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January 27, 2011

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. 2954 (SECTION 14.2)

Dear Sir:

Luminant Generation Company LLC (Luminant) submits herein a supplemental response to Request for Additional Information No. 2954 (CP RAI #75) for the Combined License Application for Comanche Peak Nuclear Power Plant Units 3 and 4. The supplemental response involves the qualification requirements for certain test engineers.

Should you have any questions regarding this supplemental response, 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 January 27, 2011.

Sincerely,

Luminant Generation Company LLC

Rafael Flores

Attachment: Supplemental Response to Request for Additional Information No. 2954 (CP RAI #75)

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NR0

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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.: 2954 (CP RAI #75)

SRP SECTION: 14.02 - Initial Plant Test Program – Design Certification And New License Applicants

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

DATE OF RAI ISSUE: 9/23/2009

QUESTION NO.: 14.02-4

SRP Section 14.2 Acceptance Criterion 3.D.i states, "The applicant should describe the education, training, and experience requirements established for each management and operating staff member—including the NSSS vendor, architect-engineer, and other major contractors, subcontractors, and vendors, as appropriate—who will conduct the preoperational and startup tests and will develop testing, operating, and emergency procedures."

The applicant's COL application, in Section 14AA.11, "Certification and Qualification of Test Personnel," includes the certification and qualification of the test engineers, the training of the test engineers, supervisors and managers, and the qualification of supervisors. Section 14AA.11 references Ch 17, "Quality Assurance and Reliability Assurance," of the applicant's COL FSAR and Regulatory Guide 1.8, revision 3 (May 2000). Regulatory Guide 1.8, revision 3 (May 2000) endorses ANSI/ANS-3.1-1993, "Selection, Qualification, and Training of Personnel for Nuclear Power Plants," with certain clarifications, additions, and exceptions.

Table 13.1-201 in Section 13.1 of the applicant's COL FSAR lists the projected staffing levels for the startup organization, which include the startup manager, preoperational test engineer, and startup engineer. Table 13.1-201 also references ANSI/ANS-3.1-1993 for the general description, needed education, minimum experience required, and special requirements for the preoperational test engineer and the startup engineer. No specific education and experience requirements are established for the startup manager.

Furthermore, Table 13.0-201 does not include the construction installation test manager, the preoperational and acceptance test manager, and the test program manager and the needed education, minimum experience required, and special requirements for those positions.

In addition, the COL application does not establish education and experience requirements for the architect-engineer personnel, other contract/vendor staff, and the site startup organization.

Lastly, Section 14.AA.3.2 and 14AA.11 list the responsibilities, certification and qualification requirements of test engineers. Table 13.1-201 in Chapter 13 identifies the specific positions identified in ANSI/ANS-3.1-1993, the corresponding plant specific title, and the corresponding titles from the plant-specific organization. Table 13.1-201 lists the startup organization as consisting of the startup manager, preoperational engineers and startup engineers. Please specify the corresponding qualification and training requirements in ANSI-3.1-1993 that will be established for the test engineers, and revise Sections 14.AA.3.2 and 14AA.11 accordingly.

Please revise Section 14.2.2 and 14AA.11 to describe the education, training, qualification, and experience requirements for organizations responsible for conducting preoperational and startup tests, and for organizations that will develop testing, operating, and emergency procedures, or justify an alternative.

SUPPLEMENTAL INFORMATION:

In the response to Question 14.02-4, Luminant committed to follow RG 1.8 and its associated standard for test engineer qualification. However, the NRC staff noted that RG 1.8 and its associated standard are not applicable for test engineers.

Luminant has chosen to follow the guidance provided in ASME NQA-1-1994, Part 1, Basic Requirement 2 and Part III, Subpart 3.1, Appendix 2A-1 for non-supervisory test engineers. FSAR Subsection 14.2.2 has been revised to provide additional guidance to MUAP-08009 Revision 1 Section 11.1, Test Engineer Certification and Qualification. Additionally, FSAR Section 14.2, Table 14.2-203 has been revised to indicate the function position for preoperational test engineer and startup test engineer are qualified in accordance with ASME NQA-1-1994, Part 1, Basic Requirement 2 and Part III, Subpart 3.1, Appendix 2A-1.

Impact on R-COLA

See attached marked-up FSAR Revision 1 pages 13.1-21, 14.2-2, and 14.2-16.

Impact on S-COLA

None; this response is site-specific.

Impact on DCD

None.

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

Table 13.1-201 (Sheet 7 of 7)

Staffing Plan for CPNPP Units 3 and 4 ⁽¹⁾

			Estimated Numbers of Full Time Equivalents			
Nuclear Function	Function Position (ANS-3.1-1993 section)	CPNPP Units 3 and 4 Position	Design Review Phase	Construction Phase	Preoperational Phase	Operational Phase
Nuclear Fuel Services	Manager (4.2.4)	Nuclear Fuel Services Manager (STARS FUELCO)		0.5	0.5	0.5
Fire Protection	Supervisor (RG 1.189)	Fire Protection Supervisor	0.5	1	1	1
Emergency Preparedness	Functional Manager (4.3)	Emergency Planning Manager		1	1	1
		EP Coordinator		2	2	2
Security	Functional Manager (4.3)	Security Manager		1	1	1
	Supervisor (4.4)	Security Supervisor ⁽²⁾		3	5	5
Security	Security Officer (NA)	Security Officer		(Withheld)	(Withheld)	(Withheld)
Preoperational and Startup Testing	Manager (NA)	Startup Manager		1	1	1
	Preop. Test Engr. (4.4.11)	Preoperational Test Engineer_ (supervisory) ⁽²⁾		20	20	
	Startup Test Engr. (4.4.12)	Startup Test Engineer_ (supervisory) ⁽²⁾		5	20	5
TOTALS			20.75	173.55	494.6	412.1

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Note (1): Each entry in this table for the number of individuals assigned to a function during a project phase (i.e., the numerical entries in the four right-hand columns, labeled Design Review Phase, Construction Phase, Preoperational Phase, and Operational Phase) reflects the sum of resources required for the two units. For resources not expected to spend all of their time on CPNPP Units 3 and 4, the entries are fractional. Contractor Support may be utilized as required to fill positions other than Licensed Shift Operations staff.

Note (2): For operations personnel assigned on a shift basis, the staffing numbers are based on the assumption of a total of five (5) operating crews to cover the shift requirements for each unit. Numbers are also based on the assumption of simultaneous full power operation of both units, using separate control rooms for CPNPP Unit 3 and Unit 4.

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

Replace the first sentence in Section 8.2 of MUAP-08009 with the following.

Test procedures are, at a minimum, reviewed by MHI or MNES engineering, Testing, Operations, Quality Assurance, Maintenance, and Licensing.

Add the following to the end of Section 11.0 of MUAP-08009.

Test personnel comply with the education, training, qualification, and experience requirements contained in ANSI/ANS-3.1 as endorsed and amended by RG 1.8 as they relate to the duties described in ANSI/ANS-3.1 and FSAR Table 14.2-203.

Add the following to the end of Section 11.1 of MUAP-08009.

In addition, individuals who:

- develop or review testing, operating, and emergency procedures.
- evaluate test deficiencies, propose or review the resolution to test deficiencies, or
- evaluate test results for acceptability

are qualified in accordance with ANSI/ANS-3.1 as endorsed and amended by RG 1.8. This includes architect-engineer personnel, other contract/vendor staff, and the site organization supporting preoperational and startup testing. Qualification requirements for architect-engineering personnel are consistent with engineering support positions defined in ANSI/ANS-3.1 (i.e., Section 4.4.10 for supervision and Section 4.6.1 for system engineers).

Acceptable qualification of non-supervisory test engineers follow the guidance provided in ASME NQA-1-1994, Appendix 2A-1, Nonmandatory Guidance on the Qualifications of Inspection and Test Personnel.

14.2.3 Test Procedures

STD COL 14.2(12) Add the following sentence at the end of DCD Subsection 14.2.3.

Approved test procedures for satisfying testing requirements of Section 14.2 are made available to the NRC approximately 60 days prior to their intended use.

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

Table 14.2-203

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**Comparison with the Qualification Requirements of the
Staffing in ANS-3.1**

<u>Table 13.1-201, CPNPP Units 3 and 4 Position</u>	<u>Position Title in MUAP-08009</u>	<u>Function Position (ANSI/ANS-3.1-1993 section)</u>
<u>Startup Manager</u>	<u>Test Manager</u>	<u>Startup Test Engineer (4.4.12)</u>
<u>(Not specified.)</u>	<u>Installation Test Manager</u>	<u>Preoperational Test Engineer (4.4.11)</u>
<u>(Not specified.)</u>	<u>Preoperational and Acceptance Test Manager</u>	<u>Preoperational Test Engineer (4.4.11)</u>
<u>(Not specified.)</u>	<u>Operations Startup Manager</u>	<u>Senior Operator (4.4.2)</u>
<u>(Not specified.)</u>	<u>Startup Test Manager</u>	<u>Startup Test Engineer (4.4.12)</u>
<u>(Not specified.)</u>	<u>Test Program Manager</u>	<u>Startup Test Engineer (4.4.12)</u>
<u>Preoperational Test Engineer (supervisory)</u>	<u>Test Engineer</u>	<u>Preoperational Test Engineer (4.4.11)</u>
<u>Startup Test Engineer (supervisory)</u>	<u>Test Engineer</u>	<u>Startup Test Engineer (4.4.12)</u>
<u>Preoperational Test Engineer (nonsupervisory)</u>	<u>Test Engineer</u>	<u>See Note 1.</u>
<u>Startup Test Engineer (nonsupervisory)</u>	<u>Test Engineer</u>	<u>See Note 1.</u>

Note 1: Qualifications are established by ASME NQA-1-1994 edition, Appendix 2A-1, for Level II personnel.

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