



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION II  
245 PEACHTREE CENTER AVENUE NE, SUITE 1200  
ATLANTA, GEORGIA 30303-1257

August 2, 2013

Gary J. Laughlin, Chief Nuclear Officer  
and Head of Technical Services  
Louisiana Energy Services, LLC  
URENCO, USA  
P.O. Box 1789  
Eunice, NM 88231

**SUBJECT: LOUISIANA ENERGY SERVICES, LLC, - NRC QUALITY ASSURANCE AND  
PROBLEM IDENTIFICATION AND RESOLUTION INSPECTION REPORT  
NO. 70-3103/2013-006**

Dear Mr. Laughlin:

This refers to the inspections conducted from June 10 through June 13, 2013, at the Louisiana Energy Services, URENCO USA (LES UUSA) facility located in Eunice, New Mexico. The purpose of the inspections was to evaluate quality assurance program implementation and Quality Level 1 safety-related construction activities to determine whether these activities were conducted safely and in accordance with Nuclear Regulatory Commission (NRC) requirements and your license requirements. The enclosed report presents the results of the inspections. The findings were discussed with members of your staff at an exit meeting held on June 13, 2013.

During the inspection, the NRC staff examined activities conducted under your license as they related to public health and safety and to confirm compliance with the Commission's rules and regulations, and with the conditions of your license. Areas examined during the inspections are identified in the enclosed report. Within these areas, the inspections consisted of selected examination of procedures and representative records, observations of activities, and interviews with personnel.

Based on the results of this inspection, no violations or deviations were identified.

In accordance with 10 *Code of Federal Regulations* (CFR) 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of the NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Should you have any questions concerning these inspections, please contact me at 404 997-4476.

Sincerely,

*/RA/*

Deborah Seymour, Chief  
Construction Projects Branch 1  
Division of Construction Projects

Docket No. 70-3103  
License No. SNM-2010

Enclosure:  
NRC Inspection Report No. 70-3103/2013-006  
w/attachment: Supplemental Information

cc w/encl: (See page 3)

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DATE	08/02/2013	08/01/2013	08/02/2013	08/01/2013	08/02/2013		
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Letter to Gary J. Laughlin from Deborah Seymour, dated August 2, 2013

SUBJECT: LOUISIANA ENERGY SERVICES, L.L.C. - NRC QUALITY ASSURANCE AND  
PROBLEM IDENTIFICATION AND RESOLUTION INSPECTION REPORT  
NO. 70-3103/2013-006

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PUBLIC

U. S. NUCLEAR REGULATORY COMMISSION  
REGION II

Docket No.: 70-3103

License: SNM-2010

Report No.: 07003103/2013-006

Licensee: Louisiana Energy Services (LES), L.L.C.

Facility: URENCO, USA (UUSA)

Location: Eunice, NM 88231

Inspection Dates: June 10 through June 13, 2013

Inspectors: C. Taylor, Senior (Sr.) Construction Project Inspector, Construction Projects Branch 1 (CPB1), Division of Construction Projects (DCP), Region II (RII)  
T. Ponko, Sr. Construction Inspector, Construction Inspection Branch 2 (CIB2), Division of Construction Inspection (DCI), RII  
D. Edwards, Construction Project Inspector, CPB1, DCP, RII  
J. Vasquez, Construction Inspector, CIB2, DCI, RII  
S. Mendez-Gonzalez, Fuel Facility Inspector, Fuel Facility Inspection Branch 2, Division of Fuel Facility Inspection, RII

Approved: D. Seymour, Chief, CPB1, DCP

## **EXECUTIVE SUMMARY**

Louisiana Energy Services (LES), L.L.C., URENCO USA (UUSA)  
NRC Inspection Report 0703103/2013-006

The purpose of the inspections was to evaluate the quality assurance program implementation and Quality Level 1(QL) -1 safety-related construction activities to determine whether these activities were conducted safely and in accordance with NRC requirements and your license requirements. The enclosed inspection report documents the inspection results that were discussed with members of your staff on June 13, 2013.

### **Program Development and Implementation (Inspection Procedure (IP) (88106)**

The inspectors determined that the licensee had adequately implemented the requirements of the LES UUSA Quality Assurance Program Description (QAPD) in the area of audits for contractors and suppliers. Specifically, the inspectors evaluated LES audits, and audits of the licensee's primary contractor, Baker Concrete Construction. No items of significance were identified (Paragraph 2).

### **Design and Document Control (IP 88107), and Structural Concrete Activities (IP 88132)**

The inspectors determined that the licensee implemented the requirements of the QAPD in the areas of document control and quality assurance records. No items of significance were identified (Paragraph 3).

### **Quality Assurance: Inspection, Test Control and Control of Measuring Equipment (IP 88109)**

The inspectors determined that the licensee had adequately implemented the requirements of the LES UUSA QAPD in the areas of inspection and test activities for LES UUSA and Baker Concrete Construction. Specifically, the inspectors evaluated the licensee's oversight activities for Baker by reviewing surveillance reports, inspection procedures, work packages, procurement documents, and interviewing personnel in charge of inspections. No items of significance were identified (Paragraph 4).

The inspectors determined that the licensee had adequately implemented requirements of the LES UUSA QAPD in the areas of measuring and test equipment (M&TE). The inspectors reviewed procedures, calibration equipment storage conditions, calibration records, and certifications of the subcontractors performing these calibrations for Baker Concrete Construction. No items of significance were identified (Paragraph 4).

### **Quality Assurance: Problem Identification, Resolution, and Corrective Action (IP 88110)**

The inspectors determined that licensee had adequately implemented the requirements of the LES UUSA QAPD in the area of problem identification, resolution and corrective action. The threshold for initiating event reports (ERs) was appropriate, issues were promptly identified and ERs were categorized in accordance with their significance. Generally, problem evaluations were effective in identifying appropriate corrective actions and preventing recurrence. The inspectors determined that the criterion for classifying significant conditions adverse to quality (SCAQ) and conditions adverse to quality (CAQ) was established and trending of data was

performed. In regards to maintaining a Safety Conscious Work Environment, the inspectors determined that the licensee and Baker Concrete Construction had established an acceptable program and environment. No findings of significance were identified (Section 5).

#### **10 CFR 21 Inspection – Facility Construction (IP 88111)**

The inspectors determined that the licensee had adequately implemented the requirements of the LES UUSA QAPD in the area of 10 Code of Federal Regulation (CFR) Part 21 reporting. The licensee had established procedures, provided postings, and included 10 CFR Part 21 applicability instructions in procurement documents. No findings of significance were identified (Paragraph 6).

#### **Control of the Electronic Management of Data (IP 88113)**

The inspectors determined that the licensee had adequately implemented the requirements of the LES UUSA QAPD in the area of electronic management of data. The inspectors reviewed established procedures and processes to verify that the licensee's controlled the management of electronic data and associated activities. No findings of significance were identified (Paragraph 7).

#### **Supplier/Vendor Inspection (Construction Phase) (IP 88115)**

The inspectors determined that the licensee had adequately implemented the requirements of the LES UUSA QAPD in the area of surveillances for Baker Concrete Construction. The licensee's oversight was consistent with the commitments identified in the QAPD. No findings of significance were identified (Paragraph 8).

#### **Inspection of Safety Function Interfaces (IP 88116)**

The inspectors determined that the licensee had adequate interface between the engineering, safety, and construction organizations in the area of management measures (records management, configuration management, procedures and incident investigation) for Items Relied on for Safety (IROFS) 27e (civil construction safety design features for SBM-1005). The licensee had adequately established and implemented controls such that there was reasonable assurance that IROFS 27e would perform its intended safety function in accordance with the defined design bases. No findings of significance were identified (Paragraph 9).



## **REPORT DETAILS**

### **1. Summary of Plant Status**

Louisiana Energy Services (LES), LLC, URENCO USA (UUSA) continued to perform on-going construction activities for the Separations Building Module (SBM)-1003, and SBM-1005.

### **2. Program Development and Implementation (Inspection Procedure (IP) 88106) Safety Operations**

#### **a. Inspection Scope and Observations**

The inspectors evaluated the quality assurance (QA) program and implementing procedures the licensee used to govern the performance of audits for suppliers and contractors to verify compliance with U. S. Nuclear Regulatory Commission (NRC) regulations, and the requirements of the licensee's Quality Assurance Program Description (QAPD). The inspectors reviewed procedures for the following: conducting audits, developing audit schedules and logs, tracking training, reviewing audit plans, documenting audit reports and performing surveillances. The inspectors interviewed and held discussions with LES UUSA QA organization representatives about staffing and organizational changes since the last inspection. The inspectors also evaluated LES audits conducted since the last inspection for Baker Concrete Construction, the primary contractor on site.

The inspectors observed that audits were scheduled, tracked and performed in a timely manner for the licensee and Baker Concrete Construction. The inspector observed that audit plans were developed and audit results documented for scheduled audits. The inspector reviewed presentation slides for changes to the corrective action program that occurred in January of this year. The inspector reviewed a sample of attendance forms to verify that the appropriate staff attended.

#### **b. Conclusion**

The inspectors determined that the licensee had adequately implemented the requirements of the LES UUSA QAPD in the area of audits for contractors and suppliers. Specifically, the inspectors evaluated LES audits, and audits of the licensee's primary contractor, Baker Concrete Construction. No items of significance were identified.

### **3. Design and Document Control (IP 88107), and Structural Concrete Activities (IP 88132)**

#### **a. Inspection Scope and Observations**

##### **(1) Design Control**

An inspection of the licensee's design control program for IROFs 27e, civil construction safety design features for SBM-1005, was performed. The inspection focused on work activities associated with the SBM-1005 facility, with an emphasis on the design,

procurement, fabrication, and erection of structural components of the UF<sub>6</sub> handling area which has been designated as an IROFS 27e structure.

The inspectors interviewed engineering managers and reviewed relevant documentation to determine if an effective design control program was established and implemented the requirements of the QAPD in the following areas: design input control, design process, design verification, design change control, design interface control, and design documentation and records. The inspectors reviewed implementing procedures, design criteria documents, design specifications, structural calculations, construction specifications, and construction work packages to determine if work associated with IROFS 27e was performed in accordance with regulatory requirements and licensee commitments.

This inspection also included the review of procured engineering services. The inspectors identified examples where the licensee did not identify that design inputs listed in vendor supplied calculations were inconsistent with the requirements of the procurement specifications

The inspectors requested additional information from the licensee to evaluate this issue. Unresolved Item (URI) 07003103/2013-006-001, Licensee Review of Vendor Calculations, was opened to review and evaluate additional information to be provided by the licensee.

(2) Document Control

An inspection of the licensee's document control program was performed to determine if the requirements of the QAPD had been implemented for IROFS 27e structures.

The inspectors interviewed licensee personnel and reviewed a variety of documents specifying quality requirements or prescribing activities affecting quality associated with Quality Level (QL)-1 and QL-1 Graded (G) controls to verify conformance with regulatory requirements and licensee commitments. Documents reviewed included design criteria documents, design specifications, structural calculations, construction specifications, and construction work packages. The inspectors also reviewed the concrete reinforcement purchase order for the SBM-1005 facility to verify that the requirements of 10 CRF 21, Reporting of Defects and Noncompliance, were delineated.

(3) Quality Assurance Records

An inspection of the licensee's quality assurance records was conducted to verify that the requirements of Section 4.17, Quality Assurance Records, of the Quality Assurance Program Description were implemented for IROFS 27e structures.

The inspectors reviewed a variety of QA records to verify the records were received and processed in accordance with QA plan commitments and associated implementing procedures or QA records. Records reviewed included design specifications, structural calculations, construction specifications, construction work packages, and procurement documents.

b. Conclusion

The inspectors determined that the licensee implemented the requirements of the Quality Assurance Program Description in the areas of document control and quality assurance records. However, for design control, URI 07003103/2013-006-001, Licensee Review of Vendor Calculations, was opened to review and evaluate additional information to be provided by the licensee.

4. **Quality Assurance: Inspection, Test Control and Control of Measuring Equipment (IP 88109)**

a. Inspection Scope and Observations

The inspectors performed a review of the licensee's inspection program by evaluating inspection procedures and Baker Concrete construction inspection activities. The inspection included an extensive review of the licensee's QA procedures associated with construction inspection activities to determine if they were implementing the requirements of Section 10, Inspection, of the LES UUSA QAPD.

The inspectors reviewed Baker's QA procedures associated with performing inspections, inspector training and qualification, receipt inspection, and statistical sampling to determine if the applicable inspection requirements and controls were properly translated from the licensee's QA procedures and specifications.

The inspectors also reviewed Baker's measuring and test equipment (M&TE) procedures to determine if they were in accordance with the licensee's approved QA plan. Specifically, the inspectors reviewed calibration procedures to determine if the following elements were implemented:

- M&TE was calibrated, adjusted, and maintained at prescribed intervals against reference calibration standards having traceability to nationally recognized standards
- The method and interval of calibration for each device was defined based on the type of equipment, stability characteristics, required accuracy, and intended use
- Calibrated M&TE was labeled and tagged to indicate a due date of interval of the next calibration and uniquely identified to provide traceability to its calibration data
- Verified the appropriate controls were present to prevent the use of out-of-calibration, damaged, or known to be in error equipment by properly labeling and segregating the measuring device

In addition, the inspectors evaluated handling and storage conditions of M&TE to determine if the measuring devices was properly stored and maintained in accordance with QA procedures.

b. Conclusion

The inspectors determined that the licensee had adequately implemented the requirements of the LES UUSA QAPD in the areas of inspection and test activities for LES UUSA and Baker Concrete Construction. Specifically, the inspectors evaluated the licensee's oversight activities for Baker by reviewing surveillance reports, inspection

procedures, work packages, procurement documents, and interviewing personnel in charge of inspections. No items of significance were identified.

The inspectors determined that the licensee had adequately implemented requirements of the LES UUSA QAPD in the areas of M&TE. The inspectors reviewed procedures, calibration equipment storage conditions, calibration records, and certifications of the subcontractors performing these calibrations for Baker Concrete Construction. No items of significance were identified.

**5. Quality Assurance: Problem Identification, Resolution, and Corrective Action (IP 88110)**

a. Inspection Scope and Observations

The inspectors assessed the adequacy of the LES UUSA and Baker Concrete program for identification, evaluation, and corrective action of conditions adverse to quality during the last twelve months. This was accomplished by reviewing selected event reports (ERs), verifying corrective actions were implemented, and attending meetings where ERs were screened for significance to determine whether the licensee was identifying, accurately characterizing, and entering problems into the corrective action program (CAP) at an appropriate threshold.

The inspectors reviewed a sample of ERs and work requests selected from the licensee's CAP for SBM-1005. The sample included problems addressed by a diverse selection of plant departments and problems classified under all of the significance levels. The sample also covered a diverse selection of sources, including problems identified in audits and assessments, nonconforming results from inspections and tests, findings from NRC inspections, concerns from anonymous sources, and concerns identified as adverse trends. Most ERs were reviewed after corrective actions had been implemented; however, some were reviewed after the corrective action plan was developed but prior to implementation.

The inspectors reviewed the licensee's and Baker Concrete Construction respective programs for resolving employee concerns. The inspectors interviewed LES UUSA Employee Concerns Manager and the major contractor's (Baker Concrete) employee concern representatives. The inspectors reviewed a sample of ERs referred to the employee concerns and ERs initiated as a result of employee concerns. The inspectors also reviewed several anonymous ERs to determine if they had been adequately captured and addressed. The inspectors reviewed and evaluated the adequacy of the programs, which provide employees with an alternate method to identify quality or safety-related concerns. The inspectors also reviewed surveys and assessments of the employee concerns programs.

The inspectors reviewed a sample of the licensee's management and quality assessments, audits, and trend reports to verify adverse results were properly evaluated and dispositioned within the corrective action program. The inspectors reviewed the revision history for corrective action program implementing procedures and assessed the integration of industry operating experience into the corrective action process. Direct observations by inspectors included meetings of the licensee's Event Report Screening

Committee (ERSC) and Baker Concrete screening committee as they screened newly reported problems and reviewed dispositions for selected issues.

In addition, the inspectors made the following observations as a result of their inspections:

(1) Effectiveness of Identifying, Evaluating, and Correcting Problems

(a) Identifying Problems

The inspectors determined that the licensee was effective in identifying problems and entering them into the CAP and that ERs normally provided complete and accurate characterization of the subject issues. Employees were encouraged by management to initiate ERs.

(b) Evaluating Problems

The inspectors attended several meetings throughout the week, including the ESRC. It was determined that the licensee had adequately prioritized issues entered into the CAP consistent with established procedures. The threshold for closing items and creating an ER when necessary was determined to be adequate.

(c) Correcting Problems

Based on a review of numerous ER corrective actions and their implementation, the team found, for the most part, that the licensee's corrective actions developed and implemented for problems were appropriate with the safety significance of the issues.

(2) Use of Operating Experience

The inspectors determined that the licensee's measures used to identify, evaluate and incorporate applicable industry and operating experience (I&OE) information into the corrective action program contained processes for including vendor recommendations and internally generated lessons learned. The I&OE information was collected, evaluated, and communicated to the affected internal stakeholders.

The inspectors determined that appropriate corrective actions were developed and taken for the sample of I&OE problem evaluation reports reviewed for the LES UUSA.

(3) Safety Conscious Work Environment (SCWE)

The inspectors reviewed several anonymous ERs, ERs that referred to the employee concerns program (ECP), and ERs generated as a result of employee concerns. The inspectors also interviewed senior employee concerns coordinators from both LES UUSA and Baker. The inspectors determined that LES UUSA and Baker's ECPs were adequate. The senior employee concerns coordinators expressed knowledge of the ECPs and the ability of employees to raise safety related concerns through various available means. The inspectors noted that individuals including non-English speaking individuals interviewed for LES UUSA and Baker Concrete were familiar with the ECPs. The inspectors determined that the ECP staff provided several ECP training sessions, ECP information in bulletins, and that they also walked around the site periodically, talked daily to employees, and attended meetings to ensure that employees were aware

of the ECPs and knew how to raise concerns if necessary. There appeared to be strong management support for both ECPs.

(4) Corrective Action Program Performance Insights and Effectiveness

The sample of audits, assessments, and surveillances reviewed by the inspectors confirmed that management and quality personnel actively conducted observations and effectiveness reviews of the corrective action program. These program assessments concluded that overall, the corrective action program was effectively implemented. The licensee continued to track and trend issues and present results to senior management. Also inspectors noted that the corrective action backlog had been greatly reduced since the last problem identification, resolution and corrective action (PI&R) inspection. The licensee's CAP was effective and adequate

b. Conclusions

The inspectors determined that licensee had adequately implemented the requirements of the LES UUSA QAPD in the area of PI&R. The threshold for initiating ERs was appropriate, issues were promptly identified and ERs were categorized in accordance with their significance. Generally, problem evaluations were effective in identifying appropriate corrective actions and preventing recurrence. The inspectors determined that the criterion for classifying SCAQ and CAQ was established and trending of data was performed. In regards to maintaining a Safety Conscious Work Environment, the inspectors determined that the licensee and Baker Concrete Construction had established an acceptable program and environment. No findings of significance were identified.

**6. 10 CFR 21 Inspection - Facility Construction (IP 88111)**

a. Inspection Scope and Observations

The Inspectors reviewed the postings required by 10 Code of Federal Regulation (CFR) Part 21. The postings were found to be easily accessed and legible. The postings were located inside glass bulletin boards which were protected from the weather. The licensee was reviewing and documenting the posting requirements as required by LS-3-1000-09, NRC Posting Requirements.

The licensee's corrective action program procedure, CA-3-1000-01, Performance Improvement Program, is used to screen for any nonconformance. The inspectors reviewed a sampling of condition reports (CRs) in which nonconforming or defective material was evaluated for Part 21 applicability. The inspectors found no instances where an item was not properly screened and notifications not made as required. Nonconforming material identified was properly tagged and segregated to prevent inadvertent installation or use.

The inspectors verified that the licensee, subject to the regulations of Part 21, has implemented the requirements of 10 CFR 21.31 regarding specifying, in appropriate procurement documents, the applicability of Part 21. A sampling of the licensee's

procurement documents were reviewed and it was determined that the licensee's vendors/contractors were adhering to the requirements of 10 CFR 21.31 as well as the licensee's QAPD.

b. Conclusion

The inspectors determined that the licensee had adequately implemented the requirements of the LES UUSA QAPD in the area of 10 CFR Part 21 reporting. The licensee had established procedures, provided postings, and included 10 CFR Part 21 applicability instructions in procurement documents. No findings of significance were identified.

7. **Control of the Electronic Management of Data (IP 88113)**

a. Inspection Scope and Observations

The inspectors reviewed implementing procedures for the control of the electronic management of data to verify they were in accordance with Section 17 of the licensee's QAPD. The inspectors reviewed QA procedures for the software control and data backup. The inspectors conducted visits of the data center and records vault. The inspectors verified that electronic data was adequately protected, stored, secure, complete and accurate. Through interviews with the licensee's information management staff, the inspectors determined that the licensee had not transferred the management and maintenance of quality records to the electronic data management system. Quality records were currently maintained in hard copy format. No findings of significance were identified.

b. Conclusion

The inspectors determined that the licensee had adequately implemented the requirements of the LES UUSA QAPD in the area of electronic management of data. The inspectors reviewed established procedures and processes to verify that the licensee's controlled the management of electronic data and associated activities. No findings of significance were identified.

8. **Supplier/Vendor Inspection (Construction Phase) (IP 88115)**

a. Inspection Scope and Observations

The inspectors reviewed procurement documents for construction materials to determine if the proper controls 10 CFR Part 21 reportability were included; the approved suppliers list (ASL) was also reviewed and compared to procurement documents to determine if construction materials or services were acquired from suppliers with an approved quality assurance program.

The inspectors also evaluated the licensee's surveillance of QA program implementation through the following activities:

- The inspectors interviewed licensee's personnel to determine if surveillance activities were properly planned and executed by members of the organization
- The inspectors reviewed LES UUSA's primary contractors, Baker's Construction, surveillance records to establish if they were deficiencies or significant issues associated with the adequacy of the licensee's execution of contractor-surveillance responsibilities
- The inspectors reviewed procurement documents related to the scope of QA and quality control (QC) responsibilities delegated to Baker were evaluated to determine if contractor-surveillances results matched the status of procurement documents
- The inspectors evaluated the results of licensee's surveillances to determine if the identified deficiencies or issues were placed into the corrective action program

b. Conclusion

The inspectors determined that the licensee had adequately implemented the requirements of the LES UUSA QAPD in the area of surveillances for Baker Concrete Construction. The licensee's oversight was consistent with the commitments identified in the QAPD. No findings of significance were identified.

9. **Inspection of Safety Function Interfaces (IP 88116)**

a. Inspection Scope and Observations

The inspectors reviewed construction interface activities across the licensee's safety function organization to verify that adequate controls were in place such that IROFS were completed in accordance with design bases. The inspectors verified that the licensee had established and implemented appropriate management measures for IROFS 27e, civil construction safety design features for SBM-1005.

The inspectors interviewed staff and reviewed records in order to determine if controls were implemented for IROFS in SBM-1005. Specifically, to ensure that information flow and coordination among the different design interfacing organizations was effective. The inspectors reviewed procedures for change requests, configuration control and identification, disposition, and resolution of non-conforming items. The inspectors selected examples in records management, configuration management, procedures and incident investigation to verify the adequacy of the management measures process. The inspectors also reviewed five engineering change requests in respect to IROFS 27e in SMB-1005.

b. Conclusion

The inspectors determined that the licensee had an adequate interface between the engineering, safety and construction organizations in the area of management measures (records management, configuration management, procedures and incident



investigation) for IROFS 27e. The licensee had adequately established and implemented controls such that there was reasonable assurance that IROFS 27e would perform its intended safety function in accordance with the defined design bases. No findings of significance were identified.

**10. Other Activities - Follow-Up Items**

a. Inspection Scope and Observations

The inspectors also reviewed the corrective actions for VIO 07003103/2011-009-03, Failure to Control Changes Made to Critical Characteristics and Key Attributes; and for VIO 07003103/2011-004-01, Failure to Verify Items and Nonconformance. Both of these violations were related to IROFS 41 (design features to ensure building leak integrity).

VIO 2011-009-03 involved changes made to critical characteristics and key attributes associated with the commercial grade dedication of components associated with IROFS 41 that were not controlled commensurate with those applied to the original design, and the reasons for the changes were not identified, approved, documented and controlled. This violation was captured in ER 2011-4047, and the corrective actions associated with the ER have been completed. It includes the downgrade of the items to QL-3 based on the elimination of IROFS 41.

VIO 2011-004 involved the failure to adequately inspect a bolt torque and was a violation of Section 10 of the QAPD, Inspection, which required, in part, that finished items shall be inspected for completeness, marking, calibration, adjustments, protection from damage or other characteristics as required in order to verify the quality and conformance of the item to specified requirements. This violation was captured in ER 2011-3560, and the corrective actions associated with the ER have been completed. It includes the downgrade of the items to QL-3 based on the elimination of IROFS 41.

License amendment request (LAR)-11-02 replaced IROFS 41 for the UF<sub>6</sub> process systems located in the Cascade Halls in SBMs with a new IROFS C23. LAR-11-02 was approved by the NRC, eliminating IROFS 41. Based on the NRC approval of LAR-11-02 commercial grade dedication of IROFS 41 for future cascades is no longer necessary or required.

The NRC has conducted several inspections to validate the adequacy of IROFS C23 and ensure that the controls adequately addressed the accident scenarios that were previously bounded by IROFS 41. Because the violations and risks were addressed by the new control, IROFS C23, the inspectors determined that VIOs 07003103/2011-009-03 and 07003103/2011-004-01 are closed.

b. Conclusions

No issues of significance were identified. The inspectors determined that violations 07003103/2011-009-03 and 07003103/2011-004-01 are closed.

11. **Exit Meeting**

The lead inspector described the areas inspected and discussed the inspection results in detail with licensee's staff on June 13, 2013. No dissenting comments were received from the licensee during these exit meetings. Proprietary information was discussed but not included in the report.

## SUPPLEMENTARY INFORMATION

### 1. KEY POINTS OF CONTACT

M. Wiemers	Head of Project Engineering
S. Scott	Project Engineering Manager
K. Miller	Engineering Supervisor Phase III
P. McCasland	Licensing Specialist
C. Slama	Licensing Engineer/Senior Operator

### 2. LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

<u>ITEM NUMBER</u>	<u>STATUS</u>	<u>DESCRIPTION</u>
70-3103/2013-006-001	Opened	Unresolved Item (URI): Licensee Review of Vendor Calculations (Paragraph 3)
70-3103/2011-009-003	Closed	Violation (VIO): Failure to Control Changes Made to Critical Characteristics and Key Attributes (Paragraph 10)
70-3103/2011-004-001	Closed	VIO: Failure to Verify Items and Nonconformance (Paragraph 10)

### 3. INSPECTION PROCEDURES USED

IP 88106 Program Development and Implementation  
IP 88107 Design and Document Control  
IP 88109 Inspection, Test Control & Control of Measuring Equipment  
IP 88110 Problem Identification, Resolution and Corrective Action  
IP 88111 10 CFR 21 Inspection - Facility Construction  
IP 88113 Control of Electronic Management of Data  
IP 88115 Supplier/Vendor Inspection (Construction Phase)  
IP 88116 Inspection of Safety Function Interfaces  
IP 88132 Structural Concrete Activities

### 4. ACRONYMS AND INITIALISMS

ADAMS	Agency-Wide Document Access and Management System
ACI	American Concrete Institute
ASL	Approved Supplier's List
CAQ	Condition Adverse to Quality
CFR	Code of Federal Regulations
CR	Condition Report
ER	Event Reports
ERSC	Event Report Screening Committee
I&OE	Industry Operating Experience
IP	Inspection Procedure
IROFS	Items Relied on for Safety
M&TE	Measuring and Test Equipment

LAR	License Amendment Request
LES	Louisiana Energy Services
NEF	National Enrichment Facility
No.	Number
NRC	Nuclear Regulatory Commission
QA	Quality Assurance
QAPD	Quality Assurance Program Description
QL	Quality Level
Rev.	Revision
RII	Region 2
SAR	Safety Analysis Report
SBM	Separation Building Module
SCAQ	Significant Condition Adverse to Quality
SCWE	Safety Conscious Work Environment
SL	Severity Level
UF <sub>6</sub>	Uranium Hexafluoride
URI	Unresolved Item
UUSA	URENCO USA
VIO	Violation

## 5. DOCUMENTS REVIEWED

### Procedures:

EG-2-2000-01, Configuration Management, Revision (Rev.) 6, March 25, 2013  
 EG-3-2100-01, Configuration Change, Rev. 19, August 2, 2012  
 EG-3-2100-02, Owner Acceptance Review, Rev. 17, March 11, 2013  
 EG-3-4100-01, Design Change Request, Rev. 7, November 30, 2011  
 EG-3-4100-05, Engineering Change Request, Rev. 13, March 7, 2013  
 NEF-BD-27e, Design Features of SBM and CRDB Structures, Rev. 4, August 12, 2012  
 LS-3-1000-01, Implementation of 10 CFR 21, Rev. 5  
 CA-3-1000-01, Performance Improvement Program, Rev. 26  
 CA-3-1000-02, Apparent Cause Evaluation Guidelines, Rev.7  
 CA-3-1000-03, Root Cause Evaluation Guidelines, Rev.6  
 CA-3-1000-04, Root Cause Evaluation Qualification, Rev.3  
 EG-3-2100-09, Identification, Disposition, and Resolution of Nonconforming Items, Rev. 7  
 LS-3-1000-01, Implementation of 10 CFR 21, Rev. 5  
 LS-3-1000-05, Notifications and Event Reporting, Rev. 7  
 LS-3-1000-09, NRC Posting Requirements, Rev. 10  
 NQAP NEF-11.01, Controlling Tests, Rev. 0  
 NQAP NEF-12.01, Controlling Measuring and Test Equipment, Rev.1  
 NQAP NEF-10.01, Performing Inspections, Rev.1  
 NQAP NEF-15.01, Controlling Nonconforming Items, Rev.1  
 QA-3-2000-03, Training and Qualification and Certification of QA Personnel  
 QA-3-3000-02, Quality Control Inspector Training and Qualification  
 QA-3-3000-02, Quality Control Test Plan Implementation  
 QA-3-2000-07, Quality Assurance Surveillance

QA-3-2000-08, Approved Suppliers List  
QA-3-3000-18, Receipt Inspection  
PR-3-2000-1, LES Control of Procurement  
IT-3-2000-07, System Data Backup, Revision 1  
IT-3-2000-01, Software Control, Revision 3  
IT-1-1000-05, IT System Data Backup Policy, Revision 0  
IT-2-1000-10, IT Backup Controls, Revision 0

#### Engineered Change Requests

7428  
8039  
8011  
7984  
8064  
7992  
7993  
8038  
8055  
8072

#### Event Reports (ERs)

2010-2558  
2010-3398  
2011-1769  
2011-330  
2011-2710  
2012-2891  
2012-3129  
2012-1044  
2012-1767  
2012-3560  
2012-1313  
2012-3219  
2012-3405  
2012-3547  
2012-3577  
2012-1658  
2012-3237  
2012-1848  
2012-3313  
2012-2432  
2012-3129  
2012-3237  
2013-143  
2013-626  
2013-809  
2013-557  
2013-367  
2013-626  
2013-143

2013-809  
2013-557  
2013-0154  
2013-0580  
2013-0620  
2013-367  
2013-1234  
2013-1024  
2013-1212  
2013-1213

Surveillance Reports

2013-S-02-033  
2013-S-04-074  
2013-S-02-028  
2013-S-03-038

Bakers Documents

TMP-CAR-0024  
TMP-CAR-0003  
TMP-CAR-0009

Miscellaneous Documents

444758-1005-C-CAL-008, Parsons Calculations for LES – National Enrichment Facility,  
January 1, 2013  
LES-S-S-03312, Specification for Placing Concrete and Reinforcing Steel, Revision 3,  
February 11, 2013  
LES-S-S-03310, Inspection Plan Mixing and Delivering of Concrete, Rev. 1  
Terracon Consultants; Certification ID: 1001261 (listed on Baker's approved suppliers list)  
Form No. 12.01-3, measuring and test equipment (M&TE) list  
Aldinger; Equipment Calibration Certificate No. 249554. listed on master M&TE list  
2012-A-008, Annual Audit of URENCO USA's Quality Assurance Program, Rev. 0  
LS-3-1000-01-F-2, UUSA PART 21 Substantial Safety Hazard Evaluation Form for ER 12-  
3237  
Regulatory Postings Inspection Sheet, LS-3-1000-09-F-2, Rev. 7