

NRR-PMDAPEm Resource

From: Singal, Balwant
Sent: Monday, April 07, 2014 4:19 PM
To: 'Hope, Timothy' (Timothy.Hope@luminant.com)
Cc: Seawright, Jimmy (Jimmy.Seawright@luminant.com)
Subject: Request for Additional Information - License Amendment Request for Spent Fuel Pool Criticality Analysis - TACs MF1365 and MF1366

Tim,

By letter dated March 28, 2013 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML13095A023), Luminant Generation Company LLC (Luminant) requested for a license amendment request to revise Technical Specifications (TSs) 3.7.16, 3.7.17, 4.3, and 5.5 for Comanche Peak Nuclear Power Plant (CPNPP), Units 1 and 2. Enclosure 1, "Comanche Peak Nuclear Power Plant Spent Fuel Pool (SFP) Configuration Controls," discusses a new software and improved administrative controls that are proposed to "ensure that the increased complexity [of the Region II storage configurations] does not result in an increased risk of a TS 3.7.17 non-compliance due to an error made during fuel movement planning." Page 3 of 15 of Enclosure 1 contains the "Configuration Confirmation Software Functionality" section, which states that a Quality Assurance (QA) controlled software program is proposed to ensure that the proposed limitations of TS 3.7.17 are satisfied for any fuel movement plan. Additionally, this software will interface with two other QA software programs (i.e., ShuffleWorks and TARPIT) at CPNPP.

1. Item 6.a of the "Software Features" section states that CPNPP software quality assurance program requires software features independently tested to ensure accuracy and completeness, reliability, functionality, and ease of use prior to approval. Item 6.c states that CPNPP software quality assurance program requires independent testing of any changes to the software prior to approval of the software revision. The U.S. Nuclear Regulatory Commission (NRC) staff would like to request for the following additional information regarding the development of the proposed software:
 - a. Please provide background information on the proposed software, including: name/version number, developer/vendor, operational experience and performance history. Additionally, please describe where the software will be installed and if it's in the same computer where Shuffleworks and TARPIT are installed.
 - b. Please describe the industry quality standards used during development and testing of the software.
 - c. Please describe the requirements of the proposed software and how the implementation of these requirements have been verified and validated independently.
 - d. Please describe the types of testing (e.g., functional testing) that have been performed, and testing tools (e.g., a simulator tool) used on the proposed software. Additionally, please describe how errors introduced during software development are identified, documented, and corrected prior to releasing the software. If another software has been used to develop the proposed software, please describe how is it assured that there is no unused or unidentified functionality that can adversely affect the proposed software.
 - e. Please describe how the proposed software configuration is controlled and the measures taken to assure that the software used is always the latest approved version.
2. Item 1.b of the "Software Features" section states that "No input files need to be created to perform this determination, since the input data will be directly obtained from the TARPIT database." Item 6.b states that CPNPP software quality assurance program requires station procedures control all input data files, and require independent review for any changes, including routine updates.

- a. Please explain if it is possible to create an input file. Additionally, please describe how the proposed software prevents the use of any input files not generated from ShuffleWorks and TARPIT.
 - b. Please explain if the proposed software can modify or delete a TARPIT or Shuffleworks configuration file or sequence file, and if so, describe your measures to prevent unintended errors and problems from any such modification or deletion.
3. Item 1.b of the "Proposed Procedural Controls and Limitations" section states that performance of Surveillance Requirement (SR) 3.7.17.1 using methods other than QA-controlled software will not be permitted. The NRC staff request for the following additional information regarding actions taken and behavior of the proposed software in case it were to fail.
- a. Please explain what methods will be used to perform SR 3.7.17.1 in the case where the proposed software fails, or is not functioning properly.
 - b. Please describe how operators will be notified of a software failure of the proposed software.
 - c. Please describe what occurs and what actions are pursued by your staff if the proposed software produces an incorrect or erroneous result?

A clarification call was held on April 7, 2014. Mr. Jimmy Seawright of Luminant agreed to provide the response within 30 days from the date of this e-mail. Please treat this e-mail as formal transmittal of RAIs.

Thanks.

Balwant K. Singal
Senior Project Manager (Comanche Peak and STP)
Nuclear Regulatory Commission
Division of Operating Reactor Licensing
Balwant.Singal@nrc.gov
Tel: (301) 415-3016
Fax: (301) 415-1222

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Pool Criticality Analysis - TACs MF1365 and MF1366
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From: Singal, Balwant

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Recipients:
"Seawright, Jimmy (Jimmy.Seawright@luminant.com)" <Jimmy.Seawright@luminant.com>
Tracking Status: None
"Hope, Timothy' (Timothy.Hope@luminant.com)" <Timothy.Hope@luminant.com>
Tracking Status: None

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MESSAGE	5126	4/7/2014 4:18:00 PM

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