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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April 16, 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
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION 273 (7006)
(SECTION 14.3.7)

Dear Sir:

Luminant Generation Company LLC (Luminant) submits herein the response to Request for Additional Information (RAI) 273 (7006) for the Combined License Application for Comanche Peak Nuclear Power Plant Units 3 and 4. The RAI addresses the ventilation system for the essential service water pump house.

Should you have any questions regarding the 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 April 16, 2013.

Sincerely,

Luminant Generation Company LLC

Rafael Flores

Rafael Flores

Attachment: Response to Request for Additional Information 273 (7006)

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NRO

Electronic distribution w/attachment:

Rafael.Flores@luminant.com
jeffry.simmons@luminant.com
William.Moore@luminant.com
Stephanie.Moore@energyfutureholdings.com
Ken.Peters@luminant.com
Robert.Bird@luminant.com
Allan.Koenig@luminant.com
Timothy.Clouser@luminant.com
Daniel.Wilder@luminant.com
Eric.Evans@luminant.com
Robert.Reible@luminant.com
donald.woodlan@luminant.com
John.Conly@luminant.com
Janice.Caldwell@luminant.com
David.Beshear@txu.com
Ashley.Monts@luminant.com
Fred.Madden@luminant.com
Debra.Gilliam@luminant.com
NuBuild Licensing files
sfrantz@morganlewis.com
jrund@morganlewis.com
tmatthews@morganlewis.com
regina.borsh@dom.com
jane.d.macek@dom.com
Barry.bryant@dom.com
tomo_imamura@mhi.co.jp
yoshinori_fujiwara@mhi.co.jp
kano_saito@mhi.co.jp
Luminant Records Management (.pdf files only)
shigemitsu_suzuki@mhi.co.jp
yoshiki_ogata@mnes-us.com
masanori_onozuka@mnes-us.com
tatsuya_hashimoto@mnes-us.com
joseph_tapia@mnes-us.com
michael_melton@mnes-us.com
michael_tschiltz@mnes-us.com
atsushi_kumaki@mnes-us.com
yukako_hill@mnes-us.com
nicholas_kellenberger@mnes-us.com
ryan_sprengel@mnes-us.com
seiki_yamabe@mnes-us.com
molly_spalding@mnes-us.com
rjb@nei.org
kra@nei.org
michael.takacs@nrc.gov
cp34update@certrec.com
David.Matthews@nrc.gov
Balwant.Singal@nrc.gov
Stephen.Monarque@nrc.gov
jeff.ciocco@nrc.gov
john.kramer@nrc.gov
Brian.Tindell@nrc.gov
Elmo.Collins@nrc.gov
Frank.Akstulewicz@nrc.gov
ComanchePeakCOL.Resource@nrc.gov
Sujata.Goetz@nrc.gov

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

Comanche Peak, Units 3 and 4

Luminant Generation Company LLC

Docket Nos. 52-034 and 52-035

RAI 273 (7006)

SRP SECTION: 14.03.07 - Plant Systems - Inspections, Tests, Analyses, and Acceptance Criteria

DATE OF RAI ISSUE: 3/13/2013

QUESTION NO.: 14.03.07-39

Acceptance Criterion 5 of NUREG-0800 Standard Review Plan 14.3.7 reads in part "The design features in Tier 1 should be selected to ensure that the integrity of the analyses are preserved in the as-built facility."

Two safety features identified in FSAR subsection 9.4.5.3.6 "UHS ESW Pump House Ventilation System" read:

1) Backdraft dampers are capable of withstanding the affects of tornado wind and atmospheric differential pressure loading.

2) The UHS ESW pump house air intakes and air outlets are protected from tornado missiles as described in Subsection 3.8.4.1.3.2.

With respect to the first safety feature, the staff notes that there is no ITAAC to demonstrate that the installed air intake and exhaust dampers of the UHS ESW Pump House Ventilation System are capable of withstanding differential loading due to a design basis tornado.

The staff requests that the applicant add an ITAAC to Tier 1 Table A.2-1 "UHS ESW Pump House Ventilation System Inspections, Tests, Analyses, and Acceptance Criteria" that captures this safety related attribute.

With respect to the second safety feature, the staff notes that there is no ITAAC that inspects the tornado missile shields described in Subsection 3.8.4.1.3.2. The staff notes that inspections exist in the DCD for the exterior protective barriers that shield the outside air intakes and exhaust outlets for the MCR HVAC system, the Class 1E electrical room HVAC system and the emergency feedwater pump area HVAC system. [Reference Design Commitments 25, 26 and 27 as amended by DCD RAI No. 926-6448, Question 14.03.07-59 (ADAMS Number ML12163A010)]

The staff requests that a similar R-COLA ITAAC be created for the tornado missile shields that protect the outside air intakes and exhaust outlets of the UHS ESW Pump House Ventilation System.

ANSWER:

1. Luminant has added ITAAC in Part 10 to verify that the ESW Pump Room air intake and discharge backdraft dampers and the UHS Transfer Pump Room air intake and discharge backdraft dampers (identified in Table A.2-2) are capable of withstanding the effects of tornado wind and atmospheric differential pressure loading or hurricane wind effects. Specifically, Part 10 Table A.2-1 has been revised to include new ITAAC that will

   (i) perform a type-test or combination of type-test and analysis to verify that the backdraft dampers identified in Table A.2-2 are capable of withstanding the effects of tornado wind and atmospheric differential pressure loading or hurricane wind effects, and can perform their active safety function after being subjected to these forces,

   (ii) verify that these as-built backdraft dampers are bounded by the type-test or combination of type-test and analysis; and

   (iii) verify that the as-built backdraft dampers have freedom of motion.

   Furthermore, the existing Table A.2-1 Item 5.c columns for "Inspection, Test, and Analyses" and for "Acceptance Criteria" have been deleted because this verification is addressed in the new ITAAC described above.

2. Luminant has added ITAAC to Table A.2-1 to verify that the UHS ESW pump house air intakes and air outlets are protected from tornado missiles and hurricane missiles.

Impact on R-COLA

See attached marked-up COLA Part 10 Revision 3 pages 25, 28, and 29.

Impact on S-COLA

None; this response is site-specific.

Impact on DCD

None.

5.c The UHS ESW pump house ventilation system backdraft dampers identified in Table A.2-2 as having a safety function perform a safety function to change position as indicated in the table.

6. Displays of the parameters identified in Table A.2-3 are provided in the MCR.

7. Displays and controls identified in Table A.2-3 are provided in the RSC.

8. The UHS ESW pump house air intakes and air outlets are protected from tornado and hurricane missiles. RCOL2_14.0 3.07-39

A.2.2 Inspections, Tests, Analyses, and Acceptance Criteria

Table A.2-1 specifies the ITAAC for the UHS ESW pump house ventilation system.

Appendix A.2

Table A.2-1 (Sheet 3 of 4)
UHS ESW Pump House Ventilation System
Inspections, Tests, Analyses, and Acceptance Criteria

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria	
5.c. The UHS ESW pump house ventilation system backdraft dampers identified in Table A.2-2 as having a safety function perform a safety function to change position as indicated in the table.	~~5.c. Tests of the as-built UHS ESW pump house ventilation system backdraft dampers identified in Table A.2-2 as having a safety function will be performed.~~ 5.c.i Type tests or a combination of type tests and analysis of the backdraft dampers identified in Table A.2-2 will be performed to verify that the dampers can withstand the affects of tornado wind and atmospheric differential pressure loading or hurricane wind effects and perform their active safety function after being subjected to these forces.	~~5.c. Each as-built UHS ESW pump house ventilation system backdraft damper identified in Table A.2-2 as having a safety function changes position as indicated in the table under design conditions.~~ 5.c.i A report exists and concludes that the backdraft dampers identified in Table A.2-2 can withstand the affects of tornado wind and atmospheric differential pressure loading or hurricane wind effects and perform their active safety function after being subjected to these forces.	RCOL2_14 03.07-39
	5.c.ii Inspections will be performed of the as-built backdraft dampers identified in Table A.2-2.	5.c.ii Each as-built backdraft damper identified in Table A.2-2 is bounded by the type tests or combination of type tests and analysis.	
	5.c.iii Tests will be performed of the as-built backdraft dampers identified in Table A.2-2 to verify freedom of motion.	5.c.iii Each as-built backdraft damper identified in Table A.2-2 has freedom of motion.	
6. Displays ~~of the parameters~~ identified in Table A.2-3 are provided in the MCR.	6. Inspections will be performed for retrievability of displays identified in Table A.2-3 in the as-built MCR.	6. Displays identified in Table A.2-3 can be retrieved in the as-built MCR.	CTS-015 04
7. Displays and controls identified in Table A.2-3 are provided in the RSC.	7.a Inspections will be performed for retrievability of the displays identified in Table A.2-3 in the as-built RSC.	7.a Displays identified in Table A.2-3 can be retrieved in the as-built RSC.	
	7.b Tests of the as-built RSC control functions identified in Table A.2-3 will be performed.	7.b Controls in the as-built RSC operate the as-built equipment identified in Table A.2-3 with an RSC control function.	

Appendix A.2

Table A.2-1 (Sheet 4 of 4)
UHS ESW Pump House Ventilation System
Inspections, Tests, Analyses, and Acceptance Criteria

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
8. The UHS ESW pump house air intakes and air outlets are protected from tornado and hurricane missiles.	8.i An analysis will be performed to verify that the UHS ESW pump house air intakes and air outlets are protected from tornado and hurricane missiles.	8.i A report exists and concludes that the UHS ESW pump house air intakes and air outlets are protected from tornado and hurricane missiles.
	8.ii Inspections will be performed of the as-built UHS ESW pump house air intakes and air outlets missile protection features.	8.ii The as-built UHS ESW pump house air intakes and air outlets missile protection features are bounded by the conditions assumed in the analysis.

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