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CP-201400209 Log # TXX-14023 REF 10 CFR 2.202

February 12, 2014

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

SUBJECT:

Comanche Peak Nuclear Power Plant (CPNPP), Docket No. 50-445, Request for Schedule Relaxation for the 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 NO. MF0860)

- 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. Luminant Generation Company LLC's Letter TXX-13030, 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

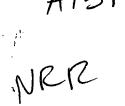
#### Dear Sir or Madam:

This letter transmits a request for relaxation of the schedule requirements contained in Nuclear Regulatory Commission ("NRC" or "Commission") Order EA-12-049. On March 12, 2012, the NRC issued an Order (Reference 1) to Luminant Generation Company, LLC (Comanche Peak Nuclear Power Plant, CPNPP). Reference 1 was immediately effective and directed Luminant Generation Company (Luminant Power) to develop, implement, and maintain guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities in the event of a beyond-design-basis external event (FLEX strategies).

Luminant Power submitted its Overall Integrated Plan on February 28, 2013 (Reference 2). In accordance with Reference 1, licensees are required to complete full implementation no later than two (2) refueling cycles after submittal of the Overall Integrated Plan, or December 31, 2016, whichever comes first. For CPNPP, the second refueling outages and current required FLEX implementation dates are Fall 2014 for Unit 1, and Fall 2015 for Unit 2. In accordance with Reference 1, the CPNPP Unit 1 first refueling outage started March 30, 2013. The CPNPP Unit 1 second refueling outage and FLEX implementation date is currently scheduled for October 2014.

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Section IV of NRC Order EA-12-049 (Reference 1) states that licensees proposing to deviate from requirements contained in NRC Order EA-12-049 may request that the Director, Office of Nuclear Reactor Regulation, relax those requirements.

In accordance with Section IV of NRC Order EA-12-049, Luminant Power is requesting that the Director, Office of Nuclear Reactor Regulation, relax the requirement for completion of full implementation for CPNPP Unit 1 as prescribed in Section IV.A.2 of NRC Order EA-12-049 to the spring of 2016.

Luminant Power considers that, upon approval by the NRC, the alternative full implementation dates regarding NRC Order EA-12-049 proposed in the attachment will constitute a condition of the NRC Order EA-12-049 for CPNPP Unit 1. Therefore, there are no new regulatory commitments contained in this letter.

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

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

Executed on February 12, 2014.

Sincerely,

Luminant Generation Company LLC

Rafael Flores

y: Malv

Director, External Affairs

Attachment Request for Relaxation of NRC Order EA-12-049 Requirement IV.A.2 for Comanche Peak Nuclear Power Plant Unit 1

 Eric J. Leeds, Director, Office of Nuclear Reactor Regulation Steven A. Reynolds, Region IV
Jessica A. Kratchman, NRR/JLD/PMB
Balwant K. Singal, NRR
Resident Inspectors, Comanche Peak

# Request for Relaxation of NRC Order EA-12-049 Requirement IV.A.2 for Comanche Peak Nuclear Power Plant Unit 1

## **Relaxation Request:**

Pursuant to the procedure specified in Section IV of Nuclear Regulatory Commission (NRC) Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events" (Reference 1), Luminant Generation Company LLC (Luminant Power) hereby submits a request for schedule relaxation from the Order requirements for completion of full implementation for Comanche Peak Nuclear Power Plant Unit 1 either no later than two (2) refueling cycles after submittal of the Overall Integrated Plan, as required in Condition C.l.a of the Order, or December 31, 2016, whichever comes first.

## Order Requirement from Which Relaxation is Requested:

NRC Order EA-12-049, Section IV.A.2 requires completion of full implementation of the Order requirements either no later than two (2) refueling cycles after submittal of the Overall Integrated Plan, as required by Condition C.I.a, or December 31, 2016, whichever comes first. In accordance with the requirements of the Order, Luminant Power submitted the Overall Integrated Plan for Comanche Peak Nuclear Power Plant (CPNPP) Unit 1 (Reference 2) on February 28, 2013. The Overall Integrated Plan milestone schedule identified the completion dates for full implementation of NRC Order EA-12-049 as completion of the fall 2014 refueling outage for CPNPP Unit 1.

NRC Order EA-12-049 requires the development, implementation, and maintenance of guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities in the event of a beyond-design-basis external event (BDBEE). As described in the Overall Integrated Plan for CPNPP Unit 1, these mitigation strategies are dependent upon installation of Westinghouse low leakage Reactor Coolant Pump (RCP) shutdown seals (SHIELD® seals). Recent post-operational testing of the SHIELD seals at another plant has resulted in the need to enhance the SHIELD design. The new seals will ensure the safety functions of containment integrity (during an extended loss of alternating current power or ELAP), and core cooling (RCS inventory and level) are maintained for beyond-design-basis external events (BDBEEs).

## Justification for Relaxation Request:

As described in the Overall Integrated Plan, a key aspect of the Comanche Peak mitigating strategies is implementation of the Westinghouse Reactor Coolant Pump SHIELD passive thermal shutdown seals (low leakage RCP seals). The reduced seal leakage is a fundamental basis for the coping analysis, required modifications, and procedures to ensure core cooling, containment integrity and equipment functionality are adequately maintained during the event. Recent testing of SHIELD RCP seals has identified issues with the reliability of the current design to perform as assumed in the Comanche Peak FLEX strategies. Westinghouse has developed design changes to the SHIELD RCP seals to fully support seal performance consistent with Reference 2. Final design, testing, and qualification are in progress, with full involvement from utility customers. Westinghouse is expected to provide a white paper in February 2014 and Topical Report in March 2014 on the basis for crediting the low leakage seals to the NRC. These documents will be reviewed by the NRC for endorsement.

Although Luminant Power remains confident that the SHIELD RCP seal design issues will be resolved to allow full credit in the FLEX strategies, there is uncertainty regarding the timing of this resolution.

Based on this timeline, Luminant Power is requesting a schedule relaxation of one refueling cycle for implementation of the mitigation strategies for CPNPP Unit 1. The extension would provide additional time to obtain NRC acceptance of the new RCP seals, and for Luminant Power to safely plan, schedule and install the new seals at CPNPP Unit 1. Luminant Power will continue to report on the status of all design and modification activities as part of the six month update process.

An extension of one additional refueling cycle for CPNPP Unit 1 is hereby requested, which would move the implementation date from the fall of 2014 to completion of the eighteenth Unit 1 refueling outage in the spring of 2016 (currently targeted for April 2016). The requested relaxation of the CPNPP Unit 1 schedule does not exceed the December 31, 2016 deadline. The schedule for CPNPP Unit 2 implementation would remain unchanged as the completion of the fifteenth Unit 2 refueling outage in the fall of 2015.

### Conclusion

As described above, compliance with the current NRC Order EA-12-049 schedule requirement for full completion of implementation of mitigation strategies would result in hardship or unusual difficulty without a compensating increase in the level of safety. Therefore, in accordance with the provisions of Section IV of the Order, Luminant Power requests relaxation of the requirement described in Section IV.A.2, as explained above.

## **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
- Luminant Generation Company LLC's Letter TXX-13030, 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