



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

July 26, 2011

David E. Sexton, Chief Nuclear Officer
and Vice President of Operations
National Enrichment Facility
P.O. Box 1789
Eunice, NM 88231

SUBJECT: NRC INSPECTION REPORT NO. 70-3103/2011-003

Dear Mr. Sexton:

The U.S. Nuclear Regulatory Commission (NRC) conducted an inspection associated with the operations and construction activities of the Louisiana Energy Services, L.L.C., National Enrichment Facility (LES NEF). The purpose of the inspection was to determine whether activities were conducted safely and in accordance with NRC requirements and the requirements of your license. Areas examined during the inspection are identified in the report. Within these areas, the inspection consisted of a selective examination of records, interviews with personnel, and observations of activities in progress.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," this document may be accessed through the NRC's public electronic reading room, Agency-Wide Document Access and Management System (ADAMS) on the internet at <http://www.nrc.gov/readingrm/adams.html>.

Should you have any questions concerning this letter, please contact me at (404) 997- 4418.

Sincerely,

/RA/

Joselito O. Calle, Chief
Fuel Facility Inspection Branch 2
Division of Fuel Facility Inspection

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

Enclosure: (See page 2)

July 26, 2011

David E. Sexton, Chief Nuclear Officer
and Vice President of Operations
National Enrichment Facility
P.O. Box 1789
Eunice, NM 88231

SUBJECT: NRC INSPECTION REPORT NO. 70-3103/2011-003

Dear Mr. Sexton:

The U.S. Nuclear Regulatory Commission (NRC) conducted an inspection associated with the operations and construction activities of the Louisiana Energy Services, L.L.C., National Enrichment Facility (LES NEF). The purpose of the inspection was to determine whether activities were conducted safely and in accordance with NRC requirements and the requirements of your license. Areas examined during the inspection are identified in the report. Within these areas, the inspection consisted of a selective examination of records, interviews with personnel, and observations of activities in progress.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," this document may be accessed through the NRC's public electronic reading room, Agency-Wide Document Access and Management System (ADAMS) on the internet at <http://www.nrc.gov/readingrm/adams.html>.

Should you have any questions concerning this letter, please contact me at (404) 997- 4418.

Sincerely,

/RA/

Joselito O. Calle, Chief
Fuel Facility Inspection Branch 2
Division of Fuel Facility Inspection

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

Enclosure: (See page 2)

PUBLICLY AVAILABLE NON-PUBLICLY AVAILABLE SENSITIVE NON-SENSITIVE
ADAMS: X Yes ACCESSION NUMBER: ML1120070634 X SUNSI REVIEW COMPLETE X FORM 665 ATTACHED

OFFICE	RII:DFFI	RII:DFFI	RII:DFFI				
SIGNATURE	DH for	/RA/	/RA/				
NAME	PGlenn	NKarloovich	DHartland				
DATE	7/25/11	7/25/11	7/25/11	7/ /2011	7/ /2011	7/ /2011	7/ /2011
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME: G:\DNMSII\FBII\REPORTS\DRAFT INSPECTION REPORT
FOLDER\LES\LES IR 2011-003.DOCX

D. Sexton

2

Enclosure: NRC Inspection Report 70-3103/2011-003

cc w/encl:

Gary Sanford, Quality and Regulatory
Affairs Director
National Enrichment Facility
P.O. Box 1789
Eunice, NM 88231

Daniel F. Stenger, Counsel
Hogan and Hartson
555 13th Street, NW
Washington, DC 20004

Richard A. Ratliff, PE, LMP
Radiation Program Officer
Bureau of Radiation Control
Department of State Health Services
Division for Regulatory Services
1100 West 49th Street
Austin, TX 78756-3189

Raj Solomon, Deputy Secretary
New Mexico Department of Environment
Office of the Secretary
1190 St. Francis Drive
P. O. Box 26110
Santa Fe, NM 87502-0157

Matt White, Mayor
City of Eunice
P.O. Box 147/1106 Ave J
Eunice, NM 88231

Gary Don Reagan, Mayor
City of Hobbs
200 E. Broadway
Hobbs, NM 88240

Michael Ortiz, Chief
Radiation Controls Bureau
Field Operations Division
Environmental Department
Harold S. Runnels Building
1190 St. Francis Drive, Room S 2100
P.O. Box 26100
Santa Fe, NM 87502-0157

cc w/encl: (Cont'd on page 3)

D. Sexton

3

(cc w.encl: cont'd)
Alton Dunn, Mayor
City of Jal
P.O. Drawer 340
Jal, NM 88252

Commissioner Gregory H. Fuller
Chairman
Lea County Board of County Commissioners
Lea County Courthouse
100 North Main, Suite 4
Lovington, NM 88260

Gregory Smith, President and Chief Executive Officer
Louisiana Energy Services, L.L.C.
Electronic Mail Distribution

Gary Sanford, Quality & Regulatory
Affairs Director
Louisiana Energy Services, L.L.C.
Electronic Mail Distribution

Perry Robinson, General Counsel
Louisiana Energy Services, L.L.C.
Electronic Mail Distribution

Brenda Brooks, Director
Community Affairs and Government Relations
Electronic Mail Distribution

D. Sexton

4

Letter to Mr. David E. Sexton from Joselito O. Calle, dated July 26, 2011

SUBJECT: NRC INSPECTION REPORT NO. 70-3103/2011-003

Distribution w/encl:

B. Smith, NMSS

T. Naquin, NMSS

T. Hiltz, NMSS

T. Gody, RII

E. Cobey, RII

D. Hartland, RII

J. Calle, RII

PUBLIC

NUCLEAR REGULATORY COMMISSION

REGION II

Docket No.: 70-3103

License: SNM-2010

Report No.: 70-3103/2011-003

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

Facility: National Enrichment Facility (NEF)

Location: Eunice, NM

Inspection Dates: April 1 through June 30, 2011

Inspectors: P. Glenn, Fuel Facility Inspector
N. Karlovich, Construction Inspector

Approved: J. Calle, Chief
Fuel Facility Inspection Branch 2
Division of Fuel Facility Inspection

Enclosure

EXECUTIVE SUMMARY

Louisiana Energy Services, L.L.C., National Enrichment Facility (LES NEF)
Nuclear Regulatory Commission (NRC) Inspection Report No. 70-3103/2011-003

This report is a summary of the quarterly inspection of the licensee's plant operations and construction activities. The inspection was conducted during the period of April 1 through June 30, 2011. The results of the inspection are contained in the details section of this report. The report details section was prepared to exclude the use of information the licensee identified as proprietary. The inspection was conducted through a review of selected records, interviews with personnel, and direct observation of activities at the facility.

Management Organization and Controls

The inspectors reviewed the LES NEF management organization structure and internal control programs such as safety committees, corrective actions, procedure, change management, and audit and assessment programs. Unresolved Item (URI) 70-3103/2011-003-001, Reporting of Changes to the Fundamental Nuclear Material Control Plan, was opened. (Section 2)

Operator Training

The inspectors observed operator training and reviewed the program's governing procedures and current training records for recently qualified operators. The operator training program was implemented in accordance with requirements and approved procedures. (Section 3)

Instrumentation and Control Systems

The inspectors observed and reviewed Instrumentation and Control activities and documentation associated with safety related construction of IROFS 1, 2, 4, and 5 located in Assay 2. Documentation, installation, inspection, and testing were adequate. (Section 4)

Attachment:

Persons Contacted

Inspection Procedures Used

List of Items Opened, Closed, and Discussed

List of Documents Reviewed

REPORT DETAILS

1. Summary of Facility Status

The licensee conducted routine plant operation of Cascades 1 and 2 throughout the inspection period. Construction and testing in some areas of Separation Building Module (SBM) 1001 and 1003 and other applicable process areas continued in preparation for future operation of other cascades and equipment.

2. Management Organization and Controls (Inspection Procedure (IP) 88005)

a. Scope and Observations

The inspectors reviewed the current organizational structure at LES NEF, including personnel responsibilities and functions of key positions and verified that requirements of the safety analysis report (SAR) were being met. The inspectors interviewed, reviewed training requirements, and observed work practices of management and licensee employees to determine if they were both aware of and implementing their respective responsibilities and that they met the qualifications outlined in the SAR, as applicable. The selection of management and licensee employees included but was not limited to Chief Nuclear Officer and Vice President of Operations, Training, Maintenance, Quality Assurance, Health Safety and Environmental, Shift Operations, Radiation Protection, and Shift Managers, control room staff, and plant operators.

During the inspection, the inspectors noted that the licensee had a formal program requiring management at all levels to conduct field observations of their staff on a prescribed frequency.

The inspectors reviewed minutes from the quarterly safety review committee meetings to verify that the committee was meeting and staffed with the appropriate safety disciplines in addition to reviewing operational and safety related items as committed to in the SAR and charter.

A review of the licensee's corrective action program (CAP) was conducted to determine whether conditions adverse to quality such as failures, malfunctions, deviations, deficiencies, and nonconformances were being promptly identified and corrected and to verify that any failures or degradation of items relied on for safety (IROFS) or management measures were also addressed via the CAP as required by the Code of Federal Regulations (CFR) and SAR. The inspectors also observed the corrective action program screening committee and corrective action review board meetings. During their review of CAP entries, the inspectors noted that, in condition report (CR) 2011-1719, LES NEF identified that changes to chapter nine of the Fundamental Nuclear Material Control Plan (FNMCP) were not reported to the NRC in accordance with 10 CFR 70.32(c). Unresolved Item (URI) 70-3103/2011-003-001, Reporting of Changes to the FNMCP, was opened to evaluate this occurrence.

The inspectors reviewed the implementation of the procedure program including requirements for procedures and procedure use and adherence. During this review a sampling of administrative, operations, training, and maintenance procedures were selected and evaluated.

The inspectors also reviewed several change management and 70.72 evaluations for proposed change packets to verify that the licensee utilized the configuration management program as committed to in the SAR and as outlined in various LES NEF procedures.

A review of the LES NEF audit and assessment program was conducted to verify that the licensee was implementing the program by conducting the respective audit or assessment and those deficiencies were incorporated into the corrective actions program. The inspectors reviewed audits and assessments of the radiation protection, nuclear criticality safety, and quality assurance programs.

b. Conclusions

The inspectors inspected several facets of the LES NEF management organization and internal control programs such as safety committees, CAP, procedure, change management, and audit and assessment programs. URI 70-3103/2011-003-001, Reporting of Changes to the FNMCP, was opened to evaluate a failure to report changes to the FNMCP to the NRC as required by the CFR.

3. **Operator Training (IP 88010)**

a. Scope and Observations

LES NEF had a formal training program for operators that include a qualification card, observations, classroom and field training, and evaluations. The training program was governed by approved procedures that were reviewed by the inspectors. The inspectors also reviewed training records for the most recently qualified operators to verify that their training was up to date and complete.

The inspector observed classroom training and interviewed trainees in Nuclear Safety Worker training and NEF Fundamentals training for qualifying operators. It was noted that the training was presented in a clear format which was supported by training materials such as handouts, slideshow presentations, and an exam. The inspectors also observed an on the job training (OJT) of a trainee approaching full certification. The OJT was accompanied by an evaluation and management observation. The trainee conducted a pre-brief demonstrating knowledge of the procedure, process parameters, potential hazards, system components, and normal operational range of equipment. The evaluator provided feedback throughout the OJT and a summary at the end.

The inspectors observed an operator while performing daily operations rounds on second shift. The inspectors noted that the operator utilized the procedure (OP-3-0610-01, Centrifuge Cooling Water System Operation) and was knowledgeable of key process parameters, system components, and normal operational range of equipment. The inspectors noted that work areas were adequately maintained, and no housekeeping or equipment issues were identified.

The inspector observed second shift turnover in the control room and noted that information was conveyed from the previous shift in its entirety and that control room staff asked questions as needed. Additionally, shift managers and individual post positions held one-on-one turnover in support of the general turnover process.

NRC Form 3 was posted on site as required.

b. Conclusions

LES NEF had a formal program for operator training that adhered to SAR and procedural requirements. There were no findings of significance identified.

4. **Instrumentation and Control Systems (IP 88140)**

a. Scope and Observations

The inspectors reviewed electrical IROFS associated with various stations that were part of Assay 2.

The inspectors compared drawings used in the field to those in document control to verify that the most up to date drawings and engineering change requests were available in the field. The inspectors observed the labeling of wires associated with the power and control panels for IROFS 4 and 5 on Feed Stations 1002-414-1B1 and 1002-414-2B1, and the inspectors observed Quality Control's review of that labeling. The inspectors reviewed the pre-operational test procedures for IROFS 1, 2, 4, and 5 for any changes since the last inspection. No changes were identified. The inspectors discussed and reviewed the Site Acceptance Test (SAT) procedure related to IROFS 1 to verify that the SAT met the hardware specification requirements.

The inspectors observed the site acceptance test and pre-operational test for IROFS 1 and 2 on Tails Station 1, 1002-434-1B3, to verify that calibrated Measuring and Test Equipment (M&TE) was used and that the procedures were followed. The inspectors inspected the wiring of the following stations associated with Assay 2 to verify that the wiring was in accordance with drawings:

- IROFS 4 and 5 associated with Feed Stations 3 and 4 (1002-414-3B1 and 1002-414-4B1, respectively),
- IROFS 1 and 2 associated with Feed Purification Station 1 (1002-415-1B3),
- IROFS 1 and 2 associated with Tails Station 1, (1002-434-1B3),
- IROFS 1 and 2 associated with Tails Station 5 (1002-434-5B3)

The inspectors reviewed the completed work plan for the SAT and the Pre-operational Test packages associated with Product Station 1. The Inspectors reviewed the completed work plan for the SAT associated with Feed Station 1.

b. Conclusion

The inspectors concluded that the pre-operational test procedures for IROFS 1, 2, 4, and 5 were adequate, and that current drawings were used by craft in the field for installation of IROFS 4 and 5. Instrumentation and Control activities for Assay 2 were adequately controlled and prescribed in work procedures and processes. No findings of significance were identified.

5. Follow-up of Previously Identified Items

Violation (VIO) 070-3103/2010-015-002

a. Scope and Observations

The inspectors reviewed licensee actions to restore compliance with NRC regulations for VIO 70-3103/2010-015-002, Failure to Assure that Applicable Requirements are Included in Procurement Document. The violation involved the licensee's failure to limit a supplier's scope of work to what the supplier had been approved to do, which resulted in the failure to verify a critical characteristic. Specifically, a purchase order allowed a supplier to define design requirements for the commercial grade dedication (CGD) of IROFS 1, 2, 4, and 5 equipment items, and the supplier was limited to work activities involving installation, fabrication, and procurement of electrical components.

The inspectors reviewed the licensee's corrective actions, including the purchase order changes, procedural changes, condition reports, test results, and training records. The inspectors also reviewed the licensee's reply to the violation.

b. Conclusion

The inspectors determined that the licensee had appropriately restored compliance with NRC regulations and the conditions of their license. This violation is closed.

6. Exit Meeting

Exit meetings were held April 21, May 27, and June 23, 2011, with members of the licensee staff. Although proprietary documents and processes were occasionally reviewed during this inspection, the proprietary nature of these documents or processes was not included in this report. Members of the licensee staff acknowledged the observations and findings during the exit meeting noted above. No dissenting comments were received from the licensee.

ATTACHMENT

1. Partial List of Personnel Contacted

Licensee Personnel:

A. Cowne, Construction Manager
G. Higgs, Maintenance Manager
D. Lakin, Performance Assessment and Feedback Manager
R. Ketchersid, PCES Craft Technician
M. Kingham, Training Manager
P. McCasland, Licensing Specialist
L. McMullen, Engineering
W. Padgett, Licensing Manager
J. Richards, PCES Craft Technician
M. Robinson, Document Control
R. Sanchez, Human Resources
D. Sexton, Chief Nuclear Officer and Vice President of Compliance
O. Torres, Quality Assurance Manager
R. Williams, Operations Manager

2. Inspection Procedure (IP) Used

IP 88005 Management Organization and Controls
IP 88010 Operator Training
IP 88140 Instrumentation and Controls Systems

3. List of Items Opened, Closed and Discussed

70-3103/2011-003-001	Open	URI - Reporting of Changes to the FNMCP.
70-3103/2010-015-002	Closed	VIO - Failure to Assure that Applicable Requirements were included in Procurement Document.

4. List of Documents Reviewed

LES Procedures Reviewed

AD-3-1000-01, Requirements for Procedures, Rev. 10
AD-3-1000-02, Procedure Use and Adherence, Rev. 4
AD-3-1000-05, Safety Review Committee, Rev. 4
AD-3-1000-10, Change Management Process, Rev. 4
CA-2-1000-02, Quality Principles, Rev. 0

CA-3-1000-01, Performance Improvement Program, Rev. 15
 CA-3-1000-06, Corrective Action Review Board, Rev. 7
 CA-3-1000-09, Assessment Program, Rev. 3
 CA-3-1000-10 Management Observation Program, Rev. 0
 HR-3-3000-01, LES Organizational Changes, Personnel Changes, and LES
 Organizational Chart Control, Rev. 1
 LS-3-1000-04, 10 CFR 70.72(c) Evaluations for Proposed Changes, Rev. 7
 MA-3-3400-01 IROFS1 Station Heater and Fan High Temperature Trip – RTD
 Surveillance, Rev. 1
 MA-3-3400-02 IROFS2 Station Heater and Fan High Temperature Trip- TC Surveillance,
 Rev. 2
 MA-3-3400-04 IROFS4 Station Heaters High Temperature Trip- RTD Surveillance,
 Rev. 3
 MA-3-3400-05 IROFS5 Station Heaters High Temperature Trip – TC Surveillance, Rev. 1
 OP-3-1000-07, Watchstanding Practices, Rev. 6
 OP-3-0610-01, Centrifuge Cooling Water System Operation, Rev. 2
 PR-3-2000-01, LES Control of Procurement, Rev. 5
 TP-211-002, Quality Procedure: IROFS Panels 1, 2, 4, & 5 Component Test and
 Inspection Procedure, Rev. 0
 TQ-3-0100-01, TSD Process Activities, Rev. 3
 TQ-3-0100-03, On-the-Job Training and Task Performance Evaluation, Rev. 4
 TQ-3-0100-06, Exam Development Process, Rev.3
 TQ-3-0100-09, Implementation Phase, Rev. 4
 TQ-3-0100-11, On-the-Job Training Development, Rev. 5
 TQ-3-0300-01, Operator Training Program, Rev. 6

Specifications / Calculations / Drawings Reviewed

LES-1001-E-WIR-010-01, Rev. 1
 LES-1001-E-WIR-010-02, Rev. 1
 LES-1001-E-WIR-010-03, Rev. 0
 LES-1001-E-WIR-010-04, Rev. 0
 LES-1001-E-WIR-010-05, Rev. 2
 LES-1001-E-WIR-010-06, Rev. 2
 LES-1002-E-WIR-005-09, Rev. 2
 LES-1002-E-WIR-005-20, Rev. 3

Inspection Records / Work Plans Reviewed

1003545 / 3006186 Perform MA-3-3400-02 IROFS 2 Station Heater and Fan High
 Temp Trip – TC Surveillance
 1003546 / 3006187 Perform MA-3-3400-01 IROFS 1 Station Heater and Fan High Temp
 Trip – RTD Surveillance
 1002-ELEC-434-012 Perform IROFS Testing for Tails Station 1B3 in Accordance with
 Attachments 5 and 6, Rev 0
 1002-ELEL-424-006 Perform IROFS Testing for Product Station 1B2 in accordance with
 Attachments 5 and 6
 1002-ELEC-414-011 Perform IROFS Testing for Feed Station 1B1 in accordance with
 Attachments 5 & 6

3008725, IROFS 1 RTD Surveillance
 3008724, IROFS 2 Thermocouple Surveillance

LES Condition Reports (CRs) Reviewed

CR 2010-3195 - Potential Violation for Commercial Grade Dedication Plans without
 Criterion III as part of their scope of supply
 CR 2010-3203 - Review of Critical Characteristics in Vendor Procurement Package
 provided to LES QC
 CR 2011-1695 - Jofra's Calibration
 CR 2011-1719 - Changes to FNMCP Chapter 9
 CR 2011-1737 - Untimely Initiation of CR 2011-1695
 CR 2011-280 Management Observation Program 4th Quarter 2010 Review
 CR 2011-1305 Management Observation Program 1st Quarter 2011 Review
 CR Screening Report- 05/24/2011
 CR Screening Report- 05/25/2011
 CR Screening Report- 05/26/2011

Miscellaneous Documents Reviewed

ANSI/SAR Personnel Qualification Review 5/1/2010 and 5/20/2011
 Safety Review Committee Meeting Minutes 2010 and 2011
 Operator I, II, III Job Description
 Senior Operator Job Description
 Student History Training Records (Recently Qualified Operators)
 Course Lesson Plans / Training – Physics Fundamentals, Sampling System,
 Management Observation Program Records April 2011 and May 2011
 Corrective Action Review Board Meeting Minutes 2010 and 2011
 Assessment 2010-0013, Performance Assessment
 Audit Report 2010-A-03-007 Performance Assessment and Feedback
 URENCO USA Self Assessment 2011 Matrix
 2010 Third Quarter Trend Report, 11/12/10
 2010 Fourth Quarter Trend Report, 2/10/11
 Assessment Report 2010-0007, Nuclear Criticality Safety Program
 Assessment Report 2010-003, Radiation Protection Program
 2010 Annual Independent Assessment of URENCO USA QA Program Effectiveness
 Human Performance Fundamentals Training Presentation and Organizational Training
 Records (as of 5/24/2011)
 CC-LS-2010-0002 and 70.72(c) 2010-0082, Organizational Change
 CC-LS-2010-0026 and 70.72(c) 2010-0620, Organizational Change
 CC-LS-2010-0024 and 70.72(c) 2010-0547, Organizational Change / SAR Update
 CC-LS-2010-0021 and 70.72(c) 2010-0385, Organizational Change
 CC-LS-2010-0023 and 70.72(c) 2010-0544 Organizational Change
 Guideline – 005.0 Human Resources Guideline Position Description Process, 6/17/09
 Procedure Approval Packet – MA-3-1000-02 Rev. 2
 Procedure Approval Packet – TQ-3-0300-01 Rev. 5
 Procedure Approval Packet – TQ-3-0300-01 Rev. 6
 Procedure Approval Packet – OP-3-1000-07 Rev. 6
 PR-3-2000-01_R5 Training Brief

PR-3-2000-01_R5 Training Roster 12/7/10
CR 2010-3195 Lessons Learned Training 09-Nov-10
CR 2010-3195 Lessons Learned Training Email to Europe(9/12/2010 from Robert Suaer
to Laura Tat, Boyle Debra Kelly Subject RE handout Yesterday on CR 2010-
3195 Lessons Learned and training Session and Safety Discussion Handout
CR 2010-3195 Lessons Learned Training
Letter to BESCO, dated November 19, 2010, Contracts PO 303199 and PO 303277
Vendor Feedback on LES CR 2010-3203 and CR 2010-3195”
PO 303277 change order 2 “IROFS 11 and 12 Panels”, 11/18/2010
PO 303277 change order 1 “IROFS 11 and 12 Panels”, 6/30/2010
CGD-11-01 Rev 3, December 13, 2010 “Commercial Grade Dedication Plan for
IROFS 1, 2, 4, &5
QADP 23-9088090-11 Areva Quality Assurance Data Package
SBM1-BESCO-211DP
Hardwired IROFS Installation Instructions, 1/29/08