

February 2, 2006

Messrs. Steven Kraft and Felix Killar  
Nuclear Energy Institute (NEI)  
Suite 400  
1776 "I" Street, NW  
Washington, DC 20006-3708

SUBJECT: PUBLIC MEETING SUMMARY

Dear Messrs. Kraft and Killar:

This letter refers to our meeting at the U.S. Nuclear Regulatory Commission (NRC) office in Rockville, MD on January 19, 2006, during which we discussed technical and programmatic issues of mutual interest to the NRC and the Nuclear Energy Institute (NEI) management in the nuclear materials, nuclear waste, and fuel cycle safety arenas.

Enclosure 1 is the agenda for the Quarterly Meeting between the Office of Nuclear Material Safety and Safeguards and NEI dated January 19, 2006. Enclosure 2 is a detailed meeting summary. Enclosure 3 is a list of meeting attendees.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Should you have any questions concerning this letter, please contact us.

Sincerely,

**/RA/**

Jack R. Strosnider, Director  
Office of Nuclear Material Safety  
and Safeguards

Enclosures:

1. Agenda
2. Meeting Summary
3. List of Attendees

cc: See Attached List

cc: Letter to Messrs. Steven Kraft and Felix Killar from Jack R. Strosnider, dated: Feb. 2, 2006

Mr. Michael Coyle  
Nuclear Energy Institute  
Suite 400  
1776 "I" Street, NW  
Washington, DC 20006-3708

Mr. Ralph Anderson  
Nuclear Energy Institute  
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Jack R. Strosnider, Director  
Office of Nuclear Material Safety  
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<b>OFC</b>	NMSS	NMSS	
<b>NAME</b>	DPstrak	JStrosnider	
<b>DATE</b>	1/31/06	2/2/06	

**OFFICIAL RECORD COPY**

Agenda

Quarterly Meeting Between  
Office of Nuclear Material Safety and Safeguards and the  
Nuclear Energy Institute

January 19, 2006

2:00 - 4:00 p.m.

Room T8E8 - U.S. Nuclear Regulatory Commission Headquarters

2:00 - 2:05	Welcome and Introductions	NEI/NRC
2:05 - 2:15	Discussion of follow-up items from July 26, 2005	NEI/NRC
2:15 - 3:00	NEI Discussion Topics <ul style="list-style-type: none"><li>- Plans and status of petitions for rulemaking</li><li>- Facility plans to request higher enrichment levels</li><li>- Allegation Tabulation for Fuel Cycle Licensees</li><li>- Predictability of annual fees</li><li>- Proposed changes in the security requirements for fuel cycle facilities</li><li>- Criticality Control Requirements</li><li>- DOE Standard Canister for Used Nuclear Fuel</li></ul>	
3:00 - 3:45	NRC Discussion Topics <ul style="list-style-type: none"><li>- SUNSI Status</li><li>- Performance Indicator Program</li><li>- Regulatory Oversight of Part 70 Fuel Cycle Licensees</li><li>- Facility Change Process (10 CFR 70.72)</li><li>- Inspection Procedure Follow-up</li><li>- Enforcement Guidance Documents</li><li>- Discussion of Spent Fuel Project Office technical and licensing initiatives</li></ul>	Cardile Galloway Galloway Galloway Galloway Galloway Brach
3:45 - 3:55	Public comment or questions	Public
3:55 - 4:00	Summary and Conclusion	NEI/NRC

## **SUMMARY OF NMSS/NEI MANAGEMENT MEETING**

### **January 19, 2006**

#### **Purpose**

On January 19, 2006, senior managers of the U.S. Nuclear Regulatory Commission (NRC), Office of Nuclear Material Safety and Safeguards (NMSS) met with senior managers of the Nuclear Energy Institute (NEI) at NRC Headquarters in Rockville, MD. The purpose of the meeting was to discuss items of mutual interest.

#### **Opening**

The meeting began at 2:00 p.m. Members of the public were reminded that this was a Category 2 NRC public meeting, and that time had been allotted at the end of the meeting for members of the public to ask questions related to the discussion. Jack Strosnider (NRC) opened the meeting by welcoming everyone and emphasizing the value of a regular public dialogue on issues of mutual interest to NRC and the industry. Each attendee then provided their name and affiliation. Felix Killar (NEI) commented that both NRC and NEI should work together to establish a set time and date for future quarterly meetings to facilitate scheduling, and that the agenda should not be set in an "us" versus "them" format.

Actions: NRC and NEI will work together to facilitate scheduling for future meetings. The location will alternate unless otherwise determined.

#### **Discussion of follow-up items from the July 26, 2005 meeting**

Felix Killar (NEI) asked whether additional follow-up actions were planned related to Security Assessments. Bob Pierson (NRC) responded that staff had completed their Security Assessments for Fuel Cycle facilities, and no further interactions with licensees were planned at this time. Concerning the issue of formatting large drawings for electronic submission to the NRC, NEI was previously provided with an NRC contact name. No other issues/follow-ups were brought up from the previous meeting.

Actions: None

Agenda Items –

#### **Criticality Control Requirements**

Tom Martin (NRC) briefly described the issue. Based on 10 CFR 50.68, subcriticality must be shown in a spent fuel cask in the spent fuel pool assuming no boron is present. Based on 10 CFR 72, however, boron can be present in the analysis. NRC noted that different assumptions are appropriate for each of these analyses because of the detailed knowledge of fuel rods and their location at the time they are loaded into the spent fuel cask in the pool. Industry expressed concern because of the potential burden poses by different analyses. NRC will continue to look at the scenarios where boron-rich water drains from the fuel pool, but is replenished with non-borated water. Preliminary results indicate that the fuel will remain subcritical. NRC may issue a Direct Final Rule if all considerations support an expedited rule. But NRC continues to analyze the data. Steve Kraft (NEI) asked what considerations were being made for those licensees who must load

fuel. Tom Martin (NRC) responded that the preferred method would be to address such considerations through amendments, but in some instances exemptions may be applied. Bill Brach (NRC) pointed out that under 10 CFR 72 NRC allows sampling of the water to determine the percent of boron present to support use/credit for boron presence in cask loading criticality evaluations. NEI added that they felt there were now three ways of doing criticality calculations. In their view,  $k_{eff} = k_{eff}$ , and that NRC needs to establish a uniformly accepted calculation. Bill Brach (NRC) added that, based on previous NEI/NRC discussions on burn up credit (from a November 2005 meeting), the process needs to run its course to gain results/input on allowance for burnup credit to be used in criticality calculations. Steve Kraft (NEI) commented that NEI appreciates the work that has been done and is being done in this area, but the Regulatory Information Summary (RIS 2005-05) equates to NRC regulating by generic communication. Tom Martin (NRC) indicated that the RIS supports the regulations. Steve Kraft (NEI) added that over 750 casks have already been loaded, and now there are new interpretations of the requirements.

Actions: Staff is continuing evaluation of the need for rulemaking in this area.

### **Allegation Tabulation for Fuel Cycle Licensees**

Felix Killar (NEI) opened this discussion by asking what the basis was for posting the number of allegations on the NRC website. Lisamarie Jarriel (NRC) responded that it is in the interest of the licensee and public to have access to the numbers because they can provide insight into a licensee's Safety Conscious Work Environment (SCWE), that is, the site's environment for raising concerns internally. NRC currently posts for reactor licensees the total number of allegations received, substantiated, and still open, and the subset of the total that are discrimination allegations. The public is not able to access information concerning the specific issues or areas of concern. An NRC SCWE analysis of the data trends for sites with a large number of allegations, however, is documented in an annual report. Felix Killar (NEI) commented that NEI feels that the postings on the website can lead to abuse of the information. He added that some of the licensees are concerned that the number received makes their facility appear to be unsafe. Lisamarie Jarriel (NRC) responded that because the data also includes how many of the allegations were substantiated, that the number received positively reflects that the workforce is identifying issues for resolution, and that the same type of data is currently available for reactor licensees without indications that the data is being misused, the NRC is not concerned about abuse of the information. Jack Strosnider (NRC) closed this discussion by stating that he understands NEI's issues with Allegation Tabulations, but he also reminded NEI that NRC has a strategic goal to provide openness in our regulatory process. Steve Kraft (NEI) added that there are many tools that are used to track trends, and this is just a single measure. But because it is available on the NRC website, the information could be widely used and/or misinterpreted.

Actions: NRC acknowledged the comments and agreed to consider context in making the proposed change to the website postings.

### **Plans and status of petitions for rulemaking**

Felix Killar (NEI) indicated that in 2006, NEI expects to petition for a rulemaking on criticality monitors.

Actions: None

### **Facility plans to request higher enrichment levels**

Felix Killar (NEI) discussed that some licensees have an interest in performing higher enrichment, and that the EPRI Robust Fuel Program is looking at enrichment of existing fuel. Bob Pierson (NRC) requested that NEI keep NRC informed, as there are potential resource issues that would need to be addressed. Bill Brach (NRC) added that transport packages for higher enriched fuel and criticality considerations also need to be addressed. Felix Killar (NEI) indicated that NEI is focusing on the performance of existing fuels and that they don't have any definitive plans for higher enrichment levels.

Actions: None

### **Predictability of annual fees**

Felix Killar (NEI) opened this discussion by indicating that licensees project costs, including licensee fees, over the upcoming 5-10 years, and they would like to know what the variables are that could impact these fees. Patti Silva (NRC) responded that NRC must recover 90 percent of the budget from Part 170 and 171 fees, and that Congress can increase the budget appropriations for various activities such as increased focus on security-related issues that can have an impact on the fees. Based on comments from industry and direction from the Commission, NRC is working to collect more of the budget needed through Part 170 fees-for-service versus Part 171 annual fees. NRC staff noted the number of licensees is probably the principle driver of the annual fees, and that NEI should have better information on this than NRC.

Actions: None

### **Proposed changes in the security requirements for fuel cycle facilities**

Bob Pierson (NRC) indicated that no additional requirements are planned at this time.

Actions: None

### **DOE Standard Canister for Used Nuclear Fuel**

Bill Reamer (NRC) provided an overview of the DOE's plan to shift the proposed pre-closure repository design to one of handling sealed canisters of fuel. NRC continues to encourage DOE to interact with NRC as there are many technical issues to resolve. He described the Transport Aging Disposal (TAD) concept that would be evaluate for transportation and storage under 10 CFR Parts 71 and 72 and waste disposal under Part 63. NRC is ready to begin interacting with DOE on this plan. Steve Kraft (NEI) indicated that they also have a working group looking into this new plan. He added that NEI represents the cask vendors and licensees, and that the U.S. Transport Council is also a member of NEI. He commented that DOE should share the specifications of their robust cask design so that the market can begin to plan accordingly. He closed his remarks by encouraging NRC and DOE to continue to work closely on this issue. Felix Killar (NEI) commented that he is concerned that NRC needs to have available resources to continue review of current cask designs when DOE comes out with the specifications for Yucca Mountain and there is a potential increase in applications to NRC. Bill Brach (NRC) responded that he is anticipating the necessary budget and resources related to this area, and is planning accordingly.

Actions: None

### **Sensitive Unclassified Non-Safeguards Information (SUNSI)**

Frank Cardile (NRC) provided a summary of SUNSI, and indicated that the NRC had issued a RIS (2005-31) in December 2005. The RIS addresses the proper methods for marking sensitive documents, and it encourages licensees to mark their documents in accordance with the RIS. Margaret Federline (NRC) commented that NRC would like NEI's help in getting the word out to licensees on SUNSI. Patti Silva (NRC) added that the screening criteria for fuel cycle facilities was still on the Fuel Cycle web site, but that SUNSI supercedes the Fuel Cycle information. Felix Killar (NEI) stated that he had made a request to Department of Homeland Security that the classification for documents and information be standardized across the government.

Actions: None

### **Performance Indicator Program and Regulatory Oversight of Part 70 Fuel Cycle Licensees**

Melanie Galloway (NRC) began her presentation on this topic by indicating that the Commission asked staff to consider a performance indicator (PI) program for fuel cycle facilities. Presently, a further effort to encompass the overall oversight program is not planned. A desired outcome of the program will be to provide licensees and the NRC a further means to more fully understand performance in a risk-informed way. The program will be consistent with the Part 70 philosophy of risk-informed, performance-based regulation and will be created in a manner that complements Part 70 fuel cycle regulation and inspection. In order to be efficient in use of resources, this current PI program will build upon relevant aspects of the earlier PI program of the 1999/2000 time frame, rather than start from scratch. The new PI program will be used in conjunction with the Integrated Safety Analysis (ISA) process and baseline inspections. PI data will be used by the NRC to help inform the inspection effort. Although the program is in the preliminary stage of development, the staff is considering a program that will have similar PIs for all fuel cycle facilities but will be "customized" on an individual facility basis based on the specific processes at the facility. The focus of the PI program will be on safety indicators rather than security indicators. The overall staff goal is to interact with and seek input from stakeholders to develop a PI program that improves the efficiency of the oversight process. To that extent, NRC expects to use the process to complement/supplement the inspection program. To facilitate this effort, NRC would like to obtain from each licensee their sense of what facility-specific performance indicators might apply to their facilities. Input for this would be appreciated by the end of February (NRC will send a separate request out in early February). The staff anticipate engaging industry on specifics of the program by this summer. Felix Killar (NEI) commented that NEI had worked on PIs in 1999/2000, but stopped due to the ISA. NEI had not heard of facility-specific PIs in the past.

Actions: Input from NEI/licensees to NRC as to their sense of what facility-specific performance indicators might apply to their facilities.

### **Facility Change Process (10 CFR 70.72)**

Melanie Galloway (NRC) provided information on this issue. She reported that 10 CFR 70.72(c)(2)



reads that NRC approval is required if an item relied on for safety (IROFS) is removed without at least an equivalent replacement of the safety function. NRC recognizes that this segment of the regulations could result in unintended amendment requests. The problem arises in that many ISA sequences have “margin” beyond simply demonstrating that performance requirements are met. For example, there are additional IROFS beyond the minimum needed. NRC is aware that in performing ISAs, licensees had latitude to choose IROFS and how to meet performance requirements. For sequences where margin in meeting the performance requirements exists, conformance to 10 CFR 70.72(c)(2) would require licensees to meet a higher standard (i.e., maintain “margin”) than what NRC required in the initial ISAs. This would introduce a regulatory burden to licensees and NRC. The only situation where NRC believes the rule intended to require an equivalent replacement of the safety function is that situation where performance requirements are met without margin and replacement of an IROFS occurs where the safety function is not equivalent. This consideration is separate from that of creating a new type of accident sequence – doing so would require NRC approval of the change. Even in cases where the margin is maintained, licensees would need to have supporting documentation to show that no new accident sequences are created as a result of the IROFS change. This provides licensees maximum flexibility consistent with the intent of Part 70 while requiring NRC approval for non-equivalent IROFS replacements when no margin exists in performance requirements. NRC has concluded that there needs to be further clarity in the regulations, and are continuing to evaluate a rule change to accomplish this. In the interim, NRC has drafted a RIS for issuance in the near future. Bob Pierson (NRC) commented that NRC wants to ensure that no new accident sequences are being created if IROFS are removed. Felix Killar (NEI) agreed, but indicated that industry and NRC had not taken the margin of safety for accident sequences into account previously.

Actions: None

### **Inspection Procedure Follow-up**

Melanie Galloway (NRC) provided the following on this topic: NRC is revising and updating Fuel Cycle inspection procedures as was discussed last August in a public meeting in Atlanta. Comments from the public meeting have been incorporated into the draft inspection procedures. NRC has completed an additional revision of the draft procedures to incorporate ISA requirements, philosophy and terminology into the procedures. Procedures are expected to be available for review in March 2006. NRC is considering use of a pilot application for certain procedures. Those procedures would be finalized after the pilot period and incorporation of the suggested changes. Restructuring of the routine inspection procedures will eventually result in a revision of the Fuel Cycle Inspection Manual Chapter. NRC is aware that the development of performance indicators for fuel cycle facilities will affect the content and structure of the inspection procedures and Inspection Manual Chapter. Felix Killar (NEI) commented that he believes there is a disconnect between NRC headquarters and the Regions on this. Melanie Galloway (NRC) responded that this effort is being closely coordinated between headquarters and the Regions. Further, the procedures, the Manual Chapter, and the enforcement are linked, and the changes to be made need to be addressed across each of them.

Actions: None

### **Enforcement Guidance Documents**

Melanie Galloway (NRC) indicated that in light of the implementation of 10 CFR Part 70 Subpart H,

NRC and industry have recognized the need to revise enforcement documents to be consistent with and reflective of the risk-informed and performance-based aspects of Part 70. Thus, NRC presented its framework for revising the enforcement policy at a stakeholder workshop in August 2005. The proposed framework incorporated concepts associated with performance requirements and IROFS. The revision effort to the enforcement policy is on-going. Since August, resources have been reallocated to support higher priority work. However, NRC remains committed to such a revision and to engaging industry in discussion as the new revised document is developed. Felix Killar (NEI) commented that NEI has a strategy in place to support the revisions to the Fuel Cycle inspection procedures, the Manual Chapter, and the enforcement documents.

Actions: None

### **Discussion of Spent Fuel Project Office technical and licensing initiatives**

Bill Brach (NRC) commented on the following areas:

Transport Aging Disposal (TAD) cask - NRC is looking at resources as many new storage and transport cask designs are expected.

10 CFR 50.68/72 Criticality - no new information. See previous discussion above.

SFPO ISG - the process has been to issue a draft for public review, address comments, and finalize the document. Two ISGs have been issued for public comment and staff is currently reviewing the comments received.

Licensing Action Task Force - SFPO is piloting a process similar to the Licensing Action Task Force in NRR. There has been one meeting between NRC and industry and a second is planned. NRC expects to maintain an open dialogue during this process.

Steve Kraft (NEI) commented on the ISG process, indicating that NEI had submitted a letter on ISG 22 requesting to have it withdrawn. He further indicated that ISGs should not establish new requirements. Bill Brach (NRC) reminded NEI that NRC must act on safety items that are brought to NRC's attention. ISGs provide consistency among the staff. Melanie Galloway (NRC) pointed out that FCSS ISG 10 was issued as an aid to make the process more efficient. Felix Killar (NEI) responded that FCSS ISG 10 is not doing that, and that he has not seen a revised version. Melanie Galloway (NRC) pointed out that a revised version is on the NRC web site. Steve Kraft (NEI) added that the concept of regulating by generic communication is wrong. To support the licensees, NEI has developed a clearing house for the various NRC generic communications. The volume of generic communications is a problem, and industry wants this system to work better. Felix Killar (NEI) added that industry is not pleased with the generic communication issue, and NEI will be asking for more specificity in the future. ISGs are intended to clarify the regulations. Furthermore, ISGs provide a means to clarify unique issues. Jack Strosnider (NRC) commented by acknowledging that the generic communication issue was not a new issue, and he said that NEI should let NRC know if they believe generic communications are not consistent with the guidelines.

Actions: None

### **Non-agenda items for discussion**

Felix Killar (NEI) commented on two issues that were not included on the agenda. First, on the issue of fuel cycle facility license renewal, he suggested that NRC needs to better integrate the request for additional information. Bob Pierson (NRC) agreed that NRC needs to do a better job, and that NRC is working on a mechanism to get the word out. Second, he shared his thoughts on an NRC idea of having a workshop for the Fuel Cycle industry, similar to the previous Dry Cask Storage conferences that have been conducted. Bob Pierson (NRC) agreed that NRC is looking to put this workshop together in the future.

### **Input from the public attendees**

A question was asked about the schedule for the Part 70.72 RIS. Melanie Galloway (NRC) responded that it is currently in draft form and going through the process, but should be out in about two months. John Nagy (NFS) commented that they would support a Fuel Cycle workshop.

Charlie Vaughan (GNF) suggested that NRC develop a description/definition for the word "margin", as it may apply differently in the 70.72 RIS versus ISG 10. He also added a comment on Allegation Tabulation. Specifically, he indicated that he felt that industry was not getting a fair objective report. In other words, the whole picture is not given based on the NRC web site information. To give the public only part of the story is not correct. He realizes that NRC has an open process, but he believes what really needs to be captured is the reporting of an employee going to the employer to get an issue fixed. What the Allegation Tabulation does, in essence, is tell industry that if you want to be in the limelight, go to the NRC, rather than going to the licensee's management. Bob Pierson (NRC) acknowledged his comment and suggested that he send a letter to NRC that addresses his concerns.

Jack Strosnider (NRC) closed the meeting by thanking everyone for attending, and indicating that NRC would issue a meeting summary with any follow up actions. He also commented that he liked the idea of setting up a routinely-scheduled meeting in the future.

The meeting was adjourned at 4:10 p.m.

**LIST OF ATTENDEES FOR THE NMSS/NEI MANAGEMENT MEETING**  
**January 19, 2006**

Name	Organization
Steven Kraft	NEI
Jack Strosnider	NRC
Margaret Federline	NRC
Bill Brach	NRC
Robert Pierson	NRC
Bill Reamer	NRC
Melanie Galloway	NRC
Tom Martin	NRC
Felix Killar	NEI
Robert Link	Framatome - ANP
Dealis Gwyn	DCS
Brandon O'Donnell	Framatome - ANP
Charlie Vaughan	GNF
Randy Shackelford	NFS
John Nagy	NFS
Tom Harrison	McGraw-Hill
Clifton Farrell	NEI
Steve Schilthelm	BWXT
Scott Moore	NRC
David Pstrak	NRC
Frank Cardile	NRC
Wayne Hodges	NRC
Bill Ruland	NRC
Patricia Silva	NRC
Dan Gillen	NRC
Charles Brinkman	Westinghouse
Lisamarie Jarriel	NRC
Andrea Kock	NRC