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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
SUPPLEMENTAL RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION
NO. 5237 (SECTION 17.5)

Dear Sir:

Luminant Generation Company LLC (Luminant) submits herein a supplemental response to Request for Additional Information No. 5237 (CP RAI #189) for the Combined License Application for Comanche Peak Nuclear Power Plant Units 3 and 4. The supplemental response involves the documents cited in Final Safety Analysis Report Chapter 17 and in the Quality Assurance Program Description.

Should you have any questions regarding this supplemental response, please contact Don Woodlan (254-897-6887, Donald.Woodlan@luminant.com) or me.

This letter completes Commitment #8242 from letter TXNB-10087 dated December 16, 2010. There are no new commitments in this letter.

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

Executed on February 7, 2011.

Sincerely,

Luminant Generation Company LLC

Donald R. Woodlan for

Rafael Flores

Attachment: Supplemental Response to Request for Additional Information No. 5237 (CP RAI #189)

DD9D
NRD

Electronic distribution w/ attachment:

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Luminant Records Management (.pdf files only)

SUPPLEMENTAL 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.: 5237 (CP RAI #189)

SRP SECTION: 17.5 - Quality Assurance Program Description - Design Certification, Early Site Permit and New License Applicants

QUESTIONS for Quality and Vendor Branch 1 (AP1000/EPR Projects) (CQVP)

DATE OF RAI ISSUE: 11/16/2010

QUESTION NO.: 17.5-12

As discussed in Sections 17.3 and 17.5 of the CPNPP 3 and 4 FSAR, the CPNPP 3 and 4 Quality Assurance Program will transition from the NuBuild Quality Assurance Program Plan to the CPNPP 3 and 4 Quality Assurance Program Description (QAPD) as the project progresses following issuance of the COL. Additionally, in response to NRC RAI 2996 (RAI Number 79), Question 17.5-6, the applicant stated, in part, that full transition to the QAPD will be completed no later than 30 days prior to fuel load, and all nuclear operations will be conducted using a fully implemented QA program based on the QAPD. Please add this information to Section 17.5 of the CPNPP 3 and 4 FSAR and add a specific reference for the CPNPP 3 and 4 QAPD to the References Sections 17.3.1 and 17.5.2 of the CPNPP 3 and 4 FSAR.

SUPPLEMENTAL INFORMATION:

Upon issuing its response to RAI-189 Question 17.5-12 in letter TXNB-10087 dated December 16, 2010, Luminant realized that there were some inconsistencies in the revision levels and dates for the references in FSAR Chapter 17. Luminant initiated Commitment #8242 to track correction of these inconsistencies and this supplemental response completes that commitment.

There are several cases to be considered in revising the references. In some cases, the precise revision level is important because it is part of the licensing basis for the units. For example, Reference 17.3-201 refers to NEI 06-14A and the precise version of that document is important to the licensing basis. For this type of reference, the revision level and/or date of the document must be identified. Such specificity is also required for Reference 17.3-202, the NuBuild Quality Assurance Project Plan (QAPP).

In other cases, the FSAR refers to the effective version of the document and a precise identification of the date or revision level is unnecessary. For example, Reference 17.3-203 identifies the CPNPP Units 1 and 2 Quality Assurance Program (QAP) embodied in CPNPP Units 1 and 2 FSAR Chapter 17. The QAPP is linked to the effective version of the CPNPP Unit 1 and 2 QAP and not a specific revision level or an FSAR amendment number. For this type of reference, the document must be identified by a complete and clear title, but the revision level or date should not be included.

A third type of reference is stand-alone documents that are part of the COL application and will be part of the licensing basis for CPNPP Units 3 and 4. An example is the CPNPP Units 3 and 4 Quality Assurance Program Description (QAPD). The QAPD is a stand-alone document submitted in Part 11 of the COL application. Once the COL is received, this document will be part of the licensing basis and will have its own requirements for processing revisions. The FSAR is always linked to the effective version of the QAPD. Not only is identifying the revision level in the FSAR unnecessary, doing so would lead to an unnecessary update of the FSAR every time the QAPD is revised.

The references in FSAR Sections 17.3 and 17.5 and the QAPD have been revised per the description above. Luminant has also made corrections to the QAPD to reference NEI 06-14A Revision 7 and to match the template.

Impact on R-COLA

See attached marked-up FSAR Revision 1 pages 17.3-2 and 17.5-1; and QAPD Revision 2 pages 40, 44, 55, 58 and 59.

Impact on S-COLA

None; this response is site-specific.

Impact on DCD

None.

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Power Plant Units 3 and 4 Quality Assurance Program Description" described in Section 17.5.

17.3.1 Reference

<u>17.3-201</u>	<u>Quality Assurance Program Description, NEI 06-14A, Revision 57, NEI, May 2008 August 2010.</u>	RCOL2_17.0 5-3 RCOL2_17.0 5-12
<u>17.3-202</u>	<u>NuBuild Quality Assurance Project Plan, Revision 2, Luminant, July 2010.</u>	RCOL2_17.5 -12 S01
<u>17.3-203</u>	<u>Comanche Peak Nuclear Power Plant Units 1 and 2 Quality Assurance Plan, Comanche Peak Steam Electric Station Final Safety Analysis Report, Chapter 17.</u>	
<u>17.3-204</u>	<u>US-APWR Quality Assurance Program Description, SQ-QD-070001.</u>	RCOL2_17.0 5-8 RCOL2_17.0 5-12
<u>17.3-205</u>	<u>Quality Assurance Program Requirements for Nuclear Facilities, N45.2-1971, ANSI/ASME, 1971.</u>	
<u>17.3-206</u>	<u>Quality Assurance Requirements for Nuclear Facility Applications, NQA-1-1994, ANSI/ASME, 1994.</u>	
<u>17.3-207</u>	<u>Comanche Peak Units 3 and 4 Quality Assurance Program Description</u>	RCOL2_17.0 5-12 RCOL2_17.5 -12 S01

**Comanche Peak Nuclear Power Plant, Units 3 & 4
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17.5 QUALITY ASSURANCE PROGRAM DESCRIPTION

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

CP COL 17.5(1) Replace the last paragraph in DCD Section 17.5 with the following.

The implementation of the QAP for CPNPP Units 3 and 4 will transition, upon issuance of the COL and as project progresses, from the NuBuild QAPP to the "Comanche Peak Nuclear Power Plant Units 3 and 4 Quality Assurance Program Description." The full transition to the QAPD will be completed no later than 30 days prior to fuel load. All nuclear operations will be conducted using a fully implemented QA program based on the QAPD. The QAPD is based on NEI 06-14A "Quality Assurance Program Description" (Reference 17.5-201) which was approved by the NRC.

RCOL2_17.0
5-12

17.5.1 Combined License Information

Replace the content of DCD Subsection 17.5.1 with the following.

CP COL 17.5(1) **17.5(1)** *Development and implementation of the QAP for the site specific design activities (i.e., non-standard plant design) and for the construction and operation*
STD COL 17.5(1)

CTS-01140

This COL item is addressed in Sections 17.0, 17.1, 17.2, 17.3 and 17.5.

17.5.2 References

CP COL 17.5(1) Add the following reference and Subsection 17.5.3 after the last reference in DCD Subsection 17.5.2.

17.5-201 Quality Assurance Program Description, NEI 06-14A, Revision 57, NEI, May 2008~~August 2010.~~

RCOL2_17.0
5-12

17.5-202 Comanche Peak Units 3 and 4 Quality Assurance Program Description

RCOL2_17.5
-12 S01

SECTION 13 HANDLING, STORAGE, AND SHIPPING

Luminant has established the necessary measures and governing procedures to control the handling, storage, packaging, shipping, cleaning, and preservation of items to prevent inadvertent damage or loss, and to minimize deterioration. These provisions include specific procedures, when required to maintain acceptable quality of the items important to the safe operations of the plant. Items are appropriately marked and labeled during packaging, shipping, handling, and storage to identify, maintain, and preserve the item's integrity and indicate the need for special controls. Special controls (such as containers, shock absorbers, accelerometers, inert gas atmospheres, specific moisture content levels, and temperature levels) are provided when required to maintain acceptable quality.

Special or additional handling, storage, shipping, cleaning, and preservation requirements are identified and implemented as specified in procurement documents and applicable procedures. Where special requirements are specified, the items and containers (where used) are suitably marked.

Special handling tools and equipment are used and controlled as necessary to ensure safe and adequate handling. Special handling tools and equipment are inspected and tested at specified time intervals and in accordance with procedures to verify that the tools and equipment are adequately maintained.

Operators of special handling and lifting equipment are experienced or trained in the use of the equipment. During the operational phase, Luminant establishes and implements controls over hoisting, rigging, and transport activities to the extent necessary to protect the integrity of the items involved, as well as potentially affected nearby structures and components. Where required, Luminant complies with applicable hoisting, rigging and transportation regulations and codes.

13.1 Housekeeping

Housekeeping practices are established to account for conditions or environments that could affect the quality of structures, systems and components within the plant. This includes control of cleanliness of facilities and materials, fire prevention and protection, disposal of combustible material and debris, control of access to work areas, protection of equipment, radioactive contamination control, and storage of solid radioactive waste. Housekeeping practices help assure that only proper materials, equipment, processes and procedures are used and that the quality of items is not degraded. Necessary procedures or work instructions, such as for electrical bus and control center cleaning, cleaning of control consoles, and radioactive decontamination are developed and used.

13.2 NQA-1-1994 Commitment / Exceptions

In establishing provisions for handling, storage and shipping, Luminant commits to compliance with NQA-1-1994, Basic Requirement 13 and Supplement 13S-1. Luminant also commits, during the construction and pre-operational phase of the plant, to compliance with the requirements of NQA-1-1994, Subpart 2.1, Subpart 2.2, and Subpart 3.2 Appendix 2.1 with the following clarifications and exceptions:

RCOL2_1
7.5-12
S01

SECTION 15 NONCONFORMING MATERIALS, PARTS, OR COMPONENTS

Luminant has established the necessary measures and governing procedures to control items, including services, that do not conform to specified requirements to prevent inadvertent installation or use. Instructions require that the individual discovering a nonconformance identify, describe, and document the nonconformance in accordance with the requirements of Part II, Section 16. Controls provide for identification, documentation, evaluation, segregation when practical, and disposition of nonconforming items, and for notification to affected organizations. Controls are provided to address conditional release of nonconforming items for use on an at-risk basis prior to resolution and disposition of the nonconformance, including maintaining identification of the item and documenting the basis for such release. Conditional release of nonconforming items for installation requires the approval of the designated management. Nonconformances are corrected or resolved prior to depending on the item to perform its intended safety function. Nonconformances are evaluated for impact on operability of quality structures, systems, and components to assure that the final condition does not adversely affect safety, operation, or maintenance of the item or service. Nonconformances to design requirements dispositioned repair or use-as-is, are subject to design control measures commensurate with those applied to the original design. Nonconformance dispositions are reviewed for adequacy, analysis of quality trends, and reports provided to the designated management. Significant trends are reported to management in accordance with Luminant procedures, regulatory requirements, and industry standards.

RCOL2_1
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15.1 Interface with the Reporting Program

Luminant has appropriate interfaces between the QAP for identification and control of nonconforming materials, parts, or components and the non-QA Reporting Program to satisfy the requirements of 10 CFR 52, 10 CFR 50.55(e) and/or 10 CFR 21 during design and construction and 10 CFR 21 during operations.

15.2 NQA-1-1994 Commitment

In establishing measures for nonconforming materials, parts, or components, Luminant commits to compliance with NQA-1-1994, Basic Requirement 15, and Supplement 15S-1.

PART IV REGULATORY COMMITMENTS

NRC Regulatory Guides and Quality Assurance Standards

This section identifies the NRC Regulatory Guides (RG) and the other quality assurance standards, which have been selected to supplement and support the Luminant QAPD. Luminant complies with these standards to the extent described or referenced. Commitment to a particular RG or standard does not constitute a commitment to ~~other~~ the ~~RGs or standards~~ that may be referenced therein.

RCOL2_17.5-12
S01

Regulatory Guides:

See FSAR Chapter 1 for the Luminant evaluation of conformance with the guidance in NRC Regulatory Guides in effect six months prior to the submittal date of the application.

RCOL2_17.5-12
S01

Regulatory Guide 1.8, Revision 3, May 2000 – Qualification and Training of Personnel for Nuclear Power Plants

Regulatory Guide 1.8 provides guidance that is acceptable to the NRC staff regarding qualifications and training for nuclear power plant personnel.

Luminant identifies conformance and exceptions for the applicable regulatory position guidance provided in this regulatory guide in the text below; commits to the applicable regulatory position guidance provided in this regulatory guide for CPNPP Units 3 & 4 with no exceptions.

This regulatory guide endorses ANSI/ANS-3.1-1993, "Selection, Qualification, and Training of Personnel for Nuclear Power Plants," with certain additions and exceptions that are listed in the Regulatory Position of this guide. Some of the exceptions are endorsements of certain sections of two other standards, ANSI N18.7-1976 (ANS-3.2), "Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants," and ANSI/ASME NQA-1-1983, "Quality Assurance Program Requirements for Nuclear Power Plants." Rather than to commit to those Standards in the QAPD, appropriate requirements have been directly incorporated into the text if not found in NQA-1-1994. These requirements are consistent with the identified acceptance criteria in SRP Section 17.5. With regard to cold licensed operators when the selection, training, and qualification requirements of ANSI/ANS-3.1-1993 may not be met, NEI 06-13A, (NRC approval as Rev. 1) (NEI published Rev. 2) provides acceptable alternatives.

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- Regulatory Positions C.1.1 through C.1.4 address definitions in ANSI/ANS-3.1-1993. Conformance with ANSI/ANS-3.1-1993 and those Regulatory Positions should be addressed by FSAR Chapter 13.
- Regulatory Position C.2.1 (2.1.1, 2.1.2, and 2.1.3) address alternatives and substitutions for education and experience for quality assurance personnel. Those alternatives and substitutions are reflected in Part II, Section 2.6 of the QAPD template.
- Regulatory Position C.2.2 through C.2.10 are not directly applicable to quality assurance personnel, but are relevant to the overall quality assurance organization described in Part II, Section 1 of the QAPD and the operating organization described in FSAR Chapter 13. Those Regulatory Positions should be addressed by FSAR Chapter 13.

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establishing the SSCs, or portions thereof, classified as needing to meet seismic design requirements. The seismic design classification of SSCs would be addressed through the FSAR (and associated DCD) Section 3.7.

- Regulatory Position C.4 addresses the application of the QA requirements of Appendix B to 10 CFR Part 50 to all activities affecting the safety-related functions of those portions of the SSCs that are covered by Regulatory Positions 2 and 3. Those in Regulatory Position 1 are considered safety-related. The QAPD described in Section 17.5 of the FSAR addresses the QA program requirements applied to safety-related activities.

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- Regulatory Position C.5 addresses the application of design requirements for portions of the fire protection SSCs as discussed in Regulatory Guide 1.189. The design and quality assurance requirements for fire protection SSCs is addressed in Section 9.5.1 of the FSAR (and associated DCD).

Regulatory Guide 1.33, Revision 2, February 1978 – Quality Assurance Program Requirements (Operations)

Regulatory Guide 1.33 describes a method acceptable to the NRC staff for complying with the Commission's regulations with regard to overall quality assurance program requirements for the operation phase of nuclear power plants.

Luminant commits to the applicable regulatory position guidance provided in this regulatory guide for CPNPP Units 3 & 4 with no exceptions. Luminant identifies conformance and exceptions for the applicable regulatory position guidance provided in this regulatory guide in the text below:

This Regulatory Guide endorses ANSI N18.7-1976/ANS-3.2 for complying with the quality assurance program requirements for the operation phase of nuclear power plants, subject to five regulatory positions. Attachment 2 to NEI 06-14, Rev. 9 Appendix 1 to NEI 06-14A, Rev 7, provides a comparison of QA requirements established within NQA-1-1994 and the template to provide an alternate method of meeting 10 CFR 50, Appendix B during the operational phase in lieu of committing to the requirements of ANSI N18.7-1976/ANS-3.2.

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12 S01

- Regulatory Position C.1 addresses "Typical Procedures for Pressurized Water Reactors and Boiling Water Reactors." QAPD Part II, Sections 5 and 6, and Part V, Section 3 address requirements for procedures consistent with requirements addressed in SRP 17.5 section II.F and ANSI N18.7-1976.

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- Regulatory Position C.2 identifies additional standards referenced by ANSI N18.7-1976/ANS-3.2 and provides a cross reference for a regulatory Guide that addressed each of those standards. The QAPD identifies commitments to ASME NQA-1-1994 instead of the listed ANSI N45.2 series standards listed. Regulatory Guides 1.28, 1.37, 1.38, 1.39, 1.30, 1.94, 1.58, 1.116, 1.88, 1.74, 1.64, and 1.123 are listed for positions on the ANSI N45.2 series standards. RG 1.8, 1.17, and 1.54 are included as addressing other ANSI Standards. RG 1.8, 1.28, and 1.37 have been revised to reference newer standards and are discussed specifically in this section. RG 1.17, 1.58, 1.64, 1.74, 1.88, and 1.123 have been withdrawn. For RG 1.30, 1.38, 1.94 and 1.116 the QAPD provides an acceptable alternative using ASME NQA-1-1994, Subparts 2.2, 2.4, 2.5, and 2.8 as identified in Part II Sections 10.3 and 13.2 and SRP 17.5 Section II.U.2. For RG 1.39 the QAPD provides an acceptable alternative in Part II,

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Section 13.1, which is consistent with SRP Section 17.5, paragraph II.M. for operations; controls during design and construction are addressed in the commitment in Section 13.2. For applicability of RG 1.54, FSAR Chapter 6 should be consulted.

- Regulatory Position C.3 identifies a position related to Independent Review. The QAPD provides an alternative for this position by addressing Independent Review requirements specifically in Part V, Section 2.2 consistent with SRP 17.5 Section II.W rather than referencing ANSI N18.7. Item 2.2 c. specifically relates to the concern of this regulatory position.
- Regulatory Position C.4 relates to provisions of the audit program. In establishing the independent audit program, the QAPD provides an alternative for this position by committing the applicant to comply with the quality standards described in NQA-1-1994, Basic Requirement 18 and Supplement 18S-1. Over the years, the utilities have modified their audit programs to provide alternatives to the amplified requirements of this Regulatory Position through risk-informed scheduling or controlling the scope of the scheduled audits. The licensee/applicant will need to provide the NRC with the rationale for any alternative to the amplified frequencies stated in the Regulatory Position. The QAPD template follows SRP Section 17.5, paragraph II.R, for establishing the necessary measures to implement audits to verify that activities covered by the QAPD are performed in conformance with the requirements established.
- Regulatory Position C.5 identifies concerns of the NRC with the usage of the verbs "should" and "shall" in ANSI N18.7-1976. The QAPD provides an alternative to this position by providing adequate guidance for establishing a quality assurance program that complies with Appendix B to 10 CFR Part 50 by using ASME NQA standard NQA-1-1994, as supplemented by the QAPD provisions in NEI 06-14A, Rev. 87. Additional regulatory guidance and industry guidance is identified in SRP Section 17.5.

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Regulatory Guide 1.37, Revision 1, March 2007 – Quality Assurance Requirements for Cleaning of Fluid Systems and Associated Components of Water-Cooled Nuclear Power Plants

Regulatory Guide 1.37 provides guidance on specifying water quality and precautions related to the use of alkaline cleaning solutions and chelating agents.

Luminant commits to the applicable regulatory position guidance provided in this regulatory guide for CPNPP Units 3 & 4 with no exceptions. Luminant identifies conformance and exceptions for the applicable regulatory position guidance provided in this regulatory guide in the text below:

This Regulatory Guide finds that the provisions and recommendations included in ASME NQA-1-1994, Part II, Subpart 2.1 are generally acceptable for onsite cleaning of materials and components, cleanliness control, and preoperational cleaning and layup of water-cooled nuclear power plant fluid systems with three regulatory positions. QAPD Part II, Section 13.2 addresses the commitment to NQA-1-1994, Part II, Subpart 2.1.

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- Regulatory Position C.1 identifies that the applicability and acceptability of any of the codes, standards, and specifications referenced in the text are or will be addressed through other