

## **NRR-PMDAPEm Resource**

---

**From:** Regner, Lisa  
**Sent:** Monday, January 25, 2016 10:36 AM  
**To:** Wayne Harrison  
**Cc:** Michael Murray; Sterling, Lance  
**Subject:** Draft Audit Plan for Feb 2016 Alion Transport Audit  
**Attachments:** draft Audit Plan Feb 2016 Transport to STP, rev1.docx

Wayne,

Here is our draft audit plan for the Alion audit in Albuquerque. We will plan to discuss both audit plans on Thursday at our 2:30 call. Hopefully, we'll be shoveled out by then.

Thanks,

Lisa

**Hearing Identifier:** NRR\_PMDA  
**Email Number:** 2737

**Mail Envelope Properties** (c401b7c93eda451da0c85ec1c027d917)

**Subject:** Draft Audit Plan for Feb 2016 Alion Transport Audit  
**Sent Date:** 1/25/2016 10:36:01 AM  
**Received Date:** 1/25/2016 10:36:01 AM  
**From:** Regner, Lisa

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

**Recipients:**

"Michael Murray" <mpmurray@STpegs.com>  
Tracking Status: None  
"Sterling, Lance" <Isterling@STPEGS.COM>  
Tracking Status: None  
"Wayne Harrison" <awharrison@STPEGS.COM>  
Tracking Status: None

**Post Office:** HQPWMSMRS01.nrc.gov

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	208	1/25/2016 10:36:01 AM
draft Audit Plan Feb 2016 Transport to STP, rev1.docx		36243

**Options**

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

**AUDIT PLAN**  
**REQUEST FOR RISK-INFORMED SOLUTION TO GSI-191**  
**SOUTH TEXAS PROJECT NUCLEAR OPERATING COMPANY**  
**SOUTH TEXAS PROJECTS UNITS 1 AND 2**

Purpose and Scope

By letter dated June 19, 2013 (ADAMS Accession No. ML131750250), as supplemented by letters dated October 3, October 31, November 13, November 21 and December 23, 2013 (two letters); and January 9, February 13, February 27, March 17, March 18, May 15 (two letters), May 22, June 25, July 15, 2014; and March 10, March 25, and August 20, 2015 (ADAMS Accession Nos. ML13295A222, ML13323A673, ML13323A128, ML13338A165, ML14015A312, ML14015A311, ML14029A533, ML14052A053, ML14072A076, ML14086A383, ML14087A126, ML14149A353, ML14149A354, ML14149A434, ML14178A481, ML14202A045, ML15072A092, ML15091A440, and ML15246A125, respectively), STPNOC submitted exemption requests accompanied by license amendment requests (LARs) for a risk-informed approach to resolve Generic Safety Issue (GSI)-191, "Assessment of Debris Accumulation on PWR [Pressurized-Water Reactor] Sump Performance," at South Texas Project, Units 1 and 2 (STP). During review of the amendment, the NRC staff identified open items associated with the safety analyses that warrant an audit to help resolve them:

- Debris Transport
- Strainer performance (deaeration)
- Pump Net Positive Suction Head (NPSH)

Audit Agenda

The audit is expected to last a total of 1 day including an opening meeting, pre-exit meeting, and exit meeting. The audit will take place at the offices of Alion Science and Technology Corporation, in Albuquerque, New Mexico. The first half day is anticipated to occur on Wednesday, February 24, 2016, in the afternoon with the second half day occurring on Thursday morning, February 25, 2016.

The agenda will include:

- Review of methodologies associated with the following coatings topics with emphasis on transport:
  - Treatment of unqualified coatings in upper containment and inside the reactor cavity
  - Treatment of unqualified epoxy as chips
- Review of methodologies associated with the transport of debris
  - Transport of coatings
  - Transport of all fiber sizes to the pool and to the strainer
  - Treatment of uncertainty in the transport and retention of small fiber and impact on estimates of fiber fines debris loads on the strainer

- Erosion of fiber in the pool
- Erosion of fiber held up above the pool
- Holdup of debris in locations above the pool
- Review of methodologies used to determine the potential for and effects of degasification of sump fluid as it passes through the strainer, and its effect on NPSH

### Audit Team

The audit team will consist of:

- Ashley Smith, Safety Issues Resolution Branch Technical Reviewer, NRR
- Steve Smith, Safety Issues Resolution Branch Technical Reviewer, NRR
- Matthew Yoder, Steam Generator Tube Integrity & Chemical Engineering Branch Technical Reviewer, NRR
- CJ Fong, PRA Licensing Branch Technical Reviewer, NRR
- Steven Laur, PRA Licensing Branch Technical Reviewer, NRR
- Shlip Vasavada, PRA Licensing Branch Technical Reviewer, NRR
- Osvaldo Pensado, Contractor, Southwest Research Institute
- Stuart Stothoff, Contractor, Southwest Research Institute

The following support personnel are requested:

Analyst(s) capable of answering questions regarding debris generation and characteristics, debris transport, and the effects of these on strainer head loss and potential degasification of fluid passing through the strainer.

### Documents Requested for Staff Examination

The staff requests that documentation pertaining to the methodologies listed above be made available including:

The latest license amendment request (LAR) and complete set of RAI responses.

- Debris Generation Calculation, ALION-CAL-STPEGS-2916-002, Rev 3
- Debris Size Calculation, ALION-REP-ALION-2806-01, Rev 4
- Transport calculation, ALION-CAL-STP-8511-08, Rev 3
- Erosion calculation, ALION-REP-ALION-1006-04, Rev 1
- Information regarding strainer head loss and the potential for degasification.

### Logistical Considerations

The following logistics are requested:

- Telephone available to call NRC Headquarters if necessary
- Private space for internal NRC staff discussion separate from the licensee
- A white board in the conference room to assist in discussion
- A projector and screen for presentations
- Wireless internet access (if available in the select work space)

The NRC staff requests a conference call between the relevant parties at South Texas Project to take place no later than February 17, 2016, to support timely conduct of the audit.

#### Documentation of Audit

An audit report is usually issued within 90 days following the audit which documents the information reviewed during the audit, and any open items identified as a result of the audit. The NRC staff will also document its understanding of the proposed resolution of any identified open items. The audit report will be provided to the licensee in draft form for proprietary markup.

draft