

April 29, 2011

MEMORANDUM TO: Marissa G. Bailey, Deputy Director  
Division of Fuel Cycle Safety  
and Safeguards  
Office of Nuclear Material Safety  
and Safeguards

FROM: Patricia A. Silva, Chief /RA/  
Technical Support Branch  
Division of Fuel Cycle Safety  
and Safeguards  
Office of Nuclear Material Safety  
and Safeguards

SUBJECT: MEETING BETWEEN THE U.S. NUCLEAR REGULATORY  
COMMISSION STAFF, NUCLEAR ENERGY INSTITUTE AND FUEL  
CYCLE FACILITIES REPRESENTATIVES CONCERNING  
ENHANCEMENTS TO THE FUEL CYCLE OVERSIGHT PROCESS

On April 14, 2011, U.S. Nuclear Regulatory Commission (NRC) staff met with representatives of the Nuclear Energy Institute (NEI) and fuel cycle licensees and certificate holders to discuss enhancements to the Fuel Cycle Oversight Process (FCOP). Enclosure 1 lists the meeting attendees.

The notice for this public meeting was issued on April 1, 2011, and was posted on the NRC's public web page under the Agencywide Documents Access and Management System (ADAMS) accession number ML110890829. The meeting slides were published on April 14, 2011, under the ADAMS accession number ML111040170 and were provided to the meeting attendees (Enclosure 3).

#### Corrective Action Programs

The NRC staff presented a corrective action program (CAP) criteria implementation results. Industry expressed concerns with the use of words such as "each," "any," and "all" in the detailed draft CAP criteria because the graded approach may be subjective to an inspector's judgment. The NRC staff will revise the criteria to ensure that possibility of subjectivity is reduced. Also, the use of "potential" regarding the significance of issues was a concern to industry because it is subjective. The NRC staff stated that potential significance of issues

CONTACT: Jonathan DeJesus, NMSS/FCSS  
(301) 492-3177

might be looked at by NRC when the frequency of the event is reduced to between one in 10 years, to one in 1000 years. An industry representative mentioned that regulatory compliance issues are not always safety issues and used as an example, a late submittal of documents. The NRC staff stated that late submittal of documents may affect the ability to regulate the facility.

The NRC staff asked industry representatives if there is a nuclear safety issue that is not a compliance issue (i.e., not tied to a regulation or license condition). An industry representative responded no, but that his workers ask what is safe enough. Another industry representative mentioned that they build as much margin as possible into their limits and that they trend and track pre-cursors as a way to defend themselves against bigger issues. The NRC staff stated that there might be a problem if licensees take credit for safety controls that were not identified as items relied on for safety (IROFS) and the NRC may not have included them in their inspections.

Industry asked for the basis to do comprehensive CAP inspections every two years. The NRC staff stated that the biennial inspection was selected as a starting point and that it could be adjusted based on what the NRC staff learns as the process is implemented. There was an extensive discussion regarding the options to accept licensee's effective CAPs. The first option (Option 1) involves a license amendment requiring an effective CAP. However, some licensees did not favor this option because it is uncertain if the CAP required by the license would be determined by the NRC to be effective in implementation prior to a review of the implementation by the NRC. Other licensees argued that they already have CAP requirements under Chapter 11, "Management Measures," of their respective license applications. The second option (Option 2), which does not involve a license requirement, seemed to be a more desirable option to the licensees. However, the NRC staff stated that inspections with Option 2 would be more frequent than in Option 1. An NEI representative mentioned that performance of licensees does not change rapidly; therefore, more frequent inspections may not be warranted. The NRC staff stated that with Option 2 the credit for an effective CAP would be suspended and reinstated as warranted by licensee performance and there is a need to normalize the criteria through all licensees because it is a challenge for the NRC to inspect different CAPs.

Some licensees asked why inspection procedure (IP) 88005, "Management Organization and Controls," could not be used to assess the effectiveness of the current CAPs. The NRC staff mentioned IP 88005 might be deactivated by the next revision of the inspection procedures, it is not risk-informed or performance based, and a significant difference in resources would be needed to perform the CAP effectiveness inspection in comparison with the current IP 88005.

On March 29, 2011, NEI sent a letter to the NRC staff (ML110900101) that included a proposed revision to the NRC Enforcement Policy. During the meeting, the NRC staff provided feedback to NEI and industry on their proposal to revise the Enforcement Policy. The NRC staff mentioned that the use of the term "low safety significance violations" might cause confusion and therefore the proposed new paragraph incorporating this term will not be included in the next revision of the Policy. Also, since the proposed language is very similar to section 2.3.2.a and one purpose of the revisions is to keep the Enforcement Policy simple, the NRC staff recommended changing the title of section 2.3.2.a to "Power Reactor and Certain Fuel Cycle Licensees." Industry was not in favor of this idea because of the different risk profiles between power reactor and fuel cycle licensees and it could cause the licensees difficulties when communicating with the public. The NRC staff suggested an alternative title, "Licensees with an

Effective CAP" and that the difference in risk profiles would be shown in Section 6.0, "Violation Examples," of the Enforcement Policy. However, this suggestion would need further internal NRC evaluation. An industry representative mentioned that the use of examples is beneficial because that would increase the predictability of the process.

### Cornerstones

The NRC staff presented the objectives, desired results, key attributes and scope of inspection activities, and metrics of the safety-related cornerstones. The safety-related cornerstones are: criticality safety, chemical process safety, emergency preparedness, public radiation safety, and worker radiation safety. Industry questioned the use of the word "metrics" and mentioned that it could be related to a performance indicator. The NRC staff mentioned the word "metrics" because it was used in the staff requirements memorandum to SECY-10-0031. On the criticality safety and chemical process safety cornerstones, industry questioned the "adverse weather protection" and "flood protection" scopes under the "protection against external events" key attribute. To industry it seemed that these scopes should be better placed under the emergency preparedness (EP) cornerstone and that the "fire protection" scope is important, but it may not be an external event. The NRC staff stated that it would inspect the features that need to be maintained to protect controls or IROFS against adverse weather and flooding.

On the EP cornerstone, industry noted the information included was what they expected. However, industry suggested that NRC staff include the facility's fire brigade (if available) and the incident command center (a process now used by licensees and local and state responders). Also, industry suggested changing the term "Alert Notification System" to "local horns" or "public warning system" because alert notification system is a Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50 term. The NRC staff agreed to revise the EP cornerstone to incorporate this suggestion, as appropriate. On the public and worker radiation safety cornerstones, industry mentioned that there was no discussion on IROFS under these cornerstones. The NRC staff stated the rationale was that for uranium processing facilities the chemical consequences in the performance requirements of 10 CFR Part 70 would be crossed before the radiological consequences. Industry mentioned that this is true for most of the accident sequences. However, there are a small number of IROFS where the radiological consequences are crossed before the chemical consequences. The NRC staff agreed to incorporate this comment into the cornerstones.

### Integrated Schedule

The NRC staff presented, at a high-level, the subsequent tasks to enhance the FCOP and noted that stakeholders will be engaged during these tasks. These tasks include the development of the significance evaluation process and associated thresholds of performance, cross cutting areas, and regulatory response tool. The staff discussed the possibility of conducting a pilot with two cornerstones and asked industry for insights on representative cornerstones and facilities. Industry indicated that the criticality safety and EP cornerstones should be used in the pilot. Also, since the number of facilities is small, that all facilities should participate in the pilot. The staff stated that an integrated schedule will be developed for the July 2011, SECY paper and that enhancing the FCOP and the credit for an

M. Bailey

- 4 -

effective CAP will be separated as two parallel processes. A public meeting around the Fuel Cycle Information Exchange was discussed. Possible topics for this meeting include more details on the schedule and conduct of a pilot.

Enclosures:

1. Meeting attendees
2. Mailing List
3. Meeting slides

M. Bailey

- 4 -

effective CAP will be separated as two parallel processes. A public meeting around the Fuel Cycle Information Exchange was discussed. Possible topics for this meeting include more details on the schedule and conduct of a pilot.

Enclosures:

1. Meeting attendees
2. Mailing List
3. Meeting slides

DISTRIBUTION:

DMcIntyre	CHaney	D. Dorman	L. Kokajko
JKinneman	MBailey	P. Silva	J. DeJesus
DMorey	DDamon	D. Collins	J. Henson
ECobey	SDingbaum	F. Brown	A. Masciantonio
AGody	SVias	J. Calle	M. Sykes
RZimmerman	JWray	T. Harris	R. Caldwell

**ADAMS Accession No.: ML111101475**

OFFICE	NMSS/FCSS/TSB	NMSS/FCSS/TSB	NMSS/FCSS/TSB
NAME	JDeJesus	PJenifer	PSilva
DATE	4/21/2011	4/22/2011	4/29/2011

**OFFICIAL RECORD COPY**

**SIGN-IN SHEET**  
**Public Meeting on Fuel Cycle Oversight Enhancements**  
**Thursday, April 14, 2011**  
**9:00 a.m. – 5:00 p.m.**  
**6003 Executive Boulevard, Rockville, MD – E-1 B13/15**

Name (Please Print)	Affiliation (Please Print)
John Wray	NRC – OE
Robert Link	AREVA
Gerard Couture	Westinghouse
Charlie Vaughan	NEI
Scott Murray	GE Hitachi
Jennifer Wheeler	Nuclear Fuel Services
Douglas Yates	MOX Services
Tim Harris	NRC/NSIR
Julius Bryant	GLE
Vernon Shanks	USEC – Paducah
Janet Schlueter	NEI
Terry Sensue	USEC Inc – Piketon
Dallas Gardner	Enercon
Barry Cole	B&W NOG
Larry Parscale	Honeywell
Mike Boren	USEC
Patricia Silva	NRC/NMSS
Arielle Miller	AREVA
Brandon Hanson	LES
Margie Kotzalas	NRC
David Spangler	B&W NOG
Douglas Collins	NRC
Marissa Bailey	NRC/NMSS
Eugene Cobey	NRC/Region II
Dennis Damon	NRC/NMSS/FCSS
Jay Henson	NRC/NMSS/FCSS
Christian Fisher	NRC/NMSS/FCSS
Jonathan DeJesus	NRC/NMSS/FCSS
<b>On the telephone bridge line</b>	
Carlos Sisco	Winston & Strawn

## Mailing List

### E-mail

[anm@nei.org](mailto:anm@nei.org) (Andrew Mauer)  
[irs@nei.org](mailto:irs@nei.org) (Janet Schlueter)  
[Vcm3@earthlink.net](mailto:Vcm3@earthlink.net) (Charlie Vaughan)  
[dlspangler@babcock.com](mailto:dlspangler@babcock.com) (Dave Spangler)  
[blcole@babcock.com](mailto:blcole@babcock.com) (Barry Cole)  
[Robert.sharkey@areva.com](mailto:Robert.sharkey@areva.com) (Robert Sharkey)  
[Robert.link@areva.com](mailto:Robert.link@areva.com) (Robert Link)  
[Calvin.manning@areva.com](mailto:Calvin.manning@areva.com) (Calvin Manning)  
[Scott.murray@ge.com](mailto:Scott.murray@ge.com) (Scott Murray)  
[Albert.kennedy@ge.com](mailto:Albert.kennedy@ge.com) (Albert Kennedy)  
[Larry.parscale@honeywell.com](mailto:Larry.parscale@honeywell.com) (Larry Parscale)  
[Michael.greeno@honeywell.com](mailto:Michael.greeno@honeywell.com) (Michael Greeno)  
[Dallas.gardner@honeywell.com](mailto:Dallas.gardner@honeywell.com) (Dallas Gardner)  
[gsanford@nefnm.com](mailto:gsanford@nefnm.com) (Gary Sanford)  
[wpadgett@nefnm.com](mailto:wpadgett@nefnm.com) (Wyatt Padgett)  
[jwnagy@nuclearfuelservices.com](mailto:jwnagy@nuclearfuelservices.com) (John Nagy)  
[wrshackelford@nuclearfuelservices.com](mailto:wrshackelford@nuclearfuelservices.com) (Randy Shackelford)  
[jkwheeler@nuclearfuelservices.com](mailto:jkwheeler@nuclearfuelservices.com) (Jennifer Wheeler)  
[shanksvj@pgdp.usec.com](mailto:shanksvj@pgdp.usec.com) (Vernon Shanks)  
[borenml@pgdp.usec.com](mailto:borenml@pgdp.usec.com) (Michael Boren)  
[fogeld@ports.usec.com](mailto:fogeld@ports.usec.com) (Doug Fogel)  
[stoneaa@ports.usec.com](mailto:stoneaa@ports.usec.com) (Al Stone)  
[minerp@usec.com](mailto:minerp@usec.com) (Pete Miner)  
[sensuet@usec.com](mailto:sensuet@usec.com) (Terry Sensue)  
[alstadcd@westinghouse.com](mailto:alstadcd@westinghouse.com) (Cary Alstadt)  
[couturgf@westinghouse.com](mailto:couturgf@westinghouse.com) (Gerald Couture)  
[dwgwyn@moxproject.com](mailto:dwgwyn@moxproject.com) (Dealis Gwyn)  
[dayates@moxproject.com](mailto:dayates@moxproject.com) (Doug Yates)  
[jimiller@intisoid.com](mailto:jimiller@intisoid.com) (John Miller)  
[Jim.kay@areva.com](mailto:Jim.kay@areva.com) (Jim Kay)  
[Scott.horton@areva.com](mailto:Scott.horton@areva.com) (Scott Horton)  
[Julie.olivier@ge.com](mailto:Julie.olivier@ge.com) (Julie Olivier)  
[Patricia.campbell@ge.com](mailto:Patricia.campbell@ge.com) (Patricia Campbell)