

PMComanchePeakPEm Resource

From: Monarque, Stephen
Sent: Friday, October 14, 2011 11:07 AM
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Cc: ComanchePeakCOL Resource; Takacs, Michael
Subject: Comanche Peak RCOL Chapter 13, Section 13.6 - RAI Number 234
Attachments: RAI 6068 (RAI 234).docx

The NRC staff has identified that additional information is needed to continue its review of the combined license application. The NRC staff's request for additional information (RAI) is contained in the attachment. Luminant is requested to inform the NRC staff if a conference call is needed.

The response to this RAI is due within 35 calendar days of **October 14, 2011**.

Note: The NRC staff requests that the RAI response include any proposed changes to the FSAR.

thanks,

Stephen Monarque
U. S. Nuclear Regulatory Commission
NRO/DNRL/NMIP
301-415-1544

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Options

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Request for Additional Information (RAI) No. 6068 COLA, Revision 2

RAI Letter Number 234

10/14/2011

Comanche Peak Units 3 and 4
Luminant Generation Company, LLC.
Docket No. 52-034 and 52-035
SRP Section: 13.06.01 - Physical Security - Combined License
Application Section: Section 13.06, MUAP-

QUESTIONS for Reactor Security Rulemaking and Licensing Branch (NSIR/DSP/RSRLB)

13.06.01-57

The following is a supplemental question to RAI Letter Number 194 (5203), Question No. 13.06.01-52 for closure and development of an SE:

Revise Section 4.0 discussion and Table 4.1 to include Target Set Groups (TSG) that were not selected based on application of criteria greater than 8-hours as a threshold for eliminating sequences of events leading to core damage and loss of spent fuel pool (SFP) cooling. The inclusion of all Target Set Groups currently identified as “not selected” in Table 4-1 would provide an accurate and complete listing of target sets acceptable for what must be protected for the US-APWR standard design against radiological sabotage.

Regulatory Basis: Subpart C of Title 10 CFR Part 52, § 52.79(a)(35)(i), (ii), and (iv) requires that the Combined license (COL) applicant submit information in the COL application that discusses how the applicant will meet the requirements of 10 CFR 73. Title 10 CFR 73.55(b)(3) requires that the applicant design the physical protection program to prevent significant core damage and spent fuel sabotage with assurance of the capabilities to detect, assess, interdict, and neutralize the design basis threat (DBT), and maintain at all times such capabilities with defense-in-depth. Title 10 CFR 73.55(b)(4) requires the applicant to analyze and identify site specific conditions, including target sets, that may affect the specific measures needed to implement the requirements of 10 CFR 73 and account for conditions in the design of the physical protection program. Target sets must be sufficiently complete and accurate, and describe what must be protected for meeting performance requirements of Title 10 CFR 73.55(b)(3). Deletion of TSG identified based on time constraints is contrary to regulatory requirements and does not conform to guidance provided in RG 5.81. Based on review of RAI 5203 response, including revised TR UAP-SGI-08002, Revision 2, High Assurance Evaluation Assessment that is incorporated by reference, this supplemental question to RAI 5203 is required to achieve full closure and development of an SE with no Open Items.

The supplemental follow-up question above relates to RAI Question No. 13.06.01-52 (RAI Letter Number 194 (5203)), that requested the following:

- a. (U) Provide the technical bases for applying the criteria of greater than 8-hours as a threshold for core damage or the loss of spent fuel pool cooling in selecting TSG identified in Table 4.1. Justify how this

technical report meets the requirement of 10 CFR 73.55(b)(3) that the physical protection program must be designed to prevent significant core damage and spent fuel sabotage. This regulation does not establish constraints based on duration to core damage and excluded TSG, which would be unprotected to prevent the adversary capabilities of the DBT to initiate the sequence of events for radiological sabotage.

Regarding the revision of TR UAP-SGI-08002, Revision 2 and discussions in Appendix A, Sections 3.1 through 3.3, it may be retained to describe the possible capabilities of recovering or possible outcome as from a DBT event (i.e., defense-in-depth). However, the applicant's licensing basis described in the COLA does not address the capabilities of required engineered, administrative, and management controls, including training and pre-planning, to support the assumption of "regain[ing] control of the plant after a security event," within a time frame (i.e., 8 hrs). Specifically, the plans and strategy described does not indicate how engineered and administrative controls and management measures, including the assurance of the reliability and availability of offsite law enforcement agencies and licensee's personnel and equipment, provide the response capabilities necessary to support the assumption stated.

13.06.01-58

The following are supplemental questions to revisions resulting from response to RAI Question Issued: No. 13.06.01-55e (RAI Letter Number 194 (5203)). Clarification of statements and representation in the revised TR UAP-SGI-080002 is required for closure and developing an SE:

(a) Appendix A and Table 6-2: Provide conservative, worst case, response time assumed for ASO that are assigned to deploy and redeploy up to three defensive positions on Page A20 (DP16, DP17, and DP 13). Provide clarification for statement in Appendix A, page 20, regarding, "ASO are not credited in the scenario time lines" but new scenario included in Section 7.11 (Scenario 4A) credit ASO to perform interdiction and neutralization at DP16 and DP17. Clarify whether the additional ASO have been accounted for in the minimum staffing for the total AR and ASO credited for response per shift.

(b) Appendix A, Page 19: Provide clarification on whether the design of the man-lift to consider the need to continue reliability and operability in the event of a loss of electrical power and the required interface with intrusion detection and alarm system (e.g., recall or position of the man-lift up on alarm). Provide clarification on whether the design includes stairs or appropriate means for travel between positions. Describe the minimum required travel time between floors for DP8.

Regulatory Basis: Title 10 CFR 73.55(2) requires protection against the DBT of radiological sabotage as stated in § 73.1. Title 10 CFR 73.55(b)(3)(i) requires applicant to ensure that the capabilities to detect, assess, interdict, and neutralize the DBT and maintain at all time such capabilities. Title 10 CFR 73.55(3)(ii) and 73.55(b)(4) requires applicant to provide defense-in-depth, and to analyze and identify site specific conditions, including target sets, that may affect the specific measures needed to

implement the requirements of 10 CFR 73 and account for conditions in the design of the physical protection program. Title 10 CFR 52.80(a) requires the application to contain information for ITA and criteria necessary and sufficient to provide reasonable assurance that the facility has been constructed and will operate in conformity with the combined license, the provisions of the Atomic Energy Act, and the Commission's rules and regulations. COL applicant submits information that discusses how the COL applicant will meet the requirements of 10 CFR 73 and describes the implementation of the physical security plan and safeguards contingency plan.

RAI Question Issued: No. 13.06.01-55e (RAI No. 5203, CP RAI #194) requested the following:

(U) Describe how task times (initiation of alarm, assessment of threat, and communications to sector or zone of intrusion, task time required to acquire target) and the available windows of opportunities to engage adversaries to demonstrate that the planned configuration of RE/BBRE currently described in Appendix A provides the reliability and availability of security responders needed to interdict or neutralize adversaries between the PA and structures (i.e., prior to cover and concealment or loss of lines of sight). Describe the assumptions of reliability and availability of security responders to interdict or neutralize adversaries, based on: (1) assumptions of maximum distance of fire (indicated in UAP-SGI-080002), (2) analyzed response task times, (3) expected results from standard training and qualification and maintaining proficiency in use of weapons (i.e., Training and Qualification Plan - Part 8 of the COLA), (4) assumed adversarial travel time, and (5) the resulting windows of opportunities (time and lines of sight) for security responders from the BRE/BBRE configuration indicated in Appendix A of UAP-SGI-08002.

The revisions to TR MHI UAP-SGI-08002 in Appendix A require supplemental clarifications requested above for closure and development of SE with no Open Items.