

September 11, 2006

MEMORANDUM TO: Michael L. Scott, Chief
Safety Issues Resolution Branch
Division of Safety Systems
Office of Nuclear Reactor Regulation

FROM: Joseph A. Golla, Project Manager */RA/*
Generic Communications and Power Uprate Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF AUGUST 2, 2006, PUBLIC MEETING WITH NEI TO
DISCUSS DOWNSTREAM EFFECTS

On August 2, 2006, Nuclear Regulatory Commission (NRC) staff met with representatives of the Nuclear Energy Institute (NEI) and industry in a public meeting at NEI headquarters in Washington D.C. The Enclosure provides a list of those in attendance at the meeting and additional industry representatives who participated via teleconference. Information presented by industry at the meeting is available in the NRC Agencywide Documents Access and Management System (ADAMS) under Accession Number ML062400123.

At this meeting, industry presented an overview of the progress made thus far on the fuel evaluation portion of the pressurized water reactor owner's group (PWROG) long-term core cooling project. The PWROG is developing a Topical Report for licensees to use in evaluating the effects of debris ingested into the reactor vessel during post-accident operation when the emergency core cooling system and containment spray system are aligned to recirculate inventory from the containment sump. This Topical Report will follow the guidance provided in Chapter 9 "Reactor Internals and Fuel Blockage Evaluation Method" of WCAP-16406-P "Evaluation of Downstream Sump Debris Effects in Support of GSI-191." The new fuels evaluation Topical Report will apply to all Westinghouse and Areva clients. For details on the progress made and path forward on the new Topical Report see the meeting presentation materials under ADAMS Accession Number ML062400123.

At the meeting, NRC representatives presented an update regarding ongoing efforts of the staff on the evaluation of downstream effects on reactor fuel. The staff presented the current status of NRC evaluation efforts in this area, challenges remaining, path forward, and preliminary evaluation results. The staff's briefing on current status of NRC efforts indicated that the NRC just completed some preliminary independent confirmatory analysis as part of a GSI-191 audit using two different analysis tools that are still in development with the NRC Office of Research. The staff representative also indicated that that NRC will continue to meet with PWROG to identify inputs needed for additional plant-specific confirmatory analysis. The challenges remaining presented by the staff representative included challenges for both the NRC and industry. The path forward for the staff includes continued interaction with PWROG and

licensees on site-specific issues and responses to staff requests for additional information, and continued performance of confirmatory analysis as part of the GSI-191 audit process as needed. For details on these issues see the meeting presentation materials under ADAMS accession number ML062400123. During the meeting NRC staff emphasized the expectation that licensees continue their downstream effects evaluations in parallel with NRC review of WCAP-16406-P.

Agreements reached at the meeting are: 1) PWROG will furnish intermediate milestones on future activities at the next meeting; 2) NRC and NEI will review recent correspondence concerning completion of actions to address Generic Letter (GL) 2004-02. The purpose of such review is to determine whether any licensees were expected to fully respond to GL 2004-02 by the end of 2006. If so, the NRC and NEI will discuss how to address situations where such licensees now believe their responses will not be complete by this date; 3) A training program for implementation of WCAP-16406-P is being developed by PWROG, the staff asked to be informed of the schedule in order to facilitate the NRC staff attendance; 4) It was agreed that interaction between the NRC and PWROG on downstream effects should continue, a followup meeting or conference call should be arranged in 4-6 weeks; 5) The PWROG presentation contained references to a number of topical/test reports that were previously reviewed by the NRC. Westinghouse agreed to provide a specific list of references and indicated that they may need some assistance from the NRC in retrieving some old NRC test reports; 6) Another meeting with NEI, PWROG, and NRC should be scheduled to discuss ongoing developments in the chemical effects area; 7) The NRC is still working with EPRI to get access to two test reports related to the destruction of non-qualified coatings. The NRC plans to have these reports reviewed by a contractor. As this review progresses, the NRC will pass findings and issues on to NEI to be communicated to the industry; and 8) NRC identified a need for information from nuclear steam supply system (NSSS) vendors for modeling reactor vessel lower internals for computational fluid dynamics analysis. The NRC staff will use the PWROG contacts to arrange a meeting with the appropriate technical contacts.

At the meeting an industry representative presented a briefing on the results of Phenoline 305 coating tests. This was a short, preliminary briefing. The overall test results indicate that Phenoline 305 paint chips are non-transportable. Results of these tests will be more fully presented at a future meeting.

At the end of the meeting a member of the public inquired about the number of Pressurized-Water Reactor Units applying for extensions to the December 2007 target date for having a redesigned sump screen installed. An NRC representative agreed to provide this information to the individual after the meeting. After the question was taken from the individual member of the public the meeting was adjourned.

Enclosure: As stated

List of Attendees for August 2, 2006,
Meeting of NEI, Industry, and NRC

NAME	ORGANIZATION
Maurice Dingler	WCNOC/PWROG
Timothy Andreychek	Westinghouse
Ken Petersen	STARS/USA
Chuck Feist	TXU Power
Thomas Engbring	APS/PVNGS
Lee Williams	AREVA
Todd Bacon	AREVA
Aaron Smith	Enercon
Bob Bryan	TVA
Gordon Wissinger	AREVA
Maria Rosa Gutierrez	Entergy
James Wong	NMC
Michael Kai	Dominion
Brian Dunn	FPL
Joe Gasper	OPPD
Paul Leonard	AEP
Saif Kuan	Entergy
Adi Irani	Entergy
Michael Licitra	GE
Cliff Po	Constellation/Ginna
Bob Gamberg	Duke Energy
Jimmy Cash	SNC
Shannon Burke	Progress Energy
Marty Legg	Dominion

ENCLOSURE

Kirk Troxler	FENOC
Ivo Garza	Sargeny & Lundy
Rick Heath	AREVA
Steven Dolley	Platts
John Butler	NEI
Davood Abdollahian	GE
Tom Hafera	NRC
Michael Scott	NRC
Joe Golla	NRC
Leon Whitney	NRC
Kim Conway	NRC
William Krotiuk	NRC
Walton Jensen	NRC
Gary Hammer	NRC
Sean Peters	NRC
Deanne Raleigh*	Scientec
Pete Wilkins*	SCE
Jimmy Pellyman*	FP&L
Mr. Ricker*	Protopower

* Participated via teleconference

licensees on site-specific issues and responses to staff requests for additional information, and continued performance of confirmatory analysis as part of the GSI-191 audit process as needed. For details on these issues see the meeting presentation materials under ADAMS accession number ML062400123. During the meeting NRC staff emphasized the expectation that licensees continue their downstream effects evaluations in parallel with NRC review of WCAP-16406-P.

Agreements reached at the meeting are: 1) PWROG will furnish intermediate milestones on future activities at the next meeting; 2) NEI will coordinate the downstream effects data collection methods of vendors and document the method by which the data is used to establish debris source terms; 3) NRC and NEI will review recent correspondence concerning completion of actions to address Generic Letter (GL) 2004-02. The purpose of such review is to determine whether any licensees were expected to fully respond to GL 2004-02 by the end of 2006. If so, the NRC and NEI will discuss how to address situations where such licensees now believe their responses will not be complete by this date; 4) A training program for implementation of WCAP-16406-P is being developed by PWROG, the staff asked to be informed of the schedule in order to facilitate the NRC staff attendance; 5) It was agreed that interaction between the NRC and PWROG on downstream effects should continue, a followup meeting or conference call should be arranged in 4-6 weeks; 6) The PWROG presentation contained references to a number of topical/test reports that were previously reviewed by the NRC. Westinghouse agreed to provide a specific list of references and indicated that they may need some assistance from the NRC in retrieving some old NRC test reports; 7) Another meeting with NEI, PWROG, and NRC should be scheduled to discuss ongoing developments in the chemical effects area; 8) The NRC is still working with EPRI to get access to two test reports related to the destruction of non-qualified coatings. The NRC plans to have these reports reviewed by a contractor. As this review progresses, the NRC will pass findings and issues on to NEI to be communicated to the industry; and 9) NRC identified a need for information from nuclear steam supply system (NSSS) vendors for modeling reactor vessel lower internals for computational fluid dynamics analysis. The NRC staff will use the PWROG contacts to arrange a meeting with the appropriate technical contacts.

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ADAMS Package Accession No.: ML062400123
 Meeting Summary Accession No.: ML062400125
 NRC Presentation Accession No.: ML062400127
 PWROG Presentation Accession No.: ML062400128

NRR-001

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DATE	8/31/2006	9/6/2006	8/31/2006	9/11/2006

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