

July 21, 2004

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

THRU: Brian W. Smith, Chief /RA/
Gas Centrifuge Facility Licensing Section
Special Projects Branch, FCSS

FROM: Timothy C. Johnson /RA/
Senior Mechanical Systems Engineer
Gas Centrifuge Facility Licensing Section
Special Projects Branch, FCSS

SUBJECT: JULY 8, 2004, MEETING SUMMARY: LOUISIANA ENERGY
SERVICES CRITICALITY ISSUES MEETING

On July 8, 2004, U.S. Nuclear Regulatory Commission (NRC) staff met with management staff from Louisiana Energy Services (LES) to discuss criticality and Integrated Safety Analysis issues applicable to the LES gas centrifuge uranium enrichment plant project proposed to be located in Eunice, New Mexico. I am attaching the meeting summary for your use. This summary contains no proprietary or classified information.

Docket: 70-3103

Attachment: Louisiana Energy Services
Meeting Summary

cc:	William Szymanski/DOE	Claydean Claiborne/Jal	Rod Krich/LES
	Monty Newman/Hobbs	James Curtiss/W&S	Troy Harris/Lovington
	Peter Miner/USEC	Betty Richman/Tatum	James Ferland/LES
	Glen Hackler/Andrews	William Floyd/New Mexico	James Brown/Eunice
	Dennis Holmberg/Lea County	Richard Ratliff/Texas	Lee Cheney/CNIC
	Michael Marriotte/NIRS	Jerry Clift/Hartsville	CO'Claire/Ohio
	Derrith Watchman-Moore/NM	Joseph Malherek/PC	Ron Curry/NMED
	Clay Clark/NMED	Patricia Madrid/NMAG	Glen Smith/NMAG
	Lindsay Lovejoy/NIRS		

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MGalloway	MWong/DWM	SFlanders/DWM	KEverly/NSIR
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DAYres/Reg II	DSeymour/RegII	JHenson/RegII	RHannah/RegII
KClark/RegII	KO'Brien/Reg III	VMitlyng/RegIII	DHartland/Reg II
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LES website - Yes

(Package) ML042020419 (Memo) ML042020430 (Attachments) ML042030213

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Summary of
Louisiana Energy Services Criticality Issues Meeting

Dates: July 8, 2004

Place: U.S. Nuclear Regulatory Commission (NRC) offices
Rockville, MD

Attendees: See Attachment 1

Purpose: The purpose of this meeting was to discuss nuclear criticality safety and Integrated Safety Analysis (ISA) issues applicable to the proposed Louisiana Energy Services (LES) gas centrifuge uranium enrichment plant project. The meeting agenda is in Attachment 2.

Discussion:

After introductions, W. Troskoski presented background information on the issues to be discussed (see Attachment 3). The two issues are: (1) the separation of the ISA summary from the rest of the application: and (2) identification of favorable geometry equipment as items relied on for safety (IROFS). Mr. Troskoski provided information on the applicable regulations related to these issues and the NRC concerns with the responses previously provided by LES to NRC Requests for Additional Information (RAIs).

In the LES application, LES provided its ISA summary as an integral part of the application. In the NRC RAI dated April 19, 2004, NRC staff requested that LES separate the ISA summary from the rest of the application. This request was made because under 10 CFR 70.65(b), NRC cannot incorporate the ISA summary into the license. For materials licenses, NRC incorporates the license application into the license by reference. Without a clear designation of what constitutes the ISA summary, NRC staff cannot fulfill the above separation requirement.

For favorable geometry equipment, LES did not designate them as IROFS, because it indicated there would be no credible scenarios that could result in a criticality with these components, including process deviations. To ensure that no detrimental changes would be made to the design of these components, LES would apply the configuration management program to these components and evaluate the criticality safety consequences of any changes that might be made in the future to the component design. NRC staff, however, considered that scenarios that involve human failures in the implementation of the configuration management program could make some accident scenarios credible.

D. Williamson and R. Krich provided proposals for resolving the above issues (see Attachment 4). For the favorable geometry equipment, LES suggested identifying these components as IROFS at a high level and applying the IROFS boundary definition process to ensure that all the subcomponents of the IROFS system would be identified and covered. Quality Level 1 management measures, including the configuration management program would be applied. NRC staff, however, questioned that the IROFS identification as proposed by LES would be too general to enable NRC staff to clearly identify its function in relation to the performance requirements. NRC staff suggested that IROFS should be identified at a more detailed level, although it was not necessary to identify subcomponents at the relay switch or wiring level at this time. NRC staff recognized that the proposed IROFS boundary process would define all

the needed subcomponents for a IROFS package. At the conclusion of the discussion, LES indicated that it would reconsider its approach and request a follow-up meeting to resolve the issue.

Mr. Williamson and Mr. Krich then discussed the separation of the ISA summary from the rest of the application. It was LES' understanding that any change in the future to the ISA summary would be evaluated in accordance with the change process in 10 CFR 70.72, and, if the license application is referenced by a license condition, the 10 CFR 70.72 process would be applicable to any future changes in other parts of the application. NRC staff agreed with this statement and that, even if the ISA summary is included in the application, which is referenced by a license condition, only those changes that meet the thresholds defined in 10 CFR 70.72 would need to be submitted as an amendment request to the license. However, NRC staff indicated that under 10 CFR 70.65(b), it is required to separate the ISA summary from the license application. Mr. Krich agreed to re-assess this request. He also stated that the submittal of the revision to the Safety Analysis Report would likely be delayed from the established schedule of the end of July.

Action Items

LES to reconsider its approach for addressing geometrically safe components and for separating the ISA summary from the application.

Attachments

1. Attendee list
2. Meeting agenda
3. NRC staff handouts
4. LES presentation handouts