| NOTE TO  | File  |              |
|----------|---|--------------|
| THRU:    | Stewart Magruder, Chief<br>Mixed Oxide Facility Licensing Section, FCSS                   | \RA\         |
| FROM:    | David H Tiktinsky, Senior Project Manager<br>Mixed Oxide Facility Licensing Section, FCSS | \RA\         |
| SUBJECT: | SUMMARY OF IN-HOUSE REVIEW OF DUKE, COGEM   | A, STONE AND |

On May 2-3, 2006, staff from the Division of fuel cycle Safety and Safeguards (FCSS) Special Projects Branch and Region II met with representatives of Duke, COGEMA, and Stone & Webster (DCS) as a follow-up to a previous in-office review that was held on February 28 and March 1, 2006 (see ML060750327 for a summary of that review). The major topic for discussion was DCS's draft license application (LA) and Integrated Safety Assessment (ISA) summary for the mixed oxide fuel fabrication facility (MFFF), that is planned to be constructed

WEBSTER HELD IN CHARLOTTE, NC, ON MAY 2-3, 2006

on the Savannah River Site. The application is scheduled to be submitted to the NRC by September 2006. The following is a summary of discussions that took place during the in-office review:

## 1. License Application

NRC provided comments on the draft LA in the previous in-office review. The comments to be addressed included: a) Construction Authorization (CA) conditions and commitments; b) inclusion of design bases; c) the basis for likelihood definitions; d) the strategy for cases of prevention or mitigation for items relied upon for Safety (IROFS); e) consequence methodology commitments; and f) process safety information.

DCS provided examples from selected sections of the draft LA to demonstrate how it addressed each of the staff comments. Based on the examples provided and discussions with DCS, the staff was satisfied that DCS had met the intent of the staff's comments.

DCS stated that it is nearing completion of the LA for submittal to DOE. The transmittal letter for the LA will discuss the commitments from the CA approval. DCS is also preparing on-site database tools to provide a crosswalk from the CA commitments to the LA.

DCS stated most of the LA will likely not be designated as proprietary with the exception of some design basis information.

2. ISA Summary

NRC provided comments on the ISA summary in the previous in-office review. The comments included: a) list unmitigated events that could exceed 10 CFR 70.61; b) identify the methodology for doses or chemical exposures; c) identify accident sequences; d) provide IROFS boundaries; e) provide IROFS availability and reliability; f) identify initiating event frequencies; and g) provide process safety information.

DCS provided examples from selected sections of the ISA summary to demonstrate how they addressed each of the staff comments. Based on the examples provided and discussions with DCS, the staff was satisfied that DCS had met the intent of the staff's comments. DCS stated that it plans to submit the ISA summary to the DOE by end of May 2006.

- 3. Other discussions
  - A. DCS and NRC discussed potential ways in which to brief the staff, when the LA and ISA summary are submitted, in order to most efficiently orient the reviewers about the content and location of information within the documents. Potential methods include an orientation meeting between DCS and the staff when the LA is submitted or a series of meetings to present the information to the staff. The LA is expected to be one volume and the ISA summary is expected to be about seven volumes in length.
  - B. There was discussion of issues regarding the length of time for NRC to complete its operating license review (currently planned for two years with an additional year for any hearings that may occur). DOE stated that the facility hot startup, when the license will actually be needed, will be some years away. There was also questions regarding NRC activities between the time the license is issued and facility startup testing. It is likely that there will be future discussions regarding other possible approaches to optimizing review resources and schedules with the needs of DCS and DOE for the MFFF.
  - C. There was a discussion of the quality assurance activities including audits and supplier examinations. DCS will keep the staff informed of scheduled activities to allow NRC to participate in selected audits.

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NRC provided comments on the ISA summary in the previous in office review. The comments included: a) list unmitigated events that could exceed 10 CFR 70.61; b) identify the methodology for doses or chemical exposures; c) identify accident sequences; d) provide IROFS boundaries; e) provided IROFS availability and reliability; f) identify initiating event frequencies; and g) provide process safety information.

DCS provided an examples from selected sections of the ISA summary to demonstrate how they addressed each of the staff comments. Based on the examples provided and discussions with DCS, the staff was satisfied that DCS had met the intent of the staff's comments. DCS stated that they planned to submit the ISA summary to the DOE by end of May 2006.

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  - B. There was discussion of issues regarding the length of time for NRC to complete its operating license review (currently planned for two years with an additional year for any hearings that may occur). DOE stated that the facility hot startup, when the license will actually be needed, will be between 2012 and 2014. There was also questions regarding NRC activities between the time the license is issued and facility startup testing. It is likely that there will be future discussions regarding other possible approaches to optimizing review resources and schedules with the needs of DCS and DOE for the MFFF.
  - C. There was a discussion of the quality assurance activities including audits and supplier examinations. DCS will keep the staff informed of scheduled activities to allow NRC to participate in selected audits.

F. Burrows

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