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Ref. # 10 CFR 52

May 17, 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
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION NO. 5722
(SECTION 2.3.1)

Dear Sir:

Luminant Generation Company LLC (Luminant) submits herein the response to Request for Additional Information (RAI) No. 5722 for the Combined License Application for Comanche Peak Nuclear Power Plant Units 3 and 4. This RAI addresses the site tornado characteristics.

Should you have any questions regarding this 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 May 17, 2011.

Sincerely,

Luminant Generation Company LLC

Donald R. Woodlan for

Rafael Flores

Attachment: Response to Request for Additional Information No. 5722 (CP RAI #217)

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NRO

Electronic distribution w/attachment:

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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.: 5722 (CP RAI #217)

SRP SECTION: 02.03.01 - Regional Climatology

QUESTIONS for Siting and Accident Conseq Branch (RSAC)

DATE OF RAI ISSUE: 4/27/2011

QUESTION NO.: 02.03.01-13

10 CFR 52.79(a)(1)(iii) states that the COL FSAR shall include "the seismic, meteorological, hydrologic, and geologic characteristics of the proposed site with appropriate consideration of the most severe of the natural phenomena that have been historically reported for the site and surrounding area and with sufficient margin for the limited accuracy, quantity, and time in which the historical data have been accumulated.

NUREG-0800, Section 2.0 states that for an applicant referencing a DC, acceptance is based on the applicant's demonstration that the characteristics of the site fall within the site parameters of the certified design. NUREG-0800, Section 2.3.1 identifies typical tornado parameters (including maximum wind speed, translational speed, rotational speed, and maximum pressure differential with the associated time interval) to be used in establishing pressure and tornado missile loadings on structures, systems, and components (SSCs) important to safety.

The US-APWR DCD, Revision 3, Table 2.0-1 presents values for the following tornado related site parameters:

- Tornado maximum wind speed
- Tornado maximum rotational wind speed
- Tornado maximum translational wind speed
- Radius of maximum rotational speed
- Tornado maximum pressure drop
- Rate of pressure drop

CPNPP COL FSAR Table 2.0-1R presents the site characteristic tornado maximum wind speed and the site characteristic tornado maximum pressure drop values; but does not present site characteristics for comparison to the remaining site parameter values in the US-APWR DCD. Please update FSAR Table 2.0-1R to include a comparison with all of the tornado site parameter values that are presented in the US-APWR DCD, Revision 3.

ANSWER:

The tornado site parameter values that are presented in the US-APWR DCD, Revision 3 and the corresponding CPNPP Units 3 and 4 tornado site parameter values were incorporated in FSAR Table 2.0-1R (Sheet 1 of 12) in FSAR Revision 1 Update Tracking Report Revision 2, submitted on June 3, 2010 (ML101610292 and ML101610135). During preparation of this RAI response, some editorial errors were identified for Sheet 1 of Table 2.0-1R and the FSAR has been revised to correct them.

Impact on R-COLA

See attached marked-up FSAR Revision 1 page 2.0-2.

Impact on S-COLA

None; this response is site-specific.

Impact on DCD

None.

Table 2.0-1R (Sheet 1 of 15)
Key Site Parameters

CP COL 2.1(1)
CP COL 2.2(1)
CP COL 2.3(1)
CP COL 2.4(1)
CP COL 2.5(1)

Meteorology		
Parameter Description	**Parameter Value**	
	DCD	**CPNPP 3 and 4**
Normal winter precipitation roof load(11)	50 lb/ft^2	~~(~~11.7 lb/ft^2~~)~~
Extreme winter precipitation roof load(12) ~~(100-year snowpack maximum snow weight including contribution portion of either extreme frozen winter precipitation event or extreme liquid winter precipitation event)~~	75 lb/ft^2	~~(~~37.8 lb/ft^2~~)~~
48-hr probable maximum winter precipitation (PMWP)	36 in	31 in
Tornado maximum wind speed	230 mph	~~(~~230 mph~~)~~
	184 mph maximum rotational	184 mph maximum rotational
	46 mph maximum translational	46 mph maximum translational
Radius of maximum rotational speed	150 ft	150 ft
Rate of Pressure drop	0.5 psi/s	0.5 psi/s
Tornado maximum pressure drop	1.2 psi	~~(~~1.2 psi~~)~~
Tornado-generated missile spectrum and associated velocities	15 ft long schedule 40 steel pipe moving horizontally at 135 ft/s~~(a)~~(1)	15 ft long schedule 40 steel pipe moving horizontally at 135 ft/s~~(a)~~(1)
	4000 lb automobile moving horizontally at 135 ft/s~~(a)~~(1)	4000 lb automobile moving horizontally at 135 ft/s~~(a)~~(1)
	1 in diameter steel sphere moving horizontally at 26 ft/s~~(a)~~(1)	1 in diameter steel sphere moving horizontally at 26 ft/s~~(a)~~(1)

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