



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

October 5, 2016

**LICENSEE:** STP Nuclear Operating Company

**FACILITY:** South Texas Project, Units 1 and 2

**SUBJECT:** SUMMARY OF AUGUST 29, 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 August 29, 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 August 17, 2016, are located in the Agencywide Documents Access and Management System (ADAMS) at Accession No. ML16242A186. A list of meeting attendees is provided in the Enclosure to this meeting summary.

By letter dated June 19, 2013 (ADAMS Package Accession No. ML131750250), as supplemented by letters dated October 3, October 31, November 13, November 21 and December 23, 2013 (two letters); January 9, February 13, February 27, March 17, March 18, May 15 (two letters), May 22, June 25, and July 15, 2014; March 10, March 25, and August 20, 2015; and April 13, May 11, June 9, June 16, July 18, July 21 (two letters), and July 28, 2016 (ADAMS Accession Nos. ML13295A222, ML13323A673, ML13323A128, ML13338A165, ML14015A312, ML14015A311, ML14029A533, ML14052A110, ML14072A075, ML14086A383, ML14087A126, ML14149A353, ML14149A354, ML14149A439, ML14178A467, ML14202A045, ML15072A092, ML15091A440, ML15246A125, ML16111B204, ML16154A117, ML16176A148, ML16196A241, ML16209A226, ML16229A189, ML16230A232, and ML16221A393, respectively), STPNOC submitted exemption requests accompanied by a license amendment request 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 meeting 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 methodology combined with a deterministic methodology – 'Risk over Deterministic' or 'RoverD.' The meeting focused on the NRC staff's follow-up questions following the licensee's request for additional information (RAI) responses dated May 11, June 16, July 18, July 21 (two letters), and July 28, 2016.

The STPNOC staff provided draft documents for the thermal-hydraulic analysis and probabilistic risk analysis (PRA) (ADAMS Accession Nos. ML16242A009 and ML16242A010, respectively) in response to draft follow-up questions from the NRC staff. The NRC staff provided draft

follow-up thermal-hydraulic analysis questions by e-mail dated August 22, 2016 (ADAMS Accession No. ML16236A231).

The NRC and STPNOC staffs discussed the PRA model core damage frequency (CDF) and large early release frequency (LERF) values. The NRC staff requested that the information be submitted formally on the docket with some additional information. The NRC staff needs to know if the CDF and LERF values provided are for one or both units, and whether the information is the complete estimate of the baseline risk (i.e., no significant hazards have been left out). The STPNOC staff stated the information would be provided in the submittal planned for September 22, 2016. In addition, the STPNOC staff stated that in the September submittal, it will provide the final critical weld list with the change in the estimated risk of debris.

The STPNOC staff discussed the draft response to NRC follow-up questions SNPB-3-1, SNPB-3-2, and SNPB-3-19. NRC staff replied that the answers to SNPB-3-1 and SNPB-3-19 appeared appropriate, and the parts of SNPB-3-2 that were answered appeared appropriate. A final determination of acceptability cannot be made until a formal submittal is provided.

The STPNOC staff questioned whether the NRC staff needed additional sensitivity studies for the thermal-hydraulic analysis. The NRC staff stated that the licensee needs to determine if additional sensitivity studies are needed for the remaining NRC questions.

The STPNOC and NRC staffs discussed follow-up question SNPB-3-2, bullet 3, at length. This question requests a justification from the licensee that the heat stored and material properties of the steam generators metal mass have been considered in the model to ensure that appropriate core flow exists following full core blockage.

The NRC staff also verified that a duplicate follow-up question exists in SNPB-3-22, bullet 1, and SNPB-3-2, bullet 4. Further, the NRC staff clarified in follow-up question SNPB-3-2, bullet 5, that, while the staff provided an example of a possible plot that could be used to answer the question, it was not identified as necessary to answer the question.

The NRC and STPNOC staffs also discussed follow-up question SNPB-3-13 on closure relationships. The NRC staff explained that STPNOC needs to provide a description of the validation performed for each closure relationship and if that validation applies to the relationship's use in the long-term core cooling evaluation model. These assessments are considered vital to the long-term core cooling evaluation model as RELAP5-3D has not previously been reviewed and approved by the NRC staff.

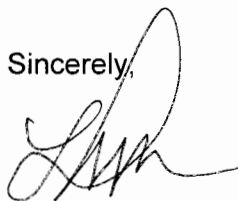
The next public meeting is planned for the week of September 12, 2016.

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

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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 'Lisa M. Regner', written in a cursive style.

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 AUGUST 29, 2016, PUBLIC MEETING

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)
Andrea Russell	NRC
Josh Kaizer	NRC
Reed Anzalone	NRC
C.J. Fong	NRC
Steven Laur	NRC
Osvaldo Pensado	Southwest Research Institute (contractor for NRC)
Mike Murray	STP Nuclear Operating Company (STPNOC)
Ernie Kee	STPNOC
Wayne Harrison	STPNOC
Steve Blossom	STPNOC
Wes Schulz	STPNOC
Drew Richards	STPNOC
Rodolfo Vaghetto	Texas A&M University
Craig Sellers	Calvert Cliffs Nuclear Power Plan
Tim Sande	Enercon

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,

*/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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List of Attendees

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JKaizer, NRR/DSS/SNPB  
SLaur, NRR, DRA, APLA

**ADAMS Accession No.: ML16246A022**

\* via email

OFFICE	NRR/DORL/LPL4-1/PM	NRR/DORL/LPL4-1/LA	NRR/DSS/SSIB/BC*	NRR/DSS/SNPB/BC*
NAME	LRegner	JBurkhardt	VCusumano	JDean
DATE	9/08/16	9/08/16	9/06/16	9/29/16
OFFICE	NRR/DRA/APLA/TL*	NRR/DORL/LPL4-1/BC	NRR/DORL/LPL4-1/PM	
NAME	CFong	RPascarelli	LRegner	
DATE	9/30/16	10/05/16	10/05/16	

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