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June 19, 2013

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 261 (6527) AND 272 (6997) (SECTIONS 1.5 AND 6.2.2)

Dear Sir:

Luminant Generation Company LLC (Luminant) submits herein supplemental information for the response to Request for Additional Information (RAI) 261 (6527) and 272 (6997) for the Combined License Application for Comanche Peak Nuclear Power Plant Units 3 and 4. The supplemental information addresses Fukushima Near-Term Task Force recommendations and containment latent debris surveys.

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 new commitments in this letter, but submittal of the letter completes Regulatory Commitment #8373 initiated on July 24, 2012 (ML12207A599).

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

Executed on June 19, 2013.

Sincerely,

Luminant Generation Company LLC

RD Bird for
Rafael Flores

Attachments: 1. Supplemental Response to Request for Additional Information 261 (6527)
2. Supplemental Response to Request for Additional Information 272 (6997)

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NRO

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Attachment 1

Supplemental Response to Request for Additional Information 261 (6527)

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.: 261 (6527)

SRP SECTION: 01.05 - Other Regulatory Considerations

QUESTIONS for USAPWR Projects Branch (NMIP)

DATE OF RAI ISSUE: 6/25/2012

QUESTION NO.: 01.05-1

This request for additional information (RAI) specifically addresses Recommendation 2.1, of the Fukushima Near-Term Task Force recommendations contained in SECY-12-0025 as it pertains to the seismic hazard evaluation. This recommendation specifies the use of NUREG-2115, "Central and Eastern United States Seismic Source Characterization for Nuclear Facilities," (CEUS-SSC) in a site probabilistic seismic hazard analysis (PSHA). Consistent with Recommendation 2.1, as well as the need to consider the latest available information in the (PSHA) for Comanche Peak Nuclear Power Plant, Units 3 and 4 planned reactor site, the NRC staff requests that Luminant:

a) Evaluate the potential impacts of the newly released CEUS-SSC model, with potential local and regional refinements as identified in the CEUS-SSC model, on the seismic hazard curves and the site-specific ground motion response spectra (GMRS)/foundation input response spectra (FIRS). For re-calculation of the PSHA, please follow either the cumulative absolute velocity (CAV) filter or minimum magnitude specifications outlined in Attachment 1 to Seismic Enclosure 1 of the March 12, 2012 letter " Request for information pursuant to Title 10 of the *Code of Federal Regulations* 50.54(f) regarding Recommendations 2.1, 2.3, and 9.3, of the near-term task force review of insights from the Fukushima Dai-Ichi accident." (ML12053A340).

b) In your response, please identify the method you selected from the above choices to perform the evaluation. Modify and submit the site-specific GMRS and FIRS changes, as necessary, given the evaluation performed in part (a) above. Provide the basis supporting your position.

SUPPLEMENTAL INFORMATION (S01):

This supplements the initial response to this RAI provided on July 24, 2012 (ML12207A599). In that response, Luminant committed to (1) submit FSAR Revision 3 Updated Tracking Report (UTR) Revision 1 reflecting the updated EPRI guidance for the CEUS earthquake sources as described in NUREG-2115, and (2) supplement the response within 60 days following the submittal of the UTR to describe the activities completed to address this question.

FSAR Revision 3 UTR Revision 1 was submitted to the NRC on May 13, 2013 (TXNB-13015). FSAR Table 2.0-1R and Section 2.5 were revised to reflect plant layout changes and inclusion of the CEUS-SSC, and to update the seismicity catalog, as described in both the Luminant Integrated Seismic Closure Plan (ML12268A41) and the initial response to this RAI. Although the initial response to this RAI stated that the CAV filter would be used to re-calculate the PSHA, a minimum magnitude of 5.0 was used (instead of using the modified CAV filter) to re-calculate the PSHA as outlined in Attachment 1 to the Seismic Enclosure 1 of the NRC March 12, 2012 letter (ML12053A340).

Impact on R-COLA

Refer to marked-up FSAR Revision 3 pages submitted in UTR Revision 1 on May 13, 2013 (TXNB-13015).

Impact on DCD

None.

Attachment 2

Supplemental Response to Request for Additional Information 272 (6997)

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.: 272 (6997)

SRP SECTION: 06.02.02 - Containment Heat Removal Systems

DATE OF RAI ISSUE: 1/29/2013

QUESTION NO.: 06.02.02-7

This is a follow-up question to RAI Letter Number 271-6965 Question 06.02.02-4.

NUREG-0800, Standard Review Plan (SRP) 6.2.2, 'Containment Heat Removal Systems,' and Regulatory Guide 1.82, 'Water Sources for Long-term Recirculation Cooling Following a Loss-of-Coolant Accident,' Revision 3, establish an acceptable approach with criteria that the NRC staff will use to evaluate whether an applicant meets applicable NRC's regulations.

Regulatory Guide 1.82, Revision 3, as modified and supplemented for pressurized water reactors by the Nuclear Energy Institute (NEI) Guidance Report (NEI 04-07 GR) and the associated NRC safety evaluation (SE) provide guidance for cleanliness programs and debris evaluations.

The Comanche Peak Nuclear Power Plant (CPNPP) COL Application Part 2, FSAR Revision 3, Sub-section 6.2.2.3.2, describes STD COL item 6.2(5) - containment cleanliness program. The COL application states that the program [containment cleanliness] includes the following:

- Guidance documents used to develop the cleanliness program survey/sampling methods including NEI 04-07 (Ref. 6.2-24) and associated NRC safety evaluation dated December 6, 2004.
- Inspection Frequency
- Evaluation Frequency

The staff seeks more specificity in these areas related to the containment cleanliness program. The staff requests that the applicant clearly state in the FSAR if the cleanliness program (to include the survey/sampling aspects) is to be implemented consistent with NEI 04-07 and the associated NRC safety evaluation. Areas of non-conformance with the guidance need to be identified and justified.

The staff requests that the applicant clearly state the inspection frequency for Latent debris, for example, inspections (to include survey/sampling) are conducted before initial startup and after refueling or maintenance outages, to provide reasonable assurance that the plant Latent debris design bases are met during plant operation.

The staff requests that the applicant clearly state when the sampling results will be evaluated (in relation to startup) and provide justification for the selected approach.

The FSAR documentation for Vogtle Electric Generating Plant, Units 3 & 4 related to containment cleanliness, and the staff's associated safety evaluation, provide a useful example of how to address the staff's information needs associated with a cleanliness program.

SUPPLEMENTAL INFORMATION (S01):

This supplemental information supersedes the response to this question (ML13066A106) with regard to containment latent debris sampling frequency.

FSAR Subsection 6.2.2.3.2 has been revised to describe the containment cleanliness program that is in accordance with the guidance in NEI 04-07 and the accompanying NRC safety evaluation. Containment latent debris surveys will be conducted prior to initial plant start-up and then once every second refueling outage.

Impact on R-COLA

See attached marked-up FSAR Revision 3 pages 6.2-1 and 6.2-2.

Impact on DCD

None.

6.2 CONTAINMENT SYSTEMS

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

6.2.2.3.2 Debris Source Term

STD COL 6.2(5) Replace the last sentence of the first bullet of seventh paragraph in DCD Subsection 6.2.2.3.2 with the following.

Administrative procedures in Subsection 13.5.1 implement the containment cleanliness program.

The program includes the following:

- Organizational responsibilities for implementing the program
- Controls and limits on type and quantity of materials for all modes of operation (not limited to outages)
- ~~Guidance documents used to develop the cleanliness program survey/sampling methods including NEI 04-07(Ref. 6.2-24) and associated NRC safety evaluation dated December 6, 2004. With the exception of sampling locations and sampling frequency, a containment sampling program is developed to be consistent with the guidance in NEI 04-07 (Ref. 6.2-24) and the associated NRC safety evaluation dated December 6, 2004.~~Guidance documents used to develop the cleanliness program survey/sampling methods including NEI 04-07(Ref. 6.2-24) and associated NRC safety evaluation dated December 6, 2004. RCOL2_06.02.02-7 RCOL2_06.02.02-7 S01
- A latent debris survey of containment is conducted prior to initial plant start-up following the conclusion of construction and pre-operational testing. Results of initial containment survey are evaluated prior to initial plant start-up.
- Subsequent latent debris surveys of containment are conducted following every second refueling outage and prior to implementation of Mode 1 - Mode 4 containment access controls. The results of the subsequent containment surveys are evaluated prior to plant restart.
- ~~Inspection frequency~~ Sampling locations deemed to be a high risk to plant personnel will be visually observed and a conservative estimate of latent debris will be used rather than direct sampling. An example of a high risk sampling location is one where a fall hazard or high radiation exists.

- ~~Evaluation frequency Sampling of latent debris is conducted prior to initial plant start-up following the conclusion of construction and pre-operational testing. Results of initial containment sampling are evaluated prior to initial plant start-up.~~

- ~~Inspections performed following refueling outages and prior to implementation of Mode 1 – Mode 4 containment access controls consist of containment exit cleanliness inspections and walk downs per the guidance in NEI 02-01. Subsequent sampling is not conducted unless visual observation indicates abnormal build-up or if extensive maintenance activities have been performed such as steam generator replacement.~~

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- Reporting requirements for degraded conditions or non-conforming results

Procedures to remove foreign materials and minimize the amount of debris that might be left in containment following refueling and maintenance outages address the following:

- Frequency of cleanliness control and inspection activities for operation and maintenance
- Restriction of materials introduced into the containment
- Accounting for materials introduced into and out of the containment (e.g., scaffold, tape, labels, plastic film, paper, cloth, keys, and pens)
- Cleaning of maintenance outage area, including areas associated with removal or replacement of insulation
- Cleanliness inspections and removal of debris/foreign material, including operation and maintenance areas, RWSP, debris interceptors, RWSP vent and drain lines (available for inspection), and strainer debris
- Preparation and review of entry/exit logs and inspection records

The containment cleanliness program including administrative procedures will be developed and implemented prior to initial fuel load.

STD COL 6.2(6)

Insert the following after the last sentence of the second bullet of the seventh paragraph in DCD Subsection 6.2.2.3.2:

Administrative procedures in Subsection 13.5.1 implement design change and configuration management controls to ensure that future modifications maintain reflective metal insulation (RMI), fiber insulation, and aluminum within values consistent with the design-basis debris specified in DCD Table 6.2.2-4.

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