



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

April 9, 2012

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 – NUCLEAR
REGULATORY COMMISSION BULLETIN 2011-01, "MITIGATING
STRATEGIES" (TAC NOS. ME6418 AND ME6419)

Dear Mr. Flores:

On May 11, 2011, the U.S. Nuclear Regulatory Commission (NRC) issued Bulletin 2011-01, "Mitigating Strategies" (Agencywide Documents Access and Management System (ADAMS) Accession No. ML111250360), to all holders of operating licenses for nuclear power reactors, except those that have permanently ceased operation and have certified that fuel has been removed from the reactor vessel. The purpose of the bulletin was to obtain a comprehensive verification that licensees' mitigating strategies to maintain or restore core cooling, spent fuel cooling, and containment following a large explosion or fire were compliant with Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.54(hh)(2).

The bulletin required two sets of responses pursuant to the provisions of 10 CFR 50.54(f). Luminant Generation Company LLC (the licensee) provided its responses to the bulletin by letters dated June 8 and July 11, 2011 (ADAMS Accession Nos. ML11168A076 and ML11200A132, respectively), for Comanche Peak Nuclear Power Plant, Units 1 and 2.

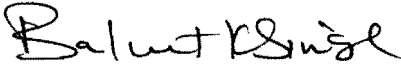
The NRC staff has reviewed the information submitted by the licensee and concludes that its response to the bulletin is acceptable. As summarized in the enclosure, the NRC staff verified that the licensee provided the information requested in the bulletin and no further information or actions under the bulletin are requested.

R. Flores

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If you have any questions, please contact Balwant K. Singal at 301-415-3016 or by e-mail at Balwant.Singal@nrc.gov.

Sincerely,


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

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

NUCLEAR REGULATORY COMMISSION BELLETIN 2011-01

MITIGATING STRATEGIES

LUMINANT GENERATION COMPANY LLC

COMANCHE PEAK NUCLEAR POWER PLANT, UNITS 1 AND 2

DOCKET NOS. 50-445 AND 50-446

1.0 INTRODUCTION

On May 11, 2011, the U.S. Nuclear Regulatory Commission (NRC) issued Bulletin 2011-01, "Mitigating Strategies" (Agencywide Documents Access and Management System (ADAMS) Accession No. ML111250360), to all holders of operating licenses for nuclear power reactors, except those that have permanently ceased operation and have certified that fuel has been removed from the reactor vessel. The bulletin required two sets of responses pursuant to the provisions of with Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.54(f). The first responses were due 30 days after issuance of the bulletin. By letter dated June 8, 2011 (ADAMS Accession No. ML11168A076), Luminant Generation Company LLC (the licensee), provided its response to this first set of questions (first response) for Comanche Peak Nuclear Power Plant (CPNPP), Units 1 and 2. The second responses were due 60 days after issuance of the bulletin. By letter dated July 11, 2011 (ADAMS Accession No. ML11200A132), the licensee provided its response to this second set of questions (second response). As summarized below, the NRC staff has verified that the licensee provided the information requested in the bulletin.

2.0 BACKGROUND

On February 25, 2002, the NRC issued ICM Order EA-02-026, "Order for Interim Safeguards and Security Compensatory Measures" (ICM Order) (ADAMS Accession No. ML020510635). Section B.5.b of the ICM Order required licensees to develop specific guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities using readily available resources (equipment and personnel) that can be effectively implemented under the circumstances associated with the loss of large areas of the plant due to explosions or fire.

By letter dated July 26, 2007 (ADAMS Accession No. ML072060005), the NRC staff issued its safety evaluation (SE) to document the final disposition of information submitted by the licensee

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regarding Section B.5.b of the ICM Order. Along with the SE, the NRC staff issued a conforming license condition to incorporate the B.5.b mitigating strategies into the licensing basis.

On March 27, 2009, the NRC issued 10 CFR 50.54(hh)(2) as a new rule, in order to capture the B.5.b mitigating strategies and related license conditions as regulatory requirements for both current and future licensees. At that time, licensee compliance with the conforming license conditions was sufficient to demonstrate compliance with 10 CFR 50.54(hh)(2) (74 FR 13926; March 27, 2009) so no further actions were required on the part of current licensees.

3.0 30-DAY REQUEST

In order to confirm continued compliance with 10 CFR 50.54(hh)(2), the bulletin requested that licensees address the following two questions within 30 days of issuing the bulletin:

1. Is the equipment necessary to execute the mitigating strategies, as described in your submittals to the NRC, available and capable of performing its intended function?
2. Are the guidance and strategies implemented capable of being executed considering the current configuration of your facility and current staffing and skill levels of the staff?

The NRC staff reviewed the licensee's first response to determine if it had adequately addressed these questions.

3.1 Question 1: Availability and Capability of Equipment

In its first response, the licensee confirmed that equipment it needs to execute the 10 CFR 50.54(hh)(2) mitigating strategies is available and capable of performing its intended function. The NRC staff verified that this confirmation covered equipment needed for each of the three phases of B.5.b mitigation strategies. Therefore, the NRC staff concludes that the licensee has adequately responded to Question 1.

3.2 Question 2: Guidance and Strategies Can Be Executed

In its first response, the licensee confirmed that the guidance and strategies it has implemented for 10 CFR 50.54(hh)(2) are capable of being executed considering the current facility configuration, staffing levels, and staff skills. Since the licensee has considered its current facility configuration, staffing levels, and staff skills, and confirmed that it can execute its implemented guidance and strategies, the NRC staff concludes that the licensee has adequately responded to Question 2.

4.0 60-DAY REQUEST

The bulletin required a response to the following five questions within 60 days of issuing the bulletin:

1. Describe in detail the maintenance of equipment procured to support the strategies and guidance required by 10 CFR 50.54(hh)(2) in order to ensure that it is functional when needed.
2. Describe in detail the testing of equipment procured to support the strategies and guidance required by 10 CFR 50.54(hh)(2) in order to ensure that it will function when needed.
3. Describe in detail the controls for assuring that the equipment is available when needed.
4. Describe in detail how configuration and guidance management is assured so that strategies remain feasible.
5. Describe in detail how you assure availability of offsite support.

The NRC staff reviewed licensee's second response to determine if it had adequately addressed these questions. The staff also reviewed the NRC's SE dated July 26, 2007, to determine what equipment, training, and offsite resources at CPNPP, Units 1 and 2, were relied upon by staff to conclude that the licensee's actions would ensure compliance with Section B.5.b of the ICM Order and the conforming license condition.

4.1 Questions 1 and 2: Maintenance and Testing of Equipment

Questions 1 and 2 of the 60-day request required licensees to describe in detail the maintenance and testing of equipment procured to support the strategies and guidance required by 10 CFR 50.54(hh)(2) in order to ensure that it is functional when needed. In its second response, the licensee listed the equipment used to support the 10 CFR 50.54(hh)(2) mitigating strategies which receives maintenance or testing. For each item, the licensee described the maintenance and testing performed, including the frequency and basis for the maintenance or testing activity.

The NRC staff verified that the licensee listed equipment that typically requires maintenance or testing which was relied upon to make conclusions in the SE or commonly needed to implement the mitigating strategies. In its second response, the licensee stated that the fire truck, portable pump, hoses, and communications equipment receive maintenance or testing. In its second response, the licensee stated it will start annually testing hoses on its fire truck in August 2011 and will replace B.5.b fire hoses every 3 years beginning in 2012. The NRC staff also verified that during inventory, the spray monitors and equipment for other strategies is verified to be in usable condition. The NRC staff noted that the fuel level for the portable pump is verified during maintenance. The licensee also identified other items that support the mitigating strategies that receive maintenance or testing.

The NRC staff verified that the licensee described the process used for corrective actions and listed the testing performed to ensure that the strategies were initially feasible. The licensee stated in its second response that its corrective action program is used to document equipment failure, establish priorities, and perform trending.

Based upon the information above, the NRC staff concludes that the licensee has provided the information requested by Questions 1 and 2.

4.2 Question 3: Controls on Equipment

Question 3 of the 60-day request required licensees to describe in detail the controls on equipment, such as inventory requirements, to ensure that the equipment is available when needed. A list of inventory deficiencies and associated corrective actions to prevent loss was also requested.

The NRC staff verified that the licensee described its process for ensuring that B.5.b equipment will be available when needed. In its second response, the licensee identified equipment included in its inventory, the inventory frequency, storage requirements, and items verified. Items verified include proper quantity, location, and accessibility of equipment, and proper control on the storage location. The licensee stated that, at the time of its second response, there were no outstanding inventory deficiencies that would render the strategies not viable.

The NRC staff verified that the licensee inventoried equipment which was relied upon to make conclusions in the SE or commonly needed to implement the mitigating strategies. The licensee stated that non-permanently installed 10 CFR 50.54(hh)(2) accident-mitigation equipment is inventoried in accordance with station procedures, and indicated that most of the items listed in response to Question 3 are inventoried at least annually. The second response specifically stated that the following items are included in the inventory: fire truck, portable pump, communications equipment, spray nozzles, flange, and firefighter turnout gear. In addition, the licensee indicated that equipment for specific strategies is stored in sealed containers and described the inventory requirements for these containers. The licensee also identified other items that support the mitigating strategies that are inventoried.

Based upon the information above, the NRC staff concludes that the licensee has provided the information requested by Question 3.

4.3 Question 4: Configuration and Guidance Management

Question 4 of the 60-day request required licensees to describe in detail how configuration and guidance management is assured so that the strategies remain feasible.

The NRC staff verified that the licensee described its measures to evaluate plant configuration changes for their effects on the mitigating strategies and to ensure its procedures are current. In its second response, the licensee indicated that since the mitigating strategies are part of the plant licensing basis, the change process is controlled per 10 CFR 50.59, and the impact on affected procedures is assessed. The Emergency Damage Mitigation Guidelines (i.e., the implementing guidelines for the mitigating strategies) are reviewed every 2 years to ensure they are up-to-date and consistent with the current plant configuration.

The NRC staff verified that the licensee described measures it has taken to validate the procedures or guidelines developed to support the mitigating strategies. In its second response, the licensee stated that "initially, mitigating strategies were validated by walk downs, engineering evaluations, and/or table top reviews" and that a similar revalidation occurred in 2011. In addition, the licensee stated that its operations personnel walk the guideline down the field when it is revised.

The NRC staff verified that the licensee described the training program implemented in support of the mitigating strategies and how its effectiveness is evaluated. In its second response, the licensee identified the training provided to its operations personnel and emergency response organization, including managers; fire brigade; and security personnel. The licensee also identified the frequency with which each type of training is provided and the methods for training evaluation.

Based upon the information above, the NRC staff concludes that the licensee has provided the information requested by Question 4.

4.4 Question 5: Offsite Support

Question 5 of the 60-day request required licensees to describe in detail how offsite support availability is assured.

The NRC staff verified that the licensee listed the offsite organizations it relies upon for emergency response, including a description of agreements and related training. The NRC staff compared the list of offsite organizations that the licensee provided in its second response with the information relied upon to make conclusions in the SE. The licensee stated that it maintains letters of agreement or other types of agreements with these offsite organizations, which are reviewed annually, and that these agreements were current at the time of its second response. The licensee also described the training and site familiarization it provides to these offsite organizations. The licensee stated that it reviewed its corrective action program back to 2008 and found no issues involving lapsed agreements related to offsite support for B.5.b events.

Based upon the information above, the NRC staff concludes that the licensee has provided the information requested by Question 5.

5.0 CONCLUSION

As described above, the NRC staff has verified that the licensee has provided the information requested in Bulletin 2011-01 for CPNPP, Units 1 and 2. Specifically, the licensee responded to each of the questions in the bulletin as requested. The NRC staff concludes that the licensee has completed all of the requirements of the bulletin for CPNPP, Units 1 and 2 and no further information or actions under the bulletin are needed.

Principal Contributor: Blake Purnell

Date: April 9, 2012

R. Flores

- 2 -

If you have any questions, please contact Balwant K. Singal at 301-415-3016 or by e-mail at Balwant.Singal@nrc.gov.

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

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