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Ref. # 10 CFR 52

July 16, 2012

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. 2583 (SECTION 14.3)

Dear Sir:

Luminant Generation Company LLC (Luminant) submits herein supplemental information for the response to Request for Additional Information (RAI) No. 2583 (CP RAI #56) for the Combined License Application for Comanche Peak Nuclear Power Plant Units 3 and 4. The supplemental information provides an additional ITAAC to address design of piping systems and components.

Should you have any questions regarding the supplemental information, 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 July 16, 2012.

Sincerely,

Luminant Generation Company LLC

A handwritten signature in black ink that reads "Donald R. Woodlan for".

Rafael Flores

Attachment: Supplemental Response to Request for Additional Information No. 2583 (CP RAI #56)

DO90
MLB

Electronic distribution w/attachment:

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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.: 2583 (CP RAI #56)

SRP SECTION: 14.03.03 - Piping Systems and Components - Inspections, Tests, Analyses, and Acceptance Criteria

QUESTIONS for Engineering Mechanics Branch 2 (ESBWR/ABWR Projects) (EMB2)

DATE OF RAI ISSUE: 9/14/2009

QUESTION NO.: 14.03.03-1

Components ITAAC

The regulatory basis for this question is discussed in NUREG-0800, Standard Review Plan (SRP), Section 14.3.3, which establishes the criteria the NRC staff uses to review combined license (COL) applications.

In the Comanche Peak Nuclear Power Plant, Units 3 and 4 (CPNPP) COL Application Part 10, 'Inspections, Tests, Analyses and Acceptance Criteria and Proposed License Conditions,' Table A.1-1, 'Ultimate Heat Sink System and Essential Service Water System,' Item 2a, the column titled 'Design Commitment' states that ASME Code Section III components are designed and constructed in accordance with the requirements of American Society of Mechanical Engineers (ASME) Code Section III. In the Inspections, Tests, and Analyses (ITA) and Acceptance Criteria (AC) sections, the "as-built" components were discussed. Please provide separate ITAAC for the two remaining activities, Fabrication & Installation and As-built Reconciliation, as follows:

(1) Fabrication and Installation:

(a) For components designated as ASME Code Section III, certified data report(s) can be used to provide assurance that these components are fabricated, installed, and inspected in accordance with ASME Code Section III requirements. Provide an ITAAC demonstrating that an inspection of the components will be conducted.

(b) Provide an AC for this ITAAC that states "Certified ASME Code Data Report(s) (including N-5 Data Reports, where applicable) and inspection reports exist and conclude that the components are fabricated, installed, and inspected in accordance with the requirements of ASME Code Section III."

(2) As-built Reconciliation

- (a) In accordance with guidance in SRP 14.3.3, provide as-built ITAAC demonstrating that the components shall be reconciled with the design requirements.
 - (b) Provide an ITA, as part of this ITAAC, to ensure that a reconciliation analysis of the components using as-designed and as-built information and ASME Code certified Design Report will be performed.
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SUPPLEMENTAL INFORMATION:

Luminant made changes in COLA Part 10 Table A.1-1 to delete "design" from the ASME component ITAAC in its previous response to this question (ML093010366). However, US-APWR DCD Tier 1 Subsection 3.2.1 requires that the site-specific safety-related pressure retaining components and their supports be designed, constructed, and inspected in accordance with ASME Code Section III. Therefore, Luminant has added an additional ITAAC to COLA Part 10 Table A.1-1 to address design of piping systems and components consistent with the response to US-APWR RAI 892-6169 Question 14.3.3-27 (ML12053A066).

Impact on R-COLA

See attached marked up COLA Part 10 Revision 3 pages 11 and 18.

Impact on S-COLA

This response is standard.

Impact on DCD

None.

**Comanche Peak Nuclear Power Plant, Units 3 & 4
COL Application
Part 10 - ITAAC and Proposed License Conditions**

Appendix A.1

18. The UHSS is capable of performing its safety functions under design basis event conditions and coincident single failure with or without offsite power available.
19. The UHS cooling tower fans, identified in Table A.1-2, can withstand design basis tornado effects, including differential pressure effects and overspeed, without loss of safety function.
20. The UHS cooling tower spray nozzles and orifices are sized to prevent clogging due to debris.
21. The ASME Code Section III, Class 3 piping systems and components, for the UHSS and ESWS (portions outside the certified design), identified in FSAR Table 3.2-201 are designed to retain their pressure integrity and functional capability under internal design and operating pressures and design basis loads.

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A.1.2 Inspections, Tests, Analysis, and Acceptance Criteria

Table A.1-1 describes ITAAC for the UHSS and ESWS portions outside the scope of the certified design.

**Comanche Peak Nuclear Power Plant, Units 3 & 4
COL Application
Part 10 - ITAAC and Proposed License Conditions**

Appendix A.1

Table A.1-1 (Sheet 7 of 7)

**Ultimate Heat Sink System and Essential Service Water System
(Portions Outside the Scope of the Certified Design)
Inspections, Tests, Analyses, and Acceptance Criteria**

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
17. The sum of the ESW pump shutoff head and static head is such that the ESWS design pressure is not exceeded.	17. Inspection, test and analysis of the as-built ESWS will be performed.	17. A report exists and concludes that the sum of the as-built ESW pump shutoff head and static head is such that the ESWS design pressure is not exceeded.
18. The UHSS is capable of performing its safety functions under design basis event conditions and coincident single failure with or without offsite power available.	18. Inspection and analysis of the as-built UHSS will be performed.	18. A report exists and concludes that the as-built UHSS is capable of performing its safety functions under design basis event conditions and coincident single failure with or without offsite power available.
19. <u>The UHS cooling tower fans, identified in Table A.1-2, can withstand design basis tornado effects, including differential pressure effects and overspeed, without loss of safety function.</u>	19.i <u>Type tests, analyses, or a combination of type tests and analyses will be performed to demonstrate that the UHS cooling tower fans, identified in Table A.1-2, can withstand the design basis tornado effects, including differential pressure effects and overspeed, without loss of safety function.</u>	19.i <u>A report exists and concludes that the UHS cooling tower fans, identified in Table A.1-2, can withstand the design basis tornado effects, including differential pressure effects and overspeed, without loss of safety function.</u>
	19.ii <u>Inspections and analyses will be performed to verify that the as-built UHS cooling tower fans identified in Table A.1-2 are bounded by the tested or analyzed conditions.</u>	19.ii <u>A report exists and concludes that the as-built UHS cooling tower fans identified in Table A.1-2 are bounded by the tested or analyzed conditions.</u>
20. <u>The UHS cooling tower spray nozzles and orifices are sized to prevent clogging due to debris.</u>	20. <u>Inspections of the as-built UHS cooling tower spray nozzles and orifices will be performed.</u>	20. <u>Each as-built UHS cooling tower spray nozzles and orifices have an orifice size greater than 3mm.</u>
21. <u>The ASME Code Section III, Class 3 piping systems and components, for the UHSS and ESWS (portions outside the certified design), identified in FSAR Table 3.2-201 are designed to retain their pressure integrity and functional capability under internal design and operating pressures and design basis loads.</u>	21. <u>An inspection of the stress report(s) for the ASME Code Section III, Class 3 piping systems and components, for the UHSS and ESWS (portions outside the certified design) will be performed.</u>	21. <u>The stress report(s) exist and conclude that the design of the ASME Code Section III, Class 3 piping systems and components, for the UHSS and ESWS (portions outside the certified design), identified in FSAR Table 3.2-201 comply with the requirements of ASME Code Section III.</u>

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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.: 2583 (CP RAI #56)

SRP SECTION: 14.03.03 - Piping Systems and Components - Inspections, Tests, Analyses, and Acceptance Criteria

QUESTIONS for Engineering Mechanics Branch 2 (ESBWR/ABWR Projects) (EMB2)

DATE OF RAI ISSUE: 9/14/2009

QUESTION NO.: 14.03.03-2

Piping ITAAC

The regulatory basis for this question is discussed in NUREG-0800, Standard Review Plan, Section 14.3.3, which establishes the criteria the NRC staff uses to review combined license (COL) applications.

In the CPNPP COL Application Part 10, Table A.1-1, Item 2b, the Design Commitment states that ASME Code Section III piping is designed and constructed in accordance with the requirements of ASME Code Section III. In the ITA and AC sections, the "as-built" piping was discussed. Provide separate ITAAC for the two remaining activities, Fabrication & Installation and As-built Reconciliation, as follows:

(1) Fabrication and Installation:

(a) For piping designated as ASME Code Section III, certified data report(s) can be used to provide assurance that the piping is fabricated, installed, and inspected in accordance with ASME Code Section III requirements. Provide an ITAAC demonstrating that an inspection of the piping will be conducted.

(b) Provide an AC for this ITAAC that states "Certified ASME Code Data Report(s) (including N-5 Data Reports, where applicable) and inspection reports exist and conclude that the piping is fabricated, installed, and inspected in accordance with ASME Code Section III requirements."

(2) As-built Reconciliation

(a) In accordance with the guidance in SRP 14.3.3, provide as-built ITAAC demonstrating that the piping shall be reconciled with the design requirements.

(b) Included in this ITAAC can be an ITA to ensure that a reconciliation analysis of the piping using as-designed and as-built information and ASME Code certified Design Reports will be performed.

SUPPLEMENTAL INFORMATION:

Luminant made changes in COLA Part 10 Table A.1-1 to delete "design" from the ASME piping ITAAC in its previous response to this question (ML093010366). Luminant has added an ITAAC to address design of piping systems and components to be consistent with US-APWR DCD Tier 1 in the supplemental response to Question 14.03.03-1 above.

Impact on R-COLA

See marked up COLA Part 10 Revision 3 pages 11 and 18 attached to the response above.

Impact on S-COLA

This response is standard.

Impact on DCD

None.