

April 1, 2004

MEMORANDUM TO: Joseph G. Giitter, Chief  
Special Projects and Inspection Branch  
Division of Fuel Cycle Safety  
and Safeguards  
Office of Nuclear Material Safety  
and Safeguards

THRU: Hironori Peterson, Acting Section Chief /RA/  
Special Projects Section  
Special Projects and Inspection Branch  
Division of Fuel Cycle Safety  
and Safeguards, NMSS

FROM: Andrew Persinko, Sr. Nuclear Engineer /RA/  
Special Projects Section  
Special Projects and Inspection Branch  
Division of Fuel Cycle Safety  
and Safeguards, NMSS

SUBJECT: MARCH 24, 2004, MEETING SUMMARY: MEETING WITH DUKE  
COGEMA STONE & WEBSTER TO DISCUSS THE LICENSE  
APPLICATION AND INTEGRATED ANALYSIS SUMMARY FORMAT  
AND CONTENT RELATED TO MIXED OXIDE FUEL FABRICATION  
FACILITY

On March 24, 2004, U.S. Nuclear Regulatory Commission (NRC) staff met with Duke Cogema Stone & Webster (DCS), the mixed oxide fuel fabrication facility (MFFF) applicant, to discuss the format and content of the Integrated Safety Analysis (ISA) summary and the license application that DCS intends to submit at a future date. The meeting agenda, summary, attendance list, and DCS-provided slides are attached (Attachments 1, 2, 3, and 4 respectively).

Docket: 70-3098

Attachments: 1. Meeting Agenda  
2. Meeting Summary  
3. Attendance List  
4. DCS slides

cc:  
P. Hastings, DCS  
J. Johnson, DOE  
H. Porter, SCDHEC  
J. Conway, DNFSB  
L. Zeller, BREDL  
D. Silverman, DCS  
G. Carroll, GANE  
D. Curran, GANE

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**DISTRIBUTION:** SPIB r/f FCSS r/f Hearing File RPierson  
 JHolonich JHull, OGC WGloersen, RII NRC Attendees

**ML040920595** (Package) **ML040920599** (Memo) **ML040930096** ( Attachment 4)

<b>OFC</b>	SPB	SPB	SPB	
<b>NAME</b>	APersinko	LGross	HPeterson	
<b>DATE</b>	03/30/04	04/01/04	04/01/04	

**OFFICIAL RECORD COPY**

**MEETING AGENDA  
MOX FUEL FABRICATION FACILITY  
March 24, 2004**

March 24, 2004

1:00 PM	Introductions
1:15 PM	DCS presentation and discussion of MOX license application and ISA Summary format and content
3:00 PM	Break
3:15 PM	Discussion of MOX programmatic issues
4:00 PM	Adjourn

**MEETING SUMMARY**  
**MOX FUEL FABRICATION FACILITY**  
**March 24, 2004**

PURPOSE

The purpose of the meeting was to discuss the format and content of the Mixed Oxide (MOX) Fuel Fabrication Facility (MFFF) license application (LA), and Integrated Safety Analysis (ISA) Summary that Duke Cogema Stone & Webster (DCS) intends to submit. The date of that submittal has not yet been determined.

DISCUSSION

LA and ISA Summary Format and Content

DCS requested to meet with NRC staff as a first in a series of meetings to discuss, at a relatively high level of detail, the format and content of the MFFF LA and ISA Summary, that DCS intends to submit at a future time. The format of the meeting was that DCS presented its proposed format and content of the LA, and the ISA Summary, and the NRC staff provided feedback to DCS concerning its presentation. There were no NRC staff presentations.

DCS indicated that it intends to build upon the information presented in the CAR to take advantage of the familiarity gained by the NRC staff during its review of the CAR. In its LA, DCS intends to: 1) separate the information presented in the CAR into two documents - the LA and the ISA Summary, and to minimize duplication; 2) show the evolution from principal structures, systems and components (PSSCs) to items relied on for safety (IROFS); 3) add information required by 10 CFR Part 70; and 4) follow the guidance in the MOX Standard Review Plan (SRP)(NUREG-1718). In general, DCS intends to include programmatic information in the LA and detailed/quantitative information in the ISA Summary.

The staff noted that the words in 10 CFR Part 70 intentionally required that the ISA summary be submitted along with the LA, but not as part of the LA. The reason for this distinction is that 10 CFR Part 70 was revised to include a change process (10 CFR 70.72) to allow the licensee to make certain changes to the facility without obtaining NRC pre-approval, similar to 10 CFR 50.59 for reactors.

NRC staff commented that DCS may wish to consider developing an IROFS package as part of the ISA documentation. The package would define the boundaries of the IROFS, including the supporting functions (e.g., administrative controls and hardware such as supporting utilities and instrumentation).

The DCS slides in Attachment 4, show DCS' proposed table of contents for the LA and ISA Summary. Also in Attachment 4, DCS provided a crosswalk between the ISA requirements listed in 10 CFR 70.65 and DCS' ISA table of contents.

## MOX Programmatic Issues

In response to questions from DCS, NRC staff stated that two different positions had been developed for nine of the ten open chemical safety items, and that these positions had been provided to management for a decision. These positions followed the positions discussed at an Advisory Committee on Reactor Safeguards (ACRS) meeting in November 2003. Staff stated that DCS submitted information regarding the electrolyzers letter dated March 12, 2004, and the staff is reviewing the DCS response.

NRC staff explained the reorganization of the former Special Projects Branch into two sections. Brian Smith is the Section Chief of the Gas Centrifuge Facility Licensing Section. Hironori Peterson is the Acting Section Chief of the Mixed Oxide Facility Licensing Section.

In response to an NRC question, DCS stated that Department Of Energy (DOE) made its decision to relocate the MFFF controlled area boundary (CAB) from being largely coincident with the boundary of the 310 square mile Savannah River Site (SRS), to being largely coincident with the MFFF site boundary, which encompasses 41 acres in SRS F-area. In November 2003, DOE directed DCS to relocate the CAB to be coincident with the restricted area boundary, which encompasses approximately 14 acres. DCS is in the process of revising its safety and environmental analyses to reflect these changes but expects that these changes will be small. DCS stated that the process cell ventilation system will become a PSSC. DCS expects to submit revised construction authorization page changes and environmental report page changes to DOE in early May, and expects that the information will be submitted to NRC in early June.

In response to an NRC question regarding a recent quality assurance in-office review that NRC conducted where significant deficiencies in the DCS implementation, communication, and oversight of MFFF quality assurance (QA) program requirements for design and supplier activities were identified, DCS stated that it is reviewing the conduct of the DCS supplier.

## CONCLUSION

NRC staff stated that the approach taken by DCS for preparation of the LA and ISA Summary appeared reasonable.

NRC and DCS agreed to have future meetings to further discuss the licensing activities including level of detail that should be provided in the LA and ISA Summary, NRC physical protection requirements, and acceptable methods for demonstrating acceptable likelihoods.

## MEETING ATTENDEES

### NAME

### AFFILIATION

Andrew Persinko	Nuclear Regulatory Commission (NRC)
Brian Smith	NRC
Hironori Peterson	NRC
William Troskoski	NRC
David Brown	NRC
Rex Wescott	NRC
Fred Burrows	NRC
Wilkins Smith	NRC
Patti Silva	NRC
Ken Ashe	Duke Cogema Stone & Webster (DCS)
Peter Hastings	DCS
Gary Kaplan	DCS
Phil Hammond	DCS
Darrell Gardner	DCS
Dave Alberstein	Department of Energy (DOE) National Nuclear Security Administration (NNSA)
Sam Glenn	DOE NNSA - Savannah River
Jim Clark	Gamma Engineering
Herbert Feinroth	Gamma Engineering
Lewis Csedrile	Morgan Lewis
Alex Polonsky	Morgan Lewis
Edwin Lyman	Union of Concerned Scientists
Paloma Sarria	Numark Associates
Daniel Horner	McGraw-Hill