March 21, 2007

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 FEBRUARY 7&8, 2007, PUBLIC MEETING WITH THE NUCLEAR ENERGY INSTITUTE (NEI), PRESSURIZED WATER REACTOR OWNERS GROUP (PWROG), LICENSEES, AND SUMP STRAINER VENDORS TO DISCUSS THE RESOLUTION OF GENERIC SAFETY ISSUE (GSI)-191

On February 7&8, 2007, Nuclear Regulatory Commission (NRC) staff met with representatives of NEI, PWROG, licensees, and sump strainer vendors in a public meeting at NRC headquarters in Rockville, Maryland. The enclosure provides a list of those in attendance and individuals who participated via teleconference. Information presented by the NRC and industry at the meeting is available in the NRC Agencywide Documents Access and Management System under Accession No. ML070510403.

The purpose of the meeting was to discuss a variety of issues related to GSI-191 with the intent to identify the next steps needed. Notably, water management, long-term cooling/fuel effects topical report, and ongoing chemical effects testing were discussed. The meeting was convened by the NRC GSI-191 project manager. This was followed by remarks from the NRC Director of the Division of Safety Systems and the NRC GSI-191 team leader.

On February 7, 2007, a NEI representative gave a presentation concerning alternate water management strategies. This presentation covered strategies for improved water management during LOCA events, current activities regarding water management, and impediments to broader application of water management strategies. Discussion between NRC and NEI followed the presentation, and the NRC Director of the Division of Safety Systems indicated that the NRC encourages the development of water management strategies.

Following this, the NRC GSI-191 team leader made remarks concerning the status of the NRC staff's requests for additional information on the downstream effects topical report, WCAP-16406-P. After this, a NRC representative gave a presentation on long-term cooling. The purpose of this presentation was to respond to a PWROG letter on long-term cooling and to emphasize some items that need to be addressed in the upcoming topical report on in-vessel downstream effects.

Following this, a representative of the PWROG gave a presentation on long-term cooling. The objective of this presentation was to provide the status of activities that the industry is undertaking to provide reasonable assurance that sufficient long-term core cooling is achieved to satisfy the requirements of Title 10 of the *Code of Federal Regulations*, Section 50.46. Briefly, to accomplish this the PWROG is performing fuel hot spot evaluations, fuel chemical effects evaluations, and blockage evaluations.

After this the NRC GSI-191 team leader presented an update status briefing on GSI-191 plant audits. There were no new issues identified at the time of this meeting to pass on to the industry.

On February 8, 2007, a representative of Westinghouse presented a briefing which discussed the incorporation of additional plant inputs in the chemical effects spreadsheet utilized by Westinghouse in performing chemical effects analysis. The objective of this project is to incorporate plant-specific inputs to address conservatisms without changing the base chemical model. The expected benefit of this effort is to reduce the predicted precipitate generation to aid demonstration of the adequacy of plant designs to handle sump screen head loss and chemical effects.

Next, NEI made a presentation on buffer replacement considerations. The NRC representatives noted that they encourage consideration of such replacements. In response to NEI questions, the staff agreed to consider review criteria for permanent versus temporary buffer changes, as well as the need for a buffer change amendment to name the buffer chosen in the technical specifications. This presentation was followed by a briefing by NRC on chemical leaching from coatings. Discussion ensued concerning the possible effects that leaching from coatings and changes to coatings can have on the amount of precipitate and effect on head loss across the sump screen. A representative of the PWROG also addressed chemical leaching from coatings. The PWROG indicated that they will be submitting information to the NRC staff that shows the potential contribution of coatings to chemical effects is expected to be insignificant.

Following these briefings, each of the involved sump strainer vendors gave a presentation on the status of their head loss testing across their sump screen designs, including effects of chemical precipitates trapped at the screen. The vendors were General Electric, Alion Science, Control Component, Inc., Performance Contracting, Inc., Areva, and Atomic Energy Canada Limited.

Plans for the next meeting were discussed with a meeting likely to be held in April. There were no questions from members of the public, and the meeting was adjourned.

Enclosure: As Stated

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ADAMS ACCESSION NUMBER: ML070510409

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NAME	CHawes CMH	JGolla	AHiser	MScott	CJackson
DATE	2/22/2007	2 /22 /2007	3/13/2007	3/21/2007	3/13/2007

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List of Attendees for February 7, 2007, Meeting of NEI, Industry, and NRC

NAME	ORGANIZATION
Kiran Mathur	PSEG Salem Plant
Brian Davenport	Exelon Nuclear
Richard Sievers	AmerGen/TMI
Dave Auch	AmerGen/TMI
Pete Wilkens	SCE-SONGS
Phil Herndon	Ginna Station
Mike Franklin	Progress Energy
Deann Raleigh	LIS Scientec
Marwan Charrouf	MPR Associates
Davi Shih	Entergy/IPEC
Roger Waters	Entergy/IPEC
Greg Ferguson	Entergy/WF3
Saif Khan	Entergy/ANO
Thomas Engbring	Arizona Public Service/PVNGS
Natalie Mosher	Entergy
Tim Andreychek	Westinghouse
Rick Reid	Westinghouse
Mo Dinglor	WCNOC/PWROG
David Midlik	Southern Nuclear
Bob Peterson	Sargent & Lundy
Andrew Kaufman	Continuum Dynamics, Inc.
Erdal Caba	Progress Energy
James Darrell	Progress Energy
Wes McGoun	Progress Energy
Bill Rinkacs	Westinghouse
Rob Choromokos	Alion Science

Mike Murdock	Duke Energy Catawba
Gilbert Zigler	Alion Science
Aaron Smith	Enercon
Bob Bryan	TVA
Charles Feist	TXU Power
Todd Bacon	Areva
Chris Kudla	PCI
Jim Bleigh	Performance Contracting
Ray Phan	Areva
Ken Greenwood	Areva
Kirk Troxler	FENOC
Dewey Rochester	Duke Energy
Dan Brosnan	PG&E Diablo Canyon
Tom Kendall	NMC-Point Beach
Jeremy Fischer	NMC-Point Beach
Bruce Beisler	FPL
Brian Dunn	FPL
Philip Green	FPL
Thomas Bartoski	Sargent & Lundy
Paul Young	Dominion
Addison Hall	Dominion
Paul Willoughby	Dominion
Eric Larson	GE
Jim Furman	GE
John Broschak	NMC-Palisades
Amy Hazelhoff	NMC-Palisades
Gordon Wissinger	Areva
Heidi Dergel	Areva
Takahiro Imamura	MNES
Addison Ricker	Proto Power

Joe Gasper	OPPD
EJ Mistele	OPG
Tobias Zieger	CCI
John Butler	NEI
Mike Scott	USNRC
Michelle Hart	USNRC
Bob Dennig	USNRC
Joe Golla	USNRC
Paul Klein	USNRC
Matt Yoder	USNRC
Steve Unikewicz	USNRC
Jared Wermiel	USNRC
John Lehning	USNRC
Shanlai Lu	USNRC
Ralph Architzel	USNRC
John Burke	USNRC
Rich Lobel	USNRC
Tom Martin	USNRC
Walt Jensen	USNRC
Tom Hafera	USNRC
Steve Smith	USNRC
Ralph Caruso	USNRC/ACRS

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List of Attendees for February 8, 2007, Meeting of NEI, Industry, and NRC

NAME	ORGANIZATION
Kiran Mathur	PSEG Salem Plant
Brian Davenport	Exelon Nuclear
Richard Sievers	AmerGen/TMI
Dave Auch	AmerGen/TMI
Pete Wilkens	SCE-SONGS
Phil Herndon	Ginna Station
Mike Franklin	Progress Energy
Marwan Charrouf	MPR Associates
Davi Shih	Entergy/IPEC
Roger Waters	Entergy/IPEC
Greg Ferguson	Entergy/WF3
Saif Khan	Entergy/ANO
Thomas Engbring	Arizona Public Service/PVNGS
Natalie Mosher	Entergy
Tim Andreychek	Westinghouse
Mo Dinglor	WCNOC/PWROG
David Midlik	Southern Nuclear
Bob Peterson	Sargent & Lundy
Andrew Kaufman	Continuum Dynamics, Inc.
Erdal Caba	Progress Energy
James Darrell	Progress Energy
Bill Rinkacs	Westinghouse
Rob Choromokos	Alion Science
Mike Murdock	Duke Energy Catawba
Gilbert Zigler	Alion Science

Aaron Smith	Enercon
Bob Bryan	TVA
Charles Feist	TXU Power
Todd Bacon	Areva
Chris Kudla	PCI
Jim Bleigh	Performance Contracting
Ray Phan	Areva
Ken Greenwood	Areva
Kirk Troxler	FENOC
Dewey Rochester	Duke Energy
Dan Brosnan	PG&E Diablo Canyon
Tom Kendall	NMC-Point Beach
Jeremy Fischer	NMC-Point Beach
Bruce Beisler	FPL
Brian Dunn	FPL
Philip Green	FPL
Paul Young	Dominion
Addison Hall	Dominion
Paul Willoughby	Dominion
Eric Larson	GE
Jim Furman	GE
John Broschak	NMC-Palisades
Amy Hazelhoff	NMC-Palisades
Heidi Dergel	Areva
Takahiro Imamura	MNES
Addison Ricker	Proto Power
Joe Gasper	OPPD
EJ Mistele	OPG
Tobias Zieger	CCI
John Butler	NEI

Jon Cavallo	CCC&L Inc.
Dave Guzonas	AECL
Ardesar Irani	Entergy
Stuart Cain	Alden Research Laboratory
Dale Vincent	Nuclear Management Co.
James Mallon	PSEG
David Dijak	Enercon Services
Paul Leonard	AEP DC Cook
Elliot Rosenfeld*	State of New Jersey
Ed Kimoto*	SONGS
Bill Bateman	USNRC
Allen Hiser	USNRC
Zena Abdullah	USNRC/ACRS
Mohammed Abid	USNRC
Mike Scott	USNRC
Joe Golla	USNRC
Paul Klein	USNRC
Matt Yoder	USNRC
John Lehning	USNRC
Shanlai Lu	USNRC
Ralph Architzel	USNRC
John Burke	USNRC
Tom Martin	USNRC
Tom Hafera	USNRC
Steve Smith	USNRC
Ralph Caruso	USNRC/ACRS

* Participated via teleconference

Enclosure

Memorandum to Michael L. Scott from Joseph A. Golla

SUBJECT: MEETING SUMMARY OF PUBLIC MEETING WITH NEI AND INDUSTRY ON FEBRUARY 7&8, 2007, TO DISCUSS TOPICS RELATED TO GSI-191

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