

#### UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555-0001

June 9, 2016

Mr. Ken J. Peters Senior Vice President and Chief Nuclear Officer Attention: Regulatory Affairs Luminant Generation Company, LLC P.O. Box 1002 Glen Rose, TX 76043

### SUBJECT: NUCLEAR REGULATORY COMMISSION REPORT FOR THE AUDIT OF LUMINANT GENERATION COMPANY, LLC.'S FLOOD HAZARD REEVALUATION REPORT SUBMITTAL RELATING TO THE NEAR-TERM TASK FORCE RECOMMENDATION 2.1-FLOODING FOR COMANCHE PEAK NUCLEAR POWER PLANT, UNITS 1 AND 2 (CAC NOS. MF1099 AND MF1100)

Dear Mr. Peters:

By letter dated June 11, 2015 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15148A677), the U.S. Nuclear Regulatory Commission (NRC) informed you of the staff's plan to conduct a regulatory audit of the Luminant Generation Company, LLC's (Luminant, the licensee) Flood Hazard Reevaluation Report (FHRR) submittal related to the Near-Term Task Force Recommendation 2.1-Flooding for Comanche Peak Nuclear Power Plant, Units 1 and 2 (Comanche Peak). The audit was intended to support the NRC staff review of the licensee's FHRR and the subsequent issuance of a staff assessment.

The NRC conducted the audit and associated follow-up calls on July 6, 2015, December 10, 2015, and January 20, 2016. The audits were performed consistent with NRC Office of Nuclear Reactor Regulation, Office Instruction LIC-111, "Regulatory Audits," dated December 29, 2008, (ADAMS Accession No. ML082900195). The purpose of this letter is to provide you with the final audit report which summarizes and documents the NRC's regulatory audit of the licensee's FHRR submittal.

K. Peters

If you have any questions, please contact me at (301) 415-2915 or by e-mail at Victor.Hall@nrc.gov.

Sincerely,

The S Mill

Victor Hall, Senior Project Manager Office of Nuclear Reactor Regulation Japan Lessons-Learned Division Hazards Management Branch

Docket Nos.: 50-445 and 50-446

Enclosure: Audit Report

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## AUDIT REPORT BY THE OFFICE OF NUCLEAR REACTOR REGULATION

## FOR THE AUDIT OF LUMINANT GENERATION COMPANY, LLC'S

### FLOOD HAZARD REEVALUATION REPORT SUBMITTAL

# RELATING TO THE NEAR-TERM TASK FORCE RECOMMENDATION 2.1-FLOODING FOR

# COMANCHE PEAK NUCLEAR POWER PLANT, UNITS 1 AND 2

# DOCKET NOS. 50-445 AND 50-446

# BACKGROUND AND AUDIT BASIS

By letter dated March 12, 2012, the U.S. Nuclear Regulatory Commission (NRC) issued a request for information to all power reactor licensees and holders of construction permits in active or deferred status, pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.54(f) "Conditions of license" (hereafter referred to as the "50.54(f) letter"). The request was issued in connection with implementing lessons-learned from the 2011 accident at the Fukushima Dai-ichi nuclear power plant, as documented in The Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident. Recommendation 2.1 in that document recommended that the NRC staff issue orders to all licensees to reevaluate seismic and flooding for their sites against current NRC requirements and guidance. Subsequent Staff Requirements Memoranda associated with Commission Papers SECY 11-0124 and SECY-11-0137, instructed the NRC staff to issue requests for information to licensees pursuant to 10 CFR 50.54(f).

By letter dated March 12, 2013, Luminant Generation Company, LLC (Luminant, the licensee) submitted its Flood Hazard Reevaluation Report (FHRR) for Comanche Peak Nuclear Power Plant, Units 1 and 2 (Comanche Peak) (Agencywide Documents Access and Management System Accession No. ML13074A058). The NRC has reviewed the submittal and has completed a regulatory audit of the licensee to better understand the development of the submittal, identify any similarities with past work completed and ultimately aid in its review of the licensees' FHRR. This audit summary was completed in accordance with the guidance set forth in NRC Office of Nuclear Reactor Regulation, Office Instruction LIC-111, "Regulatory Audits," dated December 29, 2008 (ADAMS Accession No. ML082900195).

# AUDIT LOCATION AND DATES

The audit was completed at NRC Headquarters in Rockville, MD, on July 6, 2015, by document review via the licensee's established electronic reading room and by teleconferences on December 10, 2015, and January 20, 2016.

Enclosure

### DOCUMENTS AUDITED

The documents reviewed by the NRC staff were located in an electronic reading room during the NRC staff's review. Documents used by the NRC staff to support the technical analysis will be referenced in the staff assessment.

### AUDIT TEAM

The NRC audit team, and audit partipants were as follows:

AUDIT TEAM	July 6, 2015	December 10, 2015	January 20, 2016
NRC Staff			
Victor Hall, Team Leader, NRR	Х	X	Х
Andy Campbell, NRO		X	Х
Mohamed Shams, NRR		Х	Х
Chris Cook, NRO		Х	
Aida Rivera-Varona, NRO			Х
Nebiyu Tiruneh, NRO	Х	X	
Laura Quinn-Willingham, NRO		Х	
Oak Ridge National Laboratories	s Contractors		
Scott DeNeale (via telecon)	Х	X	
David Watson (via telecon)	Х	Х	

AUDIT TEAM	July 6, 2015	December 10, 2015	January 20, 2016
Luminant			•
Tom McCool	Х	X	Х
Carl Corbin	Х	X	Х
Mike Osterman	Х	X	
Norman Terrel	Х	X	Х
Tim Hope			Х
Westinghouse			
Mark Moenssens	Х	X	Х
Richard Giachetti	Х		
Rizzo Associates			
Ahmed "Jemie" Dababneh	Х	X	
Jeffrey Oskamp	Х		
Mark Schwartz	Х		
Tom Edwards			Х

#### AUDIT ACTIVITIES

The audit focused on gaining a better understanding of the local intense precipitation modeling results for the Comanche Peak FHRR. Luminant, in coordination with Westinghouse and Rizzo Associates Inc. made presentations and shared revised modeling results. The audit included discussions regarding the licensees's use of Hydrologic Engineering Center (HEC) River Analysis System (RAS) modeling, and the licensee's quasi 2-D approach in HEC-RAS. During the discussions, the staff and licensee discussed the use of water elevation 810.6' as the local intense precipitation flood level for all the power block structures systems and components as a reasonable estimate.

#### EXIT MEETING/BRIEFING

By letter dated, February 11, 2016, the NRC staff issued a summary of the reevaluated floodcausing mechanisms (ADAMS Accession No. ML16041A228). That letter concluded that the licensee's reevaluated flooding hazard information is a suitable input for the mitigating strategies assessment as well as assessments associated with Near-Term Task Force Recommendation 2.1 "Flooding," thus closing out the discussion of the technical topics described above. K. Peters

If you have any questions, please contact me at (301) 415-2915 or by e-mail at Victor.Hall@nrc.gov.

Sincerely,

/RA/

Victor Hall, Senior Project Manager Office of Nuclear Reactor Regulation Japan Lessons-Learned Division Hazards Management Branch

Docket Nos.: 50-445 and 50-446

Enclosure: Audit Report

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#### ADAMS Accession No.: ML16131A582

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DATE	05/09/2016	05/10/2016	06/01/2016	06/07/2016	
OFFICE	NRR/JLD/JHMB/BC	NRR/JLD/JHMB/PM			
NAME	MShams	VHall			
DATE	05/15/2016	06/09/2016			

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