



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

April 24, 2014

Stephen R. Cowne
Acting Chief Nuclear Officer
URENCO USA
P.O. Box 1789
Eunice, NM 88231

SUBJECT: LOUISIANA ENERGY SERVICES, URENCO USA FACILITY – NUCLEAR
REGULATORY COMMISSION INTEGRATED INSPECTION REPORT NUMBER
70-3103/2014-002

Dear Mr. Cowne:

This refers to the inspections conducted from January 1 through March 31, 2014, at the Louisiana Energy Services (LES), URENCO USA facility located in Eunice, New Mexico. The purpose of the inspections was to determine whether activities authorized under the license were conducted safely and in accordance with U.S. Nuclear Regulatory Commission (NRC) requirements. The enclosed report presents the results of these inspections. The inspection results were discussed with members of your staff at exit meetings held January 16 and March 20, 2014, for this integrated inspection report. No findings of significance were identified.

During the inspections, the NRC staff examined activities conducted under your license as they related to public health and safety and to confirm compliance with NRC 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. The inspections covered the following areas; Operational Safety, Facility Support, and Construction.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390 of the NRC's "Rules of Practice," a copy of this letter and enclosure will be made available electronically for public inspection in the NRC Public Document Room, or from the NRC's Agency-Wide Document Access and Management System (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

Should you have any questions concerning these inspections, please contact us.

Sincerely,

/RA/

James A. Hickey, Chief
Projects Branch 1
Division of Fuel Facility Inspection

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

Enclosure:
Inspection Report No. 70-3103/2014-002
w/Attachment: Supplementary Information

cc: (See page 3)

S. Cowne

2

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cc: (See page 3)

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DATE	4/24/2014	4/24/2014	4/24/2014	4/24/2014	
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U. S. NUCLEAR REGULATORY COMMISSION
REGION II

Docket No: 70-3103

License: SNM-2010

Report No: 70-3103/2014-002

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

Facility: URENCO USA, National Enrichment Facility (NEF)

Location: Eunice, NM 88231

Inspection Dates: January 1 through March 31, 2014

Inspectors: S. Mendez, Fuel Facility Inspector, Division of Fuel Facility Inspection (DFFI) (Paragraph A.2)
L. Pitts, Senior Fuel Facility Inspector, DFFI (Paragraph A.2)
N. Pitoniak, Fuel Facility Inspector, DFFI (Paragraph A.1)
C. Read, Fuel Facility Inspector In-Training, DFFI (Paragraph A.1)
P. Startz, Fuel Facility Inspector, DFFI (Paragraph A.3)

Approved: J. Hickey, Chief
Projects Branch 1
Division of Fuel Facility Inspection

Enclosure

EXECUTIVE SUMMARY

Louisiana Energy Services, L.L.C., (LES), URENCO USA (UUSA)
NRC Integrated Inspection Report 70-3103/2014-002
January 1 - March 31, 2014

Inspections were conducted by regional inspectors during normal shifts in the areas of safety operations, facility support, and construction. The inspectors performed a selective examination of licensee activities that were accomplished by direct observation of safety-significant activities and equipment, tours of the facility, interviews and discussions with licensee personnel, and a review of facility records.

Safety Operations

- The Items Relied on for Safety (IROFS) reviewed were properly implemented and maintained in order to perform their intended safety function (Paragraph A.1).
- The inspectors determined that IROFS C23 was properly implemented for Cascades 4.9, 4.10 and 4.11 in order to perform its intended safety function. (Paragraph A.2)
- The fire protection systems were adequately maintained in accordance with site procedures. (Paragraph A.3)

Attachment

Key Points of Contact

List of Items Closed and Discussed

Inspection Procedures Used

Documents Reviewed (Partial)

REPORT DETAILS

Summary of Plant Status

During the inspection period, the licensee conducted routine plant operation of the operating Cascades. After being granted authorization, the licensee initiated operation of three Cascades during this inspection period. Construction and testing in some areas of Separation Building Modules (SBMs) 1001, 1003, 1005, and other applicable process areas continued in preparation for future operation of additional cascades and equipment.

A. Safety Operations

1. Plant Operations (IP 88020)

a. Inspection Scope and Observations

The inspectors interviewed staff and reviewed records associated with the Cylinder Receipt and Dispatch Building (CRDB) and the Separations Building Modules (SBM) process areas. The inspectors selected a sample of safety controls to review and determined that the safety controls are being adequately implemented and properly communicated as described in the Integrated Safety Analysis (ISA). The inspectors determined that the licensee is operating safely and in compliance with requirements.

The inspectors confirmed that selected engineering controls reviewed were present and capable of performing their intended safety functions. To complete this confirmation, the inspectors verified the physical presence of passive and active engineered safety controls, evaluated the safety controls to determine their capability and operability, and verified that potential accident scenarios were covered.

The inspectors determined that licensee administrative controls were implemented and communicated. The inspectors reviewed operating procedures and determined that required actions as identified in the Safety Analysis Report (SAR) have been correctly transcribed into written operating procedures. The inspectors evaluated the procedures' contents with respect to operating limits and operator responses for upset conditions and verified that limits needed to assure safety are adequately described in the procedures.

The inspectors interviewed five operators and five technicians and determined that operators and technicians were adequately implementing the required safety controls. The inspectors observed operators and technicians performance and determined that they were adhering to applicable safety procedures. The inspectors reviewed the postings and operators aids applicable to the tasks being observed and determined that these postings and operator aids were current, reflect safety controls, and were followed by the operators and technicians.

Through interviews and document reviews, the inspectors verified that the licensee conducted preventive maintenance, calibration, and periodic surveillances as required by the SAR for the selected safety controls.

The inspectors interviewed operators and technicians and determined that they were adequately implementing the required safety controls and following the Conduct of Operations. The inspectors observed shift operators and the shift turnover and determined that they were adhering to applicable safety procedures and maintained proper communication.

b. Conclusion

No violations of NRC requirements were identified.

2. Plant Operations (IP 88020) Verification that the systems structures and components designed to support operation of Cascades 4.9, 4.10, and 4.11 met license requirements prior to initiation of feed

a. Inspection Scope and Observations

The inspectors reviewed records associated with the item relied on for safety (IROFS) C23 for the verification of Cascades 4.9, 4.10, and 4.11. The inspectors determined that the design features for IROFS C23 for the TC 21 centrifuges were adequate to minimize releases and were being adequately implemented and properly communicated as described in the ISA.

The inspectors confirmed that the passive engineered controls that were reviewed were present and capable of performing their intended safety function. The inspectors reviewed the procedure applicable to the operational validation of IROFS C23 and determined that the procedure was current, reflected the safety controls, and was followed by the operators and technicians.

Through interviews and document reviews, the inspectors verified that the licensee conducted calibration and surveillance activities as required by the ISA Summary and the commercial grade dedication (CGD) process for IROFS C23. The inspectors also reviewed the CGD package for each cascade to verify compliance with applicable procedures and license requirements.

b. Conclusion

No violations of NRC requirements were identified.

3. Fire Protection Annual (IP 88055)

a. Inspection Scope and Observations

The inspectors reviewed licensee procedures and conducted physical inspections of plant areas involved in processing radiological material, and inspected the adjacent fire suppression support facilities to assess the material condition of fire protection equipment, systems, and features. The inspectors verified that flammable materials were stored in marked cabinets as specified in approved procedures and that housekeeping and the control of combustible materials were adequate and consistent with the approved procedures. The inspectors verified that the cutting, welding, and hot work program was implemented in accordance with approved procedures.

The inspectors reviewed records and interviewed licensee personnel to verify that the observed fire protection systems were maintained in an adequate state of readiness and had been properly inspected and tested to verify their ability to perform their safety function. The inspectors determined that fire dampers, doors, and penetration seals were being

maintained in a condition that would ensure they were available and reliable to perform their safety function. The inspectors determined that portable extinguishers were provided at their designated locations and access was unobstructed.

The inspectors reviewed the corrective action program (CAP) entries for the previous 12 months and determined that the licensee was identifying fire protection operability problems at an appropriate threshold and entering them into the CAP. Also, the inspectors evaluated the actions associated with the CAP and determined that the completed corrective actions were adequate.

The inspectors reviewed Emergency Response Organization drills for the past year and verified the Emergency Response Team members received training and participated in drills at least an annual basis. The inspectors verified that the offsite fire support organizations were offered an opportunity for site orientation. The inspectors did not note any issues with the communication equipment and verified that the members of the Emergency Response Team had adequate access to communications while they were on duty.

The inspectors observed a simulated functional testing of a complex pre-action fire sprinkler system. The inspectors observed that the test was successfully accomplished in compliance with procedures and practices. The inspectors also performed an extensive review of the automated fire protection system including fire panels, electrical field devices, communications networks, work stations, and fire detection devices.

b. Conclusion

No violations of NRC requirements were identified.

B. Exit Meeting

The inspection scope and results were presented to senior licensee representatives and staff January 16 and March 20, 2014. Proprietary information was discussed but not included in the report.

SUPPLEMENTARY INFORMATION

1. KEY POINTS OF CONTACT

<u>Name</u>	<u>Title</u>
B. Graham	Licensing
B. Hansen	Assistant to Operations Manager
T. Knowles	Licensing and Performance Assessment Manager
J. Laughlin	Chief Nuclear Officer
J. Rickman	Licensing
C. Slama	Licensing Engineer
K. Slavings	Shift Manager
J. Vongphachan	Shift Supervisor

2. LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

None

3. INSPECTION PROCEDURES USED

IP 88020 Operational Safety
IP 88055 Fire Protection Annual

4. DOCUMENTS REVIEWED (PARTIAL LIST)

Records:

Calibration Records for CE440 Elemental Analyzers dated September 11, 2013 through January 14, 2014

Chemistry IROFS Qualifications as of January 10, 2014

GW-Recycling IROFS Qualifications as of January 10, 2014

IROFS38 Logs dated January 12, 2014 through January 14, 2014

Operations IROFS Qualifications as of January 10, 2014

PCES Maintenance IROFS Qualifications as of January 10, 2014

MWO-1000078172, 1Y: SBM GEVS Sample and Analysis, dated February 28, 2013

MWO-1000117563, CRDB: 666 GEVS Flow Upgrade, dated September 18, 2013

MWO-1000119453, Add Oil and Sample, dated October 10, 2013

Letter; New Mexico State Fire Marshal Division to Marty Price, Permitting Supervisor LES,
Subject Allowance from testing frequencies of the International Fire Code 2003 / NFPA

101 Life Safety Code 1997, dated February 28, 2014

MWO-1000136245, 694-FM-200 Fire System Inspection

MWO-1000126133, EFWP Manual Start

MWO-1000126141, IROFS36A, Combust Cont Inspect

MWO-1000129094, IROFS25, Fire Doors Inspect

MWO-1000126158, SWY, FWPH & SSB Exting Inspect

MWO-1000126159, TSB Bldg Exting Inspection

MWO-1000126160, CUB Bldg Exting Inspection

MWO-1000126161, SMB Bldg Exting Inspection

Attachment

MWO- 000126166, FB Trailer Run of the Smoke Fans
 MWO-1000126175, FWPH Electrical Checks
 MWO-1000126176, CRDB 694 Gauge Inspect
 MWO-1000129122, FB Trailer Run of the smoke fans
 Fire System or Feature Impairments, 2013-0303, Internal conduit Pen Seal, 05/08/13-1625
 Hot Work Permit 2014-HWP-011, dated March 13, 2014
 Hot Work Permit 2014-HWP-010, dated March 10, 2014
 Hot Work Permit 2014-HWP-019, dated March 4, 2014
 Hot Work Permit 2014-HWP-010, dated March 10, 2014

Procedures:

AD-3-1000-02, Procedure Use and Adherence, Revision (Rev.) 7
 CH-3-3000-12, CE440 Elemental Analyzer Operation, Calibration, and Maintenance, Rev. 2
 FP-3-1000-02, Flammable and Combustible Materials Control, Rev. 8
 MA-3-2000-3, Oil Addition to Vacuum Pumps, Rev. 4
 OP-3-1000-25-F-1, Operator Aid Tracking Log, Rev. 1
 OP-3-3300-01, Operations Surveillance Procedure, Rev. 19
 OP-3-1000-01, Conduct of Operations, Rev. 21
 RM-3-3000-01, Control of Documents, Rev. 12
 RWP-13-022, Remove and Replace Prefilters and Carbon Filters in GEVS Trains A and B
 Filter Bank, Rev. 0
 RWP-13-028, Remove and Replace GEVS Filters, Rev. 0
 CA-3-1000-01, Performance Improvement Program, Rev. 27
 FPE-REV-001, Fire Hazards Analysis for URENCO USA, Rev 15
 FP-2-1000-01, Fire Protection Program Requirements, Rev. 7
 FP-3-1000-01, Fire System and Features Testing and Inspection, Rev. 5
 FP-3-1000-02, Flammable and Combustible Materials Control, Rev. 8
 FP-3-1000-03, Fire Prevention During Welding, Cutting, and Other Hot Work, Rev. 8
 FP-3-1000-04, Fire System or Feature Impairments, Rev. 14
 FP-3-2000-02, Combustibles Control Inspection, UBC Pad, Rev. 3
 FP-3-2000-03, IROFS35 Weekly Fire Door Inspection and IROFS35/36a/36c/36d
 Combustibles Control Inspection – CRDB and ICC, Rev. 4
 MA-3-2670-01, IROFS35 Fire Damper Inspections, Rev. 5
 OP-3-0694-01, Fire Water System Operation, Rev. 17

Condition Reports:

ER-2013-1599, Tracking Open Items for IROFS14a and IROFS14b
 ER-2013-2279, Criticality Safety Sign Missing from IROFS 14b Array
 ER-2013-1423, Unpermitted combustible materials and a fire extinguisher, delinquent of its
 Annual Inspection are stored the CRDB LECT Room
 ER-2013-1425, Unpermitted Transient Combustible Materials found in the CRDB Chemistry
 Lab
 ER-2013-1491, No Transient Combustible Permit for Logistics Materials
 ER-2013-1529, Non-permitted Transient Combustibles
 ER-2013-1530, Unpermitted combustible material in the SBM 1003/1004
 ER-2013-1583, Ineffective Change Management of Training Requirements
 ER-2013-1637, Continuing Issue of Non-Compliance with Site Transient Combustible
 Policies and Procedures
 ER-2013-1262, 1002-424-2P01 abnormal trending during IROFS38 Surveillance
 ER-2013-1613, 1002-424-1B2 Load Cells

ER-2013-908, Possible inside conduit fire seal breach, dated May 8, 2013
 ER-2013-73, Fire System NCC monitor missing, dated January 14, 2013
 ER-2013-93, Combustible material stored in Area 4 without permit, dated January 17, 2013
 ER-2013-100, Fire barrier breached during repairs, dated January 18, 2013
 ER-2013-182, Combustible material left in mini halls, dated January 31, 2013
 ER-2013-199, Unsealed fire penetrations in SBM 1004 HVAC duct, dated February 4, 2013
 ER-2013-224, SBM 1003 travel path fire sprinkler system leak, dated February 7, 2013
 ER-2013-372, Fiber cable raceway material may not meet specifications, dated February 27, 2013
 ER-2013-1703, IROFS door 1002-826-1DO170 found open, damaged crash bar prevented correct operation, dated August 13, 2013
 ER-2014-224, Excessive transient combustibles found in Fire Area 15 of CRDB, dated February 18, 2014
 ER-2104-240, Accessibility to fire dampers on 2nd floor/PSC/SBM-5 requires access determination to allow annual inspections, dated February 20, 2014
 ER-2014-282, TSB vault FM-200 fire system malfunction, dated February 27, 2014
 ER-2014-301, False fire alarm resulted from poor communications during testing, dated March 4, 2014

Condition Reports Written as a Result of the Inspection:

ER-2014-61, Conflicting procedural requirements for use of metal containers for storage of waste
 ER-2014-62, Door latch not operating properly
 ER-2014-74, Lack of respirator use requirements in work control documents
 ER-2014-75, Inactive Operator Aid found in active binder
 ER-2014-76, Transposition error during IROFS surveillance
 ER-2014-78, Storage issues with used GEVS filters in CRDB
 ER-2014-79, Observation of PFPE Oil Analysis
 ER-2014-80, Incorrect installation of GEVS filter cover
 ER-2014-390, Emergency exit fluorescent light fixture was not operational.
 ER-2014-384, Emergency exit light in Cub 11B transformer room had no apparent power
 ER-2014-388, Emergency exit lights in Assay 1003 Cascade Hall were pointed towards the ceiling
 ER-2014-382, Fire Door located in Assay 1004 Cascade Hall door closure device unbolted.
 ER-2014-386, Pressure gauge on electric fire water pump recirculation line is over-ranged.
 ER-2014-389, Errors identified in Fire Protection P&IDs

Other Documents:

NEF-BD-14a, Limit Proximity of Vessels in Non-Designed Locations by Use of Safe-By-Design Transfer Frame, Rev. 4
 NEF-BD-14b, Limit Proximity of Vessels in Non-Designed Locations by Verification of Storage Array, Rev. 6
 NEF-BD-30a, Limit Hydrocarbon Oil by Controlling Type Used, Rev. 2
 NEF-BD-30b, Limit Hydrocarbon Oil by Testing Prior to Adding to Pump, Rev. 2
 NEF-BD-30c, Limit Hydrocarbon Oil by Testing Prior to Operation, Rev. 3
 NEF-BD-36a, Limit Transient Combustible Loading in Uranic Areas, Rev. 13
 NEF-BD-38, Limit Cylinder Fill Mass to Ensure Cylinder Integrity Once per Shift, Rev. 6
 Environmental Report, Rev. 21b
 Integrated Safety Analysis Summary, Rev. 22d