E02	Scenario Event Description for Licensed Operator Examination	09/02/2020
71111.12	Corrective Action Documents		TR-2019-8503, TR-2020-005887	
	Work Orders	5849486	Power Supply CP1-ECPRCB-08	2/6/2020
71111.13	Miscellaneous		Guarded Equipment Posting Management Sign Posting Log for Safety Chiller 2-06 Outage	09/07/2020
71111.15	Corrective Action Documents		TR-2020-005621	
		CR-YYYY-NNNN	2020-6366, 2020-005556	
71111.19	Procedures	MSM-PX-4702	Fire Pump Diesel Engine Preventive Maintenance	
71111.22	Miscellaneous		Safe Shutdown Impoundment Inspection	August 2020
71114.04	Corrective Action	CR-YYYY-NNNN	2020-005975	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Documents			
	Miscellaneous	Activity Numbers EV-CR-2019-008831-4; EV-IR-2020-000756-1	Removing Section 6.7 (Laboratory Facilities in EOF-NOSF)	2/26/2020
		CP-201800662	Comanche Peak Nuclear Power Plant, Docket Nos. 50-445, 50-446, and 72-74; License Amendment Request 18-002 for Revision of the Emergency Plan	10/31/2018
		CP-201900152	Comanche Peak Nuclear Power Plant, Docket Nos. 50-445 and 50-446; Response to Request for Additional Information Regarding License Amendment Request (LAR) 18-002 for Revision of the Emergency Plan and Supplement to LAR 18-002	3/28/2019
		CP-201900354	Comanche Peak Nuclear Power Plant, Docket Nos. 50-445 and 50-446; Response to Supplemental Request for Additional Information Regarding License Amendment Request (LAR) 18-002 for Revision of the Emergency Plan and Supplement to LAR 18-002	6/3/2019
		CP-202000312	Comanche Peak Nuclear Power Plant (CPNPP), Docket Nos. 50-445, 50-446; Transmittal of Revised Emergency Plan (Revision 43)	5/12/2020
	Procedures	EPP-123	10 CFR 50.54(q) Screening and Evaluation of Changes to Emergency Plan Documentation	2
		EPP-204	Activation and Operation of the Technical Support Center (TSC)	16
71114.06	Miscellaneous		Drill scenario for table top drill conducted August 3, 2020	
71151	Miscellaneous		U1 MSPI Margin Report	6/30/2020
			U2 MSPI Margin Reports	6/30/2020
			MAY20 MSPI WANO spreadsheet	5/31/2020
			APR20 MSPI WANO spreadsheet	4/30/2020
			JUN20 MSPI WANO spreadsheet	6/30/2020