

NATIONAL ENRICHMENT FACILITY

11/16/04 MB received [signature]

19

November 5, 2004

NEF#04-045

Chief, Rules Review and Directive Branch
U.S. Nuclear Regulatory Commission
Mail Stop T6-D59
Washington, DC 20555-0001

*9/17/04
69FR 56104*

(30)

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

U.S. NUCLEAR REGULATORY COMMISSION

In the Matter of LOUISIANA ENERGY SERVICES, LP

Docket No. 70-3103-ML Official Exhibit No. 31

OFFERED by: Applicant/Licensee Intervenor LES/PC

NRC Staff Other

IDENTIFIED on Witness/Panel G. Rice

Action Taken: ADMITTED REJECTED WITHDRAWN

Reporter/Clerk

Subject: Comments Regarding Draft Report NUREG-1790, Environmental Impact Statement for the Proposed National Enrichment Facility in Lea County, New Mexico

- 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. NUREG-1790, "Environmental Impact Statement for the Proposed National Enrichment Facility in Lea County, New Mexico, Draft Report for Comment," dated September 2004

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. In accordance with NRC regulations for implementing the National Environmental Policy Act (i.e., 10 CFR 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions"), the NRC has prepared an Environmental Impact Statement for this proposed facility. The Environmental Impact Statement for the proposed National Enrichment Facility (Reference 2) was issued in a draft report for comment in September 2004.

LES representatives have reviewed this draft report and, in general, find it to be a comprehensive and objective assessment of the environmental impact of the National Enrichment Facility. However, some specific comments were generated during this review. These specific comments are included in the Enclosure, "LES Comments Regarding Draft Report NUREG-1790, Environmental Impact Statement for the Proposed National Enrichment Facility in Lea County, New Mexico."

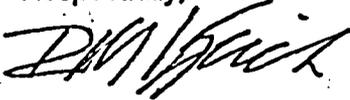
*E-RFDS = ADM-03
Call = A. Bradford (AH B1)
T. Johnson, (TAS)*

ing lte = ADM-013

November 5, 2004
NEF#04-045
Page 2

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:

LES Comments Regarding Draft Report NUREG-1790, Environmental Impact Statement for the Proposed National Enrichment Facility in Lea County, New Mexico

cc: T.C. Johnson, NRC Project Manager
A.H. Bradford, NRC Environmental Project Manager

ENCLOSURE

**LES Comments Regarding Draft Report
NUREG-1790, Environmental Impact Statement for the
Proposed National Enrichment Facility in Lea County, New Mexico**

**LES Comments Regarding Draft Report
NUREG-1790, Environmental Impact Statement for the
Proposed National Enrichment Facility in Lea County, New Mexico**

1. Page 1-3, lines 4 and 5 - The following statement refers to the Separative Work Units (SWUs) purchased by U.S. nuclear reactors.

"In 2003, the domestic enrichment services provided 14 percent of the 12 million SWUs purchased."

Page 1-4, line 34 - The following statement is made.

"USEC provides approximately 56 percent of the U.S. enrichment market."

Page 4-72, lines 47 through 49 - The following statement is made.

"In the domestic market, USEC currently supplies approximately 56 percent of enriched uranium needs while foreign suppliers provide the remaining 44 percent."

These statements should be clarified in the draft Environmental Impact Statement (DEIS) since they appear to be inconsistent with respect to the percent of SWUs/enrichment services provided by domestic enrichment service, i.e., USEC.

2. Page 1-6, line 28 - The phrase "All the issues that have identified by the NRC..." should be revised to "All the Issues that have been identified by the NRC..."
3. Pages 1-14 and 1-15, Table 1-3 - This table should be updated with information provided in the National Enrichment Facility (NEF) Environmental Report (ER) Table 1.3-1, Revision 2, dated July 2004. In particular, it should be noted that the New Mexico Air Quality Bureau has determined that the NEF will not need a construction or operating air permit.

Additionally, in Table 1-3, on page 1-15, in line 10, although the NEF will need a waste activity Environmental Protection Agency (EPA) ID number, it is not due to depleted uranium hexafluoride (DUF₆), but because of storage and use other chemicals.

4. Page 2-10, line 21 - The Uranium Byproduct Cylinders (UBC) Storage Pad Stormwater Retention Basin is stated as receiving discharges from two sources, UBC Storage Pad stormwater runoff and cooling tower blowdown discharges. However, a third source exists and should be added, i.e., heating boiler blowdown discharges.
5. Page 2-14, line 23 - The specified water requirements of the NEF reflect all water requirements, not just potable water requirements. Therefore, the phrase "potable water requirements" should be revised to "water requirements."
6. Page 2-14, lines 29 to 31 - A discussion of natural gas supply to the NEF is provided. This discussion identifies an existing gas pipeline that is owned by the Sid Richardson Energy Services Company as the pipeline that would supply natural gas to the facility. This pipeline carries "sour" gas and would not be used to supply natural gas to the NEF. As reflected in NEF ER Section 4.1.2, a separate pipeline will be provided to supply natural gas to the NEF. This separate pipeline will be

**LES Comments Regarding Draft Report
NUREG-1790, Environmental Impact Statement for the
Proposed National Enrichment Facility in Lea County, New Mexico**

designed and located such that the existing analysis provided in the Natural Gas Pipeline Hazard Risk Determination Calculation (i.e., Framatome-ANP Document No. 32-2400572-02 which was previously submitted to the NRC in letter NEF#04-023 dated June 9, 2004) remains bounding.

7. Page 2-16, lines 21 and line 22 - Production of DUF_6 is stated to increase from 748 metric tons (825 tons) to 7,800 metric tons (8,600 tons) per year. The initial value of "748" metric tons is incorrect and should be "825" metric tons, i.e., 66 - 48Y cylinders with 12,500 kg of DUF_6 per cylinder. The value of 66 cylinders of DUF_6 is consistent with Table 2-5 on page 2-17 of the draft Environmental Impact Statement and the response to NRC Request for Additional Information (RAI) 2-4A which was previously submitted to the NRC in letter NEF#04-019 dated May 20, 2004. Due to this change, "(825 tons)" should also be revised to "(909 tons)."
8. Page 2-17, line 2 - The title of Table 2-5 is currently "Maximum and Anticipated Yearly Production of DUF_6 over 30-Year License." This title may not accurately reflect the values given since the information provided in this table under the heading "Maximum" is based on a nominal 30-year operating period (i.e., the facility operates with all available equipment up to the 30-year time limit) and the information provided under the heading "Anticipated" is based on a 30-year license (i.e., the facility is gradually retired so that the operating license can be terminated by the end of the 30-year time limit).
9. Page 2-17, lines 21 through 23 - The information under the heading "Anticipated" should be deleted from these lines to be more consistent with a 30-year license period and the response to NRC RAI 2-4A which was previously submitted to the NRC in letter NEF#04-019 dated May 20, 2004.
10. Page 2-20, Figure 2-10 - The mass of "Sludge" shown in the Radioactive Liquid Waste Streams portion of the figure should be revised from "410 kg (904 lb)" to "400 kg (882 lb)" to be consistent with NEF Safety Analysis Report (SAR) Table 1.1-2 and ER Table 3.12-1.
11. Page 2-20, Figure 2-10 - The mass of uranium from the "Personnel Hand Wash & Shower" shown in the Non-Radioactive Liquid Waste Streams portion of the figure should be revised from "0 kg U (0.44 lb U)" to "0 kg U (0 lb U)" to be consistent with NEF SAR Table 1.1-3 and ER Table 3.12-4.
12. Page 2-21, line 17 - A discussion of the material to be used to exclude waterfowl from the Treated Effluent Evaporative Basin is provided and indicates that it would be "surface netting or other similar material." This should be revised to "surface netting or other suitable material" to be consistent with the ER since NEF may use other material to exclude waterfowl as recommended by the New Mexico Environment Department.
13. Page 2-21, lines 23 and 24 - It is stated that runoff and stormwater from the UBC Storage Pad would be routed to a lined basin for evaporation. The sentence should be clarified to specify the basin that would receive this runoff and stormwater from the UBC Storage Pad, i.e., the UBC Storage Pad Stormwater Retention Basin (Item 13 on Figure 2-4).

**LES Comments Regarding Draft Report
NUREG-1790, Environmental Impact Statement for the
Proposed National Enrichment Facility in Lea County, New Mexico**

14. Page 2-21, lines 25 and 26 - A discussion of the NEF septic systems is provided. However, this section is titled "Stormwater Retention and Detention Basins." The septic systems are not considered stormwater retention or detention basins. Therefore, it is suggested that the discussion of the NEF septic systems be included in a separate section titled "Septic Systems."
15. Page 2-22, lines 13 through 24 - A discussion of the Technical Services Building (TSB) Gaseous Effluent Vent System (GEVS) is provided under the section titled "Gaseous Effluent Vent System." However, as reflected in NEF Integrated Safety Analysis (ISA) Summary Section 3.4.9.1 and ER Section 4.12, the NEF design also includes a separate GEVS for the Separations Building. The Separations Building GEVS should also be discussed in this section of the Environmental Impact Statement for the NEF.
16. Page 2-23, lines 4 through 8 - A listing of non-radioactive gaseous effluents and associated quantities are provided. However, hydrogen fluoride has not been included. The hydrogen fluoride gaseous effluent annual release quantity should be included, i.e., 1.0 kg (2.2 lbs) of hydrogen fluoride per year, consistent with NEF ER Section 4.6.2.1.
17. Page 2-23, lines 12 and 13 - This sentence states that the boilers are permitted for operation as non-Title V sources under 40 CFR Part 61. The status of air quality requirements for the proposed NEF has changed as reflected in Revision 2 of NEF ER Section 1.3.2. Specifically, by letter dated May 27, 2004, the New Mexico Air Quality Board (AQB) acknowledged receipt of the Notice of Intent (NOI) application and notified LES that the application will serve as the NOI in accordance with 20.2.73 NMAC. The AQB also notified LES its determination that an air quality permit under 20.2.72 NMAC is not required and that New Source Performance Standards (NSPS) and National Emissions Standards for Hazardous Air Pollutants (NESHAPS) do not apply to the NEF as well. Lastly, the AQB stated that operation of the two emergency diesel generators and surface coating activities are exempt from permitting requirements, provided all requirements specified in 20.2.72.202 B (3) and 20.2.72.202 B (6) NMAC, respectively, are met. This section of the draft Environmental Impact Statement should be revised accordingly.
18. Page 2-25, lines 32 through 38, Table 2-6 - The radioactive waste disposal volumes from dismantling activities are provided. However, this table only includes the radioactive waste from the Separations Building. For consistency with NEF SAR Table 10.1-10, DEIS Table 2-6 should also include the 83 cubic meters of miscellaneous low level radioactive waste resulting from other NEF buildings.
19. Page 2-33, line 44 - A comparison to the American Centrifuge Plant efficiency and cost is provided. However, it is not clear what plant design is being compared to the American Centrifuge Plant. Therefore, it is recommended that phrase "as compared to a gaseous diffusion plant" be added to the end of line 44.
20. Page 2-42, line 27 - The phrase "Gas centrifuge and liquid thermal diffusion technology..." should be revised to "Gas diffusion and liquid thermal diffusion technology..."

**LES Comments Regarding Draft Report
NUREG-1790, Environmental Impact Statement for the
Proposed National Enrichment Facility in Lea County, New Mexico**

21. Page 2-44, lines 38 and 39 - This bulleted item should be revised from "The beneficial economic impacts of the proposed NEF on the local communities which have determined will be MODERATE" should be revised to "The beneficial economic impacts of the proposed NEF on the local communities which have been determined to be MODERATE."
22. Page 2-55, under the heading "Proposed Action:" - The last sentence appears to be incomplete, i.e., the remainder of the sentence or sentences appears to be truncated.
23. Page 2-56, under the heading "Proposed Action:" - The last sentence appears to be incomplete, i.e., the remainder of the sentence or sentences appears to be truncated.
24. Page 3-3, line 35 - The phrase "U.S. Nuclear Regulatory (NRC)" should be revised to "U.S. Nuclear Regulatory Commission (NRC)."
25. Page 3-8, line 39 - In New Mexico, "U.S. Highway 176" is referred to as "New Mexico State Highway 234."
26. Page 3-11, line 44 - The word "condensations" should be "condensation."
27. Page 3-17, line 30 - "Figure 3-11" should be "Figure 3-12."
28. Page 3-17, line 33 - "Figure 3-12" should be "Figure 3-11."
29. Page 3-22, Figure 3-13 - The intent of the figure legend "Number of Pollutants" should be clarified.
30. Page 3-28, Figure 3-17 - The abbreviation "Gyp" is used in this figure and needs to be defined in the same manner as the other abbreviations used in the figure.
31. Page 3-43, lines 23 and 24 - A listing of the ecological field surveys performed at the NEF site is provided. This listing should be updated to reflect the surveys conducted in October 2003 (Sias, 2003) and July 2004 (Sias, 2004). The reports of these surveys are currently included in the references for this section on page 3-76.
32. Page 3-50, line 11 - References to ecological studies performed at the NEF site are provided. These references should be updated to reflect the reference "Sias, 2003." This reference is currently included in the references for this section on page 3-76.
33. Page 3-52, line 48 - The housing vacancy in Texas should be "9.4" percent instead of "9" percent. From the 2000 census data, the total housing units in Texas is 8,157,575 with 7,393,354 units occupied.
34. Page 3-59, lines 26 through 28 - The area for impact assessment for environmental justice was expanded beyond the 6.4-km (4-mi) radius to an 80-km (50-mi) radius. This expansion, while not precluded, goes beyond the minimum recommended area for a site in a rural area provided in NUREG-1748, Appendix C, and the NRC Policy

**LES Comments Regarding Draft Report
NUREG-1790, Environmental Impact Statement for the
Proposed National Enrichment Facility in Lea County, New Mexico**

Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions. Therefore, further explanation of the rationale for expanding the area for the environmental justice impact assessment should be provided.

35. Page 3-68, line 18 - The sentence states that Figure 3-31 depicts major sources and levels of background radiation near the proposed NEF site. However, Figure 3-31 actually depicts major sources and average levels of background radiation for the U.S. Therefore, the reference to Figure 3-31 in this line should be clarified.
36. Page 3-68, line 28 - The units "microRad/hour" should be "µR/hr."
37. Page 3-69, Figure 3-31 - The title of this figure is "Major Sources and Levels of Background Radiation Exposure in the Proposed NEF Vicinity. However, Figure 3-31 actually depicts major sources and average levels of background radiation for the U.S. Therefore, the title of Figure 3-31 should be revised.

Additionally, the pointers/arrows from "Consumer Products" and "Air Travel" to the associated sections of the chart in Figure 3-31 currently point to the wrong sections of the chart.

38. Page 4-2, lines 36 through 38 - A discussion of the installation of the necessary municipal water supply piping and electrical transmission lines is provided. Accordingly, this section should also address the installation of the natural gas supply piping.
39. Page 4-7, lines 6 and 7 - The reference to "National Weather Station" should be "National Weather Service Station."
40. Page 4-11, line 49 - The UBC Storage Pad Stormwater Retention Basin, i.e., a single-lined retention basin, is stated as receiving discharges from UBC Storage Pad stormwater runoff and cooling tower blowdown discharges. However, another source exists and should be added, i.e., heating boiler blowdown discharges.
41. Page 4-13, lines 10 through 14 - For the UBC Storage Pad Stormwater Retention Basin, the following statement is made:

"A water balance of this basin, including consideration of effluent and precipitation inflows and evaporation outflows, indicates that the basin would be dry for 11 to 12 months of the year, depending on annual precipitation rates."

This sentence should be revised to "A water balance of this basin, including consideration of effluent and precipitation inflows and evaporation outflows, indicates that the basin would be dry for 12 months of the year for the minimum scenario and would have on average 0.3 m (1 ft) or less of standing water for 10 months of the year for the maximum scenario." This revised information with respect to the water balance results for the UBC Storage Pad Stormwater Retention Basin was previously submitted to the NRC in letter NEF#04-029 dated July 30, 2004.

**LES Comments Regarding Draft Report
NUREG-1790, Environmental Impact Statement for the
Proposed National Enrichment Facility in Lea County, New Mexico**

42. Page 4-13, lines 31 through 36 - An analysis of a hypothetical groundwater plume is presented for the Site Stormwater Detention Basin. The analysis appears to assume that 100% of all annual stormwater runoff into the basin eventually reaches the groundwater plume. Since nearly all of the runoff would evaporate directly from the basin before infiltrating into the ground or evapotranspire after infiltration, the assumed groundwater plume appears to be substantially overestimated. The lack of observed shallow groundwater above the red bed surface during field explorations supports this conclusion. The high evapotranspiration rate of 65 inches/year in the area (refer to DEIS page 3-32, line 20) also supports the conclusion of a limited groundwater recharge plume. Accordingly, we suggest that this discussion in the DEIS include a qualifier that explains the conservative nature of the analysis.
43. Page 4-13, line 33 - "252 meters (0.16 mile) per years" should be "252 meters (0.16 mile) per year."
44. Page 4-13, lines 43 through 45 - Regarding the discussion that portions of the plume could result in a minor seep at Custer Mountain or in the excavation 3.2 kilometers (2 miles) southeast of Monument Draw, the word "portions" should be clarified. Since little, if any, basin waters are expected to recharge the shallow groundwater system, any waters originating at the NEF that discharge at these locations would be negligible.
45. Page 4-14, lines 6 through 11 - An analysis of a hypothetical groundwater plume is presented for the septic system leach fields. The analysis appears to assume that 100% of all annual discharge to the septic systems eventually reaches the groundwater plume. Since most of septic system discharge is expected to evapotranspire after infiltration, the assumed groundwater plume is greatly overestimated. The lack of observed shallow groundwater above the red bed surface during field explorations supports this conclusion. The high evapotranspiration rate of 65 inches/year in the area (refer to DEIS page 3-32, line 20) also supports the conclusion of a limited groundwater recharge plume.
46. Page 4-14, line 19 through 22 - Regarding the discussion that portions of the plume could result in a minor seep at Custer Mountain or in the excavation 3.2 kilometers (2 miles) southeast of Monument Draw, the word "portions" should be clarified. Since little, if any, septic system discharges are expected to recharge the shallow groundwater system, any waters originating at the NEF that discharge at these locations would be negligible.
47. Page 4-18, line 44 - A discussion of installation of the material to be used to exclude waterfowl from the Treated Effluent Evaporative Basin is provided and refers to "installing appropriate netting." This discussion should be revised to "installing appropriate netting or other suitable material" to be consistent with the ER since NEF may use other material to exclude waterfowl as recommended by the New Mexico Environment Department.
48. Page 4-19, line 2 - A discussion of the design of the material to be used to exclude waterfowl from the Treated Effluent Evaporative Basin is provided and states, "The pond netting would be specifically designed..." It should be revised to "The pond netting or other suitable material would be specifically designed..." to be consistent

**LES Comments Regarding Draft Report
NUREG-1790, Environmental Impact Statement for the
Proposed National Enrichment Facility in Lea County, New Mexico**

with the ER since NEF may use other material to exclude waterfowl as recommended by the New Mexico Environment Department.

49. Page 4-19, lines 40, 41, and 42 - It is stated that "LES estimates that it would spend about \$390 million locally on construction..." However, in NEF ER Section 7.1.4.2, and Figure 7.1-5, LES estimates that it will spend \$397 million locally on construction expenditures over an 8-yr period.
50. Page 4-25, line 26 - The word "results" in this line should be revised to "result."
51. Page 4-44, line 32 - The phrase "gaseous effluent vent system" should be "gaseous effluent vent systems."
52. Page 4-50, line 43 - The word "govern" should be "governed."
53. Page 4-54, line 48 - In the discussion of maximum accident impact "12 person-sieverts (12,000 person-rem) or equivalent to 7 latent cancer fatalities" should be "12 person-sieverts (1200 person-rem) or equivalent to 0.7 latent cancer fatalities."
54. Page 4-62, lines 15 and 16 - This sentence indicates that potable water use is expected to increase during part of the decommissioning phase. However, there is no data to support this statement. It is recommended the sentence be revised to "Potable water use is expected to vary during the decommissioning phase, particularly during the middle of the nine-year decommissioning program."
55. Page 4-62, lines 17 and 18 - This sentence indicates that liquid effluents from decontamination operation would be higher than during normal operations. However, there is no data to support this statement. It is recommended the sentence be revised to "Liquid effluents from decontamination operations during decommissioning would be higher than liquid effluents from decontamination operations during normal operations."
56. Page 4-62, lines 19 through 21 - This sentence indicates that spent citric acid will be sent to the Treated Effluent Evaporative Basin as during the operation phase of the NEF. This statement is not correct. The statement should be revised since the Liquid Effluent Collection and Treatment System will remove citric acid from the waste stream before discharge to the Treated Effluent Evaporative Basin.
57. Page 4-62, lines 28 and 29 - A statement is made implying that, at the end of facility operations, structures and components are turned over to the State. This statement should be clarified since LES does not currently plan to turn structures and components over to the State at the end of facility operation.
58. Page 4-62, line 35 - The phrase "The sludge and soil in bottom of the Treated Effluent Evaporative Basin" should be revised to "The sludge and soil in the bottom of the Treated Effluent Evaporative Basin."
59. Page 4-63, lines 21 and 22 - The reference "(LES, 2004a)" should be revised to "(LES, 2004f)."

**LES Comments Regarding Draft Report
NUREG-1790, Environmental Impact Statement for the
Proposed National Enrichment Facility in Lea County, New Mexico**

60. Page 4-64, line 34 - In the discussion of occupational exposure "(approximately 0.3 millisieverts [300 millirem] per year)" should be "(approximately 0.3 millisieverts [300 millirem] per year)."
61. Page 4-66, lines 14 and 15 - This sentence discuss potential contamination from NEF operations and states that the most likely contamination would consist of manmade radionuclides. This statement is not correct and should be revised to "Any contamination resulting from proposed NEF operations, although unlikely, would most likely consist of naturally occurring radionuclides."
62. Page 4-67, line 27 - The phrase "The employment of proposed WCS disposal facility would have a peak construction force of ..." should be revised to "The proposed WCS disposal facility would have a peak construction force of ..."
63. Page 4-68, lines 47 through 49 - This sentence discusses water releases and indicates that water infiltrates to the ground from the two lined basins. This is not correct. The sentence should be clarified to read "Water used would be released from the two lined basins to the atmosphere through evaporation; from the one unlined basin to the ground through infiltration, to the atmosphere from evaporation, and to the atmosphere through evapotranspiration of infiltrated waters; and from the septic leaching fields to the ground through direct discharge and to the atmosphere through evapotranspiration of discharged waters."
64. Page 4-72, line 32 - The word "action" in this line should be revised to "actions."
65. Page 4-72, line 49 - The phrase "provide remaining 44 percent" should be revised to "provide the remaining 44 percent."
66. Page 4-74, line 29 - The phrase "because no land disturbance would be occur" should be revised to "because no land disturbance would occur."
67. Page 4-74, line 38 - The sentence "Water supply demand would continue at current rate" should be revised to "Water supply demand would continue at the current rate."
68. Page 4-74, line 49 - Delete the extraneous comma near the end of the line.
69. Page 4-75, line 32 - The phrase "Under no-action alternative" should be revised to "Under the no-action alternative."
70. Page 4-75, line 40 - The phrase "as described in the affected environment" should be revised to "as described in the affected environment section."
71. Page 4-75, line 41 - The phrase "No radiological exposure" should be revised to "No radiological exposures."
72. Page 4-75, lines 43 and 44 - The word "occupation" should be revised to "occupational" in both lines.
73. Page 5-2, Table 5-1, under the Ecological Resources impact area - The proposed mitigation measures associated with use of "netting over basins to prevent use by

**LES Comments Regarding Draft Report
NUREG-1790, Environmental Impact Statement for the
Proposed National Enrichment Facility in Lea County, New Mexico**

migratory birds" should be revised to "netting or other suitable material over basins to prevent use by migratory birds" to be consistent with the ER since NEF may use other material to exclude waterfowl as recommended by the New Mexico Environment Department.

74. Page 5-4, Table 5-2, under the Ecological Resources Impact area - The proposed mitigation measures associated with use of "netting over basins to prevent use by migratory birds" should be revised to "netting or other suitable material over basins to prevent use by migratory birds" to be consistent with the ER since NEF may use other material to exclude waterfowl as recommended by the New Mexico Environment Department.
75. Page 6-1, line 14 - The phrase "stormwater diversion ditch from the site stormwater detention basin" should be revised to "stormwater diversion ditch into the site stormwater detention basin."
76. Page 6-1, Figure 6-1 - The reference in the title "(LES, 2003)" should be revised to "(LES 2004b)."
77. Page 6-2, Figure 6-2 - The figure depicts the proposed sampling and monitoring locations for the NEF. This figure identifies that soil samples, identified by note 2, will be taken at the diversion ditch outfall. This sampling location is not consistent with the sampling and monitoring commitments provided in NEF ER Section 6.1, Radiological Monitoring, and NEF ER Section 6.2, Physiochemical Monitoring, and should be deleted from DEIS Figure 6-2.
- Additionally, the reference in the title "(LES, 2003)" should be revised to "(LES 2004a)."
78. Page 6-2, Figure 6-2 - Note 6 is not used in the figure and should be deleted.
79. Page 6-2, line 8 - It is stated that there is an additional soil sampling location at the diversion ditch outfall. This statement is not consistent with the sampling and monitoring commitments provided in NEF ER Section 6.1, Radiological Monitoring, and NEF ER Section 6.2, Physiochemical Monitoring, and should be deleted.

80. Page 6-4, lines 25 through 41, and Page 6-5, line 1 - A discussion of the administrative action levels for sample parameters is provided in Section 6.1.1. Section 6.1.1 addresses the radiological effluent monitoring program. This discussion of administrative action levels was taken from NEF ER Section 6.2.8 and only applies to physiochemical monitoring sample parameters. Therefore, this discussion does not apply to radiological effluent monitoring sample parameters and should be removed from Section 6.1.1 of the DEIS to be consistent with the NEF ER. However, this discussion of administrative action levels does apply to physiochemical monitoring sample parameters and should be placed into Section 6.2, Physiochemical Monitoring, of the DEIS to be consistent with the NEF ER. The discussion of the administrative action levels, which are applicable for radiological effluent monitoring sample parameters, is provided in NEF ER Section 6.1.1 (page 6.1-2, second full paragraph) and should be included in Section 6.1.1 of the DEIS.

**LES Comments Regarding Draft Report
NUREG-1790, Environmental Impact Statement for the
Proposed National Enrichment Facility in Lea County, New Mexico**

81. Page 6-5, line 11 - The phrase at the end of this line "and conduct audits" should be revised to "and audits are conducted."
82. Page 6-5, lines 28 and 29 - This sentence indicates that the gaseous source term would be 240 $\mu\text{Ci}/\text{year}$ for routine gaseous effluent releases and that this amount is conservative since it is twice the amount assumed for the Claiborne Enrichment Center. This statement should be clarified since the actual expected gaseous release source term is less than 10 grams of uranium or approximately 35 times less radioactivity than the 240 $\mu\text{Ci}/\text{yr}$ value used in the bounding routine dose impact assessment for demonstrating expected compliance with regulatory limits. The value of 240 $\mu\text{Ci}/\text{yr}$ is the same upper bound release value used for the Claiborne Enrichment Center analysis, only doubled since the NEF is approximately twice the planned size of the Claiborne Enrichment Center. The conservative nature of the source term from the analysis is based on it being approximately 35 times larger than the expected source term, not on the source term being twice the amount assumed for the Claiborne Enrichment Center.
83. Page 6-10, lines 4, 5, and 6 - The UBC Storage Pad Stormwater Retention Basin is stated as receiving UBC Storage Pad stormwater runoff and cooling tower blowdown discharges. However, another source exists and should be added, i.e., heating boiler blowdown discharges.
84. Page 6-11, Table 6-6, line 18 - The location of the septic tank samples and sampling and collection frequency should be revised to be consistent with ER Table 6.1-4. The location should be revised to "One from each affected tank." The sampling and collection frequency should be revised to "1 to 2 kg (2.2 to 4.4 lbs) sludge samples collected from each affected tank prior to pumping."
85. Page C-10, line 5 - The phrase "with a net covering the basin" should be revised to "with a net or other suitable material covering the basin" to be consistent with the ER since NEF may use other material to exclude waterfowl as recommended by the New Mexico Environment Department.
86. Pages C-18, C-23, C-24, C-25, C-26, and C-27, Tables C-13 and C-15 through C-19 - For worker chemical exposures, these tables refer to 5-minute exposures. As a result of discussions with representatives of the NRC and the National Advisory Committee for Acute Exposure Guideline Levels (AEGs) for Hazardous Substances, LES has decided to provide a bounding evaluation for worker exposure limits and will eliminate the use of time scaling of AEGs, and as a result worker 5-minute exposure limits, to define Consequence Categories. Correspondence to this effect will be submitted to the NRC. This change potentially impacts Tables C-13 and C-15 through C-19 of the DEIS.
87. Page D-1, lines 25 and 26 - The following statement is made.

"With the exception of the product material, all shipments can be transported in Type A shipping containers without additional requirements."

This statement is no longer correct and should be revised. Transportation regulations in 49 CFR 173.420 have been modified such that, effective October 1,

**LES Comments Regarding Draft Report
NUREG-1790, Environmental Impact Statement for the
Proposed National Enrichment Facility in Lea County, New Mexico**

2004, each package designed to contain 0.1 kg or more of fissile, fissile excepted, or non-fissile uranium hexafluoride offered for transportation must be designed to withstand the thermal test specified in 10 CFR 71.73(c)(4) without rupture of the containment system. This change impacts the transportation and handling of cylinders for the NEF. The Department of Transportation rule change will now require thermal protection (e.g., overpack or other protective assembly) of the shipping containers for all off-site UF₆ shipments as described in NEF#04-036 dated September 14, 2004.

88. Page D-1, lines 32 through 34 - The following statement is made.

"Table D-1 presents the composition of three different types of containers proposed for the shipment of feed, product, depleted uranium, and waste."

However, Table D-1 addresses "four" different types of containers. Therefore, the reference to "three different types of containers" should be revised to "four different types of containers."

89. Page D-4, Figure D-1 - The label for the cylinder end view at the lower left-hand side of the figure should be revised from "PLUG END" to "VALVE END."

90. Page D-5, Figure D-2 - The label for the cylinder end view at the lower left-hand side of the figure should be revised from "PLUG END" to "VALVE END."

91. Page D-6, Figure D-3 - The label for the cylinder end view at the lower left-hand side of the figure should be revised from "PLUG END" to "VALVE END."

92. Page E-1, line 29 - The phrase "to less than 0.5 percent of total number of hours per year" should be revised to "to less than 0.5 percent of the total number of hours per year."

93. Page E-3, line 7 - The reference to "National Weather Station" should be "National Weather Service Station."

94. Page E-4, lines 64 and 65 - This sentence refers to Figure E-8 and states "This figure shows that a narrow plume would extend to the west from the proposed NEF source." However, Figure E-8 shows the plume extending to the east of the NEF site. Therefore, the sentence should be revised to "This figure shows that a narrow plume would extend to the east from the proposed NEF source."

95. Page E-6, Figure E-10 - The Y-axis of this figure is incorrectly labeled. The labeling goes from "10⁰" to "1" to "10²." The labeling should be revised to "10⁰" to "10¹" to "10²."

96. Pages G-2 through G-7, Table G-1 - For both New Mexico and Texas, the state summaries of the percent of minorities in many cases do not match with the values given in the referenced U.S. Census Bureau Table DP-1. An explanation of the basis for the differences should be provided.