



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS
WASHINGTON, DC 20555 - 0001**

December 18, 2013

Mr. Mark A. Satorius
Executive Director for Operations
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

**SUBJECT: CHAPTERS 2, 6, AND 7 OF THE SAFETY EVALUATION REPORT WITH
 OPEN ITEMS FOR THE COMANCHE PEAK NUCLEAR POWER PLANT,
 UNITS 3 AND 4, US-APWR REFERENCE COMBINED LICENSE APPLICATION**

Dear Mr. Satorius:

During the 610th meeting of the Advisory Committee on Reactor Safeguards, December 4-7, 2013, we met with representatives of the NRC staff and Luminant Generation Company, LLC (Luminant) to review the following chapters of the Safety Evaluation Report (SER) with Open Items associated with the Comanche Peak Nuclear Power Plant, Units 3 and 4, reference combined license (COL) application for the United States Advanced Pressurized Water Reactor (US-APWR) design:

- Chapter 2, "Site Characteristics", Sections 2.0 through 2.3
- Chapter 6, "Engineered Safety Features"
- Chapter 7, "Instrumentation and Controls"

Our US-APWR Subcommittee also reviewed these chapters during meetings on April 25, 2013, and September 17, 2013. Technical aspects of the US-APWR design as well as the open items identified in each of these SER chapters were discussed at those meetings. We also had the benefit of the documents referenced.

CONCLUSIONS

1. We have not identified any issues in SER Chapter 2, Sections 2.0 through 2.3, Chapter 6, and Chapter 7 that would preclude issuance of the combined license for Comanche Peak, Units 3 and 4.
2. Elements of the digital instrumentation and control system design affect the site-specific human factors engineering evaluations which are the subject of SER Chapter 18. We will comment on any safety implications from those interfaces in our review of that chapter.

BACKGROUND

Luminant submitted its application for a COL for Comanche Peak Nuclear Power Plant, Units 3 and 4, on September 19, 2008. This is the reference COL application for the US-APWR design. Revision 3 of the Final Safety Analysis Report (FSAR) was submitted on June 28, 2012.

We have agreed to review the SER on a chapter-by-chapter basis to identify technical issues that may merit further consideration by the staff. This process aids the resolution of concerns and facilitates timely completion of the review. The SER for Chapter 2, Sections 2.0 through 2.3, Chapter 6, and Chapter 7 addresses FSAR Revision 3. These chapters of the SER contain only one site-specific open item to track information that will be updated in Revision 4 of FSAR Chapter 2.

DISCUSSION

We have not identified any issues in these SER chapters that would preclude issuance of the COL for Comanche Peak, Units 3 and 4.

The site-specific information described in Sections 2.0 through 2.3 of Chapter 2 affects the analyses of structures, systems, and components which are evaluated in other chapters of the SER. We have completed our reviews of those chapters for this phase of the COL review process. We have not identified any issues related to the site demography, meteorology, or nearby industrial, transportation, and military facilities that merit special attention at this time.

Elements of the digital instrumentation and control system design affect the site-specific human factors engineering evaluations which are the subject of SER Chapter 18. We will comment on any safety implications from those interfaces in our review of that chapter.

Sincerely,

/RA/

J. Sam Armijo
Chairman

REFERENCES

1. Comanche Peak Nuclear Power Plant, Units 3 and 4 – FSAR Chapter 2, "Site Characteristics," Revision 3, June 28, 2012 (ML12202A486)
2. Comanche Peak Nuclear Power Plant, Units 3 and 4 – FSAR Chapter 6, "Engineered Safety Features," Revision 3, June 28, 2012 (ML12202A991)
3. Comanche Peak Nuclear Power Plant, Units 3 and 4 – FSAR Chapter 7, "Instrumentation and Controls," Revision 3, June 28, 2012 (ML12202A992)

4. Comanche Peak Nuclear Power Plant, Units 3 and 4 – Safety Evaluation Report with Open Items for Chapter 2, "Site Characteristics," March 29, 2013 (ML120880665)
5. Comanche Peak Nuclear Power Plant, Units 3 and 4 – Safety Evaluation Report with Open Items for Chapter 6, "Engineered Safety Features," August 16, 2013 (ML13227A113)
6. Comanche Peak Nuclear Power Plant, Units 3 and 4 – Safety Evaluation Report with Open Items for Chapter 7, "Instrumentation and Controls," April 5, 2013 (ML12132A308)

4. Comanche Peak Nuclear Power Plant, Units 3 and 4 – Safety Evaluation Report with Open Items for Chapter 2, "Site Characteristics," March 29, 2013 (ML120880665)
5. Comanche Peak Nuclear Power Plant, Units 3 and 4 – Safety Evaluation Report with Open Items for Chapter 6, "Engineered Safety Features," August 16, 2013 (ML13227A113)
6. Comanche Peak Nuclear Power Plant, Units 3 and 4 – Safety Evaluation Report with Open Items for Chapter 7, "Instrumentation and Controls," April 5, 2013 (ML12132A308)

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