



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

March 1, 2010

LICENSEE: R.E. Ginna Nuclear Power Plant, LLC

FACILITY: R.E. Ginna Nuclear Power Plant

SUBJECT: SUMMARY OF FEBRUARY 1, 2010, MEETING WITH R.E. GINNA NUCLEAR POWER PLANT, LLC TO DISCUSS SUPPLEMENTAL RESPONSES TO GENERIC LETTER 2004-02, "POTENTIAL IMPACT OF DEBRIS BLOCKAGE ON EMERGENCY RECIRCULATION DURING DESIGN BASIS ACCIDENTS AT PRESSURIZED WATER REACTORS" (TAC NO. MC4687)

On February 1, 2010, a Category 1 public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) and representatives of R.E. Ginna Nuclear Power Plant, LLC (the licensee) and their contractor. The meeting was held via a toll-free audio telephone conference call that was available to interested members of the public. [See the Meeting Notice dated January 13, 2010 (Agencywide Document Access Management System (ADAMS) Accession No. ML100110170).] The purpose of the meeting was to discuss remaining issues identified during NRC staff review of the R.E. Ginna Nuclear Power Plant Generic Letter (GL) 2004-02 Supplemental Responses. A list of attendees is provided in the Enclosure.

The NRC staff issued a Request for Additional Information (RAI) regarding GL 2004-02 to the licensee on December 4, 2009 (ADAMS Accession No. ML093290264). The letter requested the licensee to be prepared to discuss their proposed responses with the staff prior to formal submittal. The licensee provided draft responses and the staff discussed each proposed response in detail with the licensee and their contractor. The following summarizes the discussion of each proposed response:

- RAI 1.a It was concluded that the NRC staff's RAI did not clearly articulate the information being sought. Specifically, the staff had intended for the licensee's comparison of the insulation banding to account for the difference in spacing between the configuration that was tested and the as-installed configuration at Ginna. Therefore, the staff agreed to revise the RAI and provide it to the licensee by the end of the week.
- RAI 1.b The proposed response was considered adequate and the issue resolved.
- RAI 3.1 The licensee will modify their proposed response by discussing how a significant portion of the grating will not be exposed to containment spray such that fibrous debris will not likely wash down. The NRC staff considers this to be an insignificant issue based on the limited credit taken, and the issue will be considered resolved assuming this additional information requested is provided.
- RAI 3.2 The proposed response was considered adequate and the issue resolved.
- RAI 3.3.a/b The licensee indicated it would explore the possibility of modifying the debris transport analysis such that credit would not be taken for debris settling on the operating floor. If this approach is taken, the NRC staff would consider the issue

resolved. Otherwise, additional discussions will be necessary. With regard to 3.3.a, the licensee could attempt to show that using a more refined distribution would not result in additional transport. The evaluation could be qualitative and could factor in the assumption of approximately 40 percent transport across some parts of the operating deck as well as overall conservatisms in the transport evaluation.

RAI 3.4.a The NRC staff will consider the issue resolved if the current Alion fiberglass erosion test program justifies the assumption of 10 percent fibrous debris erosion in the containment pool.

RAI 3.4.b The NRC staff will consider the issue resolved if the licensee revises its debris transport analysis and no longer takes credit for debris settlement on the operating deck. Otherwise additional discussion is needed.

RAI 3.4.c The proposed response was considered adequate and the issue resolved.

RAI 3.5.a The proposed response was considered adequate and the issue resolved.

RAI 3.5.b The licensee stated that it is considering retesting strainer performance to address this and other RAIs. The NRC staff stated that one method of addressing this question is for the licensee to ensure that effectively all debris reaches the strainer. A second method would be to permit settling under flow conditions that have been validated to be prototypical of the plant. In this case, a sensitivity test could be used to identify which debris would settle (and hence be subject to erosion), and then the licensee could add a suitable amount of eroded fines to the strainer test. For example, an assumption of 10 percent erosion for Nukon fibrous debris might be acceptable if the Alion erosion testing is successful and the expected flow velocity in the plant is consistent with that used in the Alion testing. Different erosion percentage assumptions may be applicable to other types of materials.

RAI 3.6 The licensee will modify their proposed response on page 22 to further justify their statement, "it is reasonable to assume that a negligible quantity of debris would wash out of the reactor cavity into the pool." The additional discussion should include the depth of the cavity. The NRC staff will consider this issue resolved pending confirmatory review of the additional requested information.

RAI 3.7 The NRC staff will consider the issue resolved if the licensee revises its debris transport analysis and no longer takes credit for debris settlement.

RAI 3.8 The proposed response was considered adequate and the issue resolved.

RAI 14 The issue regarding the clean strainer head loss calculation was considered adequate and resolved.

RAI 14.1 The NRC staff and licensee did not resolve concerns regarding the deaeration calculation of the Ginna sump recirculation pool fluid and its potential impact on

emergency core cooling system pump performance. The licensee agreed to contact the staff when they are prepared to continue this discussion.

RAI 14.2 The proposed response was considered adequate and the issue resolved.

RAI 14.3 The licensee stated that it is considering retesting strainer performance to address this and other RAIs. The NRC staff will consider the issue resolved if the licensee revises its debris generation and transport analysis to show that the amount of Cal-Sil included in the head loss test bounds the amount that could reach the strainer in the plant. Alternatively, the licensee could retest with the appropriate amount of Cal-Sil or justify that the debris quantities used in the previous head loss test were prototypical or conservative with respect to the potential effects of Cal-Sil.

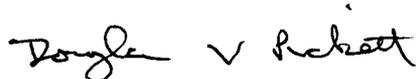
RAI 25 The licensee agreed to supplement their proposed response to address the staff's question regarding a break larger than 2 inches with no accumulator injection that could lead to reflood of the reactor coolant system. The NRC staff will consider this issue resolved pending confirmatory review of the additional information.

Depending on the licensee's chosen path forward, details of the licensee's planned responses to the following RAIs would likely need to be discussed at the public meeting if held: 1.a, 3.3.b, 3.4.b, 3.5.b, 3.7, 14.1, 14.3, and 25.

The licensee agreed to contact the NRC staff in the near future (approximately 1 week) and provide their decision on whether to adopt a revised debris transport analysis that does not take credit for debris settlement. The licensee will also contact the staff when they are prepared to continue discussions on RAI 14.1. A decision on whether to conduct a formal meeting in Rockville, Maryland (as opposed to another audio toll-free telephone conference call) will be deferred pending identification of the licensee's plans to resolve the above items.

Members of the public were not in attendance. Public Meeting Feedback forms were not received.

Please direct any inquiries to me at 301-415-1364, or Douglas.Pickett@nrc.gov.



Douglas V. Pickett, Senior Project Manager
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-244

Enclosure:
List of Attendees

cc w/encl: Distribution via Listserv

LIST OF ATTENDEES

FEBRUARY 1, 2010, MEETING WITH R.E. GINNA NUCLEAR POWER PLANT, LLC

SUPPLEMENTAL RESPONSES TO GENERIC LETTER 2004-02

R.E. Ginna Nuclear Power Plant, LLC

Mark Harriman
Mathew Zweigle
Richard Everett
Paul Swift
Damon Peters
Edward Groh
Jane Neis
Tom Harding

Alion

Timothy Sande
Craig Sellers
Gilbert Zigler
Steven Unikewicz
Kevin Hafera
Joseph Tezak

Calvert Cliffs Nuclear Power Plant, LLC

Stephen Kinsey
John Swailes

Beaver Valley Power Station

Kirk Troxler

New York State Department of Public Service

Paul Eddy

Nuclear Energy Institute

John Butler

NRC

Mike Scott
John Lehning
Steve Smith
Doug Pickett
Larry Doerflein, Region 1

emergency core cooling system pump performance. The licensee agreed to contact the staff when they are prepared to continue this discussion.

RAI 14.2 The proposed response was considered adequate and the issue resolved.

RAI 14.3 The licensee stated that it is considering retesting strainer performance to address this and other RAIs. The NRC staff will consider the issue resolved if the licensee revises its debris generation and transport analysis to show that the amount of Cal-Sil included in the head loss test bounds the amount that could reach the strainer in the plant. Alternately, the licensee could retest with the appropriate amount of Cal-Sil or justify that the debris quantities used in the previous head loss test were prototypical or conservative with respect to the potential effects of Cal-Sil.

RAI 25 The licensee agreed to supplement their proposed response to address the staff's question regarding a break larger than 2 inches with no accumulator injection that could lead to reflood of the reactor coolant system. The NRC staff will consider this issue resolved pending confirmatory review of the additional information.

Depending on the licensee's chosen path forward, details of the licensee's planned responses to the following RAIs would likely need to be discussed at the public meeting if held: 1.a, 3.3.b, 3.4.b, 3.5.b, 3.7, 14.1, 14.3, and 25.

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/RA/

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RidsNrrPMREGinna Resource		SBaggett, EDO Region 1

ADAMS Accession No. ML100350939

OFFICE	DORL/LPL1-1/PM	DORL/LPL1-1/LA	DSS/SSIB/BC	DORL/LPL1-1/BC
NAME	DPickett	SLittle	MScott	NSalgado
DATE	02 / 24 / 10	02 / 24 / 10	02 / 26 / 10	03 / 01 / 10