

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

December 20, 2012

- LICENSEE: STP Nuclear Operating Company
- FACILITY: South Texas Project, Units 1 and 2
- SUBJECT: SUMMARY OF DECEMBER 3, 2012, PRE-LICENSING PUBLIC MEETING WITH STP NUCLEAR OPERATING COMPANY HELD VIA CONFERENCE CALL TO DISCUSS THE PROPOSED RISK-INFORMED APPROACH TO THE RESOLUTION OF GSI-191, "ASSESSMENT OF DEBRIS ACCUMULATION ON PWR SUMP PERFORMANCE" (TAC NOS. ME7735 AND ME7736)

On December 3, 2012, a public meeting was held via conference call between the U.S. Nuclear Regulatory Commission (NRC) and representatives of STP Nuclear Operating Company (STPNOC, the licensee), at NRC Headquarters, Rockville, Maryland. The purpose of the meeting was to discuss the licensee's proposed licensing approach to the resolution of Generic Safety Issue (GSI)-191, "Assessment of Debris Accumulation on PWR [Pressurized-Water Reactor] Sump Performance," for South Texas Project (STP), Units 1 and 2. The meeting notice and agenda are located in the Agencywide Documents Access and Management System (ADAMS) at Accession No. ML12321A122. The licensee previously provided an overview of its proposed approach during the public meetings held on June 2, July 7, July 26, August 22, October 3, November 1, November 2, and December 1, 2011, and February 9, March 1, March 8, March 29, June 11, September 6, 2012, and October 10, 2012¹.

The licensee discussed the following licensing strategy that it intends to pursue for a riskinformed approach to resolving GSI-191.

- STPNOC would initially submit an exemption request only.
- STPNOC would evaluate the effects of debris accumulation and in-vessel effects based on the performance of the sump during long-term cooling for those breaks associated with events that cumulatively fall within Region III of NRC Regulatory Guide (RG) 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis."
- STPNOC would request a partial exemption from the provisions of paragraph 50.46(b)(5), "Long-term cooling," of Title 10 of the *Code of Federal Regulations*

¹ Summaries of the meetings held on June 2, July 7, July 26, August 22, October 3, November 1, November 2, and December 1, 2011, and February 9, March 1, March 8, March 29, June 11, September 6, and October 10, 2012, are available in ADAMS at Accession Nos. ML111640160, ML111950094, ML112130165, ML112411419, ML112840114, ML113120129, ML113180196, ML113430087, ML120620541, ML120830103, ML120830086, ML121380522, ML12187A081, ML12270A055, and ML12300A297, respectively.

(10 CFR), for loss-of-coolant accident (LOCA) events that cumulatively fall within Region III of RG 1.174. Specifically, 10 CFR 50.46(a)(1)(i) requires that:

ECCS cooling performance must be calculated in accordance with an acceptable evaluation model and must be calculated for a number of postulated loss-of-coolant accidents of different sizes, locations, and other properties sufficient to provide assurance that the most severe postulated loss-of-coolant accidents are calculated.

STPNOC would seek an exemption from demonstrating that long-term cooling performance acceptance criteria are met with an acceptable evaluation model for LOCA events that cumulatively fall within Region III of RG 1.174. Based on meeting the criteria of RG 1.174, the licensee would not perform sump strainer tests or any other calculations that demonstrate adequate pump net positive suction head and that in-vessel effects limits are maintained under the most severe postulated LOCAs.

- The exemption would support closing NRC Generic Letter 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation during Design Basis Accidents At Pressurized-Water Reactors," for STP for compliance with 10 CFR 50.46, based on NRC approval of the exemption request.
- The licensee's exemption request would reference the supporting analysis. This analysis will be maintained in the licensee's Records Management System (RMS) and would be part of the exemption request.
- This analysis would be maintained and controlled under the licensee's PRA program.
- The licensee would change the STP updated final safety analysis report (UFSAR) based on the NRC staff's safety evaluation for the exemption.

The NRC staff queried the licensee about several aspects of the proposed approach and discussed potential problems to be considered before going forward. These include, in part,

- The specific provision of 10 CFR 50.46 from which the licensee would seek exemption is unclear.
- The licensee would need to completely address all of the criteria of RG 1.174 (e.g., defense-in-depth, safety margins) in its submittal.
- The NRC staff would expect the licensee to submit for approval the model/methodology/test results used in any of the licensee's evaluations of piping breaks, in addition to the evaluations.

No regulatory decisions were made at the meeting. A list of meeting attendees is enclosed. No Public Meeting Feedback forms were received.

Please direct any inquiries to Balwant Singal at (301) 415-3016, or balwant.singal@nrc.gov.

Sincerely,

Balurat Kerse for Carl F. Lyon, Project Manager

Carl F. Lyon, Project Manager Plant Licensing Branch IV 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

DECEMBER 3, 2012, MEETING WITH STP NUCLEAR OPERATING COMPANY

REGARDING LICENSING APPROACH TO RESOLUTION OF GSI-191 ISSUE

SOUTH TEXAS PROJECT, UNITS 1 AND 2

DOCKET NOS. 50-498 AND 50-499

<u>Licensee</u>

Jamie Paul, Licensing Coley Chappell, Licensing Ernie Kee, Risk Management Linda Dyer, GSI-191 Administration

U.S. Nuclear Regulatory Commission

Carl Schulten, Technical Specifications Branch Rob Elliott, Technical Specifications Branch Tim Collins, Division of Safety Systems John Lenning, Nuclear Performance and Code Review Branch Mike Snodderly, Health Physics and Human Performance Branch John Stang, Safety Issues Resolution Branch Mike Markley, Plant Licensing Branch IV Chris Jackson, Reactor Systems Branch Donnie Harrison, PRA Licensing Branch C.J. Fong, Division of Risk Analysis Ervin Geiger, Safety Issues Resolution Branch Jack Davis, Division of Safety Systems Fred Lyon, Plant Licensing Branch IV

Public

Todd Mintz, SWRI

• The process/relation proposed by the licensee between any exemption and/or license amendment to revise the licensing basis as described in the UFSAR and the requirements of 10 CFR 50.59 is unclear.

The staff concluded that further internal discussion of the licensing approach is necessary among the NRC staff, as well as further discussion with the licensee staff. The staff anticipates further discussion of the topic during the public meeting via conference call with the licensee scheduled for December 10, 2012 (ADAMS Accession No. ML12331A292).

No regulatory decisions were made at the meeting. A list of meeting attendees is enclosed. No Public Meeting Feedback forms were received.

Please direct any inquiries to Balwant Singal at (301) 415-3016, or balwant.singal@nrc.gov.

Sincerely, /RA by Balwant K. Singal for/

Carl F. Lyon, Project Manager Plant Licensing Branch IV 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

DISTRIBUTION:

PUBLIC LPLIV r/f RidsAcrsAcnw_MailCTR Resource RidsNrrDorlLpl4 Resource RidsNrrDraApla Resource RidsNrrDss Resource RidsNrrDssSnpb Resource RidsNrrDssSrxb Resource RidsNrrDssStsb Resource RidsNrrDssStsb Resource RidsNrrLAJBurkhardt Resource RidsNrrPMSouthTexas Resource RidsOgcRp Resource RidsRgn4MailCenter Resource TSantos, EDO RIV TWertz, NRR JStang, NRR/DSS/SSIB MSnodderly, NRR/DRA/APLA EGeiger, NRR/DSS/SSIB CSchulten, NRR/DSS/SSIB TCollins, NRR/DSS JLenning, NRR/DSS/SNPB RidsNrrDssSrxb Resource CJFong, NRR/DRA

ADAMS Accession No.: ML12341A170			*previously concurred		
OFFICE	NRR/DORL/LPL4/PM	NRR/DORL/LPL4/PM	NRR/DORL/LPL4/LA	NRR/DORL/LPL4/BC	NRR/DORL/LPL4/PM
NAME	FLyon	BSingal*	JBurkhardt*	MMarkley	BSingal
DATE	12/19/12	12/17/12	12/12/12	12/20/12	12/20/12

OFFICIAL RECORD COPY