**Luminant**

**Rafael Flores**
Senior Vice President &
Chief Nuclear Officer
rafael.flores@luminant.com

**Luminant Power**
P O Box 1002
6322 North FM 56
Glen Rose, TX 76043

**T** 254.897.5590
**F** 254.897.6652
**C** 817.559.0403

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October 10, 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. 5798 (SECTION 3.7.2)

Dear Sir:

As a result of a feedback from the Defense Nuclear Facilities Safety Board staff, Luminant Generation Company LLC (Luminant) submits herein supplemental information for the response to RAI No. 5798 (CP RAI #221) for the Combined License Application for Comanche Peak Nuclear Power Plant Units 3 and 4. The supplemental information addresses use of the subtraction method in seismic analyses.

Should you have any questions regarding this 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 October 10, 2011.

Sincerely,

Luminant Generation Company LLC

Donald R. Woodlan for

Rafael Flores

Attachment: Supplemental Response to Request for Additional Information No. 5798 (CP RAI #221)

D090
NRO

Electronic distribution w/attachment:

Rafael.Flores@luminant.com
mlucas3@luminant.com
jeff.simmons@energyfutureholdings.com
Bill.Moore@luminant.com
Brock.Degeyter@energyfutureholdings.com
rbird1@luminant.com
Allan.Koenig@luminant.com
Timothy.Clouser@luminant.com
Ronald.Carver@luminant.com
David.Volkening@luminant.com
Bruce.Turner@luminant.com
Eric.Evans@luminant.com
Robert.Reible@luminant.com
donald.woodlan@luminant.com
John.Conly@luminant.com
JCaldwell@luminant.com
David.Beshear@txu.com
Ashley.Monts@luminant.com
Fred.Madden@luminant.com
Dennis.Buschbaum@luminant.com
Carolyn.Cosentino@luminant.com
NuBuild Licensing files
sfrantz@morganlewis.com
jrund@morganlewis.com
tmatthews@morganlewis.com
regina.borsh@dom.com
diane.aitken@dom.com
askolhek@bechtel.com
yoshinori_fujiwara@mhi.co.jp
kano_saito@mhi.co.jp
shigemitsu_suzuki@mhi.co.jp
joelb@dnfsb.gov
Luminant Records Management (.pdf files only)
shinji_kawanago@mnes-us.com
masanori_onozuka@mnes-us.com
ck_paulson@mnes-us.com
joseph_tapia@mnes-us.com
russell_bywater@mnes-us.com
william_mcconaghy@mnes-us.com
mutsumi_ishida@mnes-us.com
yukako_hill@mnes-us.com
nicholas_kellenberger@mnes-us.com
ryan_sprengel@mnes-us.com
al_freitag@mnes-us.com
masaya_hoshi@mnes-us.com
rjb@nei.org
kra@nei.org
michael.takacs@nrc.gov
cp34update@certrec.com
michael.johnson@nrc.gov
David.Matthews@nrc.gov
Balwant.Singal@nrc.gov
Hossein.Hamzehee@nrc.gov
Stephen.Monarque@nrc.gov
jeff.ciocco@nrc.gov
michael.willingham@nrc.gov
john.kramer@nrc.gov
Brian.Tindell@nrc.gov
Alicia.Williamson@nrc.gov
Elmo.Collins@nrc.gov
Loren.Plisco@nrc.com
Susan.Vrahoretis@nrc.gov
Frank.Akstulewicz@nrc.gov
ComanchePeakCOL.Resource@nrc.gov
hickste@earthlink.net

## 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.: 5798 (CP RAI #221)**

**SRP SECTION: 03.07.02 - Seismic System Analysis**

**QUESTIONS for Structural Engineering Branch 1 (AP1000/EPR Projects) (SEB1)**

**DATE OF RAI ISSUE: 6/3/2011**

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**QUESTION NO.: 03.07.02-21**

The Defense Nuclear Facilities Safety Board (DNFSB) issued a letter on April 8, 2011 requesting the Department of Energy (DOE) to address technical and software quality assurance issues related to potentially erroneous seismic analyses performed using the SASSI Subtraction method. The April 8, 2011 letter may be found on the DOE Departmental Representative to the DNFSB website: http://www.hss.energy.gov/deprep/.

Chapter 3, Appendix 3NN of the Comanche Peak COL FSAR states that the US-APWR standard plant employs this subtraction method. Very limited information was provided about what method was used for other seismic category I structures at Comanche Peak, Units 3 & 4. To ensure the applicant has adequately met General Design Criteria (GDC) 1 and 2 and Appendix B to Part 50, the staff requests Luminant to provide to following information:

1. Confirm whether the SASSI Subtraction method is used in the analyses of seismic category I standard and site-specific structures.

2. Provide how Luminant addressed the technical and software quality assurance issues raised by DNFSB letter in the version of SASSI which Luminant uses for analyses of all seismic category I structures part of the Comanche Peak Units 3 and 4.

3. If the SASSI Subtraction method is used by Luminant, provide an assessment to establish: a) the seismic analyses performed in support of the Comanche Peak RCOL application does not contain any errors or anomalies as identified in DNFSB letter, b) the quality assurance steps taken to ensure that any future seismic analyses in support of the Comanche Peak application will be free from errors or anomalies as identified in DNFSB letter.

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**SUPPLEMENTAL INFORMATION:**

In the previous response to this question (ML11220A306), Luminant discussed the results of an initial evaluation and assessments of the seismic analyses performed using the subtraction method. Within that

response, the modified subtraction method per ACS SASSI NQA Version 2.3.0 (or later version) was discussed and Luminant stated in Item 3b, "This method has been accepted by DNFSB and DOE to be used for future nuclear defense applications and for review of current applications that used the Subtraction method." After further review, Luminant is deleting this statement. Further, Reference 3 cited in Item 3a of the response is updated as follows:

3. U.S. Department of Energy, Soil-Structure Interaction Report, July, 2011

These changes do not affect the initial technical evaluations and assessments discussed in the response or the commitment to further study SASSI analysis methods to finalize the evaluation of results that were obtained using the subtraction method.

Impact on R-COLA

None.

Impact on S-COLA

None; this response is site-specific.

Impact on DCD

None.