



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

February 2, 2016

LICENSEE: STP Nuclear Operating Company

FACILITY: South Texas Project, Units 1 and 2

SUBJECT: SUMMARY OF OCTOBER 1, 2015, 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 October 1, 2015, a 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 September 15, 2015, are located in the Agencywide Documents Access and Management System (ADAMS) at Accession No. ML15274A247. 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, 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).

The purpose of this public teleconference call was to discuss the licensee's August 20, 2015, submittal, which provided information on STPNOC's new Risk over Deterministic (RoverD) methodology.

The licensee provided a draft of the handout, "Description of Supplement 2 to STPNOC Risk-Informed Licensing Application to Address GSI-191 and Respond to GL-2004-02," which can be found in ADAMS at Accession No. ML15271A304. The final version used during the meeting is in ADAMS at Accession No. ML15274A599. The modifications included a change to the slide 7 flowpath and additional bullets on slide 9.

The NRC staff stated that it would not meet the November 2015 issuance date requested by STP in its August 20, 2015, submittal. The NRC staff stated that there were several outstanding

questions that were not adequately addressed by STPNOC in the submittal. Many of the remaining open items are discussed below. The NRC staff stated it would likely have a draft safety evaluation completed in November, but that additional questions were being developed and a request for additional information was likely, as well as the possibility of additional audits.

STPNOC staff discussed the slideshow, which provided an overview of the changes since the November 2013 submittal to incorporate the deterministic elements of the "Risk over Deterministic" approach – referred to as RoverD. The licensee stated that much of the previous scope of the CASA Grande platform are no longer applicable, such as conditional failure probabilities, correlations for lead loss, uncertainty quantification of pipe break probability distributions, time dependent debris transport, and the use of STP's PRA model of record for calculation of delta Core Damage Frequency (CDF) [STP's PRA model of record is only used for delta Large Early Release Frequency (LERF)]. CASA Grande is still used for debris generation and transport to the containment pool (not time dependent).

STPNOC staff also provided an overview of the in-vessel cooling analysis. NRC staff expressed concern that RELAP 5 was being used a basis for long-term core cooling since no verification and validation information was provided. The NRC staff also questioned the quality assurance provided for the use of RELAP 5. A regulatory audit was discussed as a possible efficiency gain for the NRC staff's review of the in-vessel cooling analysis. This was tentatively discussed for the second week in November.

The NRC staff requested that the STP August submittal to be a 'stand-alone' document to the extent practical to enable an efficient review; however, changes to information were made in the August supplement without a statement as to the applicability of previous submittals. For example, a list of pipe break frequencies was provided which was different from previous submittals. Since there was not a statement that the latest submittal supersedes all previous submittals, the NRC staff is unclear which previous information on the docket is still applicable. The STPNOC staff stated that clarifications would be provided in a future submittal.

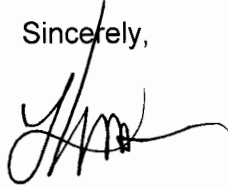
STPNOC stated that it had changed the requested exemption for Title 10 to the *Code of Federal Regulations* Section 50.46 from subsection 50.46(b)(5) 'Long-term cooling' to subsection 50.46(d). STPNOC stated it changed the specified subsection to a broader exemption specific for breaks not bounded by analysis.

Other NRC concerns discussed with the licensee included discrepancies between the submittal and NUREG-1829, "Estimating Loss-of-Coolant Accident (LOCA) Frequencies Through the Elicitation Process," the PRA for a single train of emergency core cooling system available, in-vessel long-term cooling analysis, and inorganic zinc coatings. This is not an inclusive list, however, since there was not enough time to discuss all of the NRC technical staff concerns.

No members of the public attended the meeting and no Public Meeting Feedback Forms were 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 'Lisa M. Regner', with a long horizontal flourish 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

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LIST OF ATTENDEES

OCTOBER 1, 2015, 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)
John Stang	NRC
Victor Cusumano	NRC
Matt Yoder	NRC
Josh Kaizer	NRC
Jeremy Dean	NRC
Paul Klein	NRC
Ahsan Sallman	NRC
Steve Smith	NRC
John Tsao	NRC
Marioly Diaz Colon	NRC
Steve Laur	NRC
Lindsay Robinson	NRC
Caroline Tilton	NRC
Josh Whitman	NRC
Tim Lupold	NRC
Andrea Russell	NRC
Matt Rossi	NRC
Ashley Smith	NRC
Michael Markley	NRC
Reed Anzalone	NRC
Osvaldo Pensado	Southwest Research Institute (contractor for NRC)
Mike Murray	STP Nuclear Operating Company (STPNOC)
Steve Blossom	STPNOC
Rob Engen	STPNOC
Ernie Kee	STPNOC
Wayne Harrison	STPNOC

Enclosure

<b>NAME</b>	<b>ORGANIZATION</b>
Linda Dyer	STPNOC
Wes Schulz	STPNOC
Drew Richards	STPNOC
Bruce Letellier	Alion Science & Technology
Janet Leavitt	Alion Science & Technology
Dominic Munoz	Alion Science & Technology
Kip Walker	ENERCON
Blake Stair	ENERCON
Phillip Grissom	Southern Nuclear
Craig Sellers	Calvert Cliffs Nuclear
Tim Sande	ENERCON
Paul Leonard	NextEra Energy

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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**ADAMS Accession No.: ML16011A061**

\* per email

OFFICE	NRR/DORL/LPL4-1/PM	NRR/DORL/LPL4-1/LA	NRR/DSS/SSIB/BC*	NRR/DSS/SNPB/BC*	NRR/DSS/STSB/BC*
NAME	LRegner	JBurkhardt	VCusumano	JDean	RElliott
DATE	1/11/16	1/11/16	1/19/16	1/12/16	1/15/16
OFFICE	NRR/DRA/APLA/BC*	NRR/DE/ESGB/BC*	NRR/DORL/LPL4-1/BC	NRR/DORL/LPL4-1/PM	
NAME	SRosenberg	GKulesa	RPascarelli	LRegner	
DATE	1/25/16	1/12/16	01/29/16	2/2/16	

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