



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

September 1, 2009

LICENSEE: Luminant Generation Company LLC
FACILITY: Comanche Peak Steam Electric Station, Units 1 and 2
SUBJECT: SUMMARY OF AUGUST 10, 2009, CATEGORY 1 MEETING WITH LUMINANT GENERATION COMPANY LLC ON RESOLUTION OF GENERIC LETTER 2004-02 (TAC NOS. MC4676 AND MC4677)

On August 10, 2009, a public meeting was held between the U.S. Nuclear Regulatory Commission (NRC), and representatives of Luminant Generation Company LLC (Luminant, the licensee), at NRC Headquarters, One White Flint North, 11555 Rockville Pike, Rockville, MD from 1:00 p.m. to 3:00 p.m. The purpose of the meeting was to discuss the of resolution the draft NRC request for additional information (RAI) regarding Generic Letter (GL) 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation during Design Basis Accidents at Pressurized-Water Reactors," for Comanche Peak Steam Electric Station (CPSES), Units 1 and 2. A list of meeting attendees in person or via conference call (NRC staff, Luminant, AREVA NP Inc. (AREVA), Alion Science and Technology Corporation (Alion), Performance Contracting, Inc. (PCI), and members of the public) is enclosed.

During the meeting, Luminant's proposed responses to RAI Questions 6, 8, 9, 10, 11, 15, 20, and 37 issued on May 11, 2009 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML091660376) were discussed.

Results of Discussion

RAI #6 and 8: The NRC staff expressed the view that the issues of the analytically assumed 30-day erosion percentage (RAI #6) and the erosion of fiberglass debris pieces that settled in the head loss test flume (RAI #8) were not adequately addressed during the previous meeting on July 9, 2009. The NRC staff suggested that a sensitivity study, as to the significance of these erosion issues for CPSES, Units 1 and 2, would help put the significance of the issue into perspective. The licensee agreed to follow up with additional information concerning conservatism in the analysis. The licensee also proposed to submit videos for staff review showing the release of fines from pieces of fibrous insulation added to a test flume. The staff expressed skepticism that these videos would provide quantitative insights that may be needed. The licensee requested that the NRC staff confirm the process for submitting the videos on docket. Project Manager, Balwant K. Singal, took an action to get back to the licensee after discussing this matter with Agencywide Documents Access and Management System (ADAMS) staff.

RAI #9: Luminant agreed to provide an expanded time line on wash down and pool-fill for small or large pieces of debris. The NRC staff expressed skepticism that the highly variable and chaotic processes that govern non-recirculation transport could be analyzed rigorously and suggested that the licensee instead address the issue by demonstrating that detailed modeling

of wash down and pool-fill was not necessary, in part, because (1) the transport of fine debris, which is a major contributor to head loss was treated conservatively, (2) the debris interceptor would tend to prevent the transport of larger debris, (3) a penalty of 200 ft² was assumed for the strainer sacrificial surface area. The licensee agreed to address NRC staff's concerns.

RAI #10 and 11: The licensee agreed to provide information discussed in previous teleconferences with the NRC staff, including contour plots showing turbulent kinetic energy and velocity in the containment pool, and a comparison of these values to the respective values in the test flume. The NRC staff noted that the flow conditions in the test flume appear less conducive to debris transport than the corresponding plant condition. However, based on information from the licensee about plant-specific conservatisms associated with the CPSES, Units 1 and 2 analysis, including the use of two-train test flow rates for a head loss case that assumed all of the debris on a single strainer, the NRC staff indicated that the magnitude of the non-conservatism would likely not result in the test being considered unacceptable for CPSES, Units 1 and 2.

RAI #15: The NRC staff expressed concern that addition of fiber prior to the starting of the test pump resulted in a non-prototypically low head loss due to (1) a non-prototypical reduction in the transport of the latent fiber to the strainer and (2) a non-prototypical reduction in head loss due to the addition sequence of adding fibrous debris prior to particulate debris. The licensee offered to provide a video that demonstrates that latent fiber will transport under flow conditions representative of the CPSES, Units 1 and 2, test conditions. The licensee further stated that debris is expected to arrive at the strainer homogeneously, rather than in a prescribed sequence. The NRC staff noted that adding fiber prior to particulate has been shown to lead to the lowest head loss of any debris addition sequence (i.e., heterogeneous or homogeneous). The licensee noted that other conservatism in the analysis offsets this condition and agreed to provide additional information to justify this view.

RAI #20: The NRC staff expressed concern that the transport of large debris in the test flume was inhibited by the narrowness of the flume. The licensee stated that debris pieces smaller than the large piece size category in Nuclear Energy Institute (NEI) 04-07 were added to the tests. The NRC staff stated that, in light of the debris interceptors around the strainers, the most significant concern related to this issue is that large pieces of fiber could filter and trap other debris added later, such as chemical precipitates. The NRC staff suggested that the licensee provide evidence that the large pieces of debris settled on the flume floor did not filter out significant quantities of suspended particulate debris or precipitate. The NRC staff requested licensee to provide additional information like porosity and the shape of the debris as evidence in support of the licensee's response.

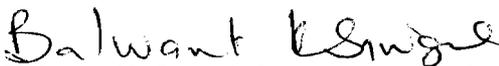
RAI #37: The licensee did not agree that main steam line break needed to be considered as part of GL 2004-02, since it is not part of design basis for CPSES, Units 1 and 2. The licensee also expressed the view that previous testing performed for this case was adequate to demonstrate acceptable strainer performance. The NRC staff questioned the sufficiency of the licensee's previous testing to demonstrate that the limiting main steam line break case had been adequately addressed. The licensee agreed to provide regulatory and technical justifications to the NRC staff by September 10, 2009, for consideration by the NRC staff. The staff agreed to consider further the regulatory aspects of the licensee's argument.

The licensee also agreed to provide responses to the RAIs by October 13, 2009.

This was a Category 1 meeting. The public was invited to observe and given an opportunity to communicate with the NRC staff after the business portion, but before the meeting was adjourned. Public Meeting Feedback forms were not received.

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

Sincerely,


Balwant K. Singal, Senior Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-445 and 50-446

Enclosure:
List of Attendees

cc w/encl: Distribution via Listserv

ENCLOSURE

LIST OF MEETING ATTENDEES AND NEI BRIDGE LINE PARTICIPANTS

AUGUST 10, 2009, PUBLIC MEETING WITH

LUMINANT GENERATION COMPANY LLC

**LIST OF ATTENDDDES VIA CEONFERENCE CALL FOR AUGUST 10, 2009
PUBLIC MEETING WITH LUMINANT GENERATION COMPANY LLC**

NAME	ORGANIZATION
Luminant and Supporting Organizations	
Tim Hope	Luminant
Fred Madden	Luminant
Jimmy Seawright	Luminant
Charles Feist	Luminant
Harold Beck	AREVA
Chris Kudla	PCI
Jim Bleigh	PCI
Stu Cain	ALDEN
William Knous	ALION
Gilbert Zigler	ALION
Tim Sande	ALION
Members of the Public	
Fred Emerson	GE
Ron Holloway	Wolf Creek Nuclear Operating Corporation
Hiroshi Mirsuoka	Mitsubishi
John Buttler	NEI

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/RA/

Balwant K. Singal, Senior Project Manager
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ADAMS Accession No.ML092330062

*** emails from M. Scott and J. Lehning dated 8/17/09**

OFFICE	NRR/LPL4/PM	NRR/LPL4/LA	NRR/SSIB/BC	NRR/LPL4/BC	NRR/LPL4/PM
NAME	BSingal	JBurkhardt SLittle for	MScott*	MMarkley	BSingal
DATE	8/20/09	8/30/09	8/17/09	9/1/09	9/1/09

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