



10 CFR 30.6  
10 CFR 40.5  
10 CFR 70.5

March 24, 2005

NEF#05-014

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: Clarifying Information Related to the National Enrichment Facility Onsite Electrical Substation

- 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 NEF#04-029 dated July 30, 2004, from R. M. Krich (Louisiana Energy Services, L. P.) to Director, Office of Nuclear Material Safety and Safeguards (NRC) regarding "Revision 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"

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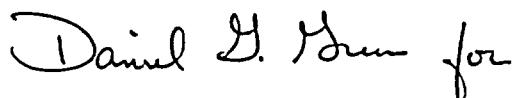
4. Letter NEF#04-037 dated September 30, 2004, from R. M. Krich (Louisiana Energy Services, L. P.) to Director, Office of Nuclear Material Safety and Safeguards (NRC) regarding "Revision to Applications for a Material License Under 10 CFR 70, "Domestic licensing of special nuclear material," 10 CFR 40, "Domestic licensing of source material," and 10 CFR 30, "Rules of general applicability to domestic licensing of byproduct material"

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). Subsequent revisions (i.e., revision 2 and revision 3) to these applications were submitted to the NRC by letters dated July 30, 2004 (Reference 3) and September 30, 2004 (Reference 4), respectively.

In a March 22, 2005, conference call between LES and NRC representatives, the NRC requested that clarification be provided concerning the National Enrichment Facility onsite electrical substation. This information, in the form of revised license application pages, is included in the Enclosure, "Clarifying Information Related to the National Enrichment Facility Onsite Electrical Substation." This information will be formally incorporated into the applicable license application sections in a future revision.

If you have any questions or need additional information, please contact me at 630-657-2813.

Respectfully,



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

Enclosure:

Clarifying Information Related to the National Enrichment Facility Onsite Electrical Substation

cc: T.C. Johnson, NRC Project Manager (w/o Enclosure)  
M.C. Wong, NRC Environmental Project Manager

**ENCLOSURE**

**Clarifying Information Related to the  
National Enrichment Facility Onsite Electrical Substation**

providing electrical service, Xcel Energy, will install two onsite transformers to ensure redundant service. Six underground septic tanks will be installed onsite. The leach fields will require about 975 linear meters (3,200 linear feet) of percolation drain field. The drain fields will either be placed below grade or buried in a mound consisting of sand, aggregate and soil.

Overall land use impacts to the site and vicinity will be minimal considering that the majority of the site will remain undeveloped, the current industrial activity on neighboring properties, the nearby expansive oil and gas well fields, and the placement of most utility installations along highway easements. LES is not aware of any Federal action that would have cumulatively significant land use impacts.

#### **4.1.3 Comparative Land Use Impacts of No Action Alternative Scenarios**

ER Chapter 2 provides a discussion of possible alternatives to the construction and operation of the NEF, including an alternative of "no action," i.e., not building the NEF. The following information provides comparative conclusions specific to the concerns addressed in this subsection for each of the three "no action" alternative scenarios addressed in ER Section 2.4, Table 2.4-2, Comparison of Environmental Impacts for the Proposed Action and the No-Action Alternative Scenarios.

**Alternative Scenario B – No NEF; USEC deploys a centrifuge plant and continues to operate the Paducah gaseous diffusion plant (GDP):** The impact would be less since less land is disturbed by building only one centrifuge plant instead of two.

**Alternative Scenario C – No NEF; USEC deploys a centrifuge plant and increases the centrifuge plant capability:** The land use would be the same if undisturbed land is used for the original or increased capacity site(s). If the site(s) were previously disturbed, the impact would be less.

**Alternative Scenario D – No NEF; USEC does not deploy a centrifuge plant and operates the Paducah GDP at an increased capacity:** The impact of this would be less because no new land would be disturbed.

minimize impacts to vegetation and wildlife. Since there are no bodies of water between the site and the city of Eunice, no waterways will be disturbed. Likewise, based on site visits, there are no bodies of water between the site vicinity and the city of Hobbs. The natural gas line feeding the site will connect to an existing, nearby line. This will minimize impacts of short-term disturbances related to the placement of the tie-in line.

Two new electrical transmission lines on a large loop system are proposed for providing electrical service to the NEF. These lines would tie into a trunk line about 13 km (8 mi) to the west. Similar to the new water supply lines, land use impacts would be minimized by placing associated support structures along New Mexico Highway 234. An application for highway easement modification will be submitted to the state. There are currently several power poles along the highway in front of the adjacent, vacant parcel east of the site. In conjunction with the new electrical lines serving the site, the local company providing electrical service, Xcel Energy, will install two onsite transformers for redundant service assurance.

Six underground septic tanks will be installed onsite. The combined leach fields will require about 975 m (3,200 ft) of percolation drain field. The drain field will either be placed below grade or buried in a mound consisting of sand, aggregate and soil.

Overall land use impacts to the site and vicinity will be minimal considering that the majority of the site will remain undeveloped, the current industrial activity on neighboring properties, the nearby, expansive oil and gas well fields, and the placement of most utility installations along highway easements.

#### Transportation Impacts:

Impacts from construction and operation on transportation will include the generation of fugitive dust, changes in scenic quality, added environmental noise and small radiation dose to the public from the transport of UF<sub>6</sub> feed and product cylinders, as well as low-level radioactive waste.

Dust will be generated to some degree during the various stages of construction activity. The amount of dust emissions will vary according to the types of activity. LES estimated that fugitive dust are expected to be well below the National Ambient Air Quality Standards (CFR, 2003w).

Although site construction will significantly alter its natural state, and considering that there are no high quality viewing areas and the industrial development of surrounding properties, impacts to the scenic quality of the site are not considered to be significant. Also, construction vehicles will be comparable to trucks servicing neighboring facilities. Construction worker and worker during operation transportation impacts are not considered to be significant.

The temporary increase in noise levels along New Mexico Highways 18 and 234 and Texas Highway 176 due to construction vehicles are not expected to impact nearby receptors significantly, due to substantial truck traffic currently using these roadways, and the large distance between the nearest receptors and the site, i.e., 4.3 km (2.63 mi). See the environmental noise discussion below concerning noise levels due to traffic during operations.

#### Water Resources:

Site groundwater will not be utilized for any reason, and therefore, should not be impacted by routine NEF operations. The NEF water supply will be obtained from the cities of Eunice, New Mexico, and Hobbs, New Mexico. Current capacities for the Eunice and Hobbs, New Mexico municipal water supply system are 16,350 m<sup>3</sup>/day (4.32 million gpd) and 75,700 m<sup>3</sup>/day