

PMNorthAnna3COLPEmails Resource

From: Diane Aitken [diane.aitken@dom.com]
Sent: Wednesday, July 13, 2011 4:23 PM
To: Patel, Chandu
Cc: Barry Bryant
Subject: Dominion's Me-Too letter NA3-11-030 dated July 5, 2011, regarding CP RAI Question 08.04-1, Supp 1.
Attachments: image001.gif; image005.png; image006.png; NA3-11-030 Enclosure page 2 of 4.pdf; TXNB-11016 CP RAI 03.03.03-2 Supp 1 response.pdf; TXNB-11017 CP RAI 08.04-1 Supp 1 response.pdf; NA3-11-014 Enclosure page 7 of 10.pdf; TXNB-10087 CP RAI 08.04-1 response.pdf

Chandu,

At the end of our draft Section 8.2 follow-up RAIs (5832) teleconference this morning, we briefly discussed Dominion's Me-Too letter NA3-11-030 dated July 5, 2011, regarding CP RAI Question 08.04-1, Supp 1.

Provided below is a discussion regarding that letter with respect to CP RAI Question 08.04-1, Supp 1 that will hopefully clarify any issues/concerns your reviewer may have regarding this item and eliminate any additional submittals.

Page 2 of the Enclosure to NA3-11-030 (attached) indicates that the response to Comanche Peak (CP) RAI Question # 08.04-1, Supp 1 (CP RAI #183) submitted by CP letter TXNB-11017 dated 3/23/2011 has been endorsed by Dominion. The CP RAI Question # is indicated as "08.04-1, Supp 1" because CP letter TXNB-11017 indicated that a Supplemental Response to CP RAI #183 was submitted.

Please note that the response heading for all CP RAI supplemental responses is titled "SUPPLEMENTAL INFORMATION." A copy of TXNB-11017 and TXNB-11016 (also referenced in NA3-11-030 for a supplemental response to RAI 03.07.04-2) which show this are attached for your reference.

As additional information, I have attached the initial response to CP RAI Question # 08.04-1 submitted by CP letter TXNB-10087 dated 12/16/2010 and Dominion Me-Too letter NA3-11-014, dated 03/16/2011, which endorsed that response.

Please feel free to give me a call or have your reviewer call me if this issue requires further discussion or action on our part.

Thank you,

Diane



Diane E. Aitken
North Anna 3 Project
Dominion Resources Services Inc.
Innsbrook Technical Center, 2SW

804-273-2694 office

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Hearing Identifier: NorthAnna3_Public_EX
Email Number: 981

Mail Envelope Properties (4E963BFE266BB84DA97B7C758C31E12D453E8B1FDD)

Subject: Dominion's Me-Too letter NA3-11-030 dated July 5, 2011, regarding CP RAI
Question 08.04-1, Supp 1.
Sent Date: 7/13/2011 4:23:29 PM
Received Date: 7/13/2011 4:23:37 PM
From: Diane Aitken

Created By: diane.aitken@dom.com

Recipients:
"Barry Bryant" <barry.bryant@dom.com>
Tracking Status: None
"Patel, Chandu" <Chandu.Patel@nrc.gov>
Tracking Status: None

Post Office: DOM-MBX04.mbu.ad.dominionnet.com

| Files | Size | Date & Time |
|--|--------|----------------------|
| MESSAGE | 2552 | 7/13/2011 4:23:37 PM |
| image001.gif | 1992 | |
| image005.png | 1593 | |
| image006.png | 1574 | |
| NA3-11-030 Enclosure page 2 of 4.pdf | 59769 | |
| TXNB-11016 CP RAI 03.03.03-2 Supp 1 response.pdf | 84193 | |
| TXNB-11017 CP RAI 08.04-1 Supp 1 response.pdf | 145245 | |
| NA3-11-014 Enclosure page 7 of 10.pdf | 66672 | |
| TXNB-10087 CP RAI 08.04-1 response.pdf | 102447 | |

Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:







| US-APWR S-COLA (North Anna Unit 3) Endorsement of Comanche Peak Units 3 and 4 R-COLA RAI Responses | | | | | | | |
|--|----------|--|----------------|-----------------------|---------------------|--|---------------|
| RAI ID # | CP RAI # | RAI Topic/Subject | Date Submitted | RAI Response Letter # | RAI Question # | NA3 S-COLA Endorsement (Note 1) (Note 2) | Clarification |
| 4986 | 191 | Mitigative Strategies Report for LOLA Information | 1/31/2011 | TXNB-11006 | - | No | Site-Specific |
| 5287 | 195 | 0% Exceedance Ambient Design Temperature Parameter | 1/24/2011 | TXNB-11002 | 02.03.01-11 | No | Site-Specific |
| 5465 | 204 | Compare 100 yr Wet Bulb Temperature and DCD 0% Value | 3/18/2011 | TXNB-11018 | 02.03.01-12 | No | Site-Specific |
| 5254 | 193 | Definitions of Backfill and Subgrade Conditions | 1/27/2011 | TXNB-11004 | 03.07.01-6 | No | Site-Specific |
| 5317 | 205 | FIRS and SSI Analysis with Embedded Structures | 3/18/2011 | TXNB-11018 | 03.07.01-7 | No | Site-Specific |
| 5255 | 193 | SSI - Concrete Cracking / Stiffness Reduction Assumption - UHSRS | 1/27/2011 | TXNB-11004 | 03.07.02-19 | Yes | |
| 4294 | 146 | CAV Checks and Location and Use of OBE Instrumentation | 3/18/2011 | TXNB-11016 | 03.07.04-2, Supp 1 | No | Site-Specific |
| 4294 | 167 | SSE Elevation and GMRS Elevation | 3/18/2011 | TXNB-11016 | 03.08.04-64, Supp 1 | No | Site-Specific |
| 5092 | 185 | Calculation of Fluid Masses | 1/6/2011 | TXNB-11001 | 03.08.04-86 | No | Site-Specific |
| 5092 | 185 | Calculation of Fluid Masses | 1/6/2011 | TXNB-11001 | 03.08.04-87 | No | Site-Specific |
| 5092 | 185 | Calculation of Fluid Masses | 1/6/2011 | TXNB-11001 | 03.08.04-88 | No | Site-Specific |
| 5411 | 202 | Compliance with ASHRAE STD 15 | 3/18/2011 | TXNB-11018 | 06.04-12 | Yes | |
| 5117 | 183 | Station Blackout Response Guidelines | 3/23/2011 | TXNB-11017 | 08.04-1, Supp 1 | Yes | |

SUPPLEMENTAL RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

Comanche Peak, Units 3 and 4

Luminant Generation Company LLC

Docket Nos. 52-034 and 52-035

RAI NO.: 4294 (CP RAI #146)

SRP SECTION: 03.07.04 – Seismic Instrumentation

QUESTIONS for Geosciences and Geotechnical Engineering Branch 1 (RGS1)

DATE OF RAI ISSUE: 2/26/2010

QUESTION NO.: 03.07.04-2

Paragraph IV(a)4 of Appendix S of 10 CFR 50 requires that, "Suitable instrumentation must be provided so that the seismic response of nuclear power plant features important to safety can be evaluated promptly after an earthquake." Regulatory Guide (RG) 1.166 provides the guidance regarding the instrumentation and procedures to make the required evaluation.

In FSAR subsection 3.7.4.1, "Comparison with Regulatory Guide 1.12" you proposed to use foundation-level instrumentation for operating basis earthquake (OBE) determinations. The FSAR states that "it is acceptable to perform a CAV check of seismic responses measured at the R/B and PS/B foundation locations". RG 1.166 explicitly states that "The evaluation to determine whether the OBE was exceeded should be performed using data obtained from the three components of the free-field ground motion (i.e., two horizontal and one vertical)". Also, Appendix A to RG 1.166, which provides interim OBE exceedance guidelines in the case that the installed seismic instrumentation or data processing equipment is inoperable, states that "For plants at which instrumentally determined data are available only from an instrument installed on a foundation, the cumulative absolute velocity (CAV) check (see Regulatory Position 4.2 of this guide) is not applicable." Considering that the CAV value of 0.16g-sec was defined using free-field instruments, the staff is not clear based on the justification provided in the FSAR and is concerned that the plant may not be shutdown in all instances when RG 1.166 anticipated a shutdown would be performed. Please provide further clarification why foundation instrument records are appropriate for CAV checks for CPNPP's OBE determinations.

SUPPLEMENTAL INFORMATION:

In the previous response to this RAI (ML100950107), Luminant provided clarification that foundation instrument records are appropriate for CAV checks for OBE determinations. In response to a teleconference on January 27, 2011, Luminant has decided to provide free-field instrumentation at grade in the plant yard in addition to the in-plant seismic instrumentation. The FSAR has been revised accordingly.



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CP-201100379
Log # TXNB-11017

Ref. # 10 CFR 52

March 23, 2011

U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555
ATTN: David B. Matthews, Director
Division of New Reactor Licensing

SUBJECT: COMANCHE PEAK NUCLEAR POWER PLANT, UNITS 3 AND 4
DOCKET NUMBERS 52-034 AND 52-035
SUPPLEMENTAL RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION
NO. 5117 (SECTION 8.4)

Dear Sir:

Luminant Generation Company LLC (Luminant) submits herein a supplemental response to Request for Additional Information No. 5117 (CP RAI #183) for the Combined License Application for Comanche Peak Nuclear Power Plant Units 3 and 4. The supplemental response addresses station blackout procedures.

Should you have any questions regarding this supplemental response, please contact Don Woodlan (254-897-6887, Donald.Woodlan@luminant.com) or me.

There are no commitments in this letter.

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

Executed on March 23, 2011.

Sincerely,

Luminant Generation Company LLC


Rafael Flores

Attachment: Supplemental Response to Request for Additional Information No. 5117 (CP RAI #183)

DO90
MFO

Electronic distribution w/attachment:

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Luminant Records Management (.pdf files only)

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SUPPLEMENTAL RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

Comanche Peak, Units 3 and 4

Luminant Generation Company LLC

Docket Nos. 52-034 and 52-035

RAI NO.: 5117 (CP RAI #183)

SRP SECTION: 08.04 – Station Blackout

QUESTIONS for Electrical Engineering Branch (EEB)

DATE OF RAI ISSUE: 10/19/2010

QUESTION NO.: 08.04-1

The regulatory basis for this question is discussed in NUREG-0800, Standard Review Plan (SRP), Section 8.4 and Regulatory Guide 1.155.

The US-APWR DCD, Tier 2, Section 8.4.2.2, "Conformance with Regulatory Guidance," states that the applicant's conformance with Position C.3.4 of Regulatory Guide 1.155, "Station Blackout," would be demonstrated by providing procedures and training to cope with Station Blackout (SBO). US-APWR DCD, FSAR Section 13.5, "Plant Procedures," explains that the development of administrative and operating procedures to be used by the operating organization (plant staff) is designated as the responsibility of the COL Applicant. Therefore, a COL applicant referencing the US-APWR design is responsible for SBO procedures, which include (1) Station Blackout Response Guidelines, (2) AC Power restoration Guidelines and (3) Severe Weather Guidelines. Confirm whether these procedures and training are addressed in the COL, Part 2, FSAR with references to the DCD FSAR description. If these procedures are not addressed in the COL FSAR, provide the procedures and revise the FSAR to reflect the addition of these procedures.

SUPPLEMENTAL INFORMATION:

Although Luminant's response to this question stated that additional revision of the FSAR is not required, based on a subsequent teleconference with the NRC, Luminant has revised FSAR Section 8.4 to refer to Subsection 13.5.2.1.

Impact on R-COLA

See attached marked FSAR Revision 1 page 8.4-1

Impact on S-COLA

None; this response is site-specific.

Impact on DCD

None.

Comanche Peak Nuclear Power Plant, Units 3 & 4
COL Application
Part 2, FSAR

8.4 STATION BLACKOUT

This section of the referenced DCD is incorporated by reference with ~~no~~the following departures and/or supplements.

RCOL2_08.0
4-1 S01

CP SUP 8.4(1) Add the following text after the ninth paragraph of DCD Subsection 8.4.2.2.

The procedures to cope with SBO are addressed in Section 13.5 and the training is addressed in Section 13.2. In particular, although not specifically referenced, SBO procedures are discussed in FSAR Subsection 13.5.2.1. This subsection addresses Operating and Emergency Operating Procedures as well as the Procedure Generation Package. The Station Blackout Response Guideline, the AC Power Restoration Guideline, and a Severe Weather Guideline are covered by the discussions in FSAR 13.5.2.1.

| US-APWR S-COLA (North Anna Unit 3) Endorsement of Comanche Peak Units 3 and 4 R-COLA RAI Responses | | | | | | | |
|--|----------|--|----------------|-----------------------|----------------|--|--|
| RAI ID # | CP RAI # | RAI Topic/Subject | Date Submitted | RAI Response Letter # | RAI Question # | NA3 S-COLA Endorsement (Note 1) (Note 2) | Endorsement Clarification |
| 4542 | 167 | Shear modulus of elasticity | 8/9/2010 | TXNB-10057 | 03.08.04-84 | No | |
| 4542 | 167 | Cutoff frequency | 8/9/2010 | TXNB-10057 | 03.08.04-85 | No | |
| 4678 | 172 | Control room habitability analysis assumptions | 10/6/2010 | TXNB-10069 | 06.04-10 | No | |
| 4678 | 172 | Hazards analysis of refrigerants | 10/6/2010 | TXNB-10069 | 06.04-11 | Yes | |
| 4678 | 172 | Consistency with regulatory positions | 10/6/2010 | TXNB-10069 | 06.04-8 | No | |
| 4678 | 172 | Control room habitability analysis | 10/6/2010 | TXNB-10069 | 06.04-9 | No | |
| 5116 | 182 | Cable monitoring program | 12/16/2010 | TXNB-10087 | 08.02-29 | No | |
| 5116 | 182 | Grid stability and analysis | 12/16/2010 | TXNB-10087 | 08.02-30 | No | |
| 5117 | 183 | Station Blackout procedures and training | 12/16/2010 | TXNB-10087 | 08.04-1 | Yes | |
| 5117 | 183 | AAC power source | 12/16/2010 | TXNB-10087 | 08.04-2 | Yes | |
| 5117 | 183 | AAC power source | 12/16/2010 | TXNB-10087 | 08.04-3 | Yes | |
| 4957 | 178 | OSC offsite communication capabilities | 10/11/2010 | TXNB-10072 | 09.05.02-2 | Yes | |
| 4846 | 169 | Turbine inspection program | 8/9/2010 | TXNB-10056 | 10.02.03-2 | Yes | Except that no license condition is proposed for the S-COLA. |
| 5201 | 187 | Table 13.4-201 corrections | 11/22/2010 | TXNB-10082 | 13.04-5 | No | |
| 4682 | 173 | Additional License Conditions related to ITP | 11/24/2010 | TXNB-10083 | 14.02-19 | No | |
| 5004 | 174 | UHS and ESW ITAAC | 10/6/2010 | TXNB-10067 | 14.03.07-29 | No | |

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

Comanche Peak, Units 3 and 4

Luminant Generation Company LLC

Docket Nos. 52-034 and 52-035

RAI NO.: 5117 (CP RAI #183)

SRP SECTION: 08.04 - Station Blackout

QUESTIONS for Electrical Engineering Branch (EEB)

DATE OF RAI ISSUE: 10/19/2010

QUESTION NO.: 08.04-1

The regulatory basis for this question is discussed in NUREG-0800, Standard Review Plan (SRP), Section 8.4 and Regulatory Guide 1.155.

The US-APWR DCD, Tier 2, Section 8.4.2.2, "Conformance with Regulatory Guidance," states that the applicant's conformance with Position C.3.4 of Regulatory Guide 1.155, "Station Blackout," would be demonstrated by providing procedures and training to cope with Station Blackout (SBO). US-APWR DCD, FSAR Section 13.5, "Plant Procedures," explains that the development of administrative and operating procedures to be used by the operating organization (plant staff) is designated as the responsibility of the COL Applicant. Therefore, a COL applicant referencing the US-APWR design is responsible for SBO procedures, which include (1) Station Blackout Response Guidelines, (2) AC Power restoration Guidelines and (3) Severe Weather Guidelines. Confirm whether these procedures and training are addressed in the COL, Part 2, FSAR with references to the DCD FSAR description. If these procedures are not addressed in the COL FSAR, provide the procedures and revise the FSAR to reflect the addition of these procedures.

ANSWER:

DCD Revision 2 Tier 2 Subsection 8.4.2.2 notes that the procedures to cope with SBO are addressed in Section 13.5 and the training is addressed in Section 13.2. These sections, as incorporated into the CPNPP FSAR, address how plant procedures and training are developed and implemented for CPNPP Units 3 and 4. These sections address the full range of procedures and training, which includes the specific procedures (guidelines) identified in the question. In particular, although not specifically referenced, SBO procedures fall under FSAR Subsection 13.5.2.1. This subsection addresses Operating and Emergency Operating Procedures as well as the Procedure Generation Package. The Station Blackout Response Guideline, the AC Power Restoration Guideline, and a Severe Weather Guideline are covered by the discussions in FSAR 13.5.2.1. The commitment provided in DCD Subsection 8.4.2.2, which is incorporated by reference into the FSAR, in concert with the discussions on procedures in Sections 13.2 and 13.5, fully address these procedures in the FSAR. Additional revision of the FSAR is not required.

Impact on R-COLA

None.

Impact on DCD

None.