

## PMComanchePeakPEm Resource

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**From:** Monarque, Stephen  
**Sent:** Friday, February 26, 2010 1:22 PM  
**To:** John.Only@luminant.com; Donald.Woodlan@luminant.com; cp34-rai-luminant@mnes-us.com; Diane Yeager; Eric.Evans@luminant.com; joseph tapia; Kazuya Hayashi; Matthew.Weeks@luminant.com; MNES RAI mailbox; Russ Bywater  
**Cc:** ComanchePeakCOL Resource; Ward, William  
**Subject:** Comanche Peak RCOL Chapter 3.7.4 - RAI Number 146  
**Attachments:** RAI 4294 (RAI 146).doc

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 February 26, 2010.

Note: If changes are needed to the safety analysis report, the NRC staff requests that the RAI response include the proposed changes.

thanks,

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

**Hearing Identifier:** ComanchePeak\_COL\_Public  
**Email Number:** 837

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**Subject:** Comanche Peak RCOL Chapter 3.7.4 - RAI Number 146  
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**Received Date:** 2/26/2010 1:21:32 PM  
**From:** Monarque, Stephen

**Created By:** Stephen.Monarque@nrc.gov

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**Post Office:** HQCLSTR02.nrc.gov

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RAI 4294 (RAI 146).doc	34298	

**Options**

**Priority:** Standard

**Return Notification:** No

**Reply Requested:** No

**Sensitivity:** Normal

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**Recipients Received:**

Request for Additional Information (RAI) No. 4294 COL Revision 1

RAI Number 146

2/26/2010

Comanche Peak Units 3 and 4  
Luminant Generation Company, LLC.  
Docket No. 52-034 and 52-035  
SRP Section: 03.07.04 - Seismic Instrumentation  
Application Section: 3.7.4

QUESTIONS for Geosciences and Geotechnical Engineering Branch 1 (RGS1)

03.07.04-2

Paragraph IV(a)4 of Appendix S of 10 CFR 50 requires that, "Suitable instrumentation must be provided so that the seismic response of nuclear power plant features important to safety can be evaluated promptly after an earthquake." Regulatory Guide (RG) 1.166 provides the guidance regarding the instrumentation and procedures to make the required evaluation.

In FSAR subsection 3.7.4.1, "Comparison with Regulatory Guide 1.12" you proposed to use foundation-level instrumentation for operating basis earthquake (OBE) determinations. The FSAR states that "it is acceptable to perform a CAV check of seismic responses measured at the R/B and PS/B foundation locations". RG 1.166 explicitly states that "The evaluation to determine whether the OBE was exceeded should be performed using data obtained from the three components of the free-field ground motion (i.e., two horizontal and one vertical)". Also, Appendix A to RG 1.166, which provides interim OBE exceedance guidelines in the case that the installed seismic instrumentation or data processing equipment is inoperable, states that "For plants at which instrumentally determined data are available only from an instrument installed on a foundation, the cumulative absolute velocity (CAV) check (see Regulatory Position 4.2 of this guide) is not applicable." Considering that the CAV value of 0.16g-sec was defined using free-field instruments, the staff is not clear based on the justification provided in the FSAR and is concerned that the plant may not be shutdown in all instances when RG 1.166 anticipated a shutdown would be performed. Please provide further clarification why foundation instrument records are appropriate for CAV checks for CPNPP's OBE determinations.