

## PMComanchePeakPEm Resource

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**From:** Monarque, Stephen  
**Sent:** Wednesday, April 27, 2011 8:45 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; MNES RAI mailbox; Russ Bywater  
**Cc:** ComanchePeakCOL Resource; Reyes, Ruth  
**Subject:** Comanche Peak RCOL Chapter 6 - section 6.4 - RAI Number 216  
**Attachments:** RAI 5652 (RAI 216).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 April 27, 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  
**Email Number:** 1331

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**Received Date:** 4/27/2011 8:45:23 AM  
**From:** Monarque, Stephen

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

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

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RAI 5652 (RAI 216).docx	21520	

**Options**

**Priority:** Standard

**Return Notification:** No

**Reply Requested:** No

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**Recipients Received:**

Request for Additional Information (RAI) No. 5652, COLA Revision 1

RAI Letter Number 216

4/27/2011

Comanche Peak Units 3 and 4  
Luminant Generation Company, LLC.  
Docket No. 52-034 and 52-035  
SRP Section: 06.04 - Control Room Habitability System  
Application Section: FSAR section 6.4

QUESTIONS for Containment and Ventilation Branch 1 (AP1000/EPR Projects) (SPCV)

06.04-13

In support of the applicant's documented conclusions of Comanche Peak Nuclear Power Plant, Units 3 and 4 COLA FSAR section 6.4.4.2, the staff performed confirmatory HABIT code modeling per the guidance of Regulatory Guide 1.78 and NUREG-0800 Standard Review Plan (SRP) 6.4. For the "CPNPP Units 3 & 4 Water Treatment Chemicals" of FSAR Table 2.2-214, the staff compared the results of its modeling to the applicant's modeling results as captured in Calculation 4CS-CP34-200800074. Calculation 4CS-CP34-200800074 "CPNPP Units 3 & 4 Control Room Habitability Analysis Following Postulated Toxic Chemical Release (Support Document)" was viewed through the applicant's "CPNPP 3&4 COLA Reading Room."

For the onsite chemicals of sulfuric acid, ammonia, hydrazine and morpholine, the staff observed differences in its own calculated initial mass values from those listed in the EXTRAN Input Files of 4CS-CP34-200800074. The differences in the calculated values were as large in magnitude as 3.5.

The staff used the following formula for calculating their initial mass values.

Initial Mass = (Number gallons of chemical) x (8.337 lb/gal) x (Specific Gravity of Chemical) x (short ton/2000 lb) x (907.185 kilograms/short ton)

The staff requests that the applicant explain how the initial mass values were determined for sulfuric acid, ammonia, hydrazine and morpholine in 4CS-CP34-200800074, Revision 0. Additionally, the staff requests additional information about the applicant's HABIT code modeling that may help explain the noted differences.