



DEC 03 2007
NEF-07-00240-NRC

ATTN: Document Control Desk
Director
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852

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

Subject: Revision to Proprietary Designation on Previous Transmittals

References: 1) NEF-07-00216-NRC, Letter from Louisiana Energy Services to Nuclear Regulatory Commission, Revision to Proprietary Designation on Previous Transmittals
2) NEF-07-00192-NRC, Letter from Louisiana Energy Services to Nuclear Regulatory Commission, Request for Written Consent to Indirect Transfer of License (LAR 07-03)

On October 19, 2007, Louisiana Energy Services submitted a Request for Written Consent to an Indirect Transfer of the License in letter NEF-07-00192-NRC. Louisiana Energy Services requested that the following Licensing Basis Documents be withheld from public disclosure in accordance with Title 10 Code of Federal Regulations 2.390:

- Safety Analysis Report
- Quality Assurance Program Description
- Fundamental Nuclear Material Control Plan
- Environmental Report
- Emergency Plan

NMSO

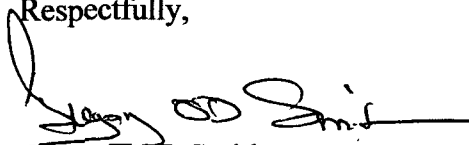
After discussion with members of your staff, on November 5, 2007, Louisiana Energy Services submitted a revision to the proprietary designation on the previously discussed transmittal in letter NEF-07-00216-NRC. This letter withdrew our requests to handle the following documents as proprietary:

- Safety Analysis Report
- Quality Assurance Program Description
- Environmental Report

As requested, these documents are enclosed in attachment 1 without the proprietary designation on them.

If you have any questions, please contact Stephen Cowne, Licensing Director, at 575-394-4646.

Respectfully,

A handwritten signature in black ink, appearing to read "Gregory OD Smith", is written over a horizontal line.

Gregory OD Smith
Chief Operating Officer and Chief Nuclear Officer

cc:

Tim Johnson
Project Manager
Enrichment & Conversion Branch T-8F42
Division of Fuel Cycle Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Deborah A. Seymour
Chief, Construction Projects Branch 1
U.S. Nuclear Regulatory Commission Region II
Sam Nunn Atlanta Federal Center, 23 T85
61 Forsyth Street SW
Atlanta, GA 30303-8931

Cynthia Taylor
U.S. Nuclear Regulatory Commission Region II
Sam Nunn Atlanta Federal Center, 23 T85
61 Forsyth Street SW
Atlanta, GA 30303-8931

USNRC, Region 2
Sam Nunn, Atlanta Federal Center, 23 T85
61 Forsyth Street SW
Atlanta, GA 30303-8931

Attachment 1

1. Revision to the Safety Analysis Report as transmitted to the NRC in letter NEF-07-00192-NRC on October 19, 2007.
2. Revision to the Quality Assurance program Description as transmitted to the NRC in letter NEF-07-00192-NRC on October 19, 2007.
3. Revision to the Environmental Report as transmitted to the NRC in letter NEF-07-00192-NRC on October 19, 2007.

Revision 13a



SAFETY ANALYSIS REPORT

1.2 INSTITUTIONAL INFORMATION

This section addresses the details of the applicant's corporate identity and location, applicant's ownership organization and financial information, type, quarterly, and form of licensed material to be used at the facility, and the type(s) of license(s) being applied for.

1.2.1 Corporate Identity

1.2.1.1 ~~Applicant~~Licensee

The ~~Applicant's~~Licensee's name, address, and principal office are as follows:

Louisiana Energy Services, ~~L.P.~~L.L.C.
~~100 Sun Avenue NE, Suite 204~~P.O. Box 1789
~~1008 12th St.~~
~~Albuquerque, NM 87109~~Eunice, NM 88231

1.2.1.2 Organization and Management of Applicant

Louisiana Energy Services (LES), ~~L.P.~~L.L.C. is a Delaware limited ~~partnership~~liability company. It has been formed solely to provide uranium enrichment services for commercial nuclear power plants. LES has one, 100% owned subsidiary, operating as a limited liability company, formed for the purpose of purchasing Industrial Revenue Bonds and no divisions. ~~The general~~The ownership of LES is as follows: ~~partner is as follows:~~

1. ~~Urenco Investments, Inc. (UII)~~ (a Delaware corporation and wholly-owned subsidiary of Urenco Limited, a corporation formed under the laws of the United Kingdom ("Urenco") and owned in equal shares by BNFL Enrichment Limited ("BNFL-EL"), Ultra-Centrifuge Nederland NV ("UCN"), and Uranit GmbH ("Uranit") companies formed under English, Dutch and German law, respectively; BNFL-EL is wholly-owned by British Nuclear Fuels plc, which is wholly-owned by the Government of the United Kingdom; UCN is 99% owned by the Government of the Netherlands, with the remaining 1% owned collectively by the Royal Dutch Shell Group, DSM, Koninklijke Philips Electronics N.V. and Stork N.V.; Uranit is owned by Eon Kernkraft GmbH (50%) and RWE Power AG (50%), which are corporations formed under laws of the Federal Republic of Germany). UII holds 29.16% (as of December 31, 2006) of the membership units and has 100% of the voting power. It is anticipated that the membership units for UII will increase to more than 50% before the end of 2007 as UII has provided the majority of the funding in 2007.

~~The name and address of the responsible official for the general partner is as follows:~~

~~Urenco Investments, Inc.
Charles W. Pryor, President and CEO
1560 Wilson Blvd., Suite 300
Arlington, VA 22209-2463~~

~~Dr. Pryor is a citizen of the United States of America.~~

~~The limited partners are as follows:~~

~~A.2~~ Urenco Deelnemingen B.V. (a Netherlands corporation and wholly-owned subsidiary of Urenco ~~Investments Inc.~~ The ownership of Urenco Investments Inc. is explicitly described above. ~~Nederlands B.V. (UNL).~~; Urenco Deelnemingen B.V. holds 70.84% of the membership units (as of December 31, 2006) and has 0% of the voting power. It is anticipated that the membership units for UDE will recede to less than 50% before the end of 2007 as UII has provided the majority of the funding in 2007.

~~A. Urenco Investments, Inc. (a Delaware corporation and wholly-owned subsidiary of Urenco Limited);~~

~~Urenco owns 100% of LES.~~

The President of LES is Reinhard Hinterreither. The President reports to the Board of Managers. The Board of Managers are:

- Dr. Helmut Engelbrecht
Chief Executive Officer
Urenco Limited
18 Oxford Road
Marlow Bucks
SL7 2NL, United Kingdom

Dr. Engelbrecht is a citizen of the Federal Republic of Germany

- Mr. Bart Le Blanc
Chief Financial Officer
Urenco Limited
18 Oxford Road
Marlow Bucks
SL7 2NL, United Kingdom

Mr. Le Blanc is a citizen of the Netherlands

- Dr. Charles W. Pryor, Jr.
Chairman of the Board of Urenco Investments
Urenco Investments, Inc.
1560 Wilson Blvd., Suite 300
Arlington, VA 22209-2463

Dr. Pryor is a citizen of the United States of America

The Vice President - Operations is the primary regulatory contact and is responsible for the safe operation of the National Enrichment Facility. LES' principal location for business is ~~Albuquerque~~ Eunice, New Mexico. The facility will be located in Lea County near Eunice, New Mexico. No other companies will be present or operating on the NEF site other than services specifically contracted by LES.

2.1 ORGANIZATIONAL STRUCTURE

The LES organizational structure is described in the following sections. The organizational structure indicates the lines of communication and management control of activities associated with the design, construction, operation, and decommissioning of the facility.

2.1.1 Corporate Functions, Responsibilities, and Authorities

LES is a registered limited ~~partnership~~ liability company formed solely to provide uranium enrichment services for commercial nuclear power plants. The LES company organization and management structure ~~partnership~~ is described in Chapter 1, Section 1.2, Institutional Information.

LES has presented to Lea County, New Mexico a proposal to develop the NEF. Lea County would issue its Industrial Revenue Bond (National Enrichment Facility Project) Series 2004 in the maximum aggregate principal amount of \$1,800,000,000 to accomplish the acquisition, construction and installation of the project pursuant to the County Industrial Revenue Bond Act, Chapter 4, Article 59 NMSA 1978 Compilation, as amended. The Project is comprised of the land, buildings, and equipment.

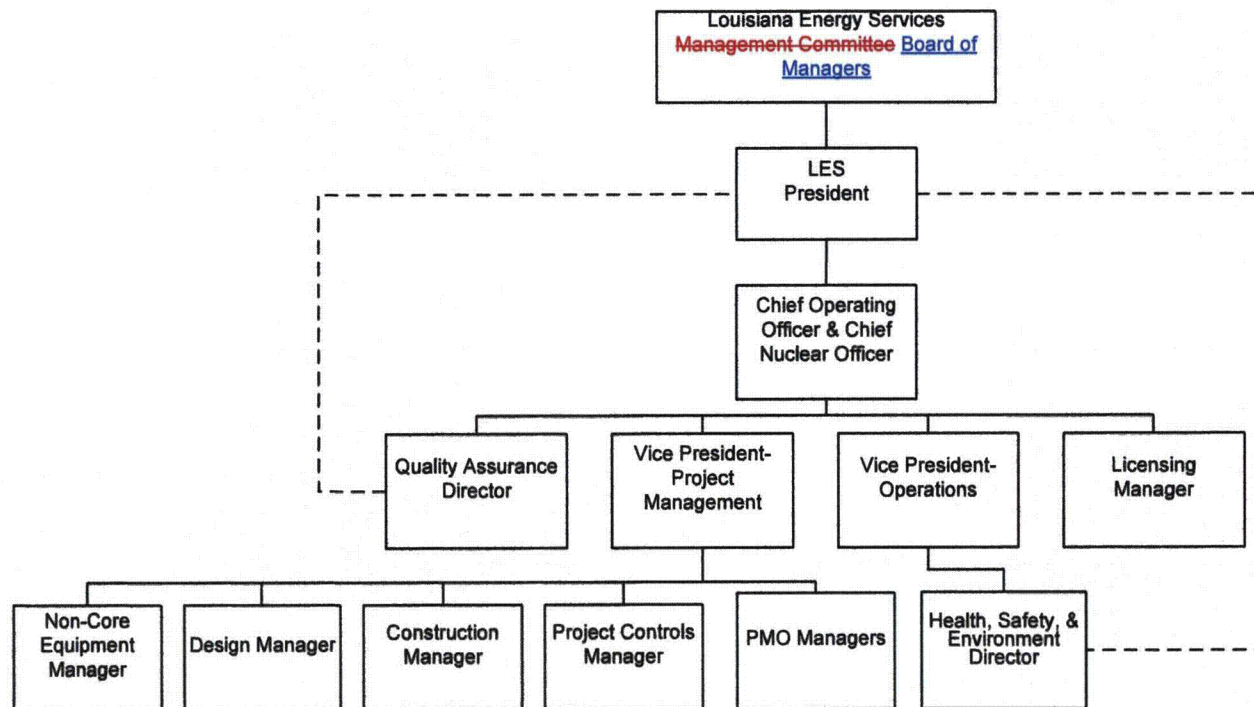
Under the Act, Lea County is authorized to acquire industrial revenue projects to be located within Lea County but outside the boundaries of any incorporated municipality for the purpose of promoting industry and trade by inducing manufacturing, industrial and commercial enterprises to locate or expand in the State of New Mexico, and for promoting a sound and proper balance in the State of New Mexico between agriculture, commerce, and industry. Lea County will lease the project to LES, and LES will be responsible for the construction and operation of the facility. Upon expiration of the Bond after 30 years, LES will purchase the project.

The County has no power under the Act to operate the project as a business or otherwise or to use or acquire the project property for any purpose, except as lessor thereof under the terms of the lease.

In the exercise of any remedies provided in the lease, the County shall not take any action at law or in equity that could result in the Issuer obtaining possession of the project property or operating the project as a business or otherwise.

LES is responsible for the design, quality assurance, construction, operation, and decommissioning of the enrichment facility. The President of LES reports to the LES ~~Management Committee~~ Board of Managers as described in Section 1.2. ~~This committee is composed of representatives from the general partners of LES.~~

The President receives policy direction from the LES ~~Management Committee~~ Board of Managers. Reporting to the President is the Chief Operating Officer & Chief Nuclear Officer. The Vice President - Project Management, Quality Assurance (QA) Director, Vice President - Operations, and Licensing Manager all report to the Chief Operating Officer & Chief Nuclear Officer. The Quality Director reports to the Chief Operating Officer & Chief Nuclear Officer for functional day to day activities and has a direct reporting relationship to the President for all quality related activities. The Health, Safety & Environment Director reports to the Vice President - Operations, but has a direct reporting relationship to the President for all matters concerning safety during design and construction. Figure 2.1-1, LES Corporate, Design and Construction Organization shows the authority and lines of communication.



LES CORPORATE, DESIGN AND
CONSTRUCTION ORGANIZATION

11.1 CONFIGURATION MANAGEMENT (CM)

This section describes the configuration management program for the NEF. Configuration management for the NEF is implemented through requirements of the QA Program and associated procedures.

The LES President is the executive responsible for quality assurance and is the highest level of management responsible for LES's QA policies, goals, and objectives. The President receives policy direction from the LES ~~Management Committee~~ Board of Managers. The LES organization during the design, construction and operation phases, including QA, is presented in Chapter 2, Organization and Administration.

11.1.1 Configuration Management Policy

Configuration management is provided throughout facility design, construction, testing, and operation. Configuration management provides the means to establish and maintain a technical baseline for the facility based on clearly defined requirements. During design and construction, the Vice President - Project Management has responsibility for configuration management through the design control process established by the Engineering Manager. Selected documentation, including the integrated safety analysis (ISA), is controlled under the configuration management system in accordance with procedures associated with design control, document control, and records management. Design changes undergo formal review, including interdisciplinary reviews as appropriate, in accordance with these procedures. This interdisciplinary review includes as a minimum the review for ISA impacts.

Configuration management provides the means to establish and maintain the essential features of the design basis of IROFS, including the ISA. As the project progresses from design and construction to operation, configuration management is maintained by the Engineering organization as the overall focus of activities changes. Procedures will define the turnover process and responsibilities since construction will continue on new work modules during operations.

During the design phase of the project, configuration management is based on the design control provisions and associated procedural controls over design documents to establish and maintain the technical baseline. Design documents, including the ISA, that provide design input, design analysis, or design results specifically for IROFS are identified with the appropriate QA level. These design documents undergo interdisciplinary review during the initial issue and during each subsequent revision. During the construction phase of the project, changes to drawings and specifications issued for construction, procurement, or fabrication are systematically reviewed and verified, evaluated for impact, including impact to the ISA, and approved prior to implementation. Proper implementation is verified and reflected in the design basis documentation.

In order to provide for the continued safe and reliable operation of the facility structures, systems and components, measures are implemented to ensure that the quality of these structures, systems and components is not compromised by planned changes (modifications). Upon acceptance by Operations, the Plant Manager is responsible for the design of and modifications to facility structures, systems or components. The design and implementation of modifications are performed in a manner so as to assure quality is maintained in a manner commensurate with the remainder of the system which is being modified, or as dictated by applicable regulations.

Revision 13a



**SAFETY ANALYSIS REPORT APPENDIX A
QUALITY ASSURANCE PROGRAM
DESCRIPTION**

SECTION 1 ORGANIZATION

The elements of the LES QA Program described in this section and associated QA procedures implement the requirements of Criterion 1, Organization, of 10 CFR 50, Appendix B, and the commitment to Basic Requirement 1 and Supplement 1S-1 of NQA-1-1994.

LES employees and contractor employees representing LES have full responsibility to ensure that the facility is designed, constructed, operated, and decommissioned in a manner to protect the health and safety of the public. This responsibility begins with initial design and continues throughout the life of the facility. The LES QA Program is designed to ensure that the necessary quality requirements for structures, systems, components and work activities are met. This objective is attained by ensuring that the organizational structure and the responsibility assignments are such that (a) quality is achieved and maintained by those who have been assigned responsibility for performing work and, (b) quality achievement is verified by persons or organizations not directly responsible for performing the work.

CORPORATE ORGANIZATION AND FUNCTIONS

LES is the owner and operator of the enrichment facility. LES is a registered limited ~~partnership~~ liability company formed to provide uranium enrichment services for commercial nuclear power plants. LES is responsible for the design, construction, operation and decommissioning of the enrichment facility in accordance with its QA Program. The President of LES reports to the LES ~~Management Committee~~ Board of Managers as described in Section 1.2 of the SAR. ~~The committee is composed of representatives from the general partners of LES.~~

The LES President establishes the basic policies of the QA Program. These policies are described in this QA Program, are transmitted to all levels of management, and are implemented through approved procedures. The LES QA Director has overall responsibility for development, management and implementation of the LES QA Program during all phases of the enrichment facility. As part of this responsibility, the QA Director is responsible for ensuring that contractor QA Programs meet all applicable requirements of the LES QA Program. LES management is continually involved in activities affecting quality and QA requirements.

DESIGN AND CONSTRUCTION ORGANIZATION AND FUNCTIONS

LES has contracted Urenco, the owner of the enrichment technology and operator of enrichment facilities in Europe, to prepare the reference design for the facility. An architect/engineering (A/E) firm was contracted and is under the responsibility of the Vice President - Project Management or President to further specify structures and systems of the facility, and ensure the reference design meets all applicable U.S. codes and standards. A contractor specializing in site evaluations was contracted to perform the site selection evaluation. A nuclear consulting company was contracted to conduct the site characterization, perform the Integrated Safety Analysis and to support development of the license application including the Environmental Report.

During the design and construction phases, preparation of design and construction documents and construction itself are contracted to qualified contractors. The Vice President - Project Management is responsible for managing the associated activities as described in Section 2.1.2, *Design and Construction Organization*, of the SAR. Figure 2.1-1 of the SAR, shows that the Vice President – Project Management is responsible for managing the work and contracts.

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ENVIRONMENTAL REPORT

1.0 INTRODUCTION OF THE ENVIRONMENTAL REPORT

This Environmental Report (ER) constitutes one portion of an application submitted by Louisiana Energy Services (LES) to the Nuclear Regulatory Commission (NRC) for a license to construct and operate a gas centrifuge uranium enrichment facility. The proposed facility, the National Enrichment Facility (NEF) will be located near Eunice, New Mexico, in Lea County. The ER for this proposed facility serves two primary purposes. First, it provides information that is specifically required by the NRC to assist it in meeting its obligations under the National Environmental Policy Act (NEPA) of 1969 (Pub. Law 91-190, 83 Stat. 852) (USC, 2003a) and the agency's NEPA-implementing regulations. Second, it demonstrates that the environmental protection measures proposed by LES are adequate to protect both the environment and the health and safety of the public.

LES has prepared this ER to meet the requirements specified in 10 CFR 51, Subpart A, particularly those requirements set forth in 10 CFR 51.45(b)-(e) (CFR, 2003a). The organization of this ER is generally consistent with the format for environmental reports recommended in NUREG-1748, Environmental Review Guidance for Licensing Actions Associated with NMSS Programs, Final Report August 2003 (NRC, 2003a).

This ER evaluates the environmental impacts of the LES proposed facility. Accordingly, this document discusses the proposed action, the need for and purposes of the proposed action, and applicable regulatory requirements, permits, and required consultations (ER Chapter 1, Introduction of the Environmental Report); considers reasonable alternatives to the proposed action (Chapter 2, Alternatives); describes the proposed NEF and the environment potentially affected by the proposed action (Chapter 3, Description of the Affected Environment); presents and compares the potential impacts resulting from the proposed action and its alternatives (Chapter 4, Environmental Impacts); identifies mitigation measures that could eliminate or lessen the potential environmental impacts of the proposed action (Chapter 5, Mitigation Measures); describes environmental measurements and monitoring programs (Chapter 6, Environmental Measurements and Monitoring Programs); provides a cost benefit analysis (Chapter 7, Cost Benefit Analysis); and summarizes potential environmental consequences (Chapter 8, Summary of Environmental Consequences). A list of references and preparers is also provided in Chapter 9, References, and Chapter 10 List of Preparers, respectively.

The effective date of this ER is December 2003.

The LES ~~Partnership~~Organizational Structure

Louisiana Energy Services (LES), L-P-L-L-C, is a Delaware limited ~~partnership~~liability company. It has been formed solely to provide uranium enrichment services for commercial nuclear power plants. ~~LES has one, 100% owned subsidiary, operating as a limited liability company, formed for the purpose of purchasing Industrial Revenue Bonds and no divisions. The general partner is as follows:~~The President of LES reports to the LES Board of Managers. Section 1.2.1 of the SAR describes the corporate identity.

~~Urenco Investments, Inc. (a Delaware corporation and wholly-owned subsidiary of Urenco Limited, a corporation formed under the laws of the United Kingdom ("Urenco") and owned in equal shares by BNFL Enrichment Limited ("BNFL-EL"), Ultra-Centrifuge Nederland NV ("UCN"), and Uranit GmbH ("Uranit") companies formed under English, Dutch and German law, respectively; BNFL-EL is wholly-owned by British Nuclear Fuels plc, which is wholly-owned by the Government of the United Kingdom; UCN is 99% owned by the Government of the Netherlands, with the remaining 1% owned collectively by the Royal Dutch Shell Group, DSM, Koninklijke Philips Electronics N.V. and Stork N.V.; Uranit is owned by Eon Kernkraft GmbH (50%) and RWE Power AG (50%), which are corporations formed under laws of the Federal Republic of Germany).~~

~~The name and address of the responsible official for the general partner is as follows:~~

~~Urenco Investments, Inc.
Charles W. Pryor, President and CEO
1560 Wilson Blvd., Suite 300
Arlington, VA 22209-2463~~

~~Dr. Pryor is a citizen of the United States of America.~~

~~The limited partners are as follows:~~

~~A. Urenco Deelnemingen B.V. (a Netherlands corporation and wholly-owned subsidiary of Urenco Nederlands B.V. (UNL));~~

~~B. Urenco Investments, Inc. (a Delaware corporation and wholly-owned subsidiary of Urenco Limited);~~

~~Urenco owns 100% of LES.~~

~~The President of LES is Reinhard Hinterreither. The Chief Nuclear Officer and Vice President—Operations is John Swailes. The Vice President—Operations is the primary regulatory contact and is responsible for the safe operation of the National Enrichment Facility. LES' principal location for business is Albuquerque, NM. The facility will be located in Lea County near Eunice, New Mexico. No other companies will be present or operating on the NEF site other than services specifically contracted by LES.~~

~~Foreign Ownership, Control and Influence (FOCI) of LES is addressed in the NEF Standard Practice Procedures for the Protection of Classified Matter, Appendix 1—FOCI Package. The NRC in their letter dated, March 24, 2003, has stated "...that while the mere presence of foreign ownership would not preclude grant of the application, any foreign relationship must be examined to determine whether it is inimical to the common defense and security [of the United States]". (NRC, 2003b) The FOCI Package mentioned above provides sufficient information for this examination to be conducted.~~

~~The~~ LES partnership has announced its plan to build a new 3 million SWU per year enrichment plant in New Mexico, using Urenco centrifuge technology (Table 1.1-5, Ref. 11). It expects to bring the new plant into operation beginning in 2007 and to achieve full capability of 3 million SWU per year in 2013 (URENCO, 2002b; HNS, 2003; LES, 2003a).

USEC has also announced plans to replace the Paducah GDP with a new 3.5 million SWU per year centrifuge enrichment plant (Table 1.1-5, Ref. 12). It now plans to begin enrichment operations at the new plant by 2009, with full capability by 2012 (TPS, 2002; Spurgeon, 2002; USEC, 2003a).

The potential new capability in Other, (Table 1.1-5, Ref. 13) is primarily due to the expected increase in PRC capability at its centrifuge plant, using Russian technology. The centrifuge enrichment capacity is expected to expand starting around 2010 in order to keep pace with the PRC's growing internal requirements, reaching 1.5 million SWU per year by 2015, for an increase of almost 0.6 million SWU/yr. A small centrifuge enrichment plant in Brazil is expected to grow to 0.2 million SWU by 2010, for an increase of just over 0.1 million SWU/yr and will be devoted to internal needs (NF, 1999a; RNS, 2002b; NTI, 2002).

It is useful to note the geographical distribution of these current and potential future sources of enrichment services, as identified in Table 1.1-7, Current and Potential Future Sources of Uranium Enrichment Services Arranged According to Geographical Locations and the concentration of sources of enrichment services among individual companies, as identified in Table 1.1-8, Current and Potential Future Sources of Uranium Enrichment Services Arranged According to Commercial Ownership or Control, to better appreciate the market considerations that will be discussed in subsequent sections of this report.

1.1.2.4 Market Analysis of Supply and Requirements

1.1.2.4.1 Scenario A – LES and USEC Centrifuge Plants Are Built in the U.S.

Scenario A represents the scenario that is being actively pursued by both LES and USEC, consistent with schedules that have been announced by each company. Figure 1.1-7, Illustration of Supply and Requirements for Scenario A, presents LES's forecast of uranium enrichment supply and requirements through 2020, consistent with this scenario. The shaded areas are keyed by reference number to Tables 1.1-5 through 1.1-8 and are described above.

During the period 2003 through 2005, the average annual economically competitive and physically usable production capacity that is not constrained by international trade agreements, together with the SWU derived from Russian HEU and other sources reflected in the tables previously provided, is forecast to be 41.8 million SWU, assuming that Urenco adds an additional one million SWU of new capacity by then. However, this is just 1.6 million SWU (4.0%) more than average annual forecast requirements during this same period of 40.2 million SWU.

2.1.2.2 Applicant for the Proposed Action

Louisiana Energy Services (LES), ~~L.P.L.L.C.~~ is a Delaware limited ~~partnership~~liability company. It has been formed solely to provide uranium enrichment services for commercial nuclear power plants. ~~LES has one, 100%-owned subsidiary, operating as a limited liability company, formed for the purpose of purchasing Industrial Revenue Bonds and no divisions. The general partner is as follows:~~The corporate identity is described in Section 1.2.1 of the SAR.

~~Urenco Investment, Inc. (a Delaware corporation and wholly-owned subsidiary of Urenco Limited, a corporation formed under the laws of the United Kingdom ("Urenco") and owned in equal shares by BNFL Enrichment Limited ("BNFL-EL"), Ultra-Centrifuge Nederland NV ("UCN"), and Uranit GmbH ("Uranit") companies formed under English, Dutch and German law, respectively; BNFL-EL is wholly-owned by British Nuclear Fuels plc, which is wholly-owned by the Government of the United Kingdom; UCN is 99% owned by the Government of the Netherlands, with the remaining 1% owned collectively by the Royal Dutch-Shell Group, DSM, Koninklijke Philips Electronics N.V. and Stork N.V.; Uranit is owned by Eon Kernkraft GmbH (50%) and RWE Power AG (50%), which are corporations formed under laws of the Federal Republic of Germany).~~

~~The name and address of the responsible official for the general partner is as follows:~~

~~Urenco Investments, Inc.
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~~Dr. Pryor is a citizen of the United States of America.~~

~~The limited partners are as follows:~~

- ~~A. Urenco Deelnemingen B.V. (a Netherlands corporation and wholly-owned subsidiary of Urenco Nederlands B.V. (UNL));~~
- ~~B. Urenco Investments, Inc. (a Delaware corporation and wholly-owned subsidiary of Urenco Limited);~~

~~Urenco owns 100% of LES.~~

~~The President of LES is Reinhard Hinterreither. The Chief Nuclear Officer and Vice President—Operations is John Swailles. The Vice President—Operations is the primary regulatory contact and is responsible for the safe operation of the National Enrichment Facility. LES' principal location for business is Albuquerque, NM. The facility will be located in Lea County near Eunice, New Mexico. No other companies will be present or operating on the NEF site other than services specifically contracted by LES.~~

LES has presented to Lea County, New Mexico a proposal to develop the NEF. Lea County would issue its Industrial Revenue Bond (National Enrichment Facility Project) Series 2004 in the maximum aggregate principal amount of \$1,800,000,000 to accomplish the acquisition, construction and installation of the project pursuant to the County Industrial Revenue Bond Act, Chapter 4, Article 59 NMSA 1978 Compilation, as amended. The Project is comprised of the land, buildings, and equipment.

Under the Act, Lea County is authorized to acquire industrial revenue projects to be located within Lea County but outside the boundaries of any incorporated municipality for the purpose of promoting industry and trade by inducing manufacturing, industrial and commercial enterprises to locate or expand in the State of New Mexico, and for promoting a sound and proper balance in the State of New Mexico between agriculture, commerce, and industry. After acquiring the project, constructing the facility, and installing the facility equipment, Lea County will lease the project to LES, which will operate the facility. Upon expiration of the Bond after 30 years, LES will purchase the project.

The County has no power under the Act to operate the project as a business or otherwise or to use or acquire the project property for any purpose, except as lessor thereof under the terms of the lease.

In the exercise of any remedies provided in the lease, the County shall not take any action at law or in equity that could result in the Issuer obtaining possession of the project property or operating the project as a business or otherwise.

LES is responsible for the design, quality assurance, construction, operation, and decommissioning of the enrichment facility. The President of LES reports to the LES ~~Management Committee~~ Board of Managers. ~~This committee is composed of representatives from the general partners of LES.~~ The Board of Managers are discussed in Section 1.2.1.2 of the SAR.

Foreign Ownership, Control and Influence (FOCI) of LES is addressed in the NEF Standard Practice Procedures for the Protection of Classified Matter, Appendix 1 – FOCI Package. The NRC in their letter dated, March 24, 2003, has stated "...that while the mere presence of foreign ownership would not preclude grant of the application, any foreign relationship must be examined to determine whether it is inimical to the common defense and security [of the United States]". (NRC, 2003b) The FOCI Package mentioned above provides sufficient information for this examination to be conducted.

2.1.2.3 Facility Description

The NEF is designed to separate a feed stream containing the naturally occurring proportions of uranium isotopes into a product stream enriched in ^{235}U and a uranium stream depleted in the ^{235}U isotope. Following is a summary description of the NEF process, buildings and related operation. The NEF Safety Analysis Report (SAR) contains a detailed description of facility characteristics, including plant design and operating parameters.

The feed material for the enrichment process is uranium hexafluoride (UF_6), with a natural composition of isotopes ^{234}U , ^{235}U , ^{236}U , and ^{238}U . The enrichment process involves the mechanical separation of isotopes using a fast rotating cylinder (centrifuge) and is based on a difference in centrifugal forces due to differences in the molecular weight of the uranic isotopes. No chemical or nuclear reactions take place. The feed, product, and depleted uranium streams are all in the form of UF_6 .

The UF_6 feed arrives from conversion facilities as a solid under partial vacuum in 122-cm (48-in) diameter transportation cylinders. Product material is collected in 76-cm (30-in) diameter containers and transported to a fuel fabricator. The depleted UF_6 material is collected in 122-cm (48-in) diameter containers and removed for storage onsite.

8.0 SUMMARY OF ENVIRONMENTAL CONSEQUENCES

8.1 INTRODUCTION

This Environmental Report (ER) was prepared by Louisiana Energy Services (LES) to assess the potential environmental impacts of licensing the construction and operation of a uranium enrichment facility to be located in Lea County, near the city of Eunice, New Mexico (the proposed action). The proposed facility will use the centrifuge enrichment process, which is an energy-efficient, proven advanced technology. The National Enrichment Facility (NEF) will be owned and operated by LES, as described in Safety Analysis Report (SAR) Chapter 1, General Information, which is a Delaware limited partnership-liability company. LES prepared this ER in accordance with 10 CFR 51 (CFR, 2003a), which implements the requirements of the National Environmental Policy Act of 1969 (NEPA), as amended (USC, 2003a). This ER also reflects the applicable elements of the Nuclear Regulatory Commission (NRC) guidance, including format, in NUREG-1748, "Environmental Review Guidelines for Licensing Actions Associated with NMSS Programs," Final Report (NRC, 2003a). This ER analyzes the potential environmental impacts of the proposed action and eventual Decontamination and Decommissioning (D&D) of the facility, and discusses the effluent and environmental monitoring programs proposed to assess the potential environmental impacts of facility construction and operation. The ER also considers a no-action alternative.

8.2 PROPOSED ACTION

The proposed action is to license the construction and operation of the NEF uranium enrichment facility in Lea County, near the city of Eunice, New Mexico. The NEF will use the gas centrifuge enrichment process to separate natural uranium hexafluoride UF_6 feed material containing 0.711 % ^{235}U into a product stream enriched up to 5.0 % ^{235}U and a depleted stream containing approximately 0.32 % ^{235}U . Production capacity at design throughput is approximately 3.0 million separative work units (SWU) per year. Facility construction is expected to require eight years. Construction would be conducted in six phases. Operation would commence after the completion of the first cascade in the first phase. The facility is licensed for 30 years. Decontamination and Decommissioning (D&D) is projected to take approximately nine years. LES estimates the cost of the plant to be approximately \$1.2 billion (in 2002 dollars) excluding escalation, contingency, interest, tails disposition, decommissioning, and any replacement equipment required during the operational life of the facility.