

May 12, 2004

NEF#04-012

ATTN: Document Control Desk  
Director  
Office of Nuclear Material Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

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

**Subject:** Response to NRC Request for Additional Information Concerning the Physical Protection and Security Sections of the License Application.

- References:**
1. Letter NEF#03-003 dated December 12, 2003, from E. J. Ferland (Louisiana Energy Services, L. P.) to Directors, Office of Nuclear Material Safety and Safeguards and the Division of Facilities and Security (NRC) regarding "Applications for a Material License Under 10 CFR 70, Domestic licensing of special nuclear material, 10 CFR 40, Domestic licensing of source material, and 10 CFR 30, Rules of general applicability to domestic licensing of byproduct material, and for a Facility Clearance Under 10 CFR 95, Facility security clearance and safeguarding of national security information and restricted data"
  2. Letter NEF#04-002 dated February 27, 2004, from R. M. Krich (Louisiana Energy Services, L. P.) to Director, Office of Nuclear Material Safety and Safeguards (NRC) regarding "Revision 1 to Applications for a Material License Under 10 CFR 70, "Domestic licensing of special nuclear material," 10 CFR 40, "Domestic licensing of source material," and 10 CFR 30, "Rules of general applicability to domestic licensing of byproduct material"
  3. Letter dated April 19, 2004, from T. C. Johnson (NRC) to Rod Krich (Louisiana Energy Services) regarding "Request for Additional Information on Louisiana Energy Services Project Physical Protection and Security Sections of the License Application"

By letter dated December 12, 2003 (Reference 1), E. J. Ferland of Louisiana Energy Services (LES), L. P., submitted to the NRC applications for the licenses necessary to authorize construction and operation of a gas centrifuge uranium enrichment facility. Revision 1 to these applications was submitted to the NRC by letter dated February 27, 2004 (Reference 2). By letter dated April 19, 2004 (Reference 3), the NRC provided the initial technical review of the

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license application and requested additional information and clarifications be provided within 30 days (i.e., by May 19, 2004).

The Reference 3 letter includes Requests for Additional Information (RAI) concerning the Physical Security Plan, the Safeguards Contingency Plan, the Guard Force Training and Qualification Plan, the Standard Practice Procedures Plan for the Protection of Classified Matter, and the Fundamental Nuclear Material Control Plan (FNMCP) that were submitted as part of the license applications for the National Enrichment Facility (NEF). This letter provides responses to all RAI except those concerning the FNMCP which will be provided at a later date. Accordingly responses to PS (except the response to PS-9 which is classified and will be submitted separately), GF, SP, and CM designated questions are provided in the attachment to this letter. Additionally, the changes to the respective plans resulting from these responses are provided in the enclosure. The responses provided in the attachment are non-proprietary and therefore the attachment is considered non-proprietary since the proprietary questions in the NRC's April 19, 2004 RAI are not repeated in the attachment. However, the plan pages showing the changes are considered proprietary in accordance with 10CFR2.390, "Public inspections, exemptions, requests for withholding," paragraph (d) (1). Accordingly, we request that the plan pages be withheld from public disclosure.

If you have any questions, please contact me at 630-657-2813.

Respectfully,



R.M. Krich  
Vice President - Licensing, Safety, and Nuclear Engineering

Attachment: Louisiana Energy Services Response to April 19, 2004 Request for Additional Information Concerning the Security Plan, the Safeguards Contingency Plan, the Guard Force Training and Qualification Plan, and the Standard Practice Procedures Plan for the Protection of Classified Matter.

Enclosure: Plan Change Pages

cc: T.C. Johnson, NRC Project Manager

**ATTACHMENT**

**Louisiana Energy Services  
Response to April 19, 2004  
Request for Additional Information Concerning  
the Security Plan, the Safeguards Contingency Plan,  
the Guard Force Training and Qualification Plan,  
and the Standard Practice Procedures Plan  
for the Protection of Classified Matter.**

Responses to April 19, 2004  
Requests for Additional Information

**A. Physical Security Plan**

**PS-1 General Comments:**

The regulatory requirements for physical protection of special nuclear material (SNM) of low strategic significance are specified in 10 CFR 73.67. However, in February 2003, the NRC issued Orders to all Category III fuel cycle licensed facilities requiring the implementation of additional security measures (ASM) at each site that stores or processes SNM of low strategic significance. Some of these measures may be applied to the Louisiana Energy Services (LES) uranium enrichment facility upon issuance of a license but are not currently part of the license application process. Note that we transmitted copies of the ASMs to you on March 19, 2004.

Given the current threat environment, the staff fully supports licensee efforts to increase security beyond the current regulatory requirements. However, following the current licensing process, the acceptance of the LES Physical Security Plan prior to license approval will be based solely on the requirements in 10 CFR 73.67 for facilities that store or process SNM of low strategic significance. It should be recognized by LES management that Orders, which may be issued to LES in the future, may not be identical to those issued to licensees in the past. LES should carefully consider the implementation of security measures which may be intended to address future Orders without the full knowledge of the requirements of those Orders.

**LES Response**

LES understands that it is not required at this time to address the additional security measures (ASMs) imposed by Order on licensed facilities and Orders containing ASMs that may be issued to LES in the future may not be identical to those Orders issued to other licensees in the past. LES did make an effort in response to recommendations from NRC staff and Management during the May 29, 2002 meeting to increase security attributes of the NEF site.

**Specific Comments**

**PS-2 Section 1.3**

The Physical Security Plan states that a vehicle barrier will be located, "... at the required standoff distance." Provide the design basis for this vehicle barrier. Also, provide general design information that will demonstrate how the applicant plans to meet the design basis. Design information may include, but is not limited to, barrier dimensions, construction material(s), and plans to calculate standoff distance based on the design basis.

**LES Response**

LES is supplying the requested information in the revision of the Physical Security Plan submitted with this response.

**PS-3**    **Section 1.3.1**

The regulations in 10 CFR 73.67(d)(4) require the licensee to conduct screening prior to granting an individual unescorted access to the Controlled Access Area (CAA). The Physical Security Plan states LES will ensure that all personnel entering or exiting a CAA are properly screened in accordance with NRC regulations. Describe the procedures and criteria that will be used for obtaining sufficient information prior to making a decision on granting unescorted access authorization to an individual to CAAs.

Section 1.3.2 states that packages and delivery vehicles will be screened for unauthorized items. Please indicate whether personnel or packages will be searched for prohibited items prior to entering the CAA as well.

Sections 1.3.1 and 2.2.2 of the Physical Security Plan describe access control measures which will be applied to the single CAA which encompasses the entire site. In addition, Sections 1.4 and 2.2.5 describe supplemental access control measures that will be applied at the Uranium Byproduct Cylinder (UBC) Storage Pad. However, the LES Fundamental Nuclear Material Control (FNMC) Plan for the facility refers to the potential for unauthorized entry into material storage areas or enrichment process areas. Figures 2.2 -1 through Figure 2.2-9 clearly indicate interior security doors and various intrusion alarms, but no description of the method and procedures for interior access control is provided. Please clarify the methods and procedures for interior access control to meet the requirements of the LES FNMC Plan. Also, please provide more information on the methods for detecting unauthorized access to material storage areas or enrichment process areas.

**LES Response**

In the revision to the Physical Security Plan submitted with this response, Section 1.3.1 describes the procedures for screening personnel prior to granting unescorted access to the CAA. Additionally, LES has clarified Section 1.3.2 to reflect that the intent of "screening" is to search personnel and packages for prohibited items prior to entering the CAA.

LES has revised the noted sections to better define its access control procedures for limiting access to storage and processing areas to authorized individuals. Revisions have also been made to the noted sections to better define the intrusion detection systems to detect unauthorized access.

**PS-4**    **Section 2.2.1, p. 2-3**

The Physical Security Plan states that the applicant used Regulatory Guide 5.44, "Perimeter Intrusion Alarm Systems," for guidance. That Regulatory Guide references many different types of perimeter intrusion systems (microwave, infra red, vibration, etc.). Clearly define what type of perimeter detection system will be used.

**LES Response**

LES has updated Section 2.2.1, Perimeter Detection, to clearly define the technology(s) to be utilized in the revision of the Physical Security Plan submitted with this response.

PS-5    Section 2.2.3

The applicant references the balanced magnetic switches used for detection as required in 10 CFR 73.67(d)(3) and also notes volumetric motion detectors. The balanced magnetic switches are designed to detect tampering. Indicate whether the motion detectors and the wiring from the detectors to the alarm central control panel will also be supervised.

The regulations in 10 CFR 73.67(a)(2) require early detection of unauthorized access to a CAA. Clarify what is meant by "secure access mode" when referring to the door contacts on exterior doors and personnel gates associated with the CAA. Typically, "secure mode" would refer to a locked and sealed condition and "access mode" would refer to an open condition. It is not clear whether "secure access mode" would meet the requirement.

**LES Response**

The term should be "secure mode"; LES has corrected this statement in Section 2.2.3 in the revision of the Physical Security Plan submitted with this response. The intent is for all system components to be under tamper protection and all lines supervised. LES has updated the Physical Security Plan to reflect these intentions in the revision submitted with this response.

PS-6    Section 2.2.5.1

The applicant references the closed circuit television (CCTV) system that will be used for detection and assessment as required in 73.67(d)(3). There are no details as to the capabilities of the CCTV system. Provide information that clearly notes the capabilities of the system, such as motion detection, recording capabilities, or video capture capabilities.

**LES Response**

LES has updated Section 2.2.5.1 to describe the capabilities of the CCTV system in the revision of the Physical Security Plan submitted with this response.

PS-7    Section 2.2.5.2

Sections 2.2.5.2 and 2.2.5.3 appear to be in conflict. Section 2.2.5.2 states that there is an access control system that should in theory detect if it was forced or defeated. Section 2.2.5.3 states that there is no intrusion detection system. Explain the two sections in more detail so that they do not appear to be contradictory.

**LES Response**

LES has explained these two areas in more detail in the revision of the Physical Security Plan submitted with this response. It appears to be a difference in terminology. The UBC Storage Pad, an outdoor storage yard, will be afforded protection via the access control, perimeter fence intrusion detection, and CCTV (motion detection) system(s).

PS-8      Section 2.2.5.3

Section 2.2.1 of the Physical Security Plan states that the fence-line portion of the CAA Boundary will be equipped with a fence intrusion detection system and that the system will be divided into multiple “zones of detection.” Section 2.2.5.3 states that the UBC Storage Pad will not have a separate intrusion detection system associated with its separate fence-line within the greater CAA. However, inspection of the referenced Figure 2.2-1 shows what is defined as detection zones located not only on the CAA fence-line but also on the UBC Storage Pad fence. Clarify this apparent contradiction.

**LES Response**

LES intends to protect the UBC Storage Pad with a fence intrusion detection system. LES has updated Section 2.2.5.3 to reflect its intention in the revision of the Physical Security Plan submitted with this response.

PS-9      Section 3.0

The applicant references 10 CFR 73.67(f)(3) and in Section 3.1 states that the number and location of SNM protection officers are referenced in the Safeguards Contingency Plan. Clearly include in Section 3.1 the minimum number of protection officers and the maximum number of officers that could be on site at any given time, and if the response will always include local law enforcement agency officers in addition to site protection officers.

**LES Response**

LES has updated Section 3.1 of the Physical Security Plan submitted with this response to include information from the Safeguards Contingency Plan on the number and location of SNM Protection Officers. The revision will also clearly define whether the response force always includes local law enforcement.

**B. Guard Force Training and Qualification Plan**

GF-1      Section 2.0

Clarify whether the licensee plans to have armed responders in civilian clothes.

**LES Response**

LES does not intend to use armed responders in civilian clothes. LES has clarified this in the revision of the Guard Force Training and Qualification Plan submitted with this response.

GF-2      Section 3.0

The applicant notes that the Employment Suitability and Qualification plan is in accordance with Appendix B to 10 CFR 73, “General Criteria for Security Personnel,” as prescribed in 10 CFR Part 73, “Physical Protection of Plants and Materials.” 10 CFR 73, Appendix B, Section I.A.2, requires that armed guards be 21 years old, while the LES Plan states age 18. Clarify the above inconsistency.

In addition, please clarify what is meant by the first bullet under T&Q Plan Section 3.1 Item 3. It would appear that the second bullet appropriately restricts security personnel applicants with felony convictions according to 10 CFR 73, Appendix B, Section I.A.1.b. However, it is not clear whether the first bullet is attempting to further restrict, loosen, or clarify the requirements regarding felony convictions.

Finally, please address 10 CFR 73, Appendix B, Section I.E, Physical and medical requalification.

### **LES Response**

(A) LES acknowledges that armed guards must be 21 years old. This text has been updated in the revision of the Guard Force Training and Qualification Plan submitted with this response to reflect the 21-years old limit.

(B) This item was meant to further restrict the requirement per New Mexico Public Law. LES has removed the bulleted item in the revision of the Guard Force Training and Qualification Plan submitted with this response to eliminate any confusion.

(C) LES has addressed Physical and Medical re-qualifications in the revision of the Guard Force Training and Qualification Plan submitted with this response.

### GF-3    Section 4.4

Clarify whether it was the intent of the applicant to indicate that the guards would be trained in all 100+ subjects as noted in 10 CFR Appendix 10 CFR 73, Appendix B, Section II.D. The current test in the LES Training and Qualification plan in the section seems to indicate that all subjects are applicable. Please note that all commitments provided in this plan inspectable.

### **LES Response**

LES intends to conduct training in all 100+ subject areas. The Guard Force Training and Qualification Plan has been revised to clarify this intent in the revision submitted with this response.

### GF-4    Section 5.0

Appendix B of Part 73 provides the requirements for firearms qualification courses (i.e., the national police course). The applicant references an approved firing course. Clarify whether it is the intent of the applicant to use the course noted in Appendix B. If so, the applicant should reference that specifically in the plan.

### **LES Response**

LES intended the reference to commit to utilizing the national police course or an equivalent nationally recognized course allowed per Part 73, Appendix B. LES has modified the Guard Force Training and Qualification Plan to reflect this requirement in the revision submitted with this response.

### **C. Safeguards Contingency Plan**

#### **SP-1 Section 2**

The applicant follows the NRC Regulatory Guide 5.55, "Standard Format and Content of Safeguards Contingency Plans for Fuel Cycle Facilities." In Section 2, "Generic Planning Base", seven possible types of events are listed, but only five are detailed. Address the last two events (workplace violence and industrial accident).

#### **LES Response**

Sections addressing Workplace Violence and Industrial Accident events has been included in the revision of the Safeguards Contingency Plan submitted with this response.

#### **SP-2 Appendix F**

On page F1, there are eight enclosures listed. The representative plan in Regulatory Guide 5.55 lists nine enclosures. Clarify whether it is LES' intention to omit enclosure number eight which is titled, "Admin, MAA, bldg 7 Personnel Procedures Summary."

#### **LES Response**

It was not LES' intention to omit enclosure number eight, titled, "Admin, MAA, bldg 7 Personnel Procedures Summary." The revision of the Safeguards Contingency Plan submitted with this response includes a new Exhibit 8 to Appendix F, titled "Admin, Process, Operations, & Maintenance Personnel's Procedures Summary," to more clearly represent the LES functional groups that this exhibit addresses.

### **D. Standard Practice Procedures Plan for the Protection of Classified Matter**

#### **CM-1 Section 2.0**

Section 2.0, "Scope," merely repeats the requirement in 10 CFR Part 95.3 for those licensees who require access to classified material. Why does the applicant require access to classified material as part of their license application? This needs to be described.

#### **LES Response**

In the revision to the Standard Practice Procedures Plan for Protection of Classified Matter submitted with this response, Section 2.0, Scope, LES has described the NEF facility basis for requiring access to classified material.

#### **CM-2 Section 3.4**

Section 3.4, "Classified Mail/Shipping Address," states that the classified mail/shipping address is to be determined at a later time. This address needs to be provided as soon as practicable to ensure that only cleared individuals have access to incoming classified mail/shipments.

### **LES Response**

LES will establish a classified mailing address as soon as practical. Establishing the address is dependent on the schedule for establishing an adequate facility in Lea County.

### **CM-3    Section 5.2**

In Section 5.2, "Description of Classified Information/Matter," why is there no reference to Gas Centrifuge Technology? More specificity is needed here.

### **LES Response**

In the revision to the Standard Practice Procedures Plan for Protection of Classified Matter submitted with this response, Section 5.2, LES is more specific on its description of classified Information/matter (including gas centrifuge technology) that will be produced and/or be accessible at the NEF facility in Lea County, New Mexico.

### **CM-4    Section 8.1**

Section 8.1, "Alarm Types," states that alarm types are to be determined at a later time. Alarm makes and models need to be provided as soon as practicable to ensure that they meet government standards for protection of classified material.

### **LES Response**

LES understands the need to identify alarm types by make and model as soon as practical. In the revision of the Standard Practice Procedures Plan for Protection of Classified Matter submitted with this response, LES has specified the type of technologies to be utilized. LES will supply make and model for all alarm types when they are identified during the design process.

### **CM-5    Section 11.6**

Section 11.6, "Derivative Classifier and Declassifier Training," does not provide enough detail as to what the various security education and training programs will entail for derivative classifiers. (See 32 CFR 2001.41). Provide additional detail in this area.

### **LES Response**

In the revision to the Standard Practice Procedures Plan for Protection of Classified Matter submitted with this response, LES has updated Section 11.6 with greater detail.

### **CM-6    Section 16.0**

Section 16.0, "Destruction of matter containing National Security Information and Restricted Data," does not describe how classified media (i.e., diskettes, CD's and hard drives) will be destroyed. Provide additional detail in this area.

### **LES Response**

LES intends to utilize the burning method for the destruction of classified media (i.e., diskettes, CD's, and hard drives). In the revision to the Standard Practice Procedures Plan for Protection

of Classified Matter submitted with this response, LES has updated Section 16.0, Destruction of matter containing National Security Information and Restricted Data, to reflect this method.

CM-7    Section 19.6.1

Section 19.6.1, "Maintenance Procedures," does not indicate whether the in-house technical staff will be appropriately cleared to work on LES' classified Automatic Data Processing (ADP) system. Provide additional detail in this area.

**LES Response**

LES in-house technical staff will be cleared to the highest level of the system(s) they are authorized to work on. In the revision to the Standard Practice Procedures Plan for Protection of Classified Matter submitted with this response, Section 19.6.1, "Maintenance Procedures," has been revised to reflect this detail.

CM-8    Section 19.10.1

Section 19.10.1, "Selection of ADP Security Officer," does not commit to having an alternate ADP security officer appointed to assist with the processing of classified data and information as recommended by the "Standard Practice Procedure Plan Standard Format and Content for the Protection of Classified Matter for NRC Licensees, Certificate Holders, and Others Regulated by the Commission." Please make a commitment to this or provide a justified alternative.

**LES Response**

LES will appoint an alternate ADP Security Officer. In the revision to the Standard Practice Procedures Plan for Protection of Classified Matter submitted with this response, Section 19.10.1, Selection of ADP Security Officer, has been revised to reflect this commitment.

CM-9    Section 19.12.11

In Section 19.12.11, "Destruction of Printed, Recorded, or Displayed Classified Information or Data," the destruction device is to be determined at a later time. The shredder make and model need to be provided as soon as practicable to ensure that they meet government standards for destruction of classified material.

**LES Response**

LES will select a make and model from the approved NSA listing. In the revision to the Standard Practice Procedures Plan for Protection of Classified Matter submitted with this response, LES has reflected the commitment to selecting the make and model from the NSA listing, and will provide the selection specifics to the NRC when they are identified during the design process.

**CM-10 Sections 12.4, 12.42, 12.43, 13.11, 17 and 21**

Sections 12.4, 12.42, 12.43, 13.11, 17, and 21 all refer to the Division of Facilities and Security, Office of Administration. In accordance with 10 CFR 95.9, all communications and reports concerning the regulations in Part 95 should be addressed to the Director, Division of Nuclear Security, Nuclear Regulatory Commission, Washington, D.C. 20555. Please update these sections accordingly.

**LES Response**

In the revision to the Standard Practice Procedures Plan for the Protection of Classified Matter submitted with this response, each referenced address for transmittal of communications and reports concerning the regulations in Part 95 has been corrected to reflect the 10 CFR 95.9 required address.

**ENCLOSURE**

**Louisiana Energy Services  
Plan Change Pages**