

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 MARCH 1, 2007, PUBLIC MEETING WITH THE
NUCLEAR ENERGY INSTITUTE (NEI), LICENSEES, AND SUMP
STRAINER VENDORS TO DISCUSS CONTAINMENT SUMP
BACKFLUSHING AS A MEANS OF CONTRIBUTING TO THE
RESOLUTION OF GENERIC SAFETY ISSUE-191 (GSI-191)

On March 1, 2007, Nuclear Regulatory Commission (NRC) staff met with representatives of NEI, licensees, and sump strainer vendors in a public meeting at the NEI offices in Washington, DC. 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 (ADAMS) Accession No. ML070720317.

The purpose of the meeting was to discuss design options available for the implementation of containment sump backflushing as a means to address GSI-191. The meeting was convened by the NRC GSI-191 project manager. This was followed by a presentation by the NRC GSI-191 team leader concerning NRC views on backflushing. It was stated that the NRC encourages licensees to consider the development of backflushing strategies as a plant-specific tool to help address strainer clogging issues. The presenter noted several issues to be addressed, and that the standard would be tougher for approaches relying on backflush as part of the credited GSI-191 solution, as opposed to use of backflush to provide defense in depth. A representative of NEI stated that it might be useful for licensees to develop and use a backflush strategy as an interim or compensatory measure for plants requesting an extension in the time allotted for addressing GSI-191. NRC representatives responded that this approach would be treated consistently with other measures proposed to support an extension request. Examples of factors that would bear consideration in a review of backflush submittals were stated by the NRC representatives to include whether the backflush strategy entails stopping flow to the reactor core, the ability of the strainer to withstand the mechanical loads that would be placed on it with reverse flow, and the feasibility of performing the operational lineup needed to accomplish the backflush strategy. The NRC presenter noted that backflush equipment and water sources relied on to show adequate long-term core cooling would likely need to be safety-related, or an exemption would be needed.

Following this, a licensee representative of Nuclear Management Company, LLC, presented a briefing on a proposed backflush strategy for Point Beach Nuclear Plant. The strategy would employ gravity drain from the refueling water storage tank through the affected strainer(s) while maintaining core injection through other means. Other licensees present stated several other potential backflush strategies for their plants. Examples included gravity drain from the spent fuel pool (SFP) or pumping from the SFP using the SFP pumps; utilization of low pressure injection pumps from the SFP, borated water storage tank, or reactor coolant system; and alignment of the containment spray pumps backward through a predetermined path.

Meeting participants discussed the amount of backflow to employ and the possibility of disturbing debris in the containment pool that has settled if 100 percent backflow is used, and subsequently drawing it toward the sump screen upon resumption of normal containment sump recirculation. Participants also discussed the strategy of using multiple backflushes.

Finally, NRC management representatives stated the NRCs position on the use of backflushing. They reiterated that the NRC encourages the use of backflushing strategies as a potential contributor to the resolution of GSI-191. They further stated that the NRC will be receptive to licensees' well-considered strategies for backflushing if the licensee shows that a given strategy provides reasonable assurance that long-term cooling is maintained. They stated that the backflush strategy must consider the mechanical loads that would be placed on the strainer during backflushing and ensure that the structural integrity of the strainer is maintained. They also stated that if a licensee wishes to employ a backflush strategy as an interim measure a somewhat less rigorous standard of proof would be applied by the NRC for its acceptance. They further stated that the NRC would prefer to see plant-specific and/or vendor-specific backflush testing done with worst case debris loading if licensees are to employ a backflush strategy in their final resolution of GSI-191, though analysis showing applicability of generic testing results would potentially also be acceptable. The bottom line is that the licensee needs to show that backflush would work if it is to be relied on.

Plans for the next meeting were discussed. There were no questions from members of the public, and the meeting was adjourned.

Enclosure: As Stated

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Enclosure: As Stated

ADAMS ACCESSION NUMBER: ML070720404

OFFICE	LA:PGCB:DPR	PM:DPR:PGCB	BC:DSS:SSIB	BC:DPR:PGCB
NAME	CHawes CMH	JGolla	MScott	CJackson
DATE	3/14/2007	3/21/2007	3/21/2007	03/14/2007

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List of Attendees for March 1, 2007,
Meeting of NEI, Industry, and NRC

NAME	ORGANIZATION
Tom Kendall	NMC
Ray Phan	Areva NP
Paul Willoughby	Dominion
Craig Miller	Progress Energy/CR-3
Tom Bartoski	Sargent & Lundy
Brian McCabe	Progress Energy/Corporate
Paul Infanger	Progress Energy/CR-3
Monica Ray	NMC
Gary Anderson	PG&E
Tony Chitwood	PG&E
Brian Dunn	FPL
Justin Ng	Areva
John Butler	NEI
Nancy Chapman*	Bechtel
Deann Raleigh*	Scientec
Dale Vincent*	NMC
Dan Brosnan*	Fort Calhoun
Joe Gasper*	OPPD
Paul Leonard*	D.C. Cook
Mike Franklin*	Progress Energy
Steve Smith	NRC
Ralph Architzel	NRC
Tom Hafera	NRC
Matt Yoder	NRC
John Lehning	NRC
Paul Klein	NRC
Allen Hiser	NRC
Leon Whitney	NRC
Tom Martin	NRC
Mike Scott	NRC
Joe Golla	NRC

* participated via teleconference

Enclosure

Memorandum to Michael L. Scott from Joseph A. Golla

SUBJECT: MEETING SUMMARY OF PUBLIC MEETING WITH NEI AND INDUSTRY ON
MARCH 1, 2007, TO DISCUSS TOPICS RELATED TO GSI-191

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JGolla (JAG2)

CJackson (CPJ)

MScott (MLS3)

RReyes-Maldonado (RRM1)

SLu (SXL2)

RArchitzel (REA)

TMartin (TOM2)

BBateman (WHB)

MEvans (MGE)

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JButler, internet: jcb@nei.org

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