

## PMComanchePeakPEm Resource

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**From:** Monarque, Stephen  
**Sent:** Tuesday, February 23, 2010 8:20 AM  
**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; Magee, Michael  
**Subject:** Comanche Peak RCOL Chapter 2.4.14 - RAI Number 142  
**Attachments:** RAI 4316 (RAI 142).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 or public meeting is needed.

The response to this RAI is due within 35 calendar days of February 23, 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:** 831

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**Subject:** Comanche Peak RCOL Chapter 2.4.14 - RAI Number 142  
**Sent Date:** 2/23/2010 8:19:36 AM  
**Received Date:** 2/23/2010 8:19:39 AM  
**From:** Monarque, Stephen

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

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RAI 4316 (RAI 142).doc		33274

**Options**

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**Recipients Received:**

Request for Additional Information (RAI) No. 4316 COLA Revision 1

RAI Number 142

2/23/2010

Comanche Peak Units 3 and 4  
Luminant Generation Company, LLC.  
Docket No. 52-034 and 52-035

SRP Section: 02.04.14 - Technical Specifications and Emergency Operation Requirements  
Application Section: FSAR Section 2.4.14

QUESTIONS for Hydrologic Engineering Branch (RHEB)

02.04.14-3

NUREG-0800, Standard Review Plan (SRP), Section 2.4.14, 'Technical Specifications and Emergency Operation Requirements,' establishes criteria that the NRC staff intends to use to evaluate whether an applicant meets the NRC's regulations.

By letter dated September 30, 2009, the NRC staff issued RAI ID 3674 (RAI No. 96) Question Number 14277 (02.04.14-1), in which the NRC staff asked "Provide a description of the monitoring, notification, and corrective procedures that would ensure that interruption of makeup water flow to the essential service water system (ESWS) would trigger actions to maintain the reliability of the ultimate heat sink (UHS) under all operating or accident conditions, or would trigger the initiation of shutdown until makeup water flow is restored."

The applicant provided its response in document CP-200901560-Log No TXNB-09064 (ML092740132) executed on November 11, 2009. The NRC staff has reviewed the response and has determined that additional information is needed in order to complete its review.

The applicant's response appropriately describes the water level monitoring that would trigger closure of blowdown control valves. The applicant also describes how UHS basin inventory is assured through periodic surveillance described in plant technical specifications. The applicant is requested to describe how a safe sufficiency of the UHS basin inventory is protected against drift and evaporation losses during an interruption of makeup water to the UHS basins.

In order to make sure that safe shutdown is possible in accordance with the practice of safe operation of a plant, the NRC staff requests that the applicant describe the procedures that would be followed to achieve safe shutdown following interruption of makeup water flow and once the trigger level of water inventory in the UHS basin is activated as a result of low water inducing processes such as drift and evaporation losses.

This is supplemental RAI 2.4.14-01-S.

02.04.14-4

NUREG-0800, Standard Review Plan (SRP), Section 2.4.14, 'Technical Specifications and Emergency Operation Requirements,' establishes criteria that Staff intends to use to evaluate whether an Applicant meets the NRC's regulations.

By letter dated September 30, 2009, the NRC staff issued RAI ID 3674 (RAI No. 96) Question Number 14278, in which the NRC staff asked "Provide a description of how sufficient cooling capacity and safety within the UHS and ESWS would be maintained during the failure of two or more cooling tower basins as a result of a single hydrologic event or other accident representing a single failure."

The applicant responded in document CP-200901560-Log No TXNB-09064, executed on November 11, 2009. The NRC staff has reviewed the response and has determined that additional information is needed in order to complete its review.

The applicant responded that the safety related plant elevation of 822 feet is greater than the design basis flood elevation reported in FSAR 2.4.2 through 2.4.11. The FSAR does reference the nuclear island safety elevation as 822 feet, but does not state explicitly the safety elevation applicable to the UHS structures.

In order to have a uniform parameter to relate to hydrologic hazard induced mechanisms and provide assurance that the safety margins are not exceeded, the NRC staff requests that the applicant state explicitly the safety elevation applicable to the UHS structures, and that the applicant clarify whether the design basis flood elevation is above or below the safety elevation applicable to the UHS structures.

This is supplemental RAI 2.4.14-02-S.