



**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  
**C** 817 559 0403  
**F** 254 897 6652

CP-201500995  
Log # TXX-15137

REF 10 CFR 2.202

November 18, 2015

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D.C. 20555-0001

**SUBJECT:** Comanche Peak Nuclear Power Plant, Docket No. 50-446,  
Compliance with NRC Order Modifying Licenses with Regard to Requirements for  
Mitigating Strategies for Beyond Design-Basis External Events (Order Number EA-12-  
049) (TAC NOS. MF0860 AND MF0861)

**REFERENCE:** 1. NRC Order Number EA-12-049, Order Modifying Licenses with Regard to  
Requirements for Mitigation Strategies for Beyond Design-Basis External Events,  
dated March 12, 2012.

Dear Sir or Madam:

On March 12, 2012, the Nuclear Regulatory Commission ("NRC" or "Commission") issued an order (Reference 1) to Luminant Generation Company LLC (Luminant Power). Reference 1 was immediately effective and required Luminant Power to implement mitigation strategies for beyond-design-basis external events. Specific requirements are outlined in Attachment 2 of Reference 1.

Pursuant to Section IV, Condition C.3 of Reference 1, the Attachment to TXX-15137 provides a summary of Comanche Peak Nuclear Power Plant Unit 2 full compliance with the requirements of Attachment 2 of Reference 1.

This letter contains no new regulatory commitments.

If you have any questions regarding this report, please contact Carl B. Corbin at (254) 897-0121 or carl.corbin@luminant.com.

A151  
NRK

I state under penalty of perjury that the foregoing is true and correct.

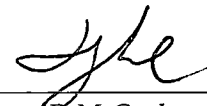
Executed on November 18, 2015.

Sincerely,

Luminant Generation Company LLC

Rafael Flores

By: \_\_\_\_\_



Thomas P. McCool  
Vice President  
Nuclear Engineering and Support

Attachment Comanche Peak Nuclear Power Plant (CPNPP) Unit 2, Compliance with  
NRC Order EA-12-049, Order Modifying Licenses with Regard to Requirements  
for Mitigating Strategies for Beyond Design-Basis External Events

c - William M Dean, Director, Office of Nuclear Reactor Regulation  
Marc L. Dapas, Region IV  
Stephen A. Monarque, NRR  
Balwant K. Singal, NRR  
Resident Inspectors, Comanche Peak

**Comanche Peak Nuclear Power Plant (CPNPP) Unit 2,  
Compliance with NRC Order EA-12-049, Order Modifying Licenses with Regard to  
Requirements for Mitigation Strategies for Beyond-Design-Basis External Events**

**1. Introduction**

Luminant Generation Company LLC (Luminant Power) developed an Overall Integrated Plan (OIP) (References 5, 6 and 7) to provide diverse and flexible strategies (FLEX) in response to Order EA-12-049, Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (References 1 and 3). As required by the order, Luminant Power has submitted OIP status updates at six month intervals (References 11, 12, 13, 17, and 19). The information provided herein, as well as the implementation of the OIP, documents compliance with Order EA-012-049 for Comanche Peak Nuclear Power Plant (CPNPP) Unit 2.

**2. Open Item Resolution**

FLEX issues from the NRC Audit Report (Reference 18) have been addressed by Luminant Power. The FLEX issues that were identified as open and pending by the NRC Audit Report (Reference 18) are listed below:

ISE Confirmatory Items (ISE CI) - ISE CI 3.2.1.2.A and 3.2.4.4.B

Audit Questions (AQs) - AQ-27, AQ-30

Licensee-identified OIP OIs - CPNPP has no open or pending licensee-identified open items.

Additional SE needed information - SE-2, SE-8

As result of communications between the NRC staff and Luminant Power, responses to address the above six open items have been uploaded to the NRC ePortal. These six open items are considered complete pending NRC review and closure.

**3. Milestone Schedule - Complete**

| Milestone   | Target Completion Date | Activity Status     | Revised Target Completion Date |
|---|------------------------|---------------------|--------------------------------|
| Submit 60 Day Status Report                             | Oct 2012               | Complete            |                                |
| Submit Overall Integrated Plan                          | Feb 2013               | Complete            |                                |
| <b>Submit 6 Month Updates:</b>                          |                        |                     |                                |
| Update 1  | Aug 2013               | Complete            |                                |
| Update 2  | Feb 2014               | Complete            |                                |
| Update 3  | Aug 2014               | Complete            |                                |
| Update 4  | Feb 2015               | Complete            |                                |
| Update 5  | Aug 2015               | Complete            |                                |
| <i>FLEX Strategy Evaluation</i>                         | <i>Aug 2013</i>        | <i>Complete</i>     |                                |
| <i>Walk-throughs or Demonstrations</i>                  | <i>Apr 2015</i>        | <i>Complete</i>     | <i>Nov 2015</i>                |
| Perform Phase 2 Staffing Analysis                       | Jun 2014               | Complete            | Jun 2015                       |
| <b>Modifications:</b>                                   |                        |                     |                                |
| <i>Modifications Evaluation</i>                         | <i>Aug 2013</i>        | <i>Complete</i>     |                                |
| Develop Unit 2 Modifications                            | Mar 2015               | Complete            | Jul 2015                       |
| Unit 2 Implementation Outage (2RF15)                    | Oct 2015               | Complete            | Nov 2015                       |
| <b>Storage:</b>   |                        |                     |                                |
| <i>Storage Design Engineering</i>                       | <i>Mar 2014</i>        | <i>Complete</i>     |                                |
| <i>Storage Implementation</i>                           | <i>Feb 2015</i>        | <i>Complete</i>     | <i>Sep 2015</i>                |
| <b>FLEX Equipment:</b>                                  |                        |                     |                                |
| Procure On-Site Equipment                               | Jul 2015               | Complete            | Nov 2015                       |
| Develop Site Response Plan with NSRC                    | Apr 2015               | Complete            | Aug 2015                       |
| <i>Install Off-Site Delivery Station (if Necessary)</i> | <i>Not Required</i>    | <i>Not Required</i> | <i>Not Required</i>            |
| National Safer Response Center Operational              | Aug 2014               | Complete            |                                |
| <b>Procedures:</b>                                      |                        |                     |                                |
| <i>PWROG issues NSSS-specific guidelines</i>            | <i>May 2013</i>        | <i>Complete</i>     |                                |
| Issue FSGs  | Aug 2014               | Complete            | Nov 2015                       |
| Create Maintenance Procedures                           | Jul 2014               | Complete            | Nov 2015                       |
| <b>Training:</b>  |                        |                     |                                |
| <i>Develop Training Plan</i>                            | <i>May 2014</i>        | <i>Complete</i>     | <i>Dec 2014</i>                |
| Implement Training                                      | Apr 2015               | Complete            | Nov 2015                       |
| <i>Full Site FLEX Implementation</i>                    | <i>Oct 2015</i>        | <i>Started</i>      | <i>May 2016</i>                |
| Submit Unit 2 Completion Report                         | Feb 2016               | Complete            | Nov 2015                       |

#### **4. Order EA-12-049 Compliance Elements Summary**

The elements identified below for CPNPP Unit 2 as well as the FLEX OIP (Reference 7), the 6-Month Status Reports (References 11, 12, 13, 17, and 19), demonstrate compliance with Order EA-12-049. Luminant Power voluntarily participated in the online NRC ePortal and NRC Audit process (virtual and onsite) (References 8, 9, 10, 15, and 18). The CPNPP, Units 1 and 2, Final Integrated Plan for mitigating strategies will be provided upon full compliance for CPNPP, Unit 1 (Spring 2016). NRC Order EA-12-051 (Reference 2) was implemented for CPNPP Units 1 and 2 in the fall of 2014 as reported in Reference 14.

##### **4.1 Strategies - Complete**

CPNPP Unit 2 strategies are in compliance with Order EA-12-049. All strategy related Open Items, Confirmatory Items, or Audit Questions/ Audit Report Open Items have been addressed as noted in Reference 18 with the exception of the six open items related to Order EA-12-049. The six open items have been addressed and uploaded to the NRC ePortal and are considered complete pending NRC closure.

##### **4.2 Modifications - Complete**

The modifications required to support the FLEX strategies for CPNPP Unit 2 have been fully implemented in accordance with the station processes.

##### **4.3 Equipment - Procurement and Maintenance & Testing - Complete**

The equipment required to implement the FLEX strategies for CPNPP Unit 2 has been procured, received at CPNPP, initially tested and performance verified as recommended in accordance with NEI 12-06, Diverse and Flexible Coping Strategies (FLEX) Implementation Guide (Reference 4) and is available for use. Maintenance and testing requirements are included in the CPNPP Preventative Maintenance Program such that equipment reliability is monitored and maintained.

##### **4.4 Protected Storage - Complete**

The storage facility required to implement the FLEX strategies for CPNPP Unit 2 has been constructed and provides adequate protection from the applicable site hazards. The equipment required to implement the FLEX strategies for CPNPP Unit 2 is stored in its protected configuration.

##### **4.5 Procedures - Complete**

FLEX Support Instructions (FSIs) for CPNPP Unit 2 have been developed and integrated with existing procedures. The FSGs and applicable procedures have been verified and are available for use in accordance with the site procedure control program.

##### **4.6 Training - Complete**

Training for CPNPP Unit 2 has been completed in accordance with an accepted training process, as recommended in NEI 12-06, Diverse and Flexible Coping Strategies (FLEX) Implementation Guide (Reference 4).

#### **4.7 Staffing - Complete**

The CPNPP Phase 2 staffing assessment for CPNPP (Reference 16) has been completed in accordance with 10 CFR 50.54(f) letter (Reference 20). The commitments in Reference 16 (which included Phase 2 staffing assessment gaps) have been completed.

#### **4.8 National Safer Response Centers - Complete**

Luminant Power has established a contract with Pooled Equipment Inventory Company (PEICo) and has joined the Strategic Alliance for FLEX Emergency Response (SAFER) Team Equipment Committee for off-site facility coordination. It has been confirmed that PEICo is ready to support CPNPP with Phase 3 FLEX equipment stored in the National SAFER Response Centers in accordance with the site specific SAFER Response Plan.

#### **4.9 Validation - Complete**

Luminant Power validated FLEX strategies in accordance with the NEI FLEX Validation Process. This consisted of validating the feasibility of individual strategies identified in the Overall Integrated Plan (OIP) (Reference 7) for Order EA-12-049 (including the Six-Month Status Reports) (References 11, 12, 13, 17, and 19) using the graded approach described in the NEI guidance document (Reference 4) and an integrated review to ensure that adequate resources (personnel, equipment, materials) are available to implement the individual strategies to achieve the intended results.

#### **4.10 FLEX Program Document - Complete**

The CPNPP FLEX Program Document (STA-250 "Beyond Design Basis External Events (BDBEE) FLEX Program") has been developed in accordance with the requirements of NEI 12-06, Revision 0, Diverse and Flexible Coping Strategies (FLEX) Implementation Guide (Reference 4).

## 5. References

1. NRC Order Number EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," dated March 12, 2012.
2. NRC Order Number EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation," dated March 12, 2012.
3. NRC Interim Staff Guidance JLD-ISG-2012-01, "Compliance with Order EA-12-049, Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," Revision 0, dated August 29, 2012
4. NEI 12-06, "Diverse and Flexible Coping Strategies (FLEX) Implementation Guide," Revision 0, dated August 2012
5. Luminant Generation Company LLC's Letter TXX-12158, Initial Status Report in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Mitigation strategies for Beyond-Design-Basis External events (Order Number EA-12-049), dated October 25, 2012
6. NRC Letter from Michele G. Evans to All Operating Power Reactors and Holders of Construction Permits, "Status of 60-Day Response To Orders Modifying Licenses Regarding Recommendations 4.2, 5.1, And 7.1 of The Near-Term Task Force Related To The Fukushima Dai-Ichi Nuclear Power Plant Accident" dated November 29, 2012
7. Comanche Peak Nuclear Power Plant Docket Nos. 50-445 and 50-446 Overall Integrated Plan in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049), dated February 28, 2013.
8. NRC Letter from David L. Skeen to All Operating Power Reactors and Holders of Construction Permits, "Online Reference Portal For Nuclear Regulatory Commission Review Of Fukushima Near-Term Task Force Related Documents" dated August 1, 2013
9. NRC Letter from Jack R. Davis to All Operating Reactor Licensees and Holders of Construction Permits, "Nuclear Regulatory Commission Audits of Licensee Responses to Mitigation Strategies Order EA-12-049," August 28, 2013.
10. NRC Interim Staff Evaluation, "Comanche Peak Nuclear Power Plant, Units 1 And 2 - Interim Staff Evaluation Relating to Overall Integrated Plan in Response to Order EA-12-049 (Mitigation Strategies) (TAC Nos. MF0860 and MF0861)," dated December 19, 2013.
11. Comanche Peak Nuclear Power Plant, Docket Nos. 50-445 and 50-446, First Six-Month Status Report in Response to March 12, 2012, Commission Order Modifying Licenses with Regard to Requirements For Mitigation Strategies For Beyond- Design-Basis External Events (Order Number EA-12-049) (TAC Nos. MF0860 and MF0861), letter TXX-13129 dated August 28, 2013.
12. Comanche Peak Nuclear Power Plant, Docket Nos. 50-445 and 50-446, Second Six-Month Status Report in Response to March 12, 2012, Commission Order Modifying Licenses with Regard to Requirements For Mitigation Strategies For Beyond- Design-Basis External Events (Order Number EA-12-049) (TAC Nos. MF0860 and MF0861), letter TXX-14025 dated February 27, 2014.

13. Comanche Peak Nuclear Power Plant, Docket Nos. 50-445 and 50-446, Third Six-Month Status Report in Response to March 12, 2012, Commission Order Modifying Licenses with Regard to Requirements For Mitigation Strategies For Beyond- Design-Basis External Events (Order Number EA-12-049) (TAC Nos. MF0860 and MF0861), letter TXX-14104 dated August 28, 2014.
14. Comanche Peak Nuclear Power Plant, Docket Nos. 50-445 AND 50-446, Compliance with NRC Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051) (TAC NOS. MF0862 AND MF0863), letter TXX-14132 dated December 16, 2014
15. NRC Letter from Stephen Monarque to Rafael Flores, "Comanche Peak Nuclear Power Plant, Units 1 And 2 - Plan For The Onsite Audit Regarding Implementation Of Mitigating Strategies Related To Order EA-12-049 (TAC NOS. MF0860 AND MF0861)" dated March 26, 2015
16. Comanche Peak Nuclear Power Plant, Docket Nos. 50-445 And 50-446, Submittal of Phase 2 Staffing Assessment Regarding Recommendation 9.3 (Staffing) and Updated Commitments Regarding Recommendation 9.3 (Communications and Staffing) (TAC NOS. ME8686 and ME8687), letter TXX-15084 dated June 1, 2015
17. Comanche Peak Nuclear Power Plant, Docket Nos. 50-445 and 50-446, Fourth Six-Month Status Report in Response to March 12, 2012, Commission Order Modifying Licenses with Regard to Requirements For Mitigation Strategies For Beyond- Design-Basis External Events (Order Number EA-12-049) (TAC Nos. MF0860 and MF0861), letter TXX-15035 dated February 26, 2015.
18. NRC Letter from Stephen Monarque to Rafael Flores, "Comanche Peak Nuclear Power Plant, Units 1 and 2 - Report for the Audit Regarding Implementation of Mitigating Strategies Related to Order EA-12-049 (TAC Nos. MF0860 and MF0861), dated August 5, 2015.
19. Comanche Peak Nuclear Power Plant, Docket Nos. 50-445 and 50-446, Fifth Six-Month Status Report in Response to March 12, 2012, Commission Order Modifying Licenses with Regard to Requirements For Mitigation Strategies For Beyond- Design-Basis External Events (Order Number EA-12-049) (TAC Nos. MF0860 and MF0861)," letter TXX-15124 dated August 27, 2015.
20. NRC Letter from Eric J. Leeds to All Power Reactor Licensees and Holders of Construction Permits in Active or Deferred Status, "Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3, of the Near-Term Task Force Review Of Insights From The Fukushima Dai-Ichi Accident" dated March 12, 2012