

JULY 7, 2020, TELECONFERENCE REGARDING NRC OBSERVATIONS ON THE  
JUNE 24, 2020, LICENSE AMENDMENT REQUEST TO MAKE A ONE-TIME CHANGE TO  
TECHNICAL SPECIFICATION 3.7.19, "SAFETY CHILLED WATER"

VISTRA OPERATIONS COMPANY LLC

COMANCHE PEAK UNIT 1 AND 2

DOCKET NOS. 50-445 AND 50-446

By letter dated June 24, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20176A281), Vistra Operations Company LLC (the licensee) submitted a license amendment request (LAR) for Nuclear Regulatory Commission (NRC) approval for an amendment to the facility operating license for the Comanche Peak Nuclear Power Plant, Units 1 and 2 (Comanche Peak). The proposed amendment would revise Technical Specification (TS) 3.7.19, "Safety Chilled Water," Condition A, "One safety chilled water train inoperable," to add new required action A.2 with a 7-day completion time. This one-time change is to allow the replacement of the Comanche Peak Unit 2 Safety Chiller 2-06 compressor. The Nuclear Regulatory Commission (NRC) staff is conducting an acceptance review of the LAR and has identified the following observations/potential issues.

SCPB

- The LAR enclosure states in several places that the proposed 7-day completion time for required action A.2 is based on a deterministic evaluation supplemented with risk insights.

LAR Enclosure Section 3.3, "Equipment Response to Loss of Cooling," addresses the deterministic evaluations related to loss of cooling to the engineered safety features equipment rooms. The conclusion of Section 3.3 states "These analyses demonstrated that on a loss of room cooling there is sufficient time to take corrective or compensatory actions to maintain acceptable room temperatures." However, Section 3.3 does not provide details to support the conclusion such as heat up rates, equipment qualification temperatures, the time to heat up to these temperatures, and the compensatory actions that are planned, including the capability to implement them within the required time periods.

- Discuss the basis for the conclusion that there is sufficient time to take corrective or compensatory actions to maintain acceptable room temperatures, including providing appropriate details. Also, discuss if the calculations were done for one train or both trains of the safety chilled water system.
- LAR Attachment 4, Figure 1, "Safety Chilled Water System," provides a flow diagram of the safety chilled water system flow diagram indicates an additional chilled water supply and return line tie-ins with trains A and B, with a blocked valve from Unit 2.
  - Discuss the function of these additional chilled water supply and return line tie-ins.

- Enclosure, Section 3.6, “Assumptions and Compensatory Measures,” identifies compensatory measures for severe weather after entry into TS 3.7.19 proposed required action A.2 and after 72 hours have elapsed. The compensatory measure addresses the issuance of a Severe Thunderstorm Warning or Tornado Warning and identifies actions to be taken within 6 hours and 36 hours. The NRC staff notes that weather warnings, compared to watches, indicate that the weather event is occurring or is imminent and that severe thunderstorm warnings or tornado warnings do not typically last 6 hours.

Enclosure, Section 3.6, states that Comanche Peak would not enter the one-time extended COMPLETION TIME if severe weather is anticipated. The NRC staff notes that this is one of the recommended compensatory measures for other allowed outage time extensions (see NUREG-0800, “Standard Review Plan,” Branch Technical Position 8-8, “Onsite (Emergency Diesel Generators) And Offsite Power Sources Allowed Outage Time Extensions”).

- Given that Comanche Peak has proposed the recommended severe weather compensatory measure and the typically short-term nature of severe thunderstorm warnings or tornado warnings, discuss the function of the compensatory measure upon issuance of warnings.

#### APLC

- LAR Enclosure Section 3.3 mentions that the licensee has evaluated the loss of room cooling on engineered safety features equipment and cites the Updated Final Safety Analysis Report (UFSAR). The identified sections in the UFSAR do not provide information about the evaluations for loss of room cooling and the resulting insights.

LAR Enclosure Section 3.5.2, “Development and Use of PRA Insights,” states that the loss of heating, ventilation, and air conditioning (HVAC) evaluations demonstrated that “in several areas analyzed the temperature reached following a loss of HVAC would allow components to continue to function with some higher likelihood and in other areas additional time would be available to take risk mitigating actions.”

LAR Enclosure Section 3.5.3, “Avoidance of Risk Significant Plant Configurations,” states that “the dominant 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.”

- Discuss the loss of HVAC evaluation performed by the licensee and the insights from that evaluation.
- Based on risk insights available to the NRC staff, the failure of the motor-driven auxiliary feedwater (AFW) pumps and failure of the component cooling water (CCW) pumps due to loss of room cooling appear to be dominant contributors to the sequences of interest for the proposed LAR. However, the risk management actions in LAR Enclosure Sections 3.5.3 and 3.6 do not include actions to provide alternate room cooling (e.g., pre-staging diesel driven fans) for the rooms containing motor-driven AFW pumps and CCW pumps. Discuss the rationale for not including the risk management actions to provide alternate room cooling for the rooms containing motor-driven AFW pumps and failure of the CCW pumps.

- Based on risk insights available to the NRC staff, the loss of CCW initiator is a dominant contributor for the licensee's plant risk. As mentioned above, the loss of room cooling can impact the availability of the CCW pumps. LAR Enclosure Section 3.6 identifies protection of the Unit 2 CCW pumps as a risk management action. However, LAR Enclosure Section 3.5.3 states that the CCW crosstie configuration will be prohibited. Discuss how prohibiting CCW crosstie is an effective risk management action for the proposed change.
- Based on risk insights in LAR Enclosure Section 3.5.3, loss-of-offsite power is the dominant sequence for the proposed configuration. It is unclear whether the risk insights were developed with credit for the existing diverse and flexible coping (FLEX) strategies. Clarify whether FLEX strategies were credited in developing the risk insights presented in LAR Enclosure Section 3.5.3 or whether those strategies are uncredited defense-in-depth measures.

### STSB

- If during the work on the "B" train of the safety chilled water system, train "A" of a supported system becomes inoperable (e.g. failure of a containment spray pump supported by train "A" of the safety chilled water system), potentially resulting in a loss of function, discuss actions to be taken as mandated by TS 5.5.15, "Safety Function Determination Program (SFDP)."