

From: Michael Scott
To: John Butler
Date: 05/02/2006 10:24:44 AM
Subject: REVISED AGENDA FOR MAY 23-25 MEETINGS AND QYUESTIONS FOR VENDORS

Hi John.

Here are the revised agendas for the two meetings in late May (one file), and a list of questions that the staff requests the sump vendors address at their meeting with us on May 24 and 25. Please let me know of any concerns or clarifications needed.

Regarding the vendor meeting: We are asking a number of questions, as you can see by reviewing the document attached. Our objective will be to hear from each vendor how they are handling each issue. There will be limited time for delving into details, and I will ensure we stay on track. Two hours per vendor - and would rather have a summary-level response to all questions than go into great detail on a few and not discuss the rest. We will use this meeting to determine if additional, more detailed discussion is needed on specific points.

Thanks for facilitating - and please convey our thanks to the vendors for agreeing to come in and meet with us.

Regards-

Mike

CC: GSI-191; Jared Wermiel; John Grobe; PWR_SUMPS; Thomas Martin

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No

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**NUCLEAR Regulatory Commission (NRC) / Nuclear Energy Institute (NEI)
Meeting on Generic Safety Issue (GSI)-191
May 23-24, 2006**

DRAFT AGENDA

Meeting objective: Develop clear understanding between the NRC and NEI regarding path forward and actions needed to bring GSI-191 to closure.

May 23, 2006

8:30 - 8:45 am	Welcome/Introduction	NRC/NEI
8:45 - 9:30 am	Overall path forward to issue resolution	NRC/NEI
9:30 - 10:30 am	Path forward on chemical effects - Recent research results - NRC planned actions - NRC expectations of industry - NEI response - Caucus - Agreements and Open Items	NRC/NEI
10:30 - 10:45 am	Break	
10:45 am - 12:30 pm	Path forward on chemical effects (cont'd)	NRC/NEI
12:30 - 1:30 pm	Lunch	
1:30 - 3:00 pm	Path forward on downstream effects - NRC planned actions - NRC expectations of industry - NEI response - Caucus - Agreements and Open Items	NRC/NEI
3:00 - 3:15 pm	Break	
3:15 - 4:30 pm	Path forward on downstream effects (cont'd)	NRC/NEI
4:30 pm	Recess	

May 24, 2006

8:30 - 10:00 am	Path forward on near-field effect - NRC planned actions - NRC expectations of industry - NEI response	NRC/NEI
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	- Caucus - Agreements and Open Items	
10:00 - 10:30 am	Break	
10:30 - 11:30 am	Path forward on coatings - NRC planned actions - NRC expectations of industry - NEI response - Caucus - Agreements and Open Items	NRC/NEI
11:30 am - 12:30 pm	Lunch	
12:30 - 2:15 pm	Path forward on coatings (cont'd)	NRC/NEI
2:15 pm	Adjourn	

**NUCLEAR Regulatory Commission (NRC)
Meeting with Sump Screen Vendors on Generic Safety Issue (GSI)-191
May 24 and 25, 2006**

DRAFT AGENDA

Meeting objectives: (1) Develop understanding with sump screen vendors regarding NRC's expectations for sump screen testing. (2) Discuss specific technical aspects of sump screen testing with sump screen vendors and identify potential NRC issues with testing procedures.

Note: Portions of this meeting may be closed to the public if proprietary information is to be discussed.

May 24, 2006

3:00 - 4:00 pm	Head loss testing general discussion - NRC observations to date - NRC-identified testing issues (generic) - Plans for additional observations - Plans to communicate observations with licensees	NRC/Vendors
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4:00 - 5:00 pm	Presentations by vendors - Detailed description of how scaling, chemical effects, and downstream effects are being addressed in testing by each vendor - Caucus - Summary of any remaining issues	NRC/Vendors
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5:00 pm	Recess	
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May 25, 2006

8:30 - 10:00 am	Presentations by vendors (cont'd)	NRC/Vendors
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10:00 - 10:15 am	Break	
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10:15 - 11:30 am	Presentations by vendors (cont'd)	NRC/Vendors
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11:30 am - 12:30 pm	Lunch	
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12:30 - 2:00 pm	Presentations by vendors (cont'd)	NRC/Vendors
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2:00 - 2:15 pm	Break	
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2:15 - 4:00 pm	Presentations by vendors (cont'd)	NRC/Vendors
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4:00 pm	Adjourn	
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NRC-requested Strainer Vendor Testing Information - May 24 and 25, 2006

Each vendor will be requested to discuss:

General Topics

1. Overview of facilities, e.g., test loop set-up, capacity of loop(s), range of test parameters, test environment(s).
2. Overview of strainer design parameters (e.g., high/low/average values for: strainer areas, approach velocities, strainer hole sizes, plant available NPSH margins)
3. List of licensees supported by that vendor. Provide brief status of the head loss testing of each licensee.
4. Summary of key test observations to date (e.g., important parameters affecting head loss)

Specific Topics

Scaling Methodology

*** Geometry**

If significant debris settling in the test flume or tank is credited for the head loss measurement, please describe the correlation between the test loop and the actual containment pool flow condition near the strainers, (e.g, average fluid velocity, submergence, turbulence, etc.)

*** Temperature**

If room temperature head loss test data have been used, please describe the temperature extrapolation methodology and how the "bore hole" phenomenon is treated.

*** Modular Strainer Set Up**

For head loss tests with a circumscribed debris accumulation, please explain how the circumscribed fluid velocity of the prototype strainers is scaled to that of the actual strainers. If these values are different, please describe what type of measures have been taken to ensure the proper simulation of the localized debris accumulation and hydraulic characteristics.

Debris Preparation Methodology

* Please describe the debris preparation processes, surrogate debris similarity requirements, and other measures taken to generate conservative head loss test data.

Debris Introduction Methodology

*** Sequence**

If significant debris settles in the test flume or tank, please describe what type of measures have been taken to avoid artificial debris agglomeration and obtain conservative debris transport and head loss results.

*** Location**

Please describe the location and methods of debris introduction and the similarity of debris concentration distribution between the test loop and the actual containment pool.

Head Loss Due To Chemical Effects

* Please describe the overall approach to evaluating plant-specific chemical effects.

* What criteria are used to select the amount of chemical products for the tests? If applicable, please discuss the role of the WCAP chemical particulate generator and chemical model in the overall plant specific testing.

* Is head loss resulting from chemical effects being investigated separately or in an integrated manner with head loss from other debris? For integrated tests, what is the timing for introduction of chemical precipitates relative to other debris and the basis for the timing chosen?

* Is the chemical effect test environment representative of a post-LOCA containment pool (e.g., pH, temperature, boron concentration, debris materials)

* Do tests include chemical surrogates and other surrogates (e.g., paint)? What is the basis for use of these materials ?

* How is it determined that additional chemical products won't form in a given plant-specific environment?

Screen Bypass Test

Many vendors have used the head loss tests to take downstream debris samples. The measured debris concentration could be used to evaluate the downstream effects. Please address the following:

* Head loss tests are usually designed to assume the maximum head loss and debris filtration efficiency. The downstream bypass measurement should minimize filtration efficiency. If applicable, what is the justification that these two tests can be conducted at the same time? Please justify the validity of downstream samples taken during an integral head loss test.

Termination Criteria

* Please describe the termination criteria applicable to the head loss tests. Describe whether any consideration has been given to extrapolating the rate of head loss increase to the point where licensees would begin to throttle flows or secure redundant pumps.