

## PMSTPCOL PEmails

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**From:** Tai, Tom  
**Sent:** Tuesday, May 19, 2009 1:11 PM  
**To:** Agles, James  
**Cc:** STPCOL  
**Subject:** Draft RAI 2558 for Chapter 9.1.1  
**Attachments:** RAI 2558 09.01.01-xx.doc

James,

Please review the attached RAI (09.01.01-xx). If you need a conference call to clarify the requested information, please contact me. If a conference call is not needed, please send me an email and I will continue the formal process of issuing the RAI to STPNOC.

Regards

Tom Tai  
DNRL/NRO  
(301) 415-8484  
[Tom.Tai@NRC.GOV](mailto:Tom.Tai@NRC.GOV)

**Hearing Identifier:** SouthTexas34Public\_EX  
**Email Number:** 1240

**Mail Envelope Properties** (C56E360E9D804F4B95BC673F886381E71F40A1423B)

**Subject:** Draft RAI 2558 for Chapter 9.1.1  
**Sent Date:** 5/19/2009 1:10:36 PM  
**Received Date:** 5/19/2009 1:10:38 PM  
**From:** Tai, Tom

**Created By:** Tom.Tai@nrc.gov

**Recipients:**  
"STPCOL" <STP.COL@nrc.gov>  
Tracking Status: None  
"Agles, James" <jaagles@STPEGS.COM>  
Tracking Status: None

**Post Office:** HQCLSTR02.nrc.gov

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**Return Notification:** No  
**Reply Requested:** No  
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Request for Additional Information No. 2558 Revision 2

South Texas Project Units 3 and 4  
South Texas Project Nuclear Operating Co  
Docket No. 52-012 and 52-013  
SRP Section: 09.01.01 - Criticality Safety of Fresh and Spent Fuel Storage and Handling  
Application Section: 9.1.1 and 9.1.2

QUESTIONS for Reactor System, Nuclear Performance and Code Review (SRSB)

09.01.01-\*\*\*

The ABWR DCD Sections 9.1.1 and 9.1.2 specify several criteria regarding the criticality of the spent and new fuel storage facilities. In Section 9.1.6.1 and 9.1.6.3 of the DCD, it is stated that "the COL applicant shall provide the NRC a confirmatory criticality analysis for the inadvertent placement of a fuel assembly in other than prescribed locations...". The associated ITAACS are presented in the DCD Tier 1 information in Section 2.5.6. Table 2.5.6 requires an analysis to determine the keff of the new and spent fuel racks to confirm the requirements presented in DCD Sections 9.1.1 and 9.1.2.

The STP FSAR does not contain a confirmatory criticality analysis as required by the ABWR DCD. Instead, the FSAR commits to preparing an analysis at an unspecified date.

Considering that the review can be lengthy depending on the complexity of the analysis, please provide a schedule and plan on the following:

1. the description of the methodology of the criticality analysis;
2. a detailed criticality analysis for NRC approval