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Ref. # 10CFR50.55a

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U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

SUBJECT: COMANCHE PEAK NUCLEAR POWER PLANT
DOCKET NO. 50-445
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION FOR
RELIEF REQUEST NO. A-1 (TAC NO. ME6827)

REFERENCES: 1. Letter logged TXX-11038 dated August 2, 2011 from Rafael Flores to the NRC submitting Relief Request No. A-1 for the Unit 1 Third Interval Inservice Inspection for Application of an Alternative to the ASME Boiler and Pressure Vessel Code Section XI Examination Requirements for Class 1 and 2 Piping Welds (Third Interval Start Date: August 13, 2010).

2. Letter logged TXX-12023 dated March 8, 2012 from Rafael Flores to the NRC submitting Response to Request for Additional Information for Relief Request No. A-1 (Tac. No. ME6827)

Dear Sir or Madam:

Per reference 1, Luminant Generation Company LLC (Luminant Power) previously submitted a request for relief for application of an alternative to the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code Section XI examination requirements for Class 1 and 2 piping welds. Per reference 2, the NRC provided a request for additional information regarding the subject relief request.

Luminant Power provided a response to a request for additional information per reference 2. Attached is the Luminant Power response to the request for additional information as discussed in a telecon on May 14, 2012, between Luminant Power and the NRC.

This communication contains no new commitment regarding Comanche Peak Unit 1.

Should you have any questions, please contact Mr. Jack Hicks at (254) 897-6725.

A047
NRR

Sincerely,

Luminant Generation Company LLC

Rafael Flores

By: Fred W. Madden

Fred W. Madden
Director, Oversight & Regulatory Affairs

Attachment 1: Response to Request for Additional Information for Relief Request A-1
Attachment 2: CPNPP Unit 1 – Inspection Location Selection Comparison Between Original Approved and Updated RI-ISI Programs by Risk Category

c - E. E. Collins, Region IV
B. K. Singal, NRR
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RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION
FOR RELIEF REQUEST NUMBER A-1 FOR THE UNIT 1 THIRD 10 YEAR IS1 INTERVAL (THIRD INTERVAL START DATE: AUGUST 13, 2010) (TAC NO. ME6827)

NRC Question 4 from Reference 2:

In the NRC rulemaking dated June 21, 2011, Title 10 of the *Code of Federal Regulations* (10 CFR), Paragraph 50.55a(g)(6)(ii)(F) describes examination requirements for American Society of Mechanical Engineers (ASME) Code Class 1 piping and nozzle dissimilar metal (DM) butt welds. Pursuant to 10 CFR 50.55a(g)(6)(ii)(F)(1), licensees shall implement the requirements of ASME Code Case N–770–1, "Alternative Examination Requirements and Acceptance Standards for Class 1 PWR Piping and Vessel Nozzle Butt Welds Fabricated with UNS N06082 or UNS W86182 Weld Filler Material with or without Application of Listed Mitigation Activities," subject to the conditions specified in paragraphs (g)(6)(ii)(F)(2) through (g)(6)(ii)(F)(10) of 10 CFR 50.55a, by the first refueling outage after August 22, 2011. On July 12, 2011 the NRC staff held a public meeting to discuss the requirements of 10 CFR 50.55a(g)(6)(ii)(F) and the implementation of ASME Code Case N-770-1 (Reference ADAMS Accession No. ML112240818).

Please describe how the proposed CPNPP, Unit 1, RI-ISI program alternative for the third 10-year ISI interval will address the requirements of 10 CFR 50.55a(g)(6)(ii)(F) and the ASME Code Case N-770-1 implementation.

Luminant Power's Response to Question 4

ASME Code Case N-770-1 will be implemented in accordance with the requirements of 10 CFR 50.55a(g)(6)(ii)(F) as a separate program. The RI-ISI program alternative for the third 10-year ISI interval will have no impact on the implementation of requirements for Code Case N-770-1. The Code Case N-770-1 butt welds are included in the RI-ISI weld count, with some of the welds counted in the RI-ISI Program as elements selected to be examined during the third interval for certain risk categories and rankings.

NRC Additional Comments on Reponse to Question 4:

The nickel based DM welds should not be included in the RI-ISI program. They are required to be inspected in accordance w/ CC N-770-1, mandated by 10 CFR 50.55a(g)(6)(ii)(F).

The NRC staff expects the nickel based DM welds will be taken out of RI-ISI program and will be inspected in accordance w/ CC N-770-1, mandated by 10 CFR 50.55a(g)(6)(ii)(F).

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION
FOR RELIEF REQUEST NUMBER A-1 FOR THE UNIT 1 THIRD 10 YEAR IS1 INTERVAL (THIRD INTERVAL START DATE: AUGUST 13, 2010) (TAC NO. ME6827)

Luminant Power's Revised Response:

In accordance with 10CFR50.55a(g)(6)(ii)(F), welds subject to PWSCC are selected for examination per Code Case N-770-1 and examined under that program. Welds for which no other degradation mechanism has been postulated will be examined solely under the Code Case N-770-1 Program and will be removed from consideration during the RI-ISI element selection process. Welds for which a degradation mechanism in addition to PWSCC has been identified during the RI-ISI process may be additionally selected and examined in accordance with the RI-ISI process such that the secondary degradation mechanism is also monitored. Discussion with the NRC representative on the ASME Section XI Working Group on Risk-Informed Activities May 14, 2012 indicated that this was the appropriate action.

Inspection of the Code Category B-F welds that are susceptible to PWSCC and no other postulated degradation mechanism will be removed from the inspections credited under the RI-ISI Program. Removal of these inspections has no impact on the total CDF or LERF since they result in an impact of 4.00E-12 and 4.00E-13, respectively, which does not show up in the reduction of 8.3E-09 in regards to CDF and 1.06E-09 in regards to LERF.

Presently, there are eight piping butt welds in the Alloy 600 Program that follow the examination requirements of Code Case N-770-1. Six other welds, associated with the Pressurizer nozzles, have been mitigated with SWOL, have all been re-examined, with no indications identified after each examination, and are identified in the RI-ISI Program.

The Inspection Location Selection Comparison Table has also been changed to reflect the Code Case N-770-1 welds and some other editorial changes to weld counts and is included as Attachment 2. These changes reduce the weld selection for the third interval from 133 to 125 to reflect the non-selection of the Code Case N-770-1 welds.

CPNPP Unit 1 - Inspection Location Selection Comparison Between Original Approved and Updated RI-ISI Programs by Risk Category												
System[1]	Risk		Consequence Rank	Failure Potential		Code Category	Original			Interval 3 Update		
	Category	Rank		DMs	Rank		Weld Count	RI-ISI	Other[2]	Weld Count	RI-ISI[3]	Other[2]
RCS	2	High	High	TASCS, TT	Medium	B-J	7	2		7	3	
RCS	2	High	High	TASCS	Medium	B-J	13	4		13	4	
RCS	2(2)	High	High	TT (PWSCC)	Medium	B-F	1	0		1	1	1
RCS	2	High	High	TT	Medium	B-J	11	2		11	2	
RCS	4 (2)	Medium (High)	High	None (PWSCC)	Low	B-F	12	10		12	0	12
RCS	4	Medium	High	None	Low	B-F	7	4		10	6	
						B-J	205	29		212	20	
RCS	5	Medium	Medium	TASCS	Medium	B-J	20	2		20	2	
RCS	5	Medium	Medium	TT	Medium	B-J	45	5		44	5	
RCS	5	Medium	Medium	TT (PWSCC)	Medium	B-F	0	0		1	1	1
RCS	6	Low	Medium	None	Low	B-J	61	0		61	0	
RCS	7	Low	Low	None	Low	B-J	15	0		15	0	
CVCS	6	Low	Medium	None	Low	B-J	47	0		47	0	
						C-F-1	231	0		18	0	
CVCS	6	Low	Low	TT	Medium	B-J	8	0		8	0	
CVCS	7	Low	Low	None	Low	B-J	30	0		30	0	
						C-F-1	0	0		235	0	
SIS	4	Medium	High	None	Low	B-J	79	7		79	7	
						C-F-1	98	11		136	18	
SIS	5	Medium	Medium	IGSCC	Medium	B-J	12	2		12	2	
SIS	6	Low	Medium	None	Low	B-J	95	0		95	0	
						C-F-1	596	0		425	0	
SIS	6	Low	Low	IGSCC	Medium	B-J	22	0		22	0	
SIS	7	Low	Low	None	Low	B-J	119	0		119	0	
						C-F-1	106	0		246	0	
RHRS	4	Medium	High	None	Low	B-J	12	2		12	2	
						C-F-1	246	24		120	12	
RHRS	6	Low	Medium	None	Low	C-F-1	8	0		134	0	
CSS	4	Medium	High	None	Low	C-F-1	10	1		176	18	
CSS	6	Low	Medium	None	Low	C-F-1	178	0		125	0	
CSS	7	Low	Low	None	Low	C-F-1	234	0		122	0	

CPNPP Unit 1 - Inspection Location Selection Comparison Between Original Approved and Updated RI-ISI Programs by Risk Category												
System[1]	Risk		Consequence Rank	Failure Potential		Code Category	Original			Interval 3 Update		
	Category	Rank		DMs	Rank		Weld Count	RI-ISI	Other[2]	Weld Count	RI-ISI[3]	Other[2]
FWS	4 (1)	Medium (High)	High	None (FAC)	Low (High)	C-F-2	0	0		100	12	
FWS	5 (3)	Medium (High)	Medium	TASCS, (FAC)	Medium (High)	C-F-2	8	1		8	1	
FWS	6 (3)	Low (High)	Medium	None (FAC)	Low (High)	C-F-2	435	0		277	0	
MSS	6	Low	Medium	None	Low	C-F-2	165	0		170	0	
AFW	4 (1)	Medium (High)	High	None (FAC)	Low (High)	C-F-2	0[4]	0[4]		81	9	
							3136	106	0	3204	125	14

change from original: 19

Notes

1 Systems were described in Table 3.1-2 of the original submittal, with the exception of AFW - Auxiliary Feedwater. This ASME Code Class 2 system consists of 4 segments with 81 elements.

2 The column labeled "Other" is generally used to identify augmented inspection program locations that are credited beyond those locations selected per the RI-ISI process, as addressed in Section 3.6.5 of EPRI TR-112657. At CPNPP this column represents those inspections performed in accordance with Code Case N-770-1, as mandated by 10CFR50.55a.

3 In accordance with 10CFR50.55a(g)(6)(ii)(F), welds subject to PWSCC are selected for examination per Code Case N-770-1 and examined under that program. Welds for which no other degradation mechanism has been postulated will be examined solely under the Code Case N-770-1 Program and will be removed from consideration during the RI-ISI element selection process. Welds for which a degradation mechanism in addition to PWSCC has been identified during the RI-ISI process may be additionally selected and examined in accordance with the RI-ISI process such that the secondary degradation mechanism is also monitored.

4 Due to a change in ASME Section XI Code criteria, 4" NPS Class 2 auxiliary feedwater piping was added to the ISI Program, and therefore the RI-ISI Program, for the first time during the second RI- ISI period. As such, there were no welds associated with this piping during the original RI-ISI application.