



Luminant

Rafael Flores
Senior Vice President &
Chief Nuclear Officer
rafael.flores@luminant.com

Luminant Power
P O Box 1002
6322 North FM 56
Glen Rose, TX 76043

T 254.897.5590
F 254.897.6652
C 817.559.0403

CP-200900717
Log # TXNB-09020

Ref. # 10 CFR 52

May 26, 2009

U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555
ATTN: David B. Matthews, Director
Division of New Reactor Licensing

SUBJECT: COMANCHE PEAK NUCLEAR POWER PLANT, UNITS 3 AND 4
DOCKET NUMBERS 52-034 AND 52-035
RESPONSES TO REQUESTS FOR ADDITIONAL INFORMATION NO. 2504 AND 2506

Dear Sir:

Luminant Generation Company LLC (Luminant) hereby submits the attached responses to Requests for Additional Information No. 2504 (CP RAI #4) and No. 2506 (CP RAI #5) for the Combined License Application for Comanche Peak Nuclear Power Plant Units 3 and 4. Should you have any questions regarding the responses or matters relating more generally to Luminant's nuclear generation development program, please contact Don Woodlan (254-897-6887, Donald.Woodlan@luminant.com) or me.

There are no commitments in this letter.

I state under penalty of perjury that the foregoing is true and correct.

Executed on May 26, 2009.

Sincerely,

Luminant Generation Company LLC

for Rafael Flores

- Attachments -
1. Response to Request for Additional Information No. 2504, Rev. 1 (CP RAI #4)
 2. Response to Request for Additional Information No. 2506, Rev. 1 (CP RAI #5)

DO90
N1W

c-

Email Distribution w/attachments

mike.blevins@luminant.com
Brett.Wiggs@luminant.com
Rafael.Flores@luminant.com
mlucas3@luminant.com
jeff.simmons@energyfutureholdings.com
Bill.Moore@luminant.com
Brock.Degeyter@energyfutureholdings.com
rbird1@luminant.com
Matthew.Weeks@luminant.com
Allan.Koenig@luminant.com
Timothy.Clouser@luminant.com
Ronald.Carver@luminant.com
David.Volkening@luminant.com
Bruce.Turner@luminant.com
Eric.Evans@luminant.com
Robert.Reible@luminant.com
donald.woodlan@luminant.com
John.Conly@luminant.com
Jean.Amundson@luminant.com
JCaldwell@luminant.com
David.Beshear@txu.com
Ashley.Monts@luminant.com
Fred.Madden@luminant.com
Dennis.Buschbaum@luminant.com
Carolyn.Cosentino@luminant.com

masahiko_kaneda@mnes-us.com
sherry_bernhof@mnnes-us.com
masanori_onozuka@mnes-us.com
ck_paulson@mnes-us.com
joseph_tapia@mnes-us.com
russell_bywater@mnes-us.com
diane_yeager@mnes-us.com
kazuya_hayashi@mnes-us.com
mutsumi_ishida@mnes-us.com
nan_sirirat@mnes-us.com
rjb@nei.org
kak@nei.org
michael.takacs@nrc.gov
cp34update@certrec.com
michael.johnson@nrc.gov
David.Matthews@nrc.gov
Balwant.Singal@nrc.gov
carey.bickett@nrc.gov
Stephen.Monarque@nrc.gov
jeff.ciocco@nrc.gov
michael.willingham@nrc.gov
john.kramer@nrc.gov
Brian.Tindell@nrc.gov
Elmo.Collins@nrc.gov
Loren.Plisco@nrc.com
sfrantz@morganlewis.com
tmatthews@morganlewis.com
Laura.Goldin@nrc.gov
James.Biggin@nrc.gov

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

Comanche Peak, Units 3 and 4
Luminant Generation Company LLC
Docket Nos. 52-034 and 52-035

RAI NO.: 2504, REVISION 1 (CP RAI #4)

SRP SECTION: 7.4 - SAFE SHUTDOWN SYSTEMS

QUESTIONS for Instrumentation, Controls and Electrical Engineering 1 (AP1000/EPR Projects) (ICE1)

DATE OF RAI ISSUE: 4/24/2009

QUESTION NO. : 07.04-1

10 CFR Part 50, Appendix A, General Design Criteria 19 requires, in part, that instrumentation and controls be provided to safely operate the nuclear unit under normal conditions and to maintain it in a safe condition under accident conditions.

Please provide a system description of the ultimate heat sink (UHS), including how it is used to achieve normal and safe shutdown and any interactions with other systems with the same functions. The COL should not only identify but also describe any supporting systems.

Section 7.4 of the Final Safety Analysis Report (FSAR) identifies ultimate heat sink indications in the control room to achieve safe shutdown. Please provide a system description, including how the systems interact to achieve a safe shutdown.

ANSWER:

FSAR Subsection 9.2.5 provides the system description of the ultimate heat sink (UHS). FSAR Subsection 7.4.1.6 will be revised to add a reference to Subsection 9.2.5.

Impact on R-COLA

See attached change for page 7.4-1 of FSAR Revision 0.

Impact on S-COLA

None.

Impact on DCD

None.

**Comanche Peak Nuclear Power Plant, Units 3 & 4
COL Application
Part 2, FSAR**

7.4 SYSTEMS REQUIRED FOR SAFE SHUTDOWN

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

7.4.1.6 Normal and Safe Shutdown Functions

CP COL 7.4(1) Replace the second paragraph in DCD Subsection 7.4.1.6 with the following.

Site-specific component control and indication to achieve shutdown and as related to the ultimate heat sink (UHS) is presented in Tables 7.4-201 and 7.4-202. A system description of the UHS is provided in Subsection 9.2.5.

RCOL2_7.04
-1

7.4.4 Combined License Information

Replace the content of DCD Subsection 7.4.4 with the following.

CP COL 7.4(1) **7.4(1)** *Description of component controls and indications required for safe shutdown related to UHS*

This Combined License (COL) item is addressed in Subsection 7.4.1.6, and Tables 7.4-201 and 7.4-202.

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

Comanche Peak, Units 3 and 4
Luminant Generation Company LLC
Docket Nos. 52-034 and 52-035

RAI NO.: 2506, REVISION 1 (CP RAI #5)

SRP SECTION: 7.5 - INFORMATION SYSTEMS IMPORTANT TO SAFETY

QUESTIONS for Instrumentation, Controls and Electrical Engineering 1 (AP1000/EPR Projects) (ICE1)

DATE OF RAI ISSUE: 4/24/2009

QUESTION NO. : 07.05-1

10 CFR Part 50, Appendix E, Section IV(E)(8) requires that "[a]dequate provisions shall be made and described for emergency facilities and equipment including:...a licensee near-site emergency operations facility from which effective direction can be given and effective control can be exercised during an emergency."

The COL FSAR section 7.5 states that the display capability of the Emergency Operations Facility (EOF) is similar to the ones in the main control room (MCR) and the technical support center (TSC). Please provide either a description of the display capability of the EOF or explain in greater detail where the display capability of the EOF will be the same as the MCR and TSC, and what the differences will include. Additionally, please clarify the extent of information that will be presented to personnel in the EOF. Will personnel be able to observe plant parameters and not control plant systems?

ANSWER:

FSAR Subsection 7.5.1.6.2 will be revised as shown on the attached marked-up page.

Impact on R-COLA

See attached changes for pages 7.5-1 and 7.5-2 of FSAR Revision 0.

Impact on S-COLA

None.

Impact on DCD

None.

**Comanche Peak Nuclear Power Plant, Units 3 & 4
COL Application
Part 2, FSAR**

7.5 INFORMATION SYSTEMS IMPORTANT TO SAFETY

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

7.5.1.1 Post-Accident Monitoring

CP COL 7.5(1) Replace the seventh paragraph in DCD Subsection 7.5.1.1 with the following.

Site-specific type D post accident monitoring (PAM) variables related to the UHS is presented in Table 7.5-201.

7.5.1.6.2 Emergency Operations Facilities

CP COL 7.5(2) Replace the third paragraph in DCD Subsection 7.5.1.6.2 with the following.

The emergency operations facility (EOF) of the Comanche Peak Nuclear Power Plant (CPNPP) Units 3 and 4 is located in the existing nuclear operations support facility, which is west of the reactor building.

The EOF is large enough to provide the following:

- Workspace for the personnel assigned to the EOF
- Space for the new displays and other related equipment associated with CPNPP Units 3 and 4
- Space for unhindered access to communication equipment related to CPNPP Units 3 and 4 by all EOF personnel
- Space for storage of and/or access to plant records and historical data
- A separate room for private U.S. Nuclear Regulatory Commission (NRC) consultations

The EOF working space is currently sized for 45 persons, including federal, state, and local emergency personnel. The existing EOF floor space is approximately 3200 sq. ft. The EOF is designed and equipped to support continuous operations over an extended period of time.

Displays associated with CPNPP Units 3 and 4 are common to both units ~~3 and 4~~ with a unit-display selection capability. Post-accident monitoring, bypassed and inoperable status indication, plant alarms, and safety parameter display system.

RCOL2_7.05
-1

Comanche Peak Nuclear Power Plant, Units 3 & 4
COL Application
Part 2, FSAR

information is displayed on non-safety human-system interface equipment in the EOF. The information displayed in the EOF, main control room (MCR), and technical support center (TSC) is identical, although the manner in which it is displayed may vary (e.g., single screen, multiple screens, single monitor, multiple monitors, etc.). The display capability is similar to the ones in main control room (MCR) and technical support center (TSC). The displays and communication related auxiliary equipment is strategically located in the existing EOF. Neither the EOF nor the TSC has plant control capability.

RCOL2_7.05
-1

7.5.4 Combined License Information

Replace the content of DCD Subsection 7.5.4 with the following.

CP COL 7.5(1) **7.5(1)** *Description of PAM variables related to UHS*

This COL item is addressed in Subsection 7.5.1.1 and Table 7.5-201.

CP COL 7.5(2) **7.5(2)** *Description of site-specific EOF*

This COL item is addressed in Subsection 7.5.1.6.2.
