



statement of intention to provide for expected tails disposition costs during the life of the facility, there should be a commitment, pursuant to NRC Staff's recognition, that "the cost of tails disposition should be included as part of the decommissioning financial assurance." Letter from John H.W. Hickey, Chief, Enrichment Branch, Division of Fuel Cycle Safety and Safeguards, NMSS, to Dr. Howard Arnold (June 18, 1993).

The tails disposition cost-estimates must have, at a minimum, a contingency factor of at least 25% as recommended by NUREG-1757. NUREG 1757, vol. 3, p. 4-09 (NRC 2003) provides that "[t]he information provided by the licensee or responsible party should be sufficient to allow NRC staff to determine if the cost estimate(s) is adequate by comparing the information presented in the decommissioning financial plan or decommissioning plan with applicable NRC regulations and guidance. Among the conditions set forth in this section, LES, at minimum, must demonstrate that "[t]he cost estimate is based on documented and reasonable assumptions," "[t]he cost estimate applies a contingency factor of *at least 25 percent* to the sum of all estimated costs," and that the estimate does not take credit for any salvage value of any assets before or after decommissioning. NUREG 1757, vol. 3, p. 4-09 to 4-10. (NRC 2003) (emphasis added).

**NRC Staff INTERROGATORY NO. 11 (Decommissioning Costs)**

**State all facts that support your contention that LES has included an inadequate capital cost in estimating decommissioning costs.**

I have determined that the application does not adequately take into account the likely scenario that tails from the enrichment process will be stored indefinitely on-site. It is my opinion that, until it is established that concrete plans are in place for the final disposition of the tails, financial assurance should account for the long-term storage of the tails. Adjustments to the financial assurance can be made in the future when the disposition of the tails actually begins.

The basis for stating that the indefinite storage of the tails on-site is likely is that the tails have been accumulating from the enrichment process for many years in the United States. Although there are steps being taken toward development of deconversion facilities in the United States, specifically Portsmouth and Paducah, those facilities have not yet been constructed and their purpose is to deconvert DUF6 now stored at DOE facilities only. Paducah DUF6 Final EIS, S-11 (June 2004); Portsmouth DUF6 Final EIS, S-11 (June 2004). Also, I am not aware that even with the deconversion facilities being planned and constructed in the United States, that ultimate disposal of the U3O8 has been determined at this time.

NRC guidance provides that the surety should be such that would enable a third party to take responsibility for the site. This must include the costs of indefinite storage.

Missing from the application was substantive information regarding the Urenco cost-estimates because of the proprietary nature of those numbers. I [Allen Messenger] was not present at the deposition of LES's cost experts, nor have I had an opportunity to review those depositions. I will review the depositions when they become available. I

was told that the Urenco cost information did not include the following information by counsel for the State of New Mexico:

1. Salvage value derived from the sale of AHF. While regulatory guidance prohibits the applicant from taking credit for any salvage value of any assets before or after decommissioning, this value must be added on to the Urenco estimate relied upon by LES as the company Urenco contracts with recognizes a financial benefit from the sale of the AHF.
2. No analysis of currency exchange rates has been undertaken in equating the Urenco experience to that likely to be realized in the United States.
3. The Urenco process does not result in the ultimate disposition of U3O8, and, based on my understanding, it is stored above-ground; and finally,
4. No analysis has been presented to justify the proposition that the Urenco experience in Europe would be equal to LES's proposed cost estimates for tails disposition in New Mexico.

**NRC Staff INTERROGATORY NO. 12 (Decommissioning Costs)**

**State what cost of capital you allege is appropriate and all facts which support the use of that cost of capital.**

There is insufficient information in LES's application to arrive at an accurate capital cost. It is the responsibility of the applicant, not the intervenor, to arrive at an accurate capital cost based on reasonable and documented assumptions such as would enable a third party to take responsibility for the site. For additional facts in support of this response, please see the response to NRC Staff Interrogatory No. 11.

**LES INTERROGATORY No. 4**

**Provide the substance of the facts and opinions to which each witness is expected to testify and a summary of the grounds for each opinion, including the documents and all pertinent pages or parts thereof which each witness will rely upon or will otherwise use for his testimony.**

Mr. Messenger will be analyzing the LES's cost estimates pertaining to the disposition of the tails. Mr. Messenger is of the opinion there is inadequate information in the license application to demonstrate the decommissioning cost for tails disposition is sufficient. He will be relying on:

Paducah DUF6 DEIS: December 2003 SUMMARY;

NEF Safety Analysis Report December 2003 Section 3.3;

NEF Environmental Report December 2003 Sections 5.0 through 5.2.13;

NEF Environmental Report December 2003 Sections 7.2.2 through 7.2.2.8;

NEF Environmental Report December 2003 Sections 3.4 through 3.12.3;

NEF Environmental Report December 2003 Sections 3.2 through 3.3.3.2;

NEF Safety Analysis Report December 2003 Section 3;

NEF Safety Analysis Report December 2003 Sections 1.0 through 2.4;

NEF Safety Analysis Report December 2003 Section 3, Figures;

NEF Safety Analysis Report December 2003 Section 3.5 through 3.5.20;

NEF Safety Analysis Report December 2003 Section 8.0 through 8.1;

NEF Safety Analysis Report Revision 1, February 2004, Sections 4.0 through 4.12;

March 24, 2003 Letter from Robert C. Pierson, Director Division of Fuel Cycle Safety and Safeguards Office of Nuclear Material Safety and Safeguards to Mr. Rod M. Krich Director, Licensing, Louisiana Energy Services;

Legal Requirements Portsmouth DUF6 DEIS: December 2003 Section 6;

COST ANALYSIS REPORT FOR THE LONG-TERM MANAGEMENT OF DEPLETED URANIUM HEXAFLUORIDE, LLNL, May 1997;

Assessment Approach and Methodology, Depleted UF6 PEIS, Section 4;

U.S. Department of Energy, Final Plan for the Conversion of Depleted Uranium Hexafluoride As Required by Public Law 105-204, July 1999;

December 1989, Australian Government Publishing Service, Canberra, National Occupational Health and Safety Commission, HYDROGEN FLUORIDE;

Impacts Paducah DUF6 DEIS: December 2003, Section 5;

Summary Paducah DUF6 DEIS: December 2003;

Summary Portsmouth DUF6 DEIS: December 2003;

LES Financial 19971218b.htm;

Scoping Summary Report Portsmouth DUF6 DEIS: December 2003, Appendix C;

UDS Contract – DE-AC05-02OR22717;

Cylinder Corrosion Depleted UF6 PEIS; and

Urenco email (Privileged);

as well as applicable NRC regulations, NUREGs and Regulatory Guides and any other documents that become available after this Interrogatory response that are applicable to analyzing LES's cost estimates and disposal costs.

Additionally, Mr. Messenger is prepared to testify that the cost of tails disposition must be included as part of the decommissioning financial assurance. The NRC Staff has recognized that “[b]ecause some or all of the tails could be at the site at the time of decommissioning, the cost of tails disposition should be included as part of the decommissioning financial assurance.” Letter from John H.W. Hickey, Chief, Enrichment Branch, Division of Fuel Cycle Safety and Safeguards, NMSS, to Dr. Howard Arnold (June 18, 1993). Therefore, rather than a statement of intention to

provide for expected tails disposition costs during the life of the facility, there should be a commitment, pursuant to NRC Staff's recognition, that "the cost of tails disposition should be included as part of the decommissioning financial assurance." Letter from John H.W. Hickey, Chief, Enrichment Branch, Division of Fuel Cycle Safety and Safeguards, NMSS, to Dr. Howard Arnold (June 18, 1993).

It is Mr. Messenger's opinion that the tails disposition cost-estimates must have, at a minimum, a contingency factor of at least 25% as recommended by NUREG-1757. NUREG 1757, vol. 3, p. 4-09 (NRC 2003) provides that "[t]he information provided by the licensee or responsible party should be sufficient to allow NRC staff to determine if the cost estimate(s) is adequate by comparing the information presented in the decommissioning financial plan or decommissioning plan with applicable NRC regulations and guidance. Among the conditions set forth in this section, LES, at minimum, must demonstrate that "[t]he cost estimate is based on documented and reasonable assumptions," "[t]he cost estimate applies a contingency factor of *at least 25* percent to the sum of all estimated costs," and that the estimate does not take credit for any salvage value of any assets before or after decommissioning. NUREG 1757, vol. 3, p. 4-09 to 4-10. (NRC 2003) (emphasis added).



## **LES INTERROGATORY No. 5**

**What is the basis for the statement “[t]he bases for Louisiana Energy Services, L.P.’s cost estimates are suspect?”**

Mr. Messenger has determined that the application does not adequately take into account the likely scenario that tails from the enrichment process will be stored indefinitely on-site. It is Mr. Messenger’s opinion that, until it is established that concrete plans are in place for the final disposition of the tails, financial assurance should account for the long-term storage of the tails. Adjustments to the financial assurance can be made in the future when the disposition of the tails actually begins.

The basis for stating that the indefinite storage of the tails on-site is likely is that the tails have been accumulating from the enrichment process for many years in the United States. Although there are steps being taken toward development of deconversion facilities in the United States, specifically Portsmouth and Paducah, those facilities have not yet been constructed and their purpose is to deconvert DUF6 now stored at DOE facilities only. Paducah DUF6 Final EIS, S-11 (June 2004); Portsmouth DUF6 Final EIS, S-11 (June 2004). Also, Mr. Messenger is not aware that even with the deconversion facilities being planned and constructed in the United States, that ultimate disposal of the U3O8 has been determined at this time.

NRC guidance provides that the surety should be such that would enable a third party to take responsibility for the site. This must include the costs of indefinite storage.

Missing from the application was substantive information regarding the Urenco cost-estimates because of the proprietary nature of those numbers. Mr. Messenger was not present at the deposition of LES’s cost experts, nor has he had an opportunity to review those depositions. He will review the depositions when they become available.

Mr. Messenger was told that the Urenco cost information did not include the following information by counsel for the State of New Mexico:

1. Salvage value derived from the sale of AHF. While regulatory guidance prohibits the applicant from taking credit for any salvage value of any assets before or after decommissioning, this value must be added on to the Urenco estimate relied upon by LES as the company Urenco contracts with recognizes a financial benefit from the sale of the AHF.
2. No analysis of currency exchange rates has been undertaken in equating the Urenco experience to that likely to be realized in the United States.
3. The Urenco process does not result in the ultimate disposition of U3O8, and, based on Mr. Messenger's understanding, it is stored above-ground; and finally,
4. No analysis has been presented to justify the proposition that the Urenco experience in Europe would be equal to LES's proposed cost estimates for tails disposition in New Mexico.

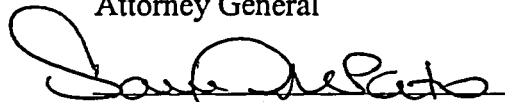
**LES INTERROGATORY No. 6**

**What is the basis for the statement that “the actual cost of disposing of tails will exceed the \$5.50 per kilogram estimated by LES . . .”?**

See the response to LES Interrogatory No. 5 above.

Respectfully submitted,

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**UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION  
ATOMIC SAFETY AND LICENSING BOARD**

Before Administrative Judges:

G. Paul Bollwerk, III, Chairman  
Dr. Paul B. Abramson  
Dr. Charles N. Kelber

In the Matter of	)	
LOUISIANA ENERGY SERVICES, L.P.	)	Docket No. 70-3103-ML
(National Enrichment Facility)	)	ASLBP No. 04-826-01-ML

**CERTIFICATE OF SERVICE**

I hereby certify that copies of the NEW MEXICO ATTORNEY GENERAL'S SUPPLEMENTAL RESPONSE TO NUCLEAR REGULATORY COMMISSION STAFF'S AND LOUISIANA ENERGY SERVICES, L.P.'S INTERROGATORIES have been served upon the following persons by electronic mail, facsimile, and/or first class U.S. mail this 11th day of October, 2004:

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Deputy Attorney General

October 11, 2004

Secretary of the Commission  
United States Nuclear Regulatory Commission  
Attn: Rulemaking and Adjudications Staff  
Washington, D.C. 20555-0001  
Facsimile: (301) 415-1101

Re: **In the Matter of Louisiana Energy Services, L.P. (National  
Enrichment Facility)**  
Docket No. 70-3103

Dear Rulemaking and Adjudications Staff:

Enclosed is the original and three copies of the NEW MEXICO ATTORNEY GENERAL'S SUPPLEMENTAL RESPONSE TO NUCLEAR REGULATORY COMMISSION STAFF'S AND LOUISIANA ENERGY SERVICES, L.P.'S INTERROGATORIES. The New Mexico Attorney General would appreciate it if you would kindly file, endorse and return a copy of each in the enclosed self-addressed, stamped envelope provided herewith.

Thank you for your assistance.

Sincerely,

David M. Pato  
Assistant Attorney General  
New Mexico Attorney General's Office

Enclosures