



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

July 13, 2016

LICENSEE: STP Nuclear Operating Company

FACILITY: South Texas Project, Units 1 and 2

SUBJECT: SUMMARY OF JUNE 22, 2016, PUBLIC MEETING WITH STP NUCLEAR OPERATING COMPANY TO DISCUSS THE LICENSE AMENDMENT AND EXEMPTION REQUESTS TO USE A RISK-INFORMED APPROACH TO THE RESOLUTION OF GENERIC SAFETY ISSUE 191, "ASSESSMENT OF DEBRIS ACCUMULATION ON PWR SUMP PERFORMANCE" (CAC NOS. MF2400, MF2401, MF2402, MF2403, MF2404, MF2405, MF2406, MF2407, MF2408, AND MF2409)

On June 22, 2016, a Category 1 public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) and representatives of STP Nuclear Operating Company (STPNOC, the licensee), at NRC Headquarters, Rockville, Maryland. The meeting notice and agenda, dated June 7, 2016, are located in the Agencywide Documents Access and Management System (ADAMS) at Accession No. ML16159A001. A list of meeting attendees is provided in the Enclosure to this meeting summary.

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, August 20, 2015, April 13, May 11, and June 9, 2016<sup>1</sup> (ADAMS Accession Nos. ML13295A222, ML13323A673, ML13323A128, ML13338A165, ML14015A312, ML14015A311, ML14029A533, ML14052A110, ML14072A075, ML14086A383, ML14087A126, ML14149A353, ML14149A354, ML14149A439, ML14178A467, ML14202A045, ML15072A092, ML15091A440, ML15246A125, ML16111B204, ML16154A127, and ML16176A148, respectively), STPNOC submitted exemption requests accompanied by a license amendment request (LAR) 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).

The purpose of this public teleconference call was to discuss the NRC staff's remaining unresolved concerns associated with the licensee's August 20, 2015, document which provided information on STPNOC's revised methodology to resolve GSI-191 using a risk combined with a deterministic – 'Risk over Deterministic' or 'RoverD' – methodology. The meeting focused on providing feedback on the STPNOC request for information (RAI) responses provided in the May 11, and June 16, 2016, letters. There were no handouts for this meeting. The NRC staff provided feedback on the RAI responses including debris generation and transport, and the thermal-hydraulic (T-H) analyses.

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<sup>1</sup> Two additional letters were submitted by STPNOC on June 11 and 16, 2016; however, the ADAMS Accession Nos. were not available as of the issuance of this meeting summary.

For debris generation and transport, the NRC staff stated that the responses appeared to address the NRC staff's issues, however, clarifications may be needed on:

- Follow-up RAI 26 – the response does not provide sufficient basis for reducing the fiber limit for the single emergency core cooling system train case by a value less than the full amount of debris added to the test prior to the pump start
- Follow-up RAI 37 – the response does not provide sufficient basis concerning how the 30 pounds of fiber fines for the small breaks was calculated, including:
  - whether latent debris or erosion debris was included
  - why the resulting bed causes insignificant head loss:
    - whether it meets clean plant criteria of less than 1/16 inch
    - whether there is a strainer test with a similar amount of debris that supports the argument
- SSIB-3-9 – the response states that the updated final safety analysis report (UFSAR) markup provides a definition for TSHL [total strainer head loss]; however, the NRC staff was unable to find it. The NRC staff also requested STPNOC to consider including examples in the UFSAR of how the net positive suction head margin can change depending on plant conditions.

For the T-H analysis review, the NRC staff stated that the majority of the responses appeared to address the issues, however, STPNOC did not appear to answer SNPB-3-1 in the May 11, 2016, response. The NRC staff could not determine if additional fiber testing was needed based on the response. The STPNOC staff stated that the existing Westinghouse analysis is bounding and that the fiber limit is not exceeded. The NRC staff requested that this should be more specifically stated in the response to the question.

The NRC staff stated that the T-H review is currently challenged because only portions of the revised methodology have been submitted by STPNOC on the docket. Further, STPNOC has provided responses to some of the NRC staff's questions, but these responses cannot be reviewed holistically under the broader view of the T-H methodology. Additionally, there have been suggested changes to the T-H analysis and associated methodology discussed during regulatory audits, but these changes have not been documented formally. The NRC staff stated that until all of the responses and supplements have been provided and the analyses are completed without further changes, the NRC cannot effectively complete the review.

However, the NRC staff indicated that to expedite the license amendment request (LAR) review, it would conduct a plant –specific T-H methodology evaluation rather than reviewing the methodology generically for possible use by other plants. This will improve efficiency in making a decision on the LAR by the end of 2016.

The NRC and STPNOC staff discussed the proposed technical specification (TS) basis change to resolve the staff's concern about a severe strainer blockage condition. STPNOC stated it intended to reference Technical Specification Task Force (TSTF) traveler TSTF-448, "Control Room Habitability" as the non-risk basis for the 90-day backstop for the proposed change to TS 3.6.2 "Depressurization and Cooling Systems, Containment Spray System."

The NRC staff provided STPNOC with an update on the Title 10 to the *Code of Federal Regulations* Section 50.54c, "Performance-Based Emergency Core Cooling Systems Cladding Acceptance Criteria" rulemaking, stating that it was not expected to be promulgated this year.

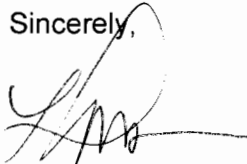
The NRC staff will issue additional RAI questions if docketed responses are needed.

The next public meeting is expected to be held on July 28, 2016.

There were no public comments or questions and no meeting feedback received.

If you have any questions, please contact me at 301-415-1906 or via e-mail at [Lisa.Regner@nrc.gov](mailto:Lisa.Regner@nrc.gov).

Sincerely,

A handwritten signature in black ink, appearing to read 'L. Regner', with a horizontal line extending to the right.

Lisa M. Regner, Senior Project Manager  
Plant Licensing Branch IV-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-498 and 50-499

Enclosure:  
List of Attendees

cc w/encl: Distribution via Listserv

LIST OF ATTENDEES JUNE 22, 2016, CONFERENCE CALL  
WITH STP NUCLEAR OPERATING COMPANY  
REGARDING RISK-INFORMED APPROACH TO RESOLUTION OF GSI-191  
SOUTH TEXAS PROJECT, UNITS 1 AND 2  
DOCKET NOS. 50-498 AND 50-499

<b>NAME</b>	<b>ORGANIZATION</b>
Lisa Regner	U.S. Nuclear Regulatory Commission (NRC)
Vic Cusumano	NRC
Steve Smith	NRC
Josh Kaizer	NRC
Matt Yoder	NRC
Paul Klein	NRC
Reed Anzalone	NRC
Ashley Smith	NRC
Caroline Tilton	NRC
Andrea Russell	NRC
Osvaldo Pensado	Southwest Research Institute (contractor for NRC)
Rob Engen	STP Nuclear Operating Company (STPNOC)
Mike Murray	STPNOC
Ernie Kee	STPNOC
Wayne Harrison	STPNOC
Steve Blossom	STPNOC
Wes Schulz	STPNOC
Drew Richards	STPNOC
Rodolfo Vaghetto	Texas A&M University
Dominic Munoz	Alion Science & Technology
Brian Krystek	Engineering Planning Management, Inc.
Craig Sellers	Calvert Cliffs Nuclear Power Plan

Enclosure

The NRC staff provided STPNOC with an update on the Title 10 to the *Code of Federal Regulations* Section 50.54c, "Performance-Based Emergency Core Cooling Systems Cladding Acceptance Criteria" rulemaking, stating that it was not expected to be promulgated this year.

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Sincerely,

*/RA/*

Lisa M. Regner, Senior Project Manager  
Plant Licensing Branch IV-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-498 and 50-499

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SSmith, NRR/DSS/SSIB  
PKlein, NRR/DE/ESGB  
MYoder, NRR/DE/ESGB  
VCusumano, NRR/DSS/SSIB

**ADAMS Accession No. ML16190A008**

\* per email

OFFICE	NRR/DORL/LPL4-1/PM	NRR/DORL/LPL4-1/LA	NRR/DSS/SSIB/BC*	NRR/DSS/STSB/BC*
NAME	LRegner	JBurkhardt*	VCusumano	AKlein
DATE	7/6/16	7/12/16	7/13/16	7/12/16
OFFICE	NRR/DE/ESGB/BC (A)*	NRR/DORL/LPL4-1/BC	NRR/DORL/LPL4-1/PM	
NAME	PKlein	RPascarelli	LRegner	
DATE	7/7/16	7/13/16	7/13/16	