



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

April 13, 2016

LICENSEE: STP Nuclear Operating Company

FACILITY: South Texas Project, Units 1 and 2

SUBJECT: SUMMARY OF MARCH 17, 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 March 17, 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 February 29, 2016, are located in the Agencywide Documents Access and Management System (ADAMS) at Accession No. ML16060A058. 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, ML14052A110, ML14072A075, ML14086A383, ML14087A126, ML14149A353, ML14149A354, ML14149A439, ML14178A467, ML14202A045, ML15072A092, ML15091A440, and ML15246A125, respectively), STPNOC submitted exemption requests accompanied by license amendment requests 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. This submittal provided information on STPNOC's revised methodology to resolve GSI-191 using a risk combined with a deterministic – 'Risk over Deterministic' or 'RoverD' – methodology. In particular, the meeting discussion topics included the in-core thermal-hydraulic review concerning large hot-leg breaks, resolution of the boric acid precipitation issue associated with current licensing basis hot-leg switchover time, STP resolution of cavity epoxy debris, the technical specification change, the Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.46 exemption change, and the schedule for completion. There were no handouts used for this meeting.

The licensee provided an update on consideration of an option to shift all hot-leg, large-break loss-of-coolant accident (LOCA) locations to a risk-informed methodology to simplify the analysis.<sup>1</sup> The licensee stated that the assumption of core failure due to debris allows elimination of the T-H analysis per 10 CFR 50.46(b)(5) for double-ended guillotine breaks in the hot leg. The licensee stated that the largest hot-leg break size to be used as the threshold is approximately 16 inches.

The licensee asked for a status update regarding the NRC staff's consideration of the current licensing basis analysis to determine hot-leg switchover timing. The NRC staff responded that the analysis reviewed during a February 4, 2016, audit<sup>2</sup> in Rockville, Maryland, includes a first-of-a-kind use of the barrel-baffle region as part of the core mixing volume. The NRC staff, therefore, needs justification from the licensee in order to consider allowing the licensee to credit this volume. This request was captured in a draft request for additional information sent by e-mail dated March 18, 2016 (ADAMS Accession No. ML16081A004).

The STPNOC staff stated that it was considering treating the epoxy coatings as qualified but degraded and that in the STP analysis epoxy coatings would fail as chips. These coatings are considered degraded since they are not in a qualified coatings inspection program and there is no continuity of inspection documentation. Portions of the coatings in containment have been visually observed and show no sign of degradation. The NRC staff stated that it would need the documentation of qualification; however, STP should not consider the epoxy coatings qualified because of the lack of continuous inspections. The NRC and STPNOC staffs agreed that a meeting dedicated to coatings discussions is needed. This has been scheduled for April 14, 2016, from 2:30–4:00 p.m. eastern daylight time.

STPNOC offered to address the NRC staff's concerns on the technical specification change (see draft question sent to STP by e-mail dated January 27, 2016, at ADAMS Accession No. ML16092A054) by providing clarification in the technical specifications basis document. The NRC staff stated that it will review the clarification to determine if it is acceptable, and that STPNOC staff should also provide the basis for the 90-day allowed outage time if actual containment debris is found to be outside analyzed limits. The licensee stated that the 90-day timeframe was based on its control room envelope heating ventilation and cooling analysis, and that it would provide this basis in its next response.

The licensee stated that it understood that the exemption to 10 CFR 50.46 that is required for this risk-informed action is 10 CFR 50.46(a)(1) instead of 50.46(d). The licensee will submit this change by letter since the justification provided in the August 20, 2015, submittal will not change. The NRC staff notified the licensee that the draft environmental assessment for the STP exemptions and amendments could not be published until the letter is received.

The next public meetings will be on March 31 and April 14, 2016.

There were no public comments and no meeting feedback forms submitted.

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<sup>1</sup> Discussed on March 3, 2016; see meeting summary at ADAMS Accession No. ML16092A044.

<sup>2</sup> The Audit Summary is found at ADAMS Accession No. ML16096A065.

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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 be 'LMR', written over a vertical line.

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 MARCH 17, 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
Paul Klein	NRC
Josh Kaizer	NRC
Reed Anzalone	NRC
Steve Laur	NRC
Andrea Russell	NRC
Steve Smith	NRC
Marioly Diaz-Colon	NRC
Matt Yoder	NRC
Caroline Tilton	NRC
Oswaldo Pensado	Southwest Research Institute (contractor for NRC)
Roland Dunn	STP Nuclear Operating Company (STPNOC)
Mike Murray	STPNOC
Ernie Kee	STPNOC
Wayne Harrison	STPNOC
Duane Gore	STPNOC
Wes Schulz	STPNOC
Drew Richards	STPNOC
Bruce Letellier	Alion Science & Technology
Janet Leavitt	Alion Science & Technology
Dominic Munoz	Alion Science & Technology
Rodolfo Vaghetto	Texas A&M
Ron Holloway	Wolf Creek Nuclear Operating Company
Brian Krystek	Engineering Planning and Management, Inc.
Tim Sande	ENERCON
Kip Walter	ENERCON
Craig Sellers	Calvert Cliffs
Phillip Grissom	Southern Co.

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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RidsRgn4MailCenter Resource	LWard, NRR/DSS/SNPB
JBowen, EDO RIV	MColon, NRR/DE/ESGB
TWertz, NRR	LRobinson, NRR/DSS/SSIB

**ADAMS Accession No. ML16092A085**

\* per email

OFFICE	NRR/DORL/LPL4-1/PM	NRR/DORL/LPL4-1/LA	NRR/DSS/STSB/BC(A)*	NRR/DSS/SSIB/BC*
NAME	LRegner	JBurkhardt	SAnderson	VCusumano
DATE	4/1/16	4/1/16	4/4/16	4/1/16
OFFICE	NRR/DSS/SNPB/BC*	NRR/DE/ESGB/BC*	NRR/DORL/LPL4-1/BC	NRR/DORL/LPL4-1/PM
NAME	JDean	GKulesa	RPascarelli	LRegner
DATE	4/11/16	4/1/16	4/12/16	4/13/16

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