

## **NRR-PMDAPEm Resource**

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**From:** Regner, Lisa  
**Sent:** Thursday, January 21, 2016 2:04 PM  
**To:** Wayne Harrison  
**Cc:** Michael Murray; Sterling, Lance (lsterling@STPEGS.COM)  
**Subject:** NRC DRAFT GSI-191 Audit Plan - week of 2/22  
**Attachments:** DRAFT Audit Plan - QA's Simualtions.docx

Wayne,  
Here is a draft of our audit plan for the week of 2/22/16. We are on schedule to get you T-H questions the first week of February.  
Thanks,  
Lisa

**Hearing Identifier:** NRR\_PMDA  
**Email Number:** 2736

**Mail Envelope Properties** (Lisa.Regner@nrc.gov20160121140400)

**Subject:** NRC DRAFT GSI-191 Audit Plan - week of 2/22  
**Sent Date:** 1/21/2016 2:04:08 PM  
**Received Date:** 1/21/2016 2:04:00 PM  
**From:** Regner, Lisa

**Created By:** Lisa.Regner@nrc.gov

**Recipients:**

"Michael Murray" <mpmurray@STpegs.com>

Tracking Status: None

"Sterling, Lance (lsterling@STPEGS.COM)" <lsterling@STPEGS.COM>

Tracking Status: None

"Wayne Harrison" <awharrison@STPEGS.COM>

Tracking Status: None

**Post Office:**

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	161	1/21/2016 2:04:00 PM
DRAFT Audit Plan - QA's Simualtions.docx		25474

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## **Audit of South Texas Project's Simulations Used to Support Closure of GSI-191**

### BACKGROUND

By letter dated August 20, 2015 (Reference 1), STP provided Supplement 2 to Risk-Informed Approach for addressing Generic Safety Issues 191. This is the latest from a significant number of references which describe STP's approach and their use of RELAP5-3D.

The NRC staff has proposed to conduct a regulatory audit at this point in the review process in an effort to increase the efficiency of the NRC staff's review. The scope of this audit is to review the recent simulations STP has performed in support of the GSI-191 licensing action request and to discuss the NRC's draft Requests for Additional Information sent by email on January 14, 2016 (ADAMS Accession No. xxxx).

The NRC staff has performed a review of the submitted information and expects the audit to increase their level of knowledge and understanding. The regulatory audit will be held in accordance with NRR procedure as described in LIC-111 *Regulatory Audits*.

### REGULATORY AUDIT SCOPE

This audit will focus on STP's simulations of long term core cooling following a loss of coolant accident (LOCA). Specifically, the NRC staff will review the following analysis:

- Small break LOCA – cold leg
- Small break LOCA – hot leg
- Medium break LOCA – hot leg
- Large break LOCA – hot leg

Additionally, the NRC staff will review the steps taken by STP to perform this analysis under the QA program. Thus, STP should make available any documentation which describes their QA process and/or demonstrates how the RELAP5-3D simulations were performed under STP's QA program.

The NRC staff would like STP to make available the appropriate engineer(s) with knowledge of the RELAP5-3D evaluation model and analysis to address any questions from the NRC staff. These questions will likely include the following topics:

- the progression of the event,
- the phenomena occurring during the LOCA,
- how the phenomena has been modeled,
- how the QA program verifies the input decks

### TEAM AND REVIEW ASSIGNMENTS

Lisa Regner – Audit Lead, STP Project Manager, Licensing  
Joshua Kaizer – Technical Lead, Nuclear Performance and Code Review Branch  
Reed Anzalone – Technical Support, Nuclear Performance and Code Review Branch  
Steve Bajorek – Technical Support, Office of Research

## LOGISTICS

Audit Dates: Tuesday February 23, 2016 – Thursday February 25, 2016

Per STP's request, the audit will take place at Texas A&M University. STP should provide a conference room for discussions, necessary documents, access to evaluation model outputs, and access to STP staff and/or contractors knowledgeable in the evaluation model, results, and QA program.

## DELIVERABLES

A regulatory audit summary is usually provided within 90 days of the completion of the audit.

## REFERENCES

1. Powell, G.T, South Texas Project Nuclear Operating Company, letter to U.S. Nuclear Regulatory Commission, "Supplement 2 to STP Pilot Submittal and Requests for Exemptions and License Amendment for a Risk-Informed Approach to Address Generic Safety Issue (GSI)-191 and Respond to Generic Letter (GL) 2004-02 (TAC NOS. MF2400 - MF2409)", NOC-AE-15003241, August 20, 2015, ADAMS Accession No. ML15246A126.