

May 3, 2005

MEMORANDUM TO: James Clifford, Acting Chief
Special Projects Branch
Division of Fuel Cycle Safety
and Safeguards

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

FROM: William Troskoski, Sr. Engineer **/RA/**
Mixed Oxide Facility Licensing Section
Special Projects Branch, FCSS

Paul Bell, Lead Quality Assurance Engineer **/RA/**
Mixed Oxide Facility Licensing Section
Special Projects Branch, FCSS

SUBJECT: APRIL 4-5, 2005, LOUISIANA ENERGY SERVICES NATIONAL
ENRICHMENT FACILITY QUALITY ASSURANCE PROGRAM ONSITE
REVIEW

On April 4-5, 2005, U.S. Nuclear Regulatory Commission (NRC) staff conducted an onsite review of the Quality Assurance Program for the LES National Enrichment Facility (NEF) gas centrifuge uranium enrichment project proposed to be located in Hobbs, New Mexico. The review took place in the AREVA engineering office in Marlborough, Massachusetts. I am attaching the meeting summary for your use.

Docket: 70-3103

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Paul Bell, Lead Quality Assurance Engineer **/RA/**
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SUBJECT: APRIL 4-5, 2005, LES NATIONAL ENRICHMENT FACILITY QUALITY
ASSURANCE PROGRAM ONSITE REVIEW

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OFC	MOFLS		GCFLS		MOFLS		GCFLS		GCFLS	
NAME	WTroskoski: bkh1		LMarshall		PBell		TJohnson		BSmith	
DATE	4/11/05		4/13/05		4/11/05		4/13/05		5/3/05	

OFFICIAL RECORD COPY

Louisiana Energy Services National Enrichment Facility

Quality Assurance Program Onsite Review

Dates: April 4-5, 2005

Place: AREVA Engineering Office
Marlborough, Massachusetts

NRC Attendees: William Troskoski
Paul Bell

Purpose:

The purpose of this onsite review was to review the status of the applicant's quality assurance (QA) program and activities related to the Integrated Safety Analysis (ISA) and the pending design phase of the project. The flow down of ISA and QA requirements and commitments from the applicant to the selected architect-engineer (AE) were reviewed to provide reasonable assurance that the results of the ISA would be incorporated throughout the design phase of the project.

Discussion:

The staff met with representatives of LES and its architect-engineer (AE), Nuclear Technology Solutions (NTS), at the AREVA Marlborough, Massachusetts, office to discuss the overall project status and QA Program implementation plans. LES provided information on the following significant points:

- NTS of Shaw, Stone & Webster has been selected as the project AE. Initial project staffing was completed in March 2005. The structural/civil design component is expected to be about 90% complete by the end of 2005, followed by the electrical/mechanical design in 2006. LES will be providing the NRC Project Manager with a Level 1 schedule.
- The LES configuration management procedure will be directly incorporated into the NTS QA program. LES will provide QA oversight of the NTS design work. NTS will conduct the design work in accordance with the Stone & Webster Nuclear Quality Assurance Program, the latest revision of which was approved by the NRC on June 8, 2004.
- To maintain the validity of the ISA functional level analysis throughout the design process, an ISA Summary Commitment List has been developed to track all hardware and software commitments. Included in the tracking system are items relied on for safety (IROFS) and associated boundaries, safe-by-design components and features, Safety Analysis Report commitments, and responses to Requests for Additional Information questions. Classified items will be forwarded to Urenco for review.

- LES is in the process of developing a system to track IROFS failures, pre-identify compensatory measures, and allowed out-of-service times to maintain the integrity of the ISA assumptions and analyses, based on experience derived from the reactor maintenance rule.
- An Employee Concerns Process, similar to that used by one of the LES partners, was being developed to assure that all potential safety concerns were adequately addressed. NTS has already implemented a similar program based on the Stone & Webster program.
- QA Organization roles, responsibilities, and interface for the design phase were identified in the LES Management Model and LES Interface Agreements procedures. Organizational charts clearly depicted the programmatic interfaces of nuclear engineering, regulatory compliance, spent fuel and decommissioning, reliability improvement, plant life extension and quality engineering and quality (Plants, Nuclear Services and Access Control). LES is currently in the process of developing an Organizational Controls procedure.
- QA procedure development and implementation status is progressively moving forward in the development and full implementation of implementing procedures and instructions. A comprehensive list of in-process procedures and instructions has been formalized. The NTS Project QA Program has been drafted and is now in the formal review and approval cycle.
- The change control process used by LES and the design interface is functionally described in interface agreements. The LES configuration management process and subsequent procedures include the appropriate level of technical, management, and safety review and approval through processes prescribed in procedures.
- LES audits/assessments of NTS's QA program have been scheduled for April 18, 2005. This audit will be used by LES to assess compliance with contract and program requirements. The audit program was reviewed and meets the requirements of 10 CFR 50, Appendix B. NTS has initiated a bid evaluation for geotechnical services. A technical service specification has been developed detailing technical scope and qualification requirements. This service contract is Quality Level-1 and provisions of the QA Program will be invoked to ensure appropriate flow-down of QA requirements prior to award.
- Software Quality Assurance procedures and validation and verifications requirements are described in NTS design control procedures. An engineering design organization is responsible for computer program and software testing. No software validation reports have been initiated.

The staff identified no ISA or QA concerns or other issues as a result of the onsite review.

