

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

June 27, 2013

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

## SUBJECT: COMANCHE PEAK NUCLEAR POWER PLANT, UNITS 1 AND 2 – SUPPLEMENTAL INFORMATION NEEDED FOR ACCEPTANCE OF REQUESTED LICENSING ACTION (TAC NOS. MF1365 AND MF1366)

Dear Mr. Flores:

By letter dated March 28, 2013 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML13095A023), Luminant Generation Company LLC (Luminant, the licensee) submitted a license amendment request for Comanche Peak Nuclear Power Plant (CPNPP), Units 1 and 2. The proposed amendment would revise the following Technical Specifications (TSs):

- TS 3.7.16, "Fuel Storage Pool Boron Concentration," to increase the minimum spent fuel pool (SFP) boron concentration from 2000 ppm to 2400 ppm
- TS 3.7.17, "Spent Fuel Assembly Storage," to describe the proposed spent fuel storage configurations allowed in Region II high density storage racks
- TS 4.3, "Fuel Storage" to describe the spent fuel storage design requirements
- TS 5.5, "Programs and Manuals" to describe the proposed Neutron Absorber
  Monitoring Program

The purpose of this letter is to provide the results of the U.S. Nuclear Regulatory Commission (NRC) staff's acceptance review of this amendment request. The acceptance review was performed to determine if there is sufficient technical information in scope and depth to allow the NRC staff to complete its detailed technical review. The acceptance review is also intended to identify whether the application has any readily apparent information insufficiencies in its characterization of the regulatory requirements or the licensing basis of the plant.

Consistent with Section 50.90 of Title 10 of the *Code of Federal Regulations* (10 CFR), an amendment to the license (including the technical specifications) must fully describe the changes requested, and following as far as applicable, the form prescribed for original applications. Section 50.34 of 10 CFR addresses the content of technical information required. This section stipulates that the submittal address the design and operating characteristics, unusual or novel design features, and principal safety considerations.

#### R. Flores

The NRC staff has reviewed your application and concluded that the information delineated in the enclosure to this letter is necessary to enable the staff to make an independent assessment regarding the acceptability of the proposed amendment/relief request in terms of regulatory requirements and the protection of public health and safety and the environment.

In order to make the application complete, the NRC staff requests that Luminant supplement the application to address the information requested in the enclosure by July 16, 2013. This will enable the NRC staff to begin its detailed technical review. If the information responsive to the NRC staff's request is not received by the above date, the application will not be accepted for review pursuant to 10 CFR 2.101, and the NRC will cease its review activities associated with the application. If the application is subsequently accepted for review, you will be advised of any further information needed to support the staff's detailed technical review by separate correspondence.

The information requested and schedule to provide the requested information were discussed with Mr. Tim Hope of your staff on June 27, 2013.

If you have any questions, please call me at 301-415-3016 or via e-mail at <u>Balwant.Singal@nrc.gov</u>.

Sincerely,

Balut & Singl

Balwant K. Singal, Senior Project Manager Plant Licensing Branch IV Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket Nos. 50-445 and 50-446

Enclosure: As stated

cc w/encl: Distribution via Listserv

# SUPPLEMENTAL INFORMATION NEEDED

## LICENSE AMENDMENT REQUEST

## REVISION TO TECHNICAL SPECIFICATIONS 3.7.16, 3.7.17, 4.3, AND 5.5

## LUMINANT GENERATION COMPANY LLC

#### COMANCHE PEAK NUCLEAR POWER PLANT, UNIT NOS. 1 AND 2

## DOCKET NOS. 50-445 AND 50-446

By letter dated March 28, 2013 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML13095A023), Luminant Generation Company LLC (Luminant, the licensee) submitted a license amendment request for Comanche Peak Nuclear Power Plant (CPNPP), Units 1 and 2. The proposed amendment would revise the following Technical Specifications (TSs):

- TS 3.7.16, "Fuel Storage Pool Boron Concentration," to increase the minimum spent fuel pool (SFP) boron concentration from 2000 ppm to 2400 ppm
- TS 3.7.17, "Spent Fuel Assembly Storage," to describe the proposed spent fuel storage configurations allowed in Region II high density storage racks
- TS 4.3, "Fuel Storage" to describe the spent fuel storage design requirements
- TS 5.5, "Programs and Manuals" to describe the proposed Neutron Absorber Monitoring Program

The U.S. Nuclear Regulatory Commission (NRC) staff's acceptance review of this amendment request in accordance with Office Instruction LIC-109, "Acceptance Review Procedures," to determine if there is sufficient technical information in scope and depth to allow the NRC staff to complete its detailed technical review. The acceptance review is also intended to identify whether the application has any readily apparent information insufficiencies in its characterization of the regulatory requirements or the licensing basis of the plant.

The NRC staff has reviewed the application and concludes that it does not provide technical information in sufficient detail to enable the NRC staff to begin its detailed technical review and make an independent assessment regarding the acceptability. In accordance with LIC-109, the NRC staff requests that Luminant supplement the application to address the following information in a timely manner.

 The methodology for the Inter-Region Interface analysis used in Section 5.4.2 of WCAP-17728 (Enclosure 2 to letter dated March 28, 2013) was not provided and does not follow the guidance of Interim Staff Guidance (ISG) DSS-ISG-2010-1, "Staff Guidance Regarding the Nuclear Criticality Safety Analysis for Spent Fuel Pools," dated September 29, 2011 (ADAMS Accession No. ML110620086). Please provide a description and justification for the methodology used in WCAP-17728, Section 5.4.2.

- 2. Section 5.5, "Normal Condition Description," of WCAP-17728 describes the normal SFP conditions considered for CPNPP, Units 1 and 2. However, it appears that the evaluation of accident conditions discussed in Section 5.5 of WCAP-17728 did not address all of the normal conditions as the initial state of the SFP at the onset of the accident. Please provide an accident analysis that considers all of the normal conditions as the initial state of the SFP at the onset of the normal conditions as the initial state of the accidents.
- 3. Section 5.7, "Accident Description," of WCAP-17728 does not discuss the effect of accidents and design basis events on the neutron absorbing material being credited for storage racks in Region 1 of the SFP. Please provide an accident analysis that considers the effect of accidents and design basis events on the neutron absorbing material being credited for storage racks in Region I of the SFP.
- 4. Section 6.2.1, "Outlier Assemblies," of WCAP-17728 discusses how the licensee may deal with fuel assemblies that are outside the bounds of its analysis. Fuel assemblies that are outside the bounds of the analysis should not be stored unless there is a full NRC-approved methodology for all possible type of fuel assemblies to be stored in the future. Please provide a full description and justification for the nuclear criticality safety methodology that will be used for fuel assemblies to be stored in future that are outside the bounds of the analyses.

The NRC staff has reviewed your application and concluded that the information delineated in the enclosure to this letter is necessary to enable the staff to make an independent assessment regarding the acceptability of the proposed amendment/relief request in terms of regulatory requirements and the protection of public health and safety and the environment.

In order to make the application complete, the NRC staff requests that Luminant supplement the application to address the information requested in the enclosure by July 16, 2013. This will enable the NRC staff to begin its detailed technical review. If the information responsive to the NRC staff's request is not received by the above date, the application will not be accepted for review pursuant to 10 CFR 2.101, and the NRC will cease its review activities associated with the application. If the application is subsequently accepted for review, you will be advised of any further information needed to support the staff's detailed technical review by separate correspondence.

The information requested and schedule to provide the requested information were discussed with Mr. Tim Hope of your staff on June 27, 2013.

If you have any questions, please call me at 301-415-3016 or via e-mail at <u>Balwant.Singal@nrc.gov</u>.

Sincerely, /RA/

Balwant K. Singal, Senior Project Manager Plant Licensing Branch IV Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket Nos. 50-445 and 50-446

Enclosure: As stated

cc w/encl: Distribution via Listserv

DISTRIBUTION: PUBLIC Branch Reading RidsAcrsAcnw\_MailCTR Resource RidsNrrDeEsgb Resource RidsNrrDorl Resource RidsNrrDorlLpl4 Resource

RidsNrrDssSrxb Resource RidsNrrLAJBurkhardt Resource RidsNrrPMComanchePeak Resource RidsRgn4MailCenter Resource KWood, NRR/DSS/SRXB EWong, NRR/DE/ESGB

#### ADAMS Accession No. ML13175A225

OFFICE	NRR/DORL/LPL4/PM	NRR/DORL/LPL4/LA	NRR/DE/ESGB/BC
NAME	BSingal	JBurkhardt	MYoder for GKulesa
DATE	6/24/13	6/24/13	6/25/13
OFFICE	NRR/DSS/SRXB/BC	NRR/DORL/LPL4/BC	NRR/DORL/LPL4/PM
NAME	CJackson	FLyon for MMarkley	BSingal
DATE	6/25/13	6/25/13	6/27/13

## OFFICIAL AGENCY RECORD