

JUN 14 2012

LES-12-00083-NRC

Attn: Document Control Desk
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Louisiana Energy Services, LLC
NRC Docket Number: 70-3103

Subject: Reply to Notice of Violation 70-3103/2012-002

Reference: 1. Letter from J. Calle (NRC) to J. Laughlin (UUSA) NRC
Inspection Report No. 70-3103/2012-002 and Notice of Violation,
dated April 30, 2012
2. LES-12-00072-NRC, Extension Request for Reply to Notice of
Violation 70-3103/2012-002, dated May 24, 2012

NRC Notice of Violation 70-3103/2012-002 (Notice), Ref. 1, was received by Louisiana Energy Services, LLC (dba "UUSA") on April 30, 2012. In response to the Notice URENCO USA (UUSA) herewith provides the enclosed Reply (Enclosure). The Reply addresses Violation B of the Notice as it relates to Section 7 (Control of Purchased Material, Equipment and Services); and Examples of Violation C of the Notice as they relate to Section 16 (Corrective Action) of the UUSA Quality Assurance Program Description (QAPD), respectively. An extension request for submittal of this NOV response was requested and granted as noted in Ref. 2. Violation A, as stated in Ref. 1, has been adequately addressed and therefore no response is required.

Pursuant to the provisions of 10 CFR 2.201(a) and the NRC's corresponding instructions specified in the Notice, the Enclosure addresses for each of the Examples of Violations A and B: 1) the reason for the violation; 2) the corrective steps that have been taken and the results achieved; 3) the corrective steps that will be taken; and 4) the date when full compliance will be achieved.

Should there be any questions regarding this submittal, please contact Zackary Rad, UUSA Licensing Manager, at 575.394.6689.

Respectfully,



Stephen R. Cowne for
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Chief Nuclear Officer and Head of Technical Services

Enclosure: Reply to Notice of Violation 70-3103/2012-002

TEO?

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ENCLOSURE

REPLY TO NOTICE OF VIOLATION (NOTICE) 70-3103/2012-002

Restatement of Violation:

During a Nuclear Regulatory Commission (NRC) inspection conducted on January 1 through March 31, 2012, three violations of NRC requirements were identified.

In accordance with the NRC Enforcement Policy, the violations are listed below:

- A. Special Nuclear Material (SNM) License No. 2010 requires, in part, that the licensee shall conduct authorized activities at the LES NEF in accordance with statements, representations, and conditions in the approved Quality Assurance Program Description (QAPD), dated April 9, 2004, and supplements thereto.

Section 7, Control of Purchased Material, Equipment and Services, of the QAPD states, in part, for commercial grade items, "one or a combination of the following methods shall be utilized to provide reasonable assurance that the item meets the acceptance criteria for the characteristics identified to be verified for acceptance:

- special test(s) or inspection(s) or both;
- commercial grade survey of the supplier;
- source verification; and
- acceptable supplier/item performance records."

Commercial Grade Dedication Plan (CGDP) CGDP-041 -0005, "Cascade Pipework," Revision (Rev.) 6, lists Method 2, commercial grade survey of supplier, as a verification reference document for Critical Characteristic Attribute 9 — Sensitive Leak Test.

Contrary to the above, as of January 13, 2012, LES NEF failed to provide reasonable assurance that a commercial grade item met the acceptance criteria for the characteristics identified to be verified for acceptance. Specifically, LES NEF did not perform a commercial grade survey of a supplier who performed calibration services on leak test equipment used to verify leak tightness of piping in the cascade pipeworks.

This is a Severity Level IV violation (Enforcement Policy 6.5.d).

- B. SNM License No. 2010 requires, in part, that the licensee shall conduct authorized activities at the LES NEF Facility in accordance with statements, representations, and conditions in the approved QAPD, dated April 9, 2004, and supplements thereto.

LES NEF QAPD Section 21, "Quality Assurance Program For Quality Level 1-Graded (QL 1G)," states, in part, that a Project Quality Assurance Plan (PQAP) shall be prepared to implement the QL-1G Program and provide documented basis describing how those responsible for the IROFS 27e structure design, procurement and fabrication and construction meet the requirements of the QL-1G Program.

PQAP Section 4.7.1, "Control of Purchased Material, Equipment, and Services," states, in part, that measures are established to ensure conformance with the procurement specifications and documents. Such activities utilizing unapproved vendors shall be controlled using the commercial grade dedication process. In addition, LES NEF QAPD, Section 7, "Control of Purchased Material, Equipment and Services," provides the licensee's process and requirements for implementing its

commercial grade dedication program. Section 7 of the LES NEF QAPD states, in part, that "prior to acceptance of a commercial grade item, LES Quality Assurance organization shall determine that inspection and/or testing is accomplished, as required, to assure conformance with critical characteristics."

CGDP D-2009-01 1, "Structural Beams and Connectors for the Cylinder Receipt and Dispatch Building (CRDB) Structure," Rev. 2, requires that all the material used in the fabrication of the CRDB structural steel, including roof diagonal brace rods, be tested.

Contrary to the above, as of March 21, 2012, the inspectors identified that the critical characteristic of diameter for American Society for Testing and Materials (ASTM) A572 roof diagonal brace rods was not verified as part of the acceptance and use of the items. This resulted in the acceptance and installation of brace rods of smaller diameter than the diameter required per design drawings.

This is a Severity Level IV violation (Enforcement Policy 6.5.d).

- C. SNM License No. 2010 requires, in part, that the licensee shall conduct authorized activities at the LES NEF Facility in accordance with statements, representations, and conditions in the approved QAPD, dated April 9, 2004, and supplements thereto.

LES NEF QAPD Section 21.16, states, in part, that "corrective action requirements for the QL-IG Program shall be in accordance with the requirements of Section 16 of the QAPD." Section 16, of the LES NEF QAPD further states, in part, that "conditions adverse to quality including activities and services shall be identified promptly and corrected as soon as practical. Conditions adverse to quality are defined as items such as failures, malfunctions, deficiencies, deviations, defective material, defective equipment or nonconformances."

Contrary to the above, on March 21, 2012, NRC inspectors identified two examples of a failure to identify and correct conditions adverse to quality during a walk down of the CRDB superstructure as evidenced below:

- 1) The inspectors identified two back to back angles used as column diagonal bracing along the west sidewall at Grid L between grid lines 26.8 and 27.8 that were bent or bowed out of plane. LES Quality Control (QC) completed final inspection for approval of installation of these components on January 10, 2011. The QC inspection form indicated the installation was adequate and approved contrary to the as-found condition by the NRC inspectors.
- 2) The inspectors identified one bracing connection (Part CO31X) located along Grid L between grid lines 26.8 and 27.8 that was missing one of the eight required nuts. LES QC completed final inspection for approval of installation of these components on January 13, 2011. The QC inspection form indicated the installation was adequate and approved contrary to the as-found condition by the NRC inspectors.

This is a Severity Level IV Violation (Enforcement Policy 6.5d).

UUSA Reply to Violation A

As stated in the inspection report, "The NRC has concluded that information regarding the reason for Violation A, the corrective actions taken and planned to correct the violation and prevent recurrence, and the date when full compliance will be (was) achieved, are already adequately addressed". Therefore, no response is being provided for Violation A.

UUSA Reply to Violation B

1. The Reason For Violation B

A detailed review of the information associated with this violation identified that the Brace Rods, although not properly documented as such, were in fact compliant with the design requirements. The investigation identified that the material used for the brace rods was measured, but not documented, by UUSA QA/QC personnel at the time of the sub vendor material receipt inspection at the fabrication facility.

The investigation that led to the above conclusion are noted in the following paragraphs. CGDP-D-2009-011 requires QC to verify the dimensions of the bulk material to the drawing requirements. This was not performed or at least not documented because at the time of material inspection the Butler shop/fabrication drawings had not been approved. QC personnel verified the rod diameter of the raw material to the value stated on the Certified Material Test Report during the receipt inspection at the sub vendor facility. The verification of material was listed on the "Butler Heat Number Test Log".

When QC personnel sampled dimensions of the Brace Rods during the sub vendor receipt inspection activity, the heat number was verified to be the same as the heat number approved on the "Butler Heat Number Test Log". The diameter was validated as acceptable without additional measurements after material fabrication. Therefore, QC personnel thought they had already validated the diameter by previous inspection during the raw material receipt. The rod diameter was not altered during the manufacturing process.

When completing the CGD Form 3, the associated referenced documentation was cross checked to confirm all of the parts were listed and the dimensions recorded were acceptable. This review missed the fact that the diameters of the Roof Diagonal Brace Rods were not documented.

A review of the subject drawings identified two primary reasons for the brace rod diameter issue. One reason was that the shop/fabrication drawings supplied by Butler and released for use by UUSA contained an incorrect nominal dimension for the 1 ¼" Brace Rods. The nominal rod dimension for a 1 ¼" rod with rolled threads is 1.145" not 1.157" as shown on the 12 Butler shop/fabrication drawings. The drawing error, at the time of the CRDB Civil inspection, led to the belief that the diameters of the installed brace rods were incorrect.

The other primary reason for this issue is that the procedural guidance in place at the time of the identified condition did not adequately identify specific requirements for verification and documentation of critical characteristics to ensure effective

implementation of the CGD requirements. Subsequent to the timeframe of the identified condition the CGD procedure has been revised to address CGD process issues. These revisions institute requirements for the CGD Plan to list specific critical characteristics to be documented.

2. Corrective Steps That Have Been Taken And Results Achieved

1. Revision 10, Attachment 2, Section E, of CGD Procedure EG-3-2100-05 provisions were added to require that the CGD Plan list specific critical characteristics to be documented to record material parameters including material dimensions. (CR 2010-2530, Action 4)
2. Revision 11, Section 5.6 was revised to include expanded detail regarding approval of CGD Plan Form 3 to document the manner in which critical characteristics are met. (CR action not applicable)

3. The Corrective Steps That Will Be Taken

Create an ECR to correct the drawings associated with 1 ¼" rods to indicate that the "Rolled Thread Diameter" should be listed as 1.145". (CR 2012-1156, Action 1)

4. The Date When Full Compliance Will Be Achieved

Full compliance will be achieved upon scheduled completion of the ECR for correction of the design drawing errors.

UUSA Reply to Violation C

1. The Reason For Violation C

A detailed review of the information associated with this violation identified that there was a failure to adequately implement the CRDB Project Quality Assurance Plan (PQAP) in multiple areas primarily due to misalignment of oversight resources brought about by competing priorities and a lack of a strategic plan for oversight of contractor activities, both on the part of UUSA Construction Management and Quality Organizations. This is substantiated by information provided in the following:

- From a programmatic standpoint, there was no strategic plan developed for conducting independent oversight of the CRDB project.
- The conditions adverse to quality noted by the NRC and subsequently by UUSA engineers and quality control inspectors during recent CRDB walkdowns were the likely result of ineffective control of field activities affecting QL-1G structures in accordance with approved work plans and/or a failure to promptly identify and report other activities that altered the already completed QL-1G structures.
- The organizational reporting relationship between the General Contractor and LES/QC was not appropriate for maintaining the necessary independence between construction and inspection activities as required by the UUSA QA

program. Additionally, the assignment of two dedicated QC resources, reporting to the General Contractor, may not have been adequate to ensure that the inspection function could be effectively implemented under an aggressive installation schedule.

- A management decision was made to have the General Contractor perform all QL-1G work under the UUSA QA Program. While this was the most practical decision from a cost and schedule standpoint, it imposed a relationship between UUSA and the General Contractor that should require intrusive oversight of field activities by UUSA management and Quality Assurance. To the contrary however, the project plan did not include a resource commitment or management methods necessary to create and maintain an effective oversight role.

In summary of these points, a primary reason for this violation was an inadequate implementation of the CRDB Project QAP in the areas of Construction Management and QA oversight of a QL-1G installation project and organizational structure. As such, certain elements of the QAPD/PQAP were not assured. Recent re-inspections of the as-built configuration of QL-1G elements substantiate that the shortcomings in the programmatic aspects for control of installation activities had a negative effect on the as-left quality of the installation.

Additionally, lessons learned from SBM Cascade authorizations were not considered for application to the CRDB activities. After construction of the CRDB was considered to be complete, there were no provisions within the project plan to perform an owner 'readiness review' (i. e., hardware and documentation) leading up to operational authorization. While not specifically required, use of lessons learned from the construction and authorization of the SBM Cascades would suggest the performance of a readiness review (both of the physical configuration and documentation) was warranted for the CRDB. However this activity was not planned or performed.

In summary, the apparent reasons for this violation were UUSA management decisions and actions (or failure to act) in response to conflicting priorities, negatively affected verification of PQAP compliance by construction management and QA organizations; and lessons learned from SBM Cascade authorizations were not considered for application to the CRDB. Site management failed to draw a parallel between conditions that caused significant problems gaining SBM cascade authorizations and the conditions under which the CRDB was constructed. As such, no provisions were made to conduct a formal readiness review following construction completion and prior to requesting inspection and authorization for CRDB operation.

2. Corrective Steps That Have Been Taken And Results Achieved

1. NCR 2012-723 was generated to evaluate the condition of the bracing and determine disposition of condition. (CR 2012-723, Action 1 Completed 4/27/2012)
2. Inspected all nuts and bolts of a type specific to this NOV example, and did not identify any other nut or bolts issues of the type noted in the NOV example. (CR 2012-724, Action 1 Completed 6/1/12)

3. The Corrective Steps That Will Be Taken

1. Develop and implement a Quality Reverification Plan (QRP) of the CRDB as-built configuration that ensures that it meets critical elements of the QL-1G design requirements. Implementation shall include the preparation of the QRP report documenting the reverification scope, exclusions and associated justifications, results, nonconformances and final disposition of the nonconforming items. (CR 2012-1157, Action 1)
2. Revise, as required, the PQAP or implementing procedures associated with Assay 1003/1004 SBM construction, to specifically require QC inspector relationship to be directly to UUSA QC supervision. (CR 2012-1157, Action 2)
3. Develop a QA Program Oversight Plan specific to SBM 1003/1004 that delineates attributes and frequency for periodic QA surveillance of QL-1 and QL-1G activities. (CR 2012-1157, Action 3)
4. Develop a Project Management Oversight Plan that delineates attributes and frequencies for routine management verification of PQAP implementation. (CR 2012-1157, Action 4)
5. Establish a governing procedure or instruction under the framework of Performance Assessment and Feedback for the conduct of periodic functional reviews by a senior management team of QL-1 and QL-1G project planning and implementation aspects. (CR 2012-1157, Action 5)
6. Review current QC resources loading associated with SBM 1003/1004, and adjust as needed to ensure adequate QA resources are assigned to that project. (CR 2012-1157, Action 7)
7. Develop a QC Resource Requirements guideline for use in future project resource loading and annual budget development. (CR 2012-1157, Action 6)

4. The Date When Full Compliance Will Be Achieved

Full compliance will be achieved upon scheduled completion of Action 1.