

PMComanchePeakPEm Resource

From: Monarque, Stephen
Sent: Tuesday, September 29, 2009 8:18 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; Otto, Ngola
Subject: Comanche Peak RCOLA Chapter 16 - RAI # 90
Attachments: RAI 3113 (RAI 90).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 36 calendar days of September 29, 2009.

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: 646

Mail Envelope Properties (9C2386A0C0BC584684916F7A0482B6CA04A7322FAD)

Subject: Comanche Peak RCOLA Chapter 16 - RAI # 90
Sent Date: 9/29/2009 8:17:31 PM
Received Date: 9/29/2009 8:17:33 PM
From: Monarque, Stephen

Created By: Stephen.Monarque@nrc.gov

Recipients:

"ComanchePeakCOL Resource" <ComanchePeakCOL.Resource@nrc.gov>

Tracking Status: None

"Otto, Ngola" <Ngola.Otto@nrc.gov>

Tracking Status: None

"John.Only@luminant.com" <John.Only@luminant.com>

Tracking Status: None

"Donald.Woodlan@luminant.com" <Donald.Woodlan@luminant.com>

Tracking Status: None

"cp34-rai-luminant@mnes-us.com" <cp34-rai-luminant@mnes-us.com>

Tracking Status: None

"Diane Yeager" <diane_yeager@mnes-us.com>

Tracking Status: None

"Eric.Evans@luminant.com" <Eric.Evans@luminant.com>

Tracking Status: None

"joseph tapia" <joseph_tapia@mnes-us.com>

Tracking Status: None

"Kazuya Hayashi" <kazuya_hayashi@mnes-us.com>

Tracking Status: None

"Matthew.Weeks@luminant.com" <Matthew.Weeks@luminant.com>

Tracking Status: None

"MNES RAI mailbox" <cp34-rai@mnes-us.com>

Tracking Status: None

"Russ Bywater" <russell_bywater@mnes-us.com>

Tracking Status: None

Post Office: HQCLSTR02.nrc.gov

Files	Size	Date & Time
MESSAGE	649	9/29/2009 8:17:33 PM
RAI 3113 (RAI 90).doc	49658	

Options

Priority: Standard

Return Notification: No

Reply Requested: No

Sensitivity: Normal

Expiration Date:

Recipients Received:

Request for Additional Information (RAI) No. 3113

RAI # 90

9/29/2009

Comanche Peak Units 3 and 4
Luminant Generation Company, LLC.
Docket No. 52-034 and 52-035
SRP Section: 16 - Technical Specifications
Application Section: Part 4, PTS and Bases

QUESTIONS for Technical Specification Branch (CTSB)

16-1

NUREG-0800, Standard Review Plan, Chapter 16, "Technical Specifications," establishes criteria that the NRC staff intends to use to evaluate whether an applicant meets the NRC's regulations.

TS 3.7.9, Ultimate Heat Sink (UHS).

Provide clarification on the discussion of Surveillance Requirement (SR) 3.7.9.5 in the TS bases B 3.7.9 which states, in part, "[T]his SR verifies that each UHS transfer pump starts and operates on an actual or simulated actuation signal." Revise the TS bases B 3.7.9, as appropriate.

Comanche Peak Nuclear Power Plant (CPNPP), Units 3 and 4 combined license application (COLA) FSAR Section 9.2.5.5, states, in part, "[D]uring accident condition, level indications from the operating basins are used to alert the MCR operator to start the UHS transfer pump to transfer water from the idle basin to the operating basins." This description appears to indicate that operation of an UHS transfer pump will be initiated manually by the MCR operator's action, not automatically by an actuation signal.

This clarification is needed to ensure accuracy of supporting information provided in the TS bases.

16-2

NUREG-0800, Standard Review Plan, Chapter 16, "Technical Specifications," establishes criteria that the NRC staff intends to use to evaluate whether an applicant meets the NRC's regulations.

TS 3.7.9, Ultimate Heat Sink.

Explain how the Essential Service Water System (ESWS) Pump required net positive suction head (NPSH) is satisfied during the 30 day period following the design basis loss-of-coolant accident (LOCA) without makeup water to the UHS basin. Revise TS 3.7.9 and its associated TS bases, as appropriate.

SR 3.7.9.1 requires verification of a minimum volume of 2,850,000 gallons in each UHS basin."

The discussion of SR 3.7.9.1 in the TS bases B 3.9.7 states, in part, "[T]his SR verifies that adequate long term (30 day) cooling can be maintained. The specified level also ensures that sufficient NPSH is available to operate the ESWS pumps."

CPNPP FSAR Subsection 9.2.5.3 states, in part, "[T]he total required 30 days cooling water capacity is approximately 8.54 millions gallons, or approximately 2.85 millions gallons per basin. Each basin dimension, not including any column or wall sections, is approximately 120 feet x 120 feet with a water depth of 29 feet from the minimum maintained water level, the usable water volume available for each basin is approximately 3.12 millions gallons." It appears that the ESWS pump NPSH requirement is not considered in the specified minimum value of 2.85 millions gallons per basin.

This information is needed to ensure adequacy and completeness of TS 3.7.9 requirements.

16-3

NUREG-0800, Standard Review Plan, Chapter 16, "Technical Specifications," establishes criteria that the NRC staff intends to use to evaluate whether an applicant meets the NRC's regulations.

TS 3.7.9, Ultimate Heat Sink.

Provide justification for the selected completion time (CT) of 7 days for Required Actions C.1 and C.2.1 when in Condition C with one or more required UHS transfer pumps inoperable. Revise TS 3.7.9 and its associated TS bases, as appropriate.

Condition C implies all three required UHS transfer pumps may be inoperable indicating a potential loss of the UHS safety function in a design basis accident event. In accordance with the Westinghouse standard technical specifications (STS), a CT of 1 hour is normally applied in this case.

This information is needed to ensure adequacy of TS 3.7.9 requirements.

16-4

NUREG-0800, Standard Review Plan, Chapter 16, "Technical Specifications," establishes criteria that the NRC staff intends to use to evaluate whether an applicant meets the NRC's regulations.

TS 3.7.9, Ultimate Heat Sink.

Provide justification for the selected completion time (CT) of 72 hours for Required Action B.1 when in Condition B with one or more UHS basins with water temperature and/or water level not within limits. Revise TS 3.7.9 and its associated TS bases, as appropriate.

Condition B implies all three required UHS cooling towers may be affected indicating a potential loss of the UHS safety function in a design basis accident event. For a similar

condition, the Westinghouse STS suggests using an alternate indication to ensure that loss of the UHS safety function will not occur (e.g. verification that the average temperature for the previous 24 hours is within limits) with a CT of 1 hour which is normally applied to an unanalyzed plant condition.

This information is needed to ensure adequacy of TS 3.7.9 requirements.

16-5

NUREG-0800, Standard Review Plan, Chapter 16, "Technical Specifications," establishes criteria that the NRC staff intends to use to evaluate whether an applicant meets the NRC's regulations.

TS 3.7.9, Ultimate Heat Sink.

Provide justification for not including testing of various newly added UHS motor operated valves (MOVs) and control valves to verify their operability in TS 3.7.9. Revise TS 3.7.9 and its associated TS bases, as appropriate.

CPNPP FSAR Table 9.2.5-202 shows the site-specific UHS equipments which include cooling tower fans, transfer pumps, pump discharge MOVs, transfer line basin inlet MOVs and basin blowdown control valves. Cooling tower fan operability is verified in SRs 3.7.9.3 and 3.7.9.4. Transfer pump operability is verified in SR 3.7.9.5. No SR was provided for the valves.

This is needed to ensure adequacy and completeness of TS 3.7.9 requirements.

16-6

NUREG-0800, Standard Review Plan, Chapter 16, "Technical Specifications," establishes criteria that the NRC staff intends to use to evaluate whether an applicant meets the NRC's regulations.

TS 3.7.9, Ultimate Heat Sink.

Provide clarification on SR 3.7.9.4 which states "[V]erify each cooling tower fan starts automatically on an actual or simulated actuation signal."

CPNPP FSAR Subsection 9.2.5, Ultimate Heat Sink, does not provide a clear description of how UHS cooling tower fan operation can be initiated in a design basis accident event.

This clarification is needed to ensure accuracy and completeness of TS 3.7.9 requirements and relevant information in the FSAR.

16-7

TS 3.7.9, Ultimate Heat Sink.

EDITORIAL

(1) Page B 3.7.9-5, SURVEILLANCE REQUIREMENTS, SR 3.7.9.5, last sentence: The phrase " inservice inspections" should be "inservice testing."

(2) Page B 3.7.9-5, REFERENCES, first reference: "FSAR Chapter 9" should be "FSAR Subsection 9.2.5."

16-8

NUREG-0800, Standard Review Plan, Chapter 16, "Technical Specifications," establishes criteria that the NRC staff intends to use to evaluate whether an applicant meets the NRC's regulations.

TS 3.7.9, Ultimate Heat Sink.

Provide justification for the selected completion time (CT) of 7 days for Required Action A.1 when in Condition A with one required cooling tower inoperable. Revise TS 3.7.9 and its associated TS bases, as appropriate.

Each independent cooling tower operation is in direct support of the respective ESWS train operation. The 7-day CT for Required Action A.1 in TS 3.7.9 is not consistent with the 72-hour CT for Required Action A.1 in TS 3.7.8 when in Condition A with one required ESWS train inoperable.

This information is needed to ensure consistency of requirements in related TS 3.7.8 and TS 3.7.9.

16-9

TS 4.1, Site Location.

Verify that the description of site location in TS 4.1 reflects relevant information provided in FSAR subsection 2.1.1.1. Revise TS 4.1, as appropriate.

The description for CPNPP site location provided in TS 4.1 is not consistent with details provided in FSAR subsection 2.1.1.1.

This is needed to ensure accuracy of information provided in TS 4.1.

16-10

NUREG-0800, Standard Review Plan, Chapter 16, "Technical Specifications," establishes criteria that the NRC staff intends to use to evaluate whether an applicant meets the NRC's regulations.

TS 5.5.19, Surveillance Frequency Control Program (SFCP).

Provide the list of Frequencies of those Surveillance Requirements for which the Frequency is controlled by the program.

The plant-specific technical specifications (PTS) are stand alone entity with the issuance of a COL. This list of Frequencies is needed by the COL holder to fully develop and implement the SFCP prior to the plant initial fuel loading. Further, Frequencies for SRs specified in TS 3.7.9 for the plant Ultimate Heat Sink were not provided as part of the MHI APWR generic technical specifications (GTS) scope.

This information is needed to ensure completeness of TS 5.5.19 requirements.