

PMComanchePeakPEm Resource

From: Monarque, Stephen
Sent: Wednesday, November 23, 2011 10:45 AM
To: John.Only@luminant.com; Donald.Woodlan@luminant.com; 'cp34-rai-luminant@mnes-us.com'; Eric.Evans@luminant.com; joseph tapia; 'Kazuya Hayashi'; Matthew.Weeks@luminant.com; 'Russ Bywater'; MNES RAI mailbox (cp34-rai-luminant@mnes-us.com)
Cc: ComanchePeakCOL Resource; Roy, Tarun
Subject: Comanche Peak RCOL Chapter 2 - Section 2.3.1 - RAI Number 242
Attachments: RAI 6193 (RAI 242).docx

The NRC staff has identified that additional information is needed to continue its review of the combined license application. The NRC staff's request for additional information (RAI) is contained in the attachment. Luminant is requested to inform the NRC staff if a conference call is needed.

The response to this RAI is due within 35 calendar days of **November 23, 2011**.

Note: The NRC staff requests that the RAI response include any proposed changes to the FSAR.

thanks,

Stephen Monarque
U. S. Nuclear Regulatory Commission
NRO/DNRL/NMIP
301-415-1544

Hearing Identifier: ComanchePeak_COL_Public
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From: Monarque, Stephen

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Request for Additional Information (RAI) No. 6193, COLA Revision 2

RAI Letter Number 242

11/23/2011

Comanche Peak Units 3 and 4
Luminant Generation Company, LLC.
Docket No. 52-034 and 52-035
SRP Section: 02.03.01 - Regional Climatology
Application Section: Regional Climatology

QUESTIONS for Siting and Accident Conseq Branch (RSAC)

02.03.01-14

General Design Criteria 44, "Cooling Water," of Appendix A to 10 CFR Part 50 states a system to transfer heat from SSCs important to safety to an ultimate heat sink (UHS) shall be provided. Section C.III.2.3.1.2, "Regional Meteorological Conditions for Design and Operating Bases," of RG 1.206 states the meteorological data used to evaluate the performance of the UHS should be provided.

The following sentences were added in Revision 2 of FSAR Section 2.3.1.2.10, "Ultimate Heat Sink," in the response to Question 02.03.01-1:

The ambient design air temperatures in Table 2.0-1R are considered in the design of the UHS and are derived based on hourly readings of dry bulb temperature and dew point data from Dallas/Fort Worth Airport (DFW) for the 30-year period from 1977- 2006. Wet bulb temperatures are determined from the NOAA/NCDC data using psychrometric conversion algorithms consistent with the ASHRAE Handbook – Fundamentals (2005). The 1-percent exceedance values for dry bulb temperature and non-coincident wet bulb temperature represent the 99th percentile values (minimum and maximum). The 1-day, 5-day and 30-day worst time periods for the 30-year period were selected from these data. The 0-percent exceedance values (maximum and minimum historical limits) were selected by screening the 30-year hourly temperature records with maximum or minimum dry bulb temperature readings for at least two consecutive hours. Mean coincident wet bulb temperatures represent the average wet bulb values associated with the corresponding dry bulb temperatures at the specified exceedance value.

Please update FSAR Section 2.3.1.2.10 as follows:

- a. Clarify which of the ambient design air temperatures in FSAR Table 2.0-1R were considered in the design of the UHS.
- b. Explain how the 1% exceedance dry bulb and non-coincident wet bulb temperatures discussed in the paragraph above were used in the design of the UHS.
- c. Describe the 1-day and 5-day worst time periods discussed in the paragraph above and explain how they were used in the design of the UHS.