



MAR 16 2009

NEF-09-00053-NRC

Document Control Desk  
Director  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Louisiana Energy Services, LLC  
National Enrichment Facility  
NRC Docket No. 70-3103

Subject: Final Report under the Provisions of 10 CFR 21

Reference: 1) NEF-09-00025-NRC, Letter from LES to NRC, Interim Report  
Notification under the Provisions of 10 CFR 21, dated January 16,  
2009

Pursuant to 10 CFR 21.21(a)(2), this letter provides the NRC with the prescribed Final Report of a condition identified by Louisiana Energy Services, LLC (LES) as a deviation (defect) associated with Nelson studs supplied by WGI/Engineered Products Department (EPD). These studs are classified as Quality Level- 1 (QL-1).

LES initially identified and documented in a Condition Report, dated November 17, 2008, as an adverse condition. The condition involved a failure (breakage from mechanical frame) of one Nelson stud in each of two (HVAC) mechanical sleeve penetrations while they were being positioned in the Process Service Corridor. The mode of failure, as documented in an LES Nonconformance Report, was that one stud was found broken off whereas the second stud broke as it was being pulled to facilitate rebar installation.

Subsequent testing was performed in support of the evaluation with the following results reported:

- **Structural Anchor Embeds**

As reported in Tables 2.1-2.5 there was only one failure of a Nelson stud out of the 336 Nelson studs tested on structural anchor embed plates for a failure rate of 0.3%. The single failure occurred on a QL-3 anchor at an angle greater than the AWS D1.1 specified 15°. Therefore, the failure rate at the AWS D1.1 specified 15° angle was zero. On this basis it is concluded that there is no substantial safety hazard regarding Nelson studs in this important application.

IE72  
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NMS

- **HVAC Penetration Sleeves**

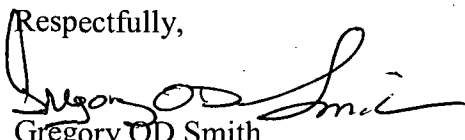
Controlled bend tests of 341 Nelson studs on HVAC penetration sleeves resulted in 9 failures for a total failure rate of 2.6%. However, a review of the HVAC sleeve installation shows that there is an angle bolted to the channel framework under the floor (see Figure 6) which would prevent these penetration sleeves from dropping through the floor even in the extremely unlikely event that all of the Nelson studs on an HVAC penetration sleeve were to fail. Accordingly, these failures do not result in a substantial safety hazard.

In its Interim Report Notification (Ref. 1) LES: 1) indicated that it had performed a 10 CFR 21 screening which concluded that a Substantial Safety Hazard Evaluation was required; and 2) requested an additional 60 days to complete the corresponding evaluation process. This Final Report provides the results of that evaluation process, entailing a Substantial Safety Hazard Evaluation (SSHE) (see Enclosure), from which LES concludes that there are no substantial safety hazards existing at the National Enrichment Facility related to the subject Nelson studs. Accordingly, the referenced "condition" does not constitute a 10 CFR 21 reportable defect. Washington Group International, Engineered Products Division (EPD), the LES Quality Level-1 supplier of the Nelson studs, has been notified of the results of the LES evaluation (SSHE).

Because Enclosure 1 to this letter contains confidential or privileged commercial information, LES requests that this Enclosure be withheld from public disclosure in accordance with 10 CFR 2.390(b).

Should you have any questions on this Final Report, please contact Stephen Cowne, LES Director of Quality and Regulatory Affairs at (575) 394-5253.

Respectfully,



Gregory OD Smith

Chief Operating Officer and Chief Nuclear Officer

Enclosure: 1.) Affidavit  
2.) National Enrichment Facility Substantial Safety Hazard Evaluation (SSHE)

cc:

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**ENCLOSURE 1**

Affidavit

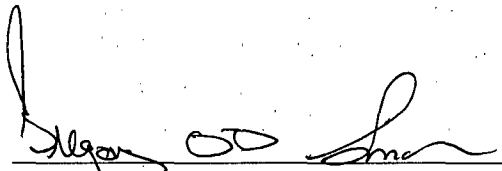
Enclosure contains confidential or privileged commercial information  
withhold from public disclosure in accordance with 10 CFR 2.390 (b).

## Enclosure 1

### Affidavit

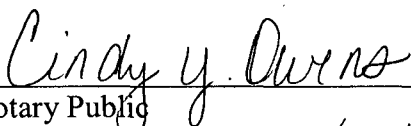
I, Gregory O. D. Smith, Chief Operating Officer and Chief Nuclear Officer of Louisiana Energy Services, LLC at the National Enrichment Facility (NEF), make the following representations that to the best of my knowledge and beliefs:

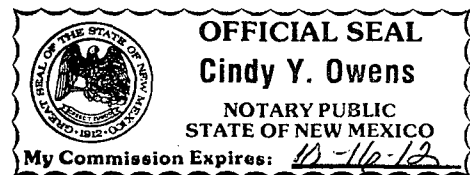
1. Louisiana Energy Services as the owner of this information wishes to have withheld from public disclosure, the following documents:
  - Enclosure 2 to LES correspondence to the NRC, NEF-09-00053-NRC, Final Report under the Provisions of 10 CFR 21 on March 13, 2009.
2. The information contained in the document cited in Item 1 for which exemption from public disclosure is requested contains confidential or privileged commercial information.
3. The information contained in the document cited in Item 1 for which exemption from public disclosure is requested describes Items Relied On For Safety (IROFS) which were identified as having defects in the design or manufacturing process. The IROFS are supplied to LES from an approved Quality Level-1 vendor/supplier. The design of the QL-1 items is considered proprietary by the vendor/supplier. The descriptions of the applications, identified failures, and subsequent testing and evaluations that were performed as part of the LES Substantial Safety Hazard Evaluation is considered confidential or privileged commercial information.
4. Louisiana Energy Services therefore requests that this information be exempt from disclosure pursuant to the provisions in Title 10 of the Code of Federal Regulations Parts 2.390(b). The information stated in this affidavit has been submitted in accordance with NRC regulations in 10 CFR Section 2.390 and guidance contained in NUREG-1556.

 3/16/09  
 Gregory O. D. Smith Date  
 Chief Operating Officer and Chief Nuclear Officer  
 Louisiana Energy Services, LLC  
 National Enrichment Facility

I certify the above named person appeared before me and executed this document on this

16<sup>th</sup> day of March, 2009

  
 Notary Public  
 My commission expires: 6-16-2012



**ENCLOSURE 2**

National Enrichment Facility Part 21 Substantial Safety Hazard Evaluation (SSHE)

Enclosure contains confidential or privileged commercial information  
withhold from public disclosure in accordance with 10 CFR 2.390 (b).