



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

April 28, 2010

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, UNIT 1 – REQUEST TO  
DELAY THE UPDATE OF THE CODE OF RECORD FOR INSERVICE  
INSPECTION PROGRAM (TAC NO. ME1703)

Dear Mr. Flores:

The U.S. Nuclear Regulatory Commission (NRC) staff has reviewed and evaluated the information provided by Luminant Generation Company LLC (the licensee) in its letter dated July 14, 2009, as supplemented by letter dated February 18, 2010. The licensee requested approval to delay the update of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (Code) of record for Comanche Peak Nuclear Power Plant (CPNPP), Unit 1, inservice inspection program until the required update for CPNPP, Unit 2.

The NRC staff has completed its review of the licensee's request and concludes that the proposed alternative adequately addresses all the regulatory requirements set forth in Title 10 of the *Code of Federal Regulations*, paragraph 50.55a(3)(i). Therefore, the NRC authorizes the proposed alternative to delay the update of the Code of record for CPNPP, Unit 1, until the time of the CPNPP, Unit 2, Code of record update in 2014.

All other ASME Code, Section XI requirements for which relief was not specifically requested and approved remain applicable, including third-party review by the Authorized Nuclear Inservice Inspector.

R. Flores

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The NRC safety evaluation is enclosed. If you have any questions, please contact Balwant K. Singal at 301-415-3016 or by e-mail at [Balwant.Singal@nrc.gov](mailto:Balwant.Singal@nrc.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Michael T. Markley". The signature is written in a cursive style with a large initial "M".

Michael T. Markley, Chief  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-445

Enclosure:  
As stated

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

REQUEST TO DELAY THE CODE OF RECORD

INSERVICE INSPECTION PROGRAM

LUMINANT GENERATION COMPANY LLC

COMANCHE PEAK NUCLEAR POWER PLANT, UNIT 1

DOCKET NO. 50-445

1.0 INTRODUCTION

By letter dated July 14, 2009 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML092030380), as supplemented by letter dated February 18, 2010 (ADAMS Accession No. ML100570066), Luminant Generation Company LLC (the licensee) requested authorization to delay updating the Comanche Peak Nuclear Power Plant (CPNPP), Unit 1, American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (Code) of record for the third 10-year inservice inspection (ISI) interval until the time of the CPNPP, Unit 2, Code of record update in 2014. After the start of the third 10-year ISI interval for CPNPP, Unit 2, both CPNPP units would utilize the same Edition of the Code.

2.0 REGULATORY EVALUATION

Pursuant to Title 10 of the *Code of Federal Regulations*, Part 50 (10 CFR 50), paragraph 55a(g)(4), ASME Code Class 1, 2, and 3 components (including supports) must meet the requirements, except design and access provisions and preservice examination requirements, set forth in the ASME Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," to the extent practical within the limitations of design, geometry, and materials of construction of the components. The regulations require that inservice examination of components and system pressure tests conducted during the first 10-year ISI and subsequent 10-year inspection intervals comply with the requirements in the latest edition and addenda of Section XI of the ASME Code incorporated by reference in 10 CFR 50.55a(b) 12 months prior to the start of the 120-month inspection interval, subject to the limitations and modifications listed therein.

The regulations in 10 CFR 50.55a(a)(3) state that alternatives to the requirements of 10 CFR 50.55a(g) may be used, when authorized by the Office of Nuclear Reactor Regulation, if (i) the proposed alternatives would provide an acceptable level of quality and safety, or (ii) compliance

Enclosure

with the specified requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety. The U.S. Nuclear Regulatory Commission (NRC) staff reviewed and evaluated the licensee's request pursuant to 10 CFR 50.55a(a)(3)(i).

### 3.0 TECHNICAL EVALUATION

#### 3.1 Code Requirement

For CPNPP, Unit 1, the applicable edition of Section XI of the ASME Code for the second 10-year ISI interval, which ends in August 2010, is the 1998 Edition through the 2000 Addenda.

Pursuant to 10 CFR 50.55a(g)(4)(ii), CPNPP, Unit 1, is required to update its ISI program to the requirements of the latest Code Edition and Addenda incorporated by reference in 10 CFR 50.55a(b)(2) 12 months prior to the start of its subsequent 120-month inspection interval. In the case of CPNPP, Unit 1, the applicable edition of the ASME Code which its third 10-year ISI program should reflect is the 2004 Edition, no Addenda.

#### 3.2 Licensee's Proposed Alternative

The licensee requests an approval to delay the update of the Code of Record for the CPNPP, Unit 1, ISI program until the time of the required update for CPNPP, Unit 2. The third 10-year ISI interval for CPNPP, Unit 1, starts on August 13, 2010. CPNPP, Unit 2 is scheduled to adopt the latest edition and addenda of the Code incorporated by reference in 10 CFR 50.55a(b) 12 months prior to the start of its third 10-year ISI interval, which begins on August 3, 2014.

The CPNPP, Unit 1, ISI inspections will continue with a revised 10-year Program Plan for the third interval that references the same Code of record used for the second interval, that is, the 1998 Edition of the ASME Code, Section XI, through the 2000 Addenda. This edition of the Code is the same as that currently being used for the second ISI interval at CPNPP, Unit 2. The licensee states that having both units on the same Code of record provides many implementation benefits which will maintain or enhance the existing level of quality and safety and provides cohesive programs for ISI, repairs, replacements, and pressure testing. Having two separate ASME Code years implemented on a two-unit site can create procedural and programmatic differences that could potentially result in implementation errors.

At the time of the required CPNPP, Unit 2, Code update, the CPNPP, Unit 1, ISI program will be revised to implement the updated Code of record for the remainder of the CPNPP, Unit 1, third inspection interval, which is expected to include the second and third inspection periods in their entirety (approximately 7 years).

#### 3.3 NRC Staff Evaluation

The NRC staff has reviewed the proposed alternative submitted in the licensee's letter dated July 14, 2009, as supplemented by letter dated February 18, 2010, for the third 10-year ISI interval for CPNPP, Unit 1. The licensee requests to have the ISI programs for CPNPP, Unit 1 and CPNPP, Unit 2, based on the same Code of record. The licensee proposed that CPNPP, Unit 1, will continue ISI inspections in accordance with the current 1998 Code Edition through

the 2000 Addenda until the time of the required CPNPP, Unit 2, update. At the time of the CPNPP, Unit 2, update, both units will be updated to the applicable Code Edition required by 10 CFR 50.55a(g)(4)(ii) for CPNPP, Unit 2.

In its letter dated July 14, 2009, the licensee stated that having two ISI programs based on separate Editions of ASME Code, Section XI, implemented for the two CPNPP units can possibly create procedural and programmatic differences that could potentially result in implementation errors. Conversely, having the ISI programs for both units based on the same Code Edition can eliminate such differences and should provide for more cohesive programs for ISI, repairs, replacements, and pressure testing, and will maintain the existing level of quality and safety.

The NRC staff concludes that having the ISI programs for both units based on the same Code Edition will likely reduce the probability of errors during implementation. The staff has previously authorized a delay of Code of record for CPNPP, Unit 1, for the second ISI interval in its letter dated June 29, 2000 (ADAMS Accession No. ML003727727). In response to the staff's request for additional information concerning the use of ASME Code, Section XI paragraphs IWA-4340 and IWA-4540(c), the licensee committed to prohibit the use of these paragraphs until the next Code of record update for CPNPP, Unit 1. The staff concludes that these commitments fulfill the requirements of 10 CFR 50.55a(b)(2)(xxv) and (xxvi) and, therefore, are acceptable.

The NRC staff notes that the continued use of the current 1998 Code Edition through the 2000 Addenda is subject to the limitations and modifications of 10 CFR 50.55a(b)(2). The staff also notes that Class 1 and Class 2 Examination Category B-F, B-J, C-F-1, and C-F-2 piping welds are inspected under a risk-informed ISI (RI-ISI) program through the end of the second interval, and that 100 percent of the required RI-ISI inspections will be completed in the second inspection interval. At the end of the second interval, the RI-ISI program will need to be authorized, if it is to be used in the third interval.

Based on the above discussion, the transition to the implementation of the new Code of record for the third inspection interval, by including the second and third inspection periods in their entirety, is acceptable and the NRC staff concludes that the licensee's proposed alternative will provide an acceptable level of quality and safety.

#### 4.0 LICENSEE COMMITMENTS

The licensee has made the following regulatory commitments:

Commitment No. 3891111: The licensee will revise the current procedures to prohibit the use of paragraph IWA-4340 until the next code of record update for CPNPP, Unit 1.

Commitment No. 3891114: The licensee will revise the current procedures to invoke the use of paragraph IWA-4540(c) until the next code of record update for CPNPP, Unit 1.

## 5.0 CONCLUSION

As set forth above, the NRC staff determines that the proposed alternative, to delay updating the ISI program Code of record of CPNPP, Unit 1, until the time of the CPNPP, Unit 2, Code of record update, provides an acceptable level of quality and safety. Accordingly, the staff concludes that the licensee has adequately addressed all of the regulatory requirements set forth in 10 CFR 50.55a(3)(i). Therefore, the staff authorizes the proposed alternative at CPNPP, Unit 1, until the time of the CPNPP, Unit 2, Code of record update in 2014.

All other ASME Code, Section XI requirements for which relief was not specifically requested and approved remain applicable, including third-party review by the Authorized Nuclear Inservice Inspector.

Principal Contributor: Jay S. Wallace

Date: April 28, 2010

R. Flores

- 2 -

The NRC safety evaluation is enclosed. If you have any questions, please contact Balwant K. Singal at 301-415-3016 or by e-mail at [Balwant.Singal@nrc.gov](mailto:Balwant.Singal@nrc.gov).

Sincerely,

*/ra/*

Michael T. Markley, Chief  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-445

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