

# **Environmental Impact Statement for the Proposed National Enrichment Facility in Lea County, New Mexico**

**Appendices H through J**

**Final Report**

**U.S. Nuclear Regulatory Commission  
Office of Nuclear Material Safety and Safeguards  
Washington, DC 20555-0001**



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Office of Nuclear Material Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
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## ABSTRACT

Louisiana Energy Services (LES) has submitted a license application to the U.S. Nuclear Regulatory Commission (NRC) to construct, operate, and decommission a gas centrifuge uranium enrichment facility near Eunice, New Mexico, in Lea County. The proposed facility, referred to as the National Enrichment Facility (NEF), would produce enriched uranium-235 ( $^{235}\text{U}$ ) up to 5 weight percent by the gas centrifuge process with a nominal production of 3 million separative work units per year. The enriched uranium would be used in commercial nuclear power plants. The proposed NEF would be licensed in accordance with the provisions of the *Atomic Energy Act*. Specifically, an NRC license under Title 10, "Energy," of the *U.S. Code of Federal Regulations* (10 CFR) Parts 30, 40, and 70 would be required to authorize LES to possess and use special nuclear material, source material, and byproduct material at the proposed NEF site.

This Environmental Impact Statement (EIS) was prepared in compliance with the *National Environmental Policy Act* (NEPA) and the NRC regulations for implementing NEPA. This EIS evaluates the potential environmental impacts of the proposed action and its reasonable alternatives. This EIS also describes the environment potentially affected by LES's proposal, presents and compares the potential environmental impacts resulting from the proposed action and its alternatives, and describes LES's environmental monitoring program and proposed mitigation measures.

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## APPENDIX H PUBLIC COMMENTS

### H.1 Overview

The U.S. Nuclear Regulatory Commission (NRC) staff published a notice in the *Federal Register* requesting public review and comment of the Draft Environmental Impact Statement (Draft EIS) on September 17, 2004 (69 FR 56104-56105) in accordance with Title 10, Parts 51.73, 51.74, and 51.117 of the *U.S. Code of Federal Regulations* (10 CFR § 51.73, 51.74, and 51.117). The NRC staff initially established November 6, 2004, as the deadline for submitting public comments on the Draft EIS. The NRC staff subsequently extended this deadline twice; first to December 18, 2004 (69 FR 64983), and then to a final deadline of January 7, 2005 (69 FR 76485). More than 390 comment documents (i.e., letters, facsimiles, and e-mails) were submitted to the NRC. In addition, oral comments were received from approximately 60 individuals at a public meeting conducted by the NRC staff in October 2004.

The NRC staff considered and evaluated comment documents received after the January 7, 2005, deadline for public comment and concluded that none raised issues not already captured in timely comments and already considered in the EIS analysis.

### H.2 Public Participation

Public participation is an essential part of the environmental review process. This section discusses the process for public participation during the NRC staff's development of the EIS for the proposed NEF.

The NRC conducted an open, public EIS development process consistent with the requirements of the *National Environmental Policy Act of 1969* (NEPA) and the NRC's regulations (detailed discussions follow). The NRC held a public scoping meeting early in the environmental review process (March 4, 2004) and a public meeting on the Draft EIS during the public comment period (October 14, 2004). With extensions in the comment period, the NRC provided a 113-day public comment period for agencies and the public to review the Draft EIS and provide comments. This EIS considers and addresses the nearly 4,200 individual comments the NRC staff identified from letters, facsimile transmittals, and e-mails received from more than 390 individuals and from oral comments given by approximately 60 individuals.

#### H.2.1 Initial Notification and Notice of Formal Proceeding

Upon receipt of the Louisiana Energy Services' (LES's) application for the proposed National Enrichment Facility (NEF) and completion of an initial acceptance review, the NRC published a notice in the *Federal Register* (69 FR 5873) of receipt of the application and notice of hearing on February 6, 2004.

#### H.2.2 Public Scoping

The NRC's public scoping process for the EIS began on February 4, 2004, with the publication in the *Federal Register* (69 FR 5374-5375) of a Notice of Intent (NOI) to prepare an EIS. As part of this process, the NRC conducted a public scoping meeting in Eunice, New Mexico, on March 4, 2004. At this meeting, the NRC staff provided a description of NRC's role, responsibilities, and mission; gave a brief overview of its environmental and safety review processes; discussed how the public could effectively participate in the environmental review process; and solicited input from the general public on environmental concerns related to the proposed NEF. The NRC staff published notice of the scoping

meeting in the same *Federal Register* notice as the NOI to prepare the EIS. The NRC staff advertised the meeting in the *Lovington Leader* (Lovington, New Mexico); *Albuquerque Journal* and *Albuquerque Tribune* (Albuquerque, New Mexico); *Hobbs News-Sun* (Hobbs, New Mexico); *Carlsbad Current-Argus*, (Carlsbad, New Mexico); *Chamber Pot* (Eunice, New Mexico); *Eunice News* (Eunice, New Mexico); and *Jal Record* (Jal, New Mexico).

### **H.2.3 Issuance and Availability of the Draft EIS**

On September 17, 2004, in accordance with NRC regulations, the NRC staff published a Notice of Availability for the Draft EIS in the *Federal Register* (69 FR 56104-56105). In the notice, the NRC staff provided information on how to obtain a free copy of the Draft EIS. Additionally, copies of the Draft EIS were mailed to approximately 300 individuals including Federal, Tribal, State, and local government officials as well as members of the general public. An electronic version of the document and supporting information was made accessible through the NRC's project-specific web site (<http://www.nrc.gov/materials/fuel-cycle-fac/lesfacility.html>) and through the NRC's Agencywide Documents Access and Management System (ADAMS) database on the NRC's web site.

### **H.2.4 Public Comment Period**

In the publication of the Notice of Availability of the Draft EIS on September 17, 2004 (69 FR 56104-56105), the NRC staff stated that public comments on the Draft EIS should be submitted by November 6, 2004. On November 9, 2004, the NRC staff extended the public comment period to December 18, 2004, (69 FR 64983) in response to the closing of public access to the ADAMS database. A redacted version of the Draft EIS was made available to the public on the NRC's web site on December 20, 2004. The NRC staff extended the public comment period a second time to January 7, 2005, due to the continued suspension of public access to ADAMS (69 FR 76485; December 21, 2004). The 113-day period for public comment (i.e., from September 17, 2004, to January 7, 2005) exceeds the 45-day comment period required under the NRC regulations. By letter, facsimile, and e-mail, more than 390 individuals submitted more than 4,200 comments on the Draft EIS.

### **H.2.5 Public Comment Meeting**

On October 17, 2004, in Eunice, New Mexico, the NRC staff conducted a public meeting to receive oral comments on the Draft EIS from members of the public. The NRC staff selected the city of Eunice as the location for the meeting because it is approximately 8 kilometers (5 miles) from the proposed NEF site. The NRC staff advertised this meeting in the local and regional newspapers noted in section H.2.2 and issued a nationwide press release. The meeting received coverage in the Eunice-Hobbs, New Mexico, area media.

Approximately 60 people provided oral comments during the meeting. A certified court reporter recorded the oral comments and prepared a written transcript. The transcript is provided in Appendix J of this EIS. The transcript is part of the public record for the proposed project and was used in the development of the comment summaries contained in Appendix I.

## **H.3 Comments Received on the Draft EIS**

As discussed above, the NRC staff received both oral and written comments on the Draft EIS during the comment period. The NRC staff identified nearly 4,200 comments in the more than 390 letters, facsimiles, and e-mails received and from the oral comments.

### **H.3.1 Comment Review**

The NRC staff reviewed each comment letter and the transcript of the public meeting. Comments relating to similar issues and topics were grouped, as permitted by NRC regulations in 10 CFR § 51.91 and the Council on Environmental Quality's *National Environmental Policy Act* (NEPA) regulations at 40 CFR § 1503.4(b).

Appendix I presents the comments, or summaries of comments, along with the NRC staff's corresponding responses. When comments have resulted in a modification to the Draft EIS, those changes are noted in the staff's response. In cases for which the comments do not warrant a detailed response, the NRC staff provides an explanation as to why no further response is necessary. In all cases, the NRC staff sought to respond to all comments received during the public comment period.

Due to the volume of comments received, Appendix I provides summaries of all substantive comments received on the Draft EIS. The NRC staff prepared responses for each of the comments or for summaries of comments.

### **H.4 Major Issues and Topics of Concern**

The majority of the comments received specifically addressed the scope of the environmental reviews, analysis, and issues contained in the Draft EIS, including existing conditions, potential impacts, proposed mitigation, and the NRC's environmental review process. However, other comments addressed topics and issues that were not part of the review process for the proposed action. Those comments included questions about the NRC's safety evaluation of the proposed uranium enrichment facility, security concerns, general statements of support or opposition to nuclear power, observations regarding past NRC or LES activities, comments on the NRC regulatory process in general, and comments on policies of the NRC and other Government agencies.

#### **H.4.1 Comments on Out-of-Scope Topics**

Some commenters raised issues that were not related to the NRC staff's environmental review of LES's application to construct, operate, and decommission the proposed NEF. These issues are identified below. Because these issues did not directly relate to the environmental effects of the proposed action and were outside the scope of the NEPA review of the proposed action, the NRC staff did not prepare detailed responses to these comments.

##### **H.4.1.1 Public Hearing**

By law, a license to construct and operate the proposed NEF cannot be issued until completion of a hearing before the NRC's Atomic Safety and Licensing Board. Notice of the hearing, including guidance on certain aspects, was provided by the Commission in a notice published in the Federal Register on February 6, 2004. Thereafter, a Licensing Board comprised of three administrative judges was established to conduct the hearing. Three parties have been permitted to intervene in the proceeding: Nuclear Information and Resource Services and Public Citizen, the New Mexico Attorney General, and the New Mexico Environment Department. These parties have advanced contentions which are under consideration by the Licensing Board. From February 7 to 10, 2005, the Licensing Board conducted an evidentiary hearing on contentions relating to the Draft EIS. Based on the evidence presented, the Licensing Board issued a Partial Initial Decision on June 8, 2005, resolving the contentions in favor of the Staff and/or LES and upholding the adequacy of the Draft EIS. Additional evidentiary hearings are



expected to be conducted in order to consider other admitted contentions. In addition, the Licensing Board will conduct a mandatory hearing. Following completion of these hearings, the Licensing Board will issue a final decision as to whether the requested license should be issued. The evidence submitted during the hearing and the decisions of the Licensing Board are publically available except to the extent that they contain proprietary information.

#### **H.4.1.2 Public Participation in the NRC Environmental Review Process**

The NRC's environmental review begins with the receipt and docketing of an application, which is described above. Pursuant to 10 CFR § 51.60, an applicant for an NRC license to construct and operate a uranium enrichment facility must submit an environmental report to the NRC with the application. In support of its licensing decision for a uranium enrichment facility, the NRC is required under 10 CFR § 51.20(b)(10) to prepare an EIS, and pursuant to 10 CFR § 51.26, to issue an NOI to prepare the EIS, which is published in the *Federal Register*. [For this licensing action, the NRC staff published the NOI in the *Federal Register* (69 FR 5374) on February 4, 2004.] In the NOI, the NRC staff describes, among other things, the scoping process proposed for the requested action. While a public meeting on the scoping process is not required under 10 CFR § 51.27, should the NRC staff decide that such a meeting is appropriate, the NOI identifies its time and place or when the time and place will be announced. Pursuant to 10 CFR § 51.28, the NRC staff invites designated persons to participate in the scoping process, including any person who has requested to participate.

Once the NRC staff has completed the scoping process, defined the proposed action, and determined the scope of the EIS, the staff prepares a Draft EIS. Pursuant to 10 CFR § 51.74, the NRC staff then makes the Draft EIS publicly available, publishes notice of the Draft EIS's availability in the *Federal Register*, and requests public comment on it. As specified in 10 CFR § 51.73, the minimum public comment period is 45 days. The NRC staff also distributes copies of the Draft EIS to the persons or organizations identified in 10 CFR § 51.74 including the EPA, certain State and local agencies, Indian Tribes, and, upon written request and to the extent copies are available, to any other person. After receipt and consideration of public comments on the Draft EIS, the NRC staff prepares a Final EIS pursuant to 10 CFR § 51.90 and 51.91.

#### **H.4.1.3 NRC Safety Review Process**

The NRC staff evaluates a license application to determine whether an applicant has demonstrated compliance with the regulatory requirements which pertain to the type of license being sought. In the case of the present license application from LES to construct, operate, and decommission a uranium enrichment facility, the NRC staff evaluated the application against the Commission's regulations found at 10 CFR Part 70. The NRC staff's evaluation of an applicant's demonstration of compliance with the regulations is documented in an Safety Evaluation Report (SER). The NRC staff evaluates an applicant's attempt to demonstrate compliance with the regulations by reviewing the license application against the regulations. Requests by the NRC staff for additional information from the applicant are made publicly available. However, there is no requirement for a formal public comment resolution process for SERs.

#### **H.4.1.4 Redaction of Material in the NEPA Process**

The NRC has a duty to balance the need for public disclosure of relevant information with the need to protect sensitive information that could, in the wrong hands, pose a danger to the public. To address security concerns about information that could be used to undermine the safety of operations at the proposed NEF, the NRC redacted certain information from the Draft EIS. The NRC made a redacted

version of the Draft EIS available to the public in December 2004, replacing the original Draft EIS on its project-specific web site and in ADAMS. Thereafter, in the interest of providing full public disclosure, the unredacted version was placed on the web site and in ADAMS.

#### **H.4.1.5 Terrorism**

As stated in the Commission's Memorandum and Order CLI-02-24<sup>1</sup>, although the NRC has determined that issues of terrorism in the context of NEPA should not be addressed, the NRC is devoting substantial time and attention to terrorism-related matters. For example, as part of fulfilling its mission to protect public health and safety and common defense and security pursuant to the *Atomic Energy Act*, the NRC staff is conducting security assessments of commercial uses of radioactive material.

#### **H.4.1.6 Nonproliferation**

Nonproliferation issues, such as the downblending of Russian highly enriched uranium under the Megatons to Megawatts program, are issues of national U.S. policy. The proposed action in this EIS is limited to the construction, operation, and decommissioning of the proposed NEF. Thus, based on the no-action alternative provided in section 2.2.1 of this EIS, the impacts associated with the no-action alternative discussed in section 4.8 address the range of impacts associated with not constructing, operating, or decommissioning the proposed NEF.

### **H.5 Comment Summaries and Responses for Public Review**

Detailed responses to comments are given in Appendix I. The structure of Appendix I provides commenter identification, the comment summaries, and the NRC staff's responses. The comments were grouped into the following subject areas:

- I.1 General Opposition
- I.2 General Support
- I.3 NEPA Process
- I.4 Purpose and Need
- I.5 Scope of the Analysis
- I.6 Cooperating Agencies and Consultations
- I.7 Alternatives Considered but Eliminated
- I.8 Land Use
- I.9 Historic and Cultural Resources
- I.10 Climatology, Meteorology, and Air Quality
- I.11 Geology, Minerals, Soils, and Seismic Issues
- I.12 Water Resources
- I.13 Ecological Resources
- I.14 Socioeconomics
- I.15 Environmental Justice
- I.16 Noise
- I.17 Transportation
- I.18 Public and Occupational Health - Normal Operations

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<sup>1</sup> Commission Memorandum and Order CLI-02-24. "In the Matter of Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation)." December 18, 2002. ADAMS Accession Number ML023520349.

- I.19 Public and Occupational Health - Accidents
- I.20 Waste Management
- I.21 Decontamination and Decommissioning
- I.22 Cumulative Impacts
- I.23 Environmental Measurements and Monitoring Program
- I.24 Cost Benefit Analysis
- I.25 Terrorism, Security, and Nonproliferation
- I.26 Conflict of Interest
- I.27 Editorial Comments

## **H.6 Commenter and Comment Identification**

The NRC staff received several hundred comment documents from which the staff identified 396 individual commenters and over 4,200 comments. As discussed in the next section, the NRC staff assigned an identification number to each commenter which will aid the reader in locating comments submitted by individual commenters and the NRC staff's corresponding responses.

### **H.6.1 Commenter Identification**

Each commenter has been identified using either a commenter identification number, a Commenter Group letter, or both. This was carried out as follows:

- A three-digit commenter identification number was assigned to commenters who submitted unique comment documents.
- A group letter(s) was assigned to commenters who submitted comment documents that were duplicates of comment documents previously submitted. Each Commenter Group letter signifies a single comment document that was received by the NRC staff multiple times from different commenters. Commenter Group letters also were assigned to comment documents that contained multiple signatures.

Table H-1 provides an alphabetical listing of individuals who provided comments on the Draft EIS during the comment period. Please note that the NRC staff used "Illegible" for those whose signatures could not be deciphered. Also listed for each identified commenter is their affiliation (if provided), as well as their assigned three-digit commenter number and/or their assigned Commenter Group letter(s)<sup>2</sup>.

Table H-2 identifies the Commenter Groups and the commenters who belong to each group.

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<sup>2</sup>Twenty-seven sets of duplicate comment documents were identified.

**Table H-1 Commenter Identification**

<b>Commenter Name</b>	<b>Affiliation</b>	<b>Commenter No.</b>
Abousleman, Ron	City of Eunice, New Mexico	084; Group J
Adelberg, Kurt	Member of the Public	Group L
Adkins, Ami	Member of the Public	Group L
Allison, Donna and George	Members of the Public	Group L
Ambrose, Christian	Member of the Public	Group L
Amundsen, Olav	New Mexico Junior College	063
Anderson, Clifford	Member of the Public	Group L
Andrews, Sharon	Member of the Public	Group L
Armstrong II, W.E.	Member of the Public	Group H
Ash, Coila	Creative Commotion: Voices for Social Change	Group M
Aviles, Lauren Louise	Member of the Public	Group L
Aviles, Olivia Shannon	Member of the Public	Group L
Aviles, Thomas Sullivan	Member of the Public	Group L
Aviles, William Timothy	Member of the Public	Group L
Ayling, Allene	Member of the Public	Group L
Barnes, Brent	Member of the Public	Group L
Barnes, Melanie	Member of the Public	041
Barr, Phillip	Member of the Public	033
Battaglini, Ray	Hobbs Chamber of Commerce	006
Baumwald, Keith	Member of the Public	Group L
Bavel, Lana	City of Andrews, Texas	087
Baxter, Dean	Member of the Public	Group L
Bearden, Kathi	Lea County Economic Development Corporation Hobbs News-Sun	074; 051
Beatty, Diane	Member of the Public	Group L
Berggren, Nancy	Member of the Public	Group L
Berghofer, Richard	Member of the Public	Group L
Bernard, Elaine	Member of the Public	Group L
Bettis, Vera	Member of the Public	Group A
Betzen, Ray	City of Hobbs, New Mexico	081; Group B

Commenter Name	Affiliation	Commenter No.
Bingaman, Jeff	United States Senator for the State of New Mexico	067
Birnie, Patricia	Tucson Branch of the Women's International League for Peace and Freedom	343
Blumberg, Rena	Member of the Public	Group L
Bogle, Paula	Member of the Public	Group L
Borje, Christine	Member of the Public	Group L
Branch, Shawn	Member of the Public	Group L
Bratton, Donald E.	State of New Mexico House of Representatives	058
Braun, Marisa	Member of the Public	Group L
Breiding, Joan	Member of the Public	Group L
Brickle, Vickey	Member of the Public	Group L
Brock, Michael	Member of the Public	Group I
Brown, James	City of Eunice, New Mexico	066; Group H
Brown, Sharon	Member of the Public	Group L
Bulger, Paul	Member of the Public	Group L
Bundick, Mike	City of Eunice, New Mexico Chamber of Commerce	089; Group H
Buono, Alfred	Member of the Public	Group L
Burke, Bonnie Margay	Member of the Public	Group L
Burns, Deborah	Member of the Public	Group L
Butler, Kirk	Member of the Public	Group L
Caballero, Albert	Member of the Public	009
Calderon, Irene	Member of the Public	Group J
Calderon, Joe	City of Hobbs, New Mexico School Board Member	027
Callahan, Sharon	Member of the Public	Group L
Carmack, Linda C.	Member of the Public	Group I
Carmack, Reyce L.	Member of the Public	Group I
Carter, Bob	Lea County Community Improvement Corporation	069
Cheek, Charlene	Member of the Public	Group L
Cheney, Lee	Citizens Nuclear Information Center	031; Group M
Choi, Sabrina	Member of the Public	Group L

<b>Commenter Name</b>	<b>Affiliation</b>	<b>Commenter No.</b>
Claiborne, Claydean	City of Jal, New Mexico	018; Group E
Clark, Sharon	Economic Development Corporation of Lea County	Group J
Clarke, Margot	Sierra Club, Lone Star Chapter	356
CNIC	Citizens' Nuclear Information Center	036
Coake, Jennifer	Member of the Public	Group L
Coghlan, Jay	Nuclear Watch of New Mexico	Group M
Cohagn, Emmett	Member of the Public	Group I
Cole, David	Member of the Public	016
Connery, Brendan	Member of the Public	Group L
Connor, Thomas	Member of the Public	Group L
Cope, Johnny	State of New Mexico Transportation Commission	082
Craig, Clavin	Member of the Public	Group G
Cramer, Don	Member of the Public	Group L
Cutter, Sandra	Member of the Public	Group L
D., John	Member of the Public	Group I
Daley, Richard	Member of the Public	Group L
Davis, J.D.	Member of the Public	Group F
Davis, Jared	Member of the Public	Group L
DeClue, Anne	Member of the Public	Group L
DeLeon, Alice	Member of the Public	Group E
Demar, Ben	Member of the Public	Group L
Dempster, Brian	Member of the Public	Group L
Dill, Garu	College of the Southwest	091
Dill, Marilyn	Southwest Symphony in Hobbs, New Mexico	090
Dobryn, Renata	Member of the Public	Group L
Dolgener, Richard	Andrews County, Texas	086
Dorch, David A.	Member of the Public	Group L
Douglas, Ben	Member of the Public	Group L
Dressler, Pat	Member of the Public	Group L
Duesler Jr., John G.	Member of the Public	Group L
Dunham, Russ	Member of the Public	Group L
Eaves, Carol	Member of the Public	Group L

<b>Commenter Name</b>	<b>Affiliation</b>	<b>Commenter No.</b>
Edmonson, Scott	Member of the Public	Group L
Ehrhardt, Erin	Member of the Public	Group L
Enszer, Julie	Member of the Public	Group L
Ervin, John	Member of the Public	Group L
Espinosa, Mick	Member of the Public	Group G
Evilsizer, Susan	Member of the Public	Group L
Fareed, Nashid	Member of the Public	Group L
Feldman, Mark	Member of the Public	Group L
Ferguson, Rick	Jal Public Schools	076
Ferland, James	Louisiana Energy Services	073
Fisher, Amber	Member of the Public	Group B
Fisher, Karen	State of New Mexico Attorney General's Office	034
Ford, Corisa	Member of the Public	Group L
Foster, Ariele	Member of the Public	Group L
Fourmyle, Lisa	Member of the Public	Group L
Fox, Tannis	New Mexico Environment Department	042
Fredericks, Misha	Member of the Public	Group L
Frontz, Jeff	Member of the Public	Group L
Fulfer, Kim	Member of the Public	100
Fuller, Mary J.	Eunice, New Mexico City Council	020; Group H
Galbraith Jr., John F.	An Alternative Way	245
Gardner, Rose	Member of the Public	032
Gebhard, Sister Mary	Member of the Public	Group L
Gliva, Davis	Member of the Public	Group L
Gliva, Stephen	Member of the Public	Group L
Goff, Buster	Lea County Water Users Association	083
Goldstein, Sidney	Member of the Public	Group L
Good, John	Member of the Public	061; Group K
Gordon, Joal A.	Member of the Public	Group L
Gosule, Leonard	Member of the Public	Group L
Graves, Glen A.	Los Alamos Education Group	045
Greenwald, Janet	Citizens for Alternatives to Radioactive Dumping	295; Group M

Commenter Name	Affiliation	Commenter No.
Grove, John	Member of the Public	151
Grover, Ravi	Member of the Public	Group L
Habibi, Anoushka	Member of the Public	Group L
Hackler, Glen E. and Robert Zap	City of Andrews, Texas	002
Haislen, Tom	Member of the Public	Group G
Halsey, Chad	Member of the Public	Group L
Hancock, Don	Southwest Research and Information Center	358
Hande, G.	Member of the Public	Group L
Harlan, Harry	Member of the Public	Group I
Harper, Jerry	Eunice Fire Department	088
Harper, Jerry	Member of the Public	Group C
Harrison, Emily	Member of the Public	Group L
Hawkins, Karen R.	Member of the Public	Group K
Hawkins, J. Brad	Member of the Public	Group F
Hayes, Paula B.	Members of the Public	149
Henderson, Barbara	Member of the Public	Group L
Henry, Christopher	Member of the Public	Group L
Hernandez, Junior	Member of the Public	Group I
Herron, Rixey	Member of the Public	Group L
Hersh, Charles	Member of the Public	185
Hetrick, Nathan	Member of the Public	Group L
Hicks, Debra P.	Pettigrew and Associates, P.A.	025
Hobbs, A.I.	Member of the Public	Group I
Holladay, Kelly	New Mexico Junior College	029
Holler, Suzanne	Member of the Public	010
Holmberg, Dennis	Lea County	075
Hopper, Pam	Member of the Public	Group L
Howald, William	Member of the Public	Group L
Howard, Patricia	Member of the Public	Group L
Howard, William	Member of the Public	Group L
Hudson, Murray	Member of the Public	Group L
Hughes, Maurice	Member of the Public	Group I



<b>Commenter Name</b>	<b>Affiliation</b>	<b>Commenter No.</b>
Hunt, Jim	Member of the Public	Group L
Hutto, Janet	Member of the Public	Group L
Illegible - 1	Member of the Public	Group C
Illegible - 2	Member of the Public	Group C
Illegible - 3	Member of the Public	Group F
Illegible - 4	Member of the Public	Group H
Illegible - 5	Member of the Public	Group H
Illegible - 6	Member of the Public	Group H
Illegible - 7	Member of the Public	Group H
Illegible - 8	Member of the Public	Group H
Illegible - 9	Member of the Public	Group I
Illegible - 10	Member of the Public	Group K
Illegible - 11	Member of the Public	Group K
Illegible - 12	Member of the Public	Group N; O; P; R; T; U; V; W; X; Y
Illegible - 13	Member of the Public	Group N; O; P; R; T; U; V; W; X; Y
Illegible - 14	Member of the Public	Group N; O; P; R; T; U; V; W; X; Y
Illegible - 15	Member of the Public	Group N; O; P; R; T; U; V; W; X; Y
Illegible - 16	Member of the Public	Group N; O; P; R; T; U; V; W; X; Y
Illegible - 17	Member of the Public	Group N; O; Q; R; S; T; U; V; X; Y; Z
Illegible - 18	Member of the Public	Group N; O; P; Q; R; S; T; U; V; W; X; Y; Z; AA
Illegible - 19	Member of the Public	Group N; O; P; Q; R; S; T; U; V; W; X; Y; Z; AA
Illegible - 20	Member of the Public	Group N; O; P; Q; R; S; T; U; V; W; X; Y; Z; AA
Illegible - 21	Member of the Public	Group N; O; P; Q; R; S; T; U; V; W; X; Y; Z; AA

Commenter Name	Affiliation	Commenter No.
Illegible - 22	Member of the Public	001
Inmann, Pam O.	Western Governors' Association	103
Irizarry, Miguel A.	Member of the Public	Group L
Isaacson, Joel	Member of the Public	Group L
J., John	Member of the Public	Group H
James, Erin	Member of the Public	Group L
Jansky, Michael P.	United States Environmental Protection Agency	044
Jennings, Lewayne	Member of the Public	Group H
Johnson, Carol	Member of the Public	Group L
Johnson, Karen	Member of the Public	Group L
Johnson, Linda	Member of the Public	Group J
Johnson, Richard M.	Member of the Public	Group L
Johnston, Timothy	Member of the Public	Group L
Jordon, Jennifer L.	New Mexico Junior College	053
Kauffman, Patricia	Member of the Public	Group L
Kellum, Lucille	Member of the Public	Group I
Kendall, Mark	Member of the Public	Group L
Kendrick, Ben A.	Economic Development Corporation of Lea County	054
Kernan, Gay G.	New Mexico State Senate	062
Kesner, Guy	Zia Natural Gas Company	Group J
Khalsa, Mha Atma S	Member of the Public	Group L
Kimball, Toni	Member of the Public	Group L
Kirkpatrick, Lisa	State of New Mexico, Department of Game and Fish	038
Kirkpatrick, Mary	Member of the Public	Group L
Klosterman, Jim	Member of the Public	Group L
Knijnenburg, Michelle	Member of the Public	Group L
Koelle, Helena	Member of the Public	Group L
Kosuda, Constance	Member of the Public	Group L
Kovacs, Michael	Member of the Public	Group L
Kowatch, William E.	Member of the Public	Group L
Krich, R.M.	Louisiana Energy Services	048
Kuhlik, Barry	Member of the Public	Group L

Commenter Name	Affiliation	Commenter No.
L., Nelda	Member of the Public	Group E
Lacki, Isabella	Member of the Public	Group L
Laeng-Gilliatt, Sarah	Institute for Nonviolent Economics	Group M
Lara, Joe	United States Department of Interior, Bureau of Land Management	039
Leavell, Carroll H.	New Mexico State Senate	022
Lee, Minerva	Member of the Public	Group D
Levendos, Mary	Member of the Public	Group L
Levitt, Ellen	Member of the Public	Group L
Linn, Eva	Member of the Public	Group L
Linscott, Chuck	Member of the Public	Group L
Liu, C.	Member of the Public	Group L
Locke, Rhonda	Member of the Public	Group H
Long, Freddie	Member of the Public	Group L
Longacre, David	Member of the Public	Group L
Lorentzen, Robin	Member of the Public	Group L
Lowery, Alana	Member of the Public	Group L
Luster, Willie Lee	Member of the Public	Group I
Lyle, Janet	Member of the Public	Group I
Lynch, Marybeth	Member of the Public	Group L
Lynch, Robert S.	Member of the Public	Group L
Lyons, Jacob	Member of the Public	Group L
Lyons, Pat	State Land Office	085
Mackie, William B.	Western Governors' Association	035
Magee, Dan	Member of the Public	Group L
Malherek, Joseph and Michael Mariotte	Public Citizen/Nuclear Information and Resource Service	316
Manetas, Michael	Member of the Public	Group L
Mariotte, Michael and Wenonah Hauter	Public Citizen/Nuclear Information and Resource Service	037
Markham, Thomas	Member of the Public	Group L
Marshall, Laurel	Member of the Public	Group L
Mastro, Nick	Member of the Public	Group L
Mathews, Kristi	Member of the Public	Group I

Commenter Name	Affiliation	Commenter No.
Matlock, KL	Member of the Public	Group L
McCasland, Pat	Member of the Public	093; Group H
McCleery, Steve	New Mexico Junior College	026
McCormick, Randall D.	McCormick & Sons Tire & Service Center	109
McGrath, Justin	City of Carlsbad, New Mexico Chamber of Commerce	092
McMonagle, Patricia	Member of the Public	Group L
McMullen, Penelope	Loretto Community	Group M
Meiklejohn, Douglas	New Mexico Environmental Law Center	Group M
Mendoza, Susan	Member of the Public	Group H
Merenda, Michael	Member of the Public	Group L
Metreger, Tabitha	Member of the Public	Group L
Meyers, Natalie	Member of the Public	Group I
Miller, Danielle	Member of the Public	Group L
Milliner, Susan Emge	Member of the Public	Group L
Milstein, Noah	Member of the Public	Group L
Minault, Kent	Member of the Public	Group L
Misale, Judi	Member of the Public	Group L
Montanez, Alicia N.	Member of the Public	024
Moreno, Dorinda	Member of the Public	Group L
Morgenstern, Jack and Helga Freund	Members of the Public	Group L
Moyer, Jessica	Member of the Public	Group G
Mozer, Elizabeth	Member of the Public	Group L
Mullarkey, Mike	Member of the Public	Group L
Munn, Mary	Member of the Public	Group L
Murphy, Juliann	Member of the Public	Group L
Nidess, Rael	Member of the Public	Group L
Norsworthy, William	Member of the Public	Group L
Norwood Brian	City of Jal, New Mexico Chamber of Commerce	094
Ojeda, Hermilo	KLMA Radio 96.5 FM	059; Group J
O'Nan, Elizabeth M.S.	Member of the Public	Group L
Overby, James	Member of the Public	Group L

Commenter Name	Affiliation	Commenter No.
Owens, Robert	Member of the Public	Group G
P., Larry	Member of the Public	Group G
Paddock, Kathryn	Member of the Public	Group L
Palmer, Will	Member of the Public	095
Parker, G.	Member of the Public	Group H
Parker, Twilla	Member of the Public	Group I
Patience, J.	Member of the Public	Group L
Patnode, Martha	Member of the Public	Group L
Patrick, A.A.	Member of the Public	Group L
Patsis, John	Member of the Public	Group L
Patterson, Michael	Member of the Public	Group I
Pawlowski, Georgia	Member of the Public	Group L
Pearce, Stevan	United States Representative for the State of New Mexico	068
Pearlman, Tamara R.	Member of the Public	Group L
Perner, Mary	Member of the Public	Group L
Petersen, Donald F.	Los Alamos Education Group	046
Peterson, Ellen	Member of the Public	Group L
Peterson, Ron	Member of the Public	Group L
Picleul, Norman	Member of the Public	Group G
Pihl, Julie	Member of the Public	Group L
Pinkerton, Brian	Member of the Public	Group L
Pipes, Glenn	Member of the Public	065; Group H
Preston, Twilla	Member of the Public	096
R., Amelia	Member of the Public	Group I
R., Connie	Member of the Public	Group I
Ramirez, Hector	City of Hobbs, New Mexico	079
Ramos, Pedro	Member of the Public	Group I
Rattner, Ron	Member of the Public	Group L
Raunio, Diane	Member of the Public	Group L
Raunio, Larry	Member of the Public	Group L
Redd, Sherry	Member of the Public	Group L
Reed, Cyrus	Texas Center for Policy Studies	355

<b>Commenter Name</b>	<b>Affiliation</b>	<b>Commenter No.</b>
Reed, Mary S.	Member of the Public	Group L
Reese, Mary Celeste	Member of the Public	Group L
Representative	Carlsbad Chamber of Commerce, Convention & Visitors Bureau	060
Representative	Member of the Public	Group F
Richardson, Roberta	Member of the Public	Group L
Ritz, Theodore	Member of the Public	Group L
Rivera, Mario George	Member of the Public	Group L
Roane, Christine	Member of the Public	Group L
Robbins, Daniel	Member of the Public	Group L
Robertson, Justin	Member of the Public	Group G
Rodriguez, Robby	SouthWest Organizing Project	Group M
Rogers, Sandy	Member of the Public	104
Rolfes, Kevin	Member of the Public	Group L
Rosmarino, Nicole J.	Forest Guardians	043
Ross, Jeanne	Member of the Public	Group L
Rounds, Stan	City of Hobbs, New Mexico Municipal Schools	021
Runnels, Jack	Member of the Public	Group L
Rutkowski, Robert	Member of the Public	Group L
Saecker, Jan	Member of the Public	365
Salazar, Joe	Member of the Public	Group L
Salb, Karen	Member of the Public	Group D
Sands, Kris	Member of the Public	Group L
Santerre, Roger	Member of the Public	Group L
Schneider, Jeremy	Member of the Public	Group L
Schtick, Nici	Member of the Public	Group L
Schubert, Gary	Lea County Commission	078
Scurrah, James	Member of the Public	Group L
Serrano, Russell	Member of the Public	Group L
Silberman, Phil	Member of the Public	105
Simpson, Craig	Member of the Public	Group L
Simpson, Richard	Member of the Public	284
Smay, Betty	Member of the Public	Group L

Commenter Name	Affiliation	Commenter No.
Smith, Don	Member of the Public	Group L
Smith, Ken J.	Member of the Public	Group H
Smith, Mark E.	Member of the Public	Group L
Smith, Scott	City of Hobbs, New Mexico Chamber of Commerce	097
Spence, Janice	Member of the Public	071
Spencer, Stephen R.	U.S. Department of the Interior, Office of Environmental Policy and Compliance	040
SS	Member of the Public	Group L
St.Onge, Kathleen	Member of the Public	Group L
Stanley, Phyllis	Member of the Public	Group L
Starr, Paul J.	Noalmark Broadcasting Corporation	Group I
Stein, Paul	Member of the Public	Group L
Stephenson, Darrold	Lea County Commission	011; Group H
Stevens, Karen	City of Jal, New Mexico Chamber of Commerce	052; Group F
Stoner, Kyle	Member of the Public	Group L
Stratton, W.R.	Los Alamos Education Group	047
Strickland, Gene	Eunice High School	077
Strubhart, Kristi L.	Member of the Public	Group K
Stuckman, Scott	Member of the Public	Group L
Sumrall, Daniel	Member of the Public	Group L
Teague, Harry	Lea County Commission	005; Group D
Tenio, Gary	Member of the Public	Group L
Thompson, Delores	Member of the Public	Group I
Thompson, Fay	Member of the Public	Group H
Timmerman, Don and Roberta Thurstin	Members of the Public	Group L
Tjessem, Sandra	Member of the Public	Group L
Tromm, Curtis	Member of the Public	Group L
Trujillo, Toni Nolan	City of Eunice, New Mexico Public Schools	007
Tucker, Joan	Member of the Public	070
Turner, Kathleen Keading	Member of the Public	Group L
Turnoy, David	Member of the Public	Group L

Commenter Name	Affiliation	Commenter No.
Valdez, Chris	Member of the Public	Group H
Valey, Erika	Economic Development Corporation of Lea County	Group E
Wagner, Jim and Virginia	Member of the Public	Group L
Wahosi, Mare	Member of the Public	Group L
Walker, Betha	Member of the Public	Group G
Walker, Todd	Member of the Public	Group L
Wallace, DeeDee	Andrews Industrial Foundation, Inc.	028
Wallach, Robert	City of Hobbs, New Mexico	080
Warner, Darryl	Member of the Public	Group L
Weaver, Bill and Sue	Members of the Public	Group H
Weishaar, Jennifer M.	Member of the Public	Group L
White, Lee	Eunice Municipal Schools	099
White, Lynn	Member of the Public	098; Group I
White, Tanya	Eunice News	030; Group I
Williams, Paul	Member of the Public	Group L
Williams, Amy	Concerned Citizens for Nuclear Safety	Group M
Williams, Fletch	Member of the Public	102; Group N; O; P; Q; R; S; T; U; V; W; X; Y; Z; AA
Wilson, Pamela	Member of the Public	Group L
Winter, Warren	Member of the Public	Group L
Woodell, E.O.	Member of the Public	Group G
Worrell, Jennifer	Member of the Public	Group L
x x	Member of the Public	Group L
Y., Sarah	Member of the Public	Group A
Yribar, Rita	Member of the Public	Group L
Zap, Robert	City of Andrews, Texas	072
Zee-Six, M.	Member of the Public	Group L
Zinn, Roger	Member of the Public	Group L
Zoda, Al	Member of the Public	Group L



Table H-2 Duplicate Comment Document Groups

Group	Commenters			
Group A	Bettis, Vera	Y., Sarah		
Group B	Betzen, Ray	Fisher, Amber		
Group C	Harper, Jerry	Illegible - 1	Illegible - 2	
Group D	Lee, Minerva	Salb, Karen	Teague, Harry	
Group E	Claiborne, Claydean	DeLeon, Alice	L., Nelda	Valey, Erika
Group F	Davis, J.D. Hawkins, J. Brad	Illegible - 3 Representative	Stevens, Karen	
Group G	Craig, Clavin Espinosa, Mick Haislen, Tom	Moyer, Jessica Owens, Robert P., Larry	Picleul, Norman Robertson, Justin Walker, Betha	Woodell, E.O.
Group H	Armstrong II, W.E. Brown, James Bundick, Mike Fuller, Mary J. Illegible - 4 Illegible - 5	Illegible - 6 Illegible - 7 Illegible - 8 J., John Jennings, Lewayne Locke, Rhonda	McCasland, Pat Mendoza, Susan Parker, G. Pipes, Glenn Smith, Ken J. Stephenson, Darrold	Thompson, Fay Valdez, Chris Weaver, Bill and Sue
Group I	Brock, Michael Carmack, Linda C. Carmack, Reyce L. Cohagn, Emmett D., John Harlan, Harry	Hernandez, Junior Hobbs, A.I. Hughes, Maurice Illegible - 9 Kellum, Lucille Luster, Willie Lee	Lyle, Janet Mathews, Kristi Meyers, Natalie Parker, Twilla Patterson, Michael R., Amelia	R., Connie Ramos, Pedro Starr, Paul J. Thompson, Delores White, Lynn White, Tanya
Group J	Abousleman, Ron Calderon, Irene	Clark, Sharon Johnson, Linda	Kesner, Guy Ojeda, Hermilo	
Group K	Good, John Hawkins, Karen R.	Illegible - 10 Illegible - 11	Strubhart, Kristi L.	
Group L	Adelberg, Kurt Adkins, Ami Allison, Donna and George Ambrose, Christian Anderson, Clifford Andrews, Sharon Aviles, Lauren Louise Aviles, Olivia Shannon Aviles, Thomas Sullivan Aviles, William Timothy Ayling, Allene Barnes, Brent	Edmonson, Scott Ehrhardt, Erin Enszer, Julie Ervin, John Evilsizer, Susan Fareed, Nashid Feldman, Mark Ford, Corisa Foster, Ariele Fourmyle, Lisa Fredericks, Misha Frontz, Jeff Gebhard, Sister Mary Gliva, Davis Gliva, Stephen	Lacki, Isabella Levendos, Mary Levitt, Ellen Linn, Eva Linscott, Chuck Liu, C. Long, Freddie Longacre, David Lorentzen, Robin Lowery, Alana Lynch, Marybeth Lynch, Robert S. Lyons, Jacob Magee, Dan Manetas, Michael	Reed, Mary S. Reese, Mary Celeste Richardson, Roberta Ritz, Theodore Rivera, Mario George Roane, Christine Robbins, Daniel Rolfes, Kevin Ross, Jeanne Runnels, Jack Rutkowski, Robert Salazar, Joe Sands, Kris Santerre, Roger Schneider, Jeremy

Group	Commenters			
	Baumwald, Keith	Goldstein, Sidney	Markham, Thomas	Schtick, Nici
	Baxter, Dean	Gordon, Joel A.	Marshall, Laurel	Scurrah, James
	Beatty, Diane	Gosule, Leonard	Mastro, Nick	Serrano, Russell
	Berggren, Nancy	Grover, Ravi	Matlock, KL	Simpson, Craig
	Berghofer, Richard	Habibi, Anoushka	McMonagle, Patricia	Smay, Betty
	Bernard, Elaine	Halsey, Chad	Merenda, Michael	Smith, Don
	Blumberg, Rena	Hande, G.	Metreger, Tabitha	Smith, Mark E.
	Bogle, Paula	Harrison, Emily	Miller, Danielle	SS
	Borje, Christine	Henderson, Barbara	Milliner, Susan Emge	St.Onge, Kathleen
	Branch, Shawn	Henry, Christopher	Milstein, Noah	Stanley, Phyllis
	Braun, Marisa	Herron, Rixey	Minault, Kent	Stein, Paul
	Breiding, Joan	Hetrick, Nathan	Misale, Judi	Stoner, Kyle
	Brickle, Vickey	Hopper, Pam	Moreno, Dorinda	Stuckman, Scott
	Brown, Sharon	Howald, William	Morgenstern, Jack	Sumrall, Daniel
	Bulger, Paul	Howard, Patricia	and Helga Freund	Tenio, Gary
	Buono, Alfred	Howard, William	Mozer, Elizabeth	Timmerman, Don and
	Burke, Bonnie Margay	Hudson, Murray	Mullarkey, Mike	Roberta Thurstin
	Burns, Deborah	Hunt, Jim	Munn, Mary	Tjessem, Sandra
	Butler, Kirk	Hutto, Janet	Murphy, Juliann	Tromm, Curtis
	Callahan, Sharon	Irizarry, Miguel A.	Nidess, Rael	Turner, Kathleen
	Cheek, Charlene	Isaacson, Joel	Norsworthy, William	Keading
	Choi, Sabrina	James, Erin	O'Nan, Elizabeth	Turnoy, David
	Coake, Jennifer	Johnson, Carol	Overby, James	Wagner, Jim and
	Connery, Brendan	Johnson, Karen	Paddock, Kathryn	Virginia
	Connor, Thomas	Johnson, Richard M.	Patience, J.	Wahosi, Mare
	Cramer, Don	Johnston, Timothy	Patnode, Martha	Walker, Todd
	Cutter, Sandra	Kauffman, Patricia	Patrick, A.A.	Warner, Darryl
	Daley, Richard	Kendall, Mark	Patsis, John	Weishaar, Jennifer M.
	Davis, Jared	Khalsa, Mha Atma S	Pawlowski, Georgia	Williams, Paul
	DeClue, Anne	Kimball, Toni	Pearlman, Tamara R.	Wilson, Pamela
	Demar, Ben	Kirkpatrick, Mary	Perner, Mary	Winter, Warren
	Dempster, Brian	Klosterman, Jim	Peterson, Ellen	Worrell, Jennifer
	Dobryn, Renata	Knijnenburg,	Peterson, Ron	x x
	Dorch, David A.	Michelle	Pihl, Julie	Yribar, Rita
	Douglas, Ben	Koelle, Helena	Pinkerton, Brian	Zee-Six, M.
	Dressler, Pat	Kosuda, Constance	Rattner, Ron	Zinn, Roger
	Duesler Jr., John G.	Kovacs, Michael	Raunio, Diane	Zoda, Al
	Dunham, Russ	Kowatch, William E.	Raunio, Larry	
	Eaves, Carol	Kuhlik, Barry	Redd, Sherry	
Group M	Ash, Coila	Greenwald, Janet	Meiklejohn, Douglas	
	Cheney, Lee	Laeng-Gilliatt, Sarah	Rodriguez, Robby	
	Coghlan, Jay	McMullen, Penelope	Williams, Amy	
Group N	Illegible - 12	Illegible - 15	Illegible - 18	Illegible - 21
	Illegible - 13	Illegible - 16	Illegible - 19	Williams, Fletch
	Illegible - 14	Illegible - 17	Illegible - 20	

Group	Commenters			
Group O	Illegible - 12	Illegible - 15	Illegible - 18	Illegible - 21 Williams, Fletch
	Illegible - 13	Illegible - 16	Illegible - 19	
	Illegible - 14	Illegible - 17	Illegible - 20	
Group P	Illegible - 12	Illegible - 15	Illegible - 19	Williams, Fletch
	Illegible - 13	Illegible - 17	Illegible - 20	
	Illegible - 14	Illegible - 18	Illegible - 21	
Group Q	Illegible - 16	Illegible - 18	Illegible - 20	Williams, Fletch
	Illegible - 17	Illegible - 19	Illegible - 21	
Group R	Illegible - 12	Illegible - 15	Illegible - 18	Illegible - 21 Williams, Fletch
	Illegible - 13	Illegible - 16	Illegible - 19	
	Illegible - 14	Illegible - 17	Illegible - 20	
Group S	Illegible - 17	Illegible - 19	Illegible - 21	Williams, Fletch
	Illegible - 18	Illegible - 20		
Group T	Illegible - 12	Illegible - 15	Illegible - 18	Illegible - 21 Williams, Fletch
	Illegible - 13	Illegible - 16	Illegible - 19	
	Illegible - 14	Illegible - 17	Illegible - 20	
Group U	Illegible - 12	Illegible - 15	Illegible - 18	Illegible - 21 Williams, Fletch
	Illegible - 13	Illegible - 16	Illegible - 19	
	Illegible - 14	Illegible - 17	Illegible - 20	
Group V	Illegible - 12	Illegible - 15	Illegible - 18	Illegible - 21 Williams, Fletch
	Illegible - 13	Illegible - 16	Illegible - 19	
	Illegible - 14	Illegible - 17	Illegible - 20	
Group W	Illegible - 12	Illegible - 15	Illegible - 19	Williams, Fletch
	Illegible - 13	Illegible - 17	Illegible - 20	
	Illegible - 14	Illegible - 18	Illegible - 21	
Group X	Illegible - 12	Illegible - 15	Illegible - 18	Illegible - 21 Williams, Fletch
	Illegible - 13	Illegible - 16	Illegible - 19	
	Illegible - 14	Illegible - 17	Illegible - 20	
Group Y	Illegible - 12	Illegible - 15	Illegible - 18	Illegible - 21 Williams, Fletch
	Illegible - 13	Illegible - 16	Illegible - 19	
	Illegible - 14	Illegible - 17	Illegible - 20	
Group Z	Illegible - 17	Illegible - 19	Illegible - 21	Williams, Fletch
	Illegible - 18	Illegible - 20		
Group AA	Illegible - 17	Illegible - 19	Illegible - 21	Williams, Fletch
	Illegible - 18	Illegible - 20		

## H.6.2 Comment Identification

Comment documents received contained at least one comment on the Draft EIS. The NRC staff assigned each identified comment a two-part comment number (e.g., 000-1 or A-1). The first part of the comment number specifies the individual commenter or Commenter Group while the second part of the number is the number assigned to a specific comment made by the individual commenter or the Commenter Group.

These specific comment numbers increase sequentially with each subsequent identified comment. The two-part comment numbers assigned by the NRC staff are provided in Table H-3.

Table H-3 is arranged in order, first alphabetically by Group and then numerically by commenter. This table also lists the appropriate section in Appendix I where the summary of each comment appears with the corresponding NRC staff's response.

Appendix J contains the copies of the actual comment documentation received by the NRC staff. The documents are arranged in the following order: (1) Public Meeting transcript<sup>3</sup>; (2) Group letters; and (3) commenter identification numbers. Within each comment document, boxes are placed around individual comments with the corresponding comment numbers appearing in the margins.

As an actual example, Ms. Sandy Rogers submitted a comment letter on the Draft EIS. If one wanted to read the NRC staff's response to Ms. Rogers' comments, one would first find her name in Table H-1 to get her comment identification number (she is assigned commenter No. 104). Then, one would move to Table H-3 to find her comment numbers. There, one would find that the NRC staff identified three comments from Ms. Rogers' submittal (these are comments 104-1, 104-2, and 104-3). Also identified are the sections in Appendix I where these comments are summarized and responded to by the NRC staff. If one wanted to read Ms. Rogers' comments in the context of her original letter, one would find comment document 104 in Appendix J. Comment document 104 in Appendix J is a scanned image of Ms. Rogers' letter with brackets around each identified comment.

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<sup>3</sup>A notation (\*) is provided in Table H-3 if the comment was a verbal comment received at the public meeting.

Table H-3 Index by Comment Number

Comment No.	Appendix H Section	Commenter	Comment No.	Appendix H Section	Commenter
A-1	I.2	Group A	L-12	I.20.7	Group L
A-2	I.2		L-13	I.10.2	
B-1	I.2	Group B	L-14	I.19.1	
C-1	I.2	Group C	L-15	I.9	
C-2	I.2		L-16	I.3.4	
D-1	I.2	Group D	M-1	I.1; I.7.3	Group M
D-2	I.2		M-2	I.26	
E-1	I.2	Group E	M-3	I.26	
E-2	I.2		M-4	I.4	
F-1	I.2	Group F	M-5	I.7.3	
F-2	I.2		M-6	I.18.2	
G-1	I.2	Group G	M-7	I.27	
H-1	I.2	Group H	M-8	I.4	
H-2	I.2		M-9	I.4	
I-1	I.2	Group I	M-10	I.3.4	
I-2	I.2		M-11	I.5.2	
J-1	I.2	Group J	M-12	I.18.2	
J-2	I.2		M-13	I.11.1	
K-1	I.2	Group K	M-14	I.8.1	
K-2	I.2		M-15	I.12.5	
L-1	I.3.4	Group L	M-16	I.8.1	
L-2	I.7.2		M-17	I.12.3	
L-3	I.7.3		M-18	I.20.5	
L-4	I.7.3		M-19	I.20.2	
L-5	I.4		M-20	I.20.4	
L-6	I.14.4		M-21	I.7.2	
L-7	I.14.1		M-22	I.7.3	
L-8	I.15		M-23	I.7.3	
L-9	I.12.5		M-24	I.7.3	
L-10	I.12.2		M-25	I.20.2	
L-11	I.20.7		M-26	I.19.1	

Comment No.	Appendix H Section	Commenter
M-27	I.10.1	Group M
M-28	I.10.1	
M-29	I.7.3	
M-30	I.7.3	
M-31	I.13.2	
M-32	I.13.2	
M-33	I.14.3	
M-34	I.14.1	
M-35	I.15	
M-36	I.9	
M-37	I.10.2	
M-38	I.10.2	
M-39	I.11.1	
M-40	I.12.2	
M-41	I.12.3	
M-42	I.12.3	
M-43	I.14.1	
M-44	I.14.2	
M-45	I.12.5; I.27	
M-46	I.17.2	
M-47	I.20.2	
M-48	I.20.3	
M-49	I.18.1	
M-50	I.22	
M-51	I.23.1	
M-52	I.23.1	
M-53	I.23.2	
M-54	I.23.1	
M-55	I.23.1	
M-56	I.23.1	
M-57	I.21	
M-58	I.24.2	

Comment No.	Appendix H Section	Commenter
M-59	I.24.1	Group M
M-60	I.6	
M-61	I.6	
M-62	I.5.2	
M-63	I.5.2	
M-64	I.5.2	
M-65	I.8.2	
M-66	I.18.1	
M-67	I.18.2	
M-68	I.19.1	
M-69	I.19.2	
M-70	I.19.1	
M-71	I.19.3	
M-72	I.19.2	
N-1	I.7.3	Group N
O-1	I.20.5	Group O
P-1	I.20.2	Group P
Q-1	I.20.3	Group Q
Q-2	I.12.5	
R-1	I.20.2	Group R
S-1	I.4	Group S
T-1	I.10.3	Group T
T-2	I.10.3; I.21	
U-1	I.14.1	Group U
U-2	I.14.2	
V-1	I.23.2	Group V
W-1	I.6	Group W
X-1	I.7.3	Group X
Y-1	I.15	Group Y
Z-1	I.4	Group Z
AA-1	I.25	Group AA
001-4	I.2	Illegible - 22

Comment No.	Appendix H Section	Commenter
001-19	I.2	Illegible - 22
002-1	I.2	Glen E. Hackler and Robert Zap
002-2	I.2	
005-2 <sup>a</sup>	I.2	Harry Teague
005-3 <sup>a</sup>	I.2	
006-1	I.2	Ray Battaglini
007-1	I.2	Toni Nolan Trujillo
007-2 <sup>a</sup>	I.2	
007-3 <sup>a</sup>	I.2	
007-4 <sup>a</sup>	I.2	
007-5	I.2	
007-6	I.2	
007-7	I.2	
009-1	I.2	Albert Caballero
010-1	I.2	Suzanne Holler
010-2 <sup>a</sup>	I.2	
010-3	I.2	
011-2 <sup>a</sup>	I.2	Darold Stephenson
011-3 <sup>a</sup>	I.2	
016-1	I.2	David Cole
016-2	I.2	
018-2 <sup>a</sup>	I.2	Claydean Claiborne
018-3 <sup>a</sup>	I.2	
020-2 <sup>a</sup>	I.2	Mary J. Fuller
021-1	I.2	Stan Rounds
021-2 <sup>a</sup>	I.2	
022-1	I.2	Carroll H. Leavell
022-2 <sup>a</sup>	I.2	
022-3 <sup>a</sup>	I.2	
022-4	I.2	
024-1	I.2	Alicia N. Montanez
025-1	I.2	Debra P. Hicks

Comment No.	Appendix H Section	Commenter
025-2 <sup>a</sup>	I.2	Debra P. Hicks
025-3 <sup>a</sup>	I.3.6	
025-4 <sup>a</sup>	I.2	
026-1	I.2	Steve McCleery
026-2 <sup>a</sup>	I.2	
026-3 <sup>a</sup>	I.14.2	
026-4	I.2	
026-5 <sup>a</sup>	I.2	
027-1	I.2	Joe Calderon
027-2 <sup>a</sup>	I.2	
027-3 <sup>a</sup>	I.2	
027-4	I.2	
028-1	I.2	DeeDee Wallace
028-2 <sup>a</sup>	I.2	
028-3 <sup>a</sup>	I.2	
028-4 <sup>a</sup>	I.2	
029-1	I.2	Kelly Holladay
029-2 <sup>a</sup>	I.2	
029-3 <sup>a</sup>	I.20.3	
029-4	I.2	
029-5 <sup>a</sup>	I.12.2	
029-6	I.20.3	
030-2	I.2	Tanya White
031-1	I.5.3	Lee Cheney
031-2	I.12.3	
031-3	I.20.4	
031-4 <sup>a</sup>	I.3.4	
031-5 <sup>a</sup>	I.3.4	
031-6	I.1	
031-7	I.24.1	
031-8	I.24.1	
031-9	I.24.1	

Comment No.	Appendix H Section	Commenter
031-10	I.5.1	Lee Cheney
032-1	I.19.2	Rose Gardner
032-2	I.25	
032-3	I.20.4	
032-4	I.12.5	
032-5	I.22	
032-6 <sup>a</sup>	I.25	
032-7 <sup>a</sup>	I.20.4	
032-8 <sup>a</sup>	I.3.4	
032-9 <sup>a</sup>	I.20.4	
032-10 <sup>a</sup>	I.12.5	
032-11 <sup>a</sup>	I.22	
032-12 <sup>a</sup>	I.18.2	
032-13 <sup>a</sup>	I.1	
032-14	I.10.2	
032-15	I.12.5	
032-16	I.20.4	
032-17	I.10.2	
032-18	I.1	
032-19	I.25	
032-20	I.7.1	
032-21	I.19.2	
032-22	I.5.3	
032-23	I.20.1	
032-24	I.26	
032-25	I.5.1	
032-26	I.14.1	
032-27	I.12.1	
032-28	I.20.2	
032-29	I.20.2	
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032-32	I.5.3	
032-33	I.20.2	
032-34	I.12.5	
032-35	I.14.3	
032-36	I.14.3	
032-37	I.15	
032-38	I.10.2	
032-39	I.12.5	
032-40	I.19.2	
032-41	I.19.2	
032-42	I.17.4	
032-43	I.18.2	
032-44	I.19.3	
032-45	I.19.2	
032-46	I.10.2; I.20.2	
032-47	I.18.2	
032-48	I.20.1	
032-49 <sup>a</sup>	I.5.1	
032-50	I.1	
033-1	I.18.1	Phillip Barr
033-2	I.10.2	
033-3	I.12.3	
033-4	I.5.3	
033-5	I.1	
033-6	I.10.2	
033-7	I.18.2	
034-1	I.3.1	Karen Fisher
034-2	I.7.3	
034-3	I.12.2	
034-4	I.12.2	



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034-7	I.6	
034-8	I.20.7	
034-9	I.27	
034-10	I.27	
034-11	I.27	
034-12	I.27	
034-13	I.20.4	
034-14	I.27	
034-15	I.10.2	
034-16	I.10.2	
034-17	I.27	
034-18	I.11.1	
034-19	I.11.1	
034-20	I.11.1	
034-21	I.12.5	
034-22	I.12.3	
034-23	I.12.3	
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034-25	I.12.3	
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034-27	I.13.1	
034-28	I.13.4	
034-29	I.17.1	
034-30	I.18.2	
034-31	I.15	
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034-39	I.17.1	
034-40	I.17.4	
034-41	I.17.2	
034-42	I.17.4	
034-43	I.17.1	
034-44	I.17.4	
034-45	I.17.1	
034-46	I.18.1	
034-47	I.19.1	
034-48	I.27	
034-49	I.20.9	
034-50	I.10.2	
034-51	I.14.1	
034-52	I.15	
034-53	I.16	
034-54	I.22	
034-55	I.12.5	
034-56	I.27	
034-57	I.15	
034-58	I.8.2	
034-59	I.13.4	
034-60	I.27	
034-61	I.27	
034-62	I.23.1	
034-63	I.23.1	
034-64	I.27	
034-65	I.23.1	
034-66	I.27	
034-67	I.23.2	
034-68	I.23.2	

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035-1	I.6	William B. Mackie
036-1	I.7.3	Citizens' Nuclear Information Center
036-2	I.7.3	
036-3	I.15	
036-4	I.14.1	
036-5	I.14.2	
036-6	I.20.4	
036-7	I.20.2	
036-8	I.6	
036-9	I.23.1	
036-10	I.21	
036-11	I.23.2	
036-12	I.23.1	
037-1	I.3.1; I.3.2	Michael Mariotte and Wenonah Hauter
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038-1	I.13.4	Lisa Kirkpatrick
038-2	I.13.4	
038-3	I.13.2	
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038-6	I.27	
038-7	I.13.3	
038-8	I.13.4	
038-9	I.4	
038-10	I.13.2	
039-1	I.11.2	Joe Lara
040-1	I.13.4	Stephen R. Spencer
040-2	I.13.4	
040-3	I.13.4	
040-4	I.10.2	

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041-2	I.23.1	
041-3	I.23.2	
041-4	I.14.2	
041-5	I.3.2; I.3.3	
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042-2	I.12.4	
042-3	I.12.3	
042-4	I.12.2	
042-5	I.12.2	
042-6	I.12.5	
042-7	I.11.1	
042-8	I.11.1; I.12.2	
042-9	I.11.1	
042-10	I.12.2	
042-11	I.12.3	
042-12	I.12.2	
042-13	I.12.2	
042-14	I.12.2	
042-15	I.12.2	
042-16	I.12.2	
042-17	I.12.2	
042-18	I.12.3	
042-19	I.12.2	
042-20	I.12.4	
042-21	I.12.2; I.12.4	
042-22	I.12.2	
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042-28	I.12.3	
042-29	I.12.1	
042-30	I.12.1	
042-31	I.12.1	
042-32	I.10.2	
042-33	I.10.2	
042-34	I.10.2	
042-35	I.10.3	
042-36	I.10.3	
042-37	I.19.1	
042-38	I.19.2	
042-39	I.27	
042-40	I.27	
042-41	I.12.3	
042-42	I.11.2	
042-43	I.20.3	
042-44	I.23.1	
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042-46	I.19.1	
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043-1	I.13.3	Nicole J. Rosmarino
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043-7	I.13.1; I.13.3	
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044-1	I.6	Michael P. Jansky
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045-1	I.2	Glen A. Graves
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046-1	I.2	Donald F. Petersen
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046-2 <sup>a</sup>	I.2	

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046-4 <sup>a</sup>	I.25	
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046-6	I.2	
046-7	I.25	
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047-1	I.2	W.R. Stratton
047-2	I.20.3	
047-3	I.2	
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047-5	I.2	
047-6	I.2	
047-7	I.5.1	
047-8	I.20.8	
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048-2	I.27	
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048-4	I.20.3	
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048-7	I.8.1	
048-8	I.27	
048-9	I.5.6	
048-10	I.5.6	
048-11	I.27	
048-12	I.27	
048-13	I.13.4	
048-14	I.12.3	
048-15	I.27	
048-16	I.5.5	
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048-23	I.27		048-55	I.27	
048-24	I.27		048-56	I.27	
048-25	I.27		048-57	I.27	
048-26	I.27		048-58	I.20.3	
048-27	I.27		048-59	I.21	
048-28	I.27		048-60	I.27	
048-29	I.27		048-61	I.27	
048-30	I.27		048-62	I.27	
048-31	I.27		048-63	I.27	
048-32	I.13.1		048-64	I.27	
048-33	I.27		048-65	I.12.3	
048-34	I.27		048-66	I.27	
048-35	I.15		048-67	I.27	
048-36	I.18.1		048-68	I.27	
048-37	I.27		048-69	I.27	
048-38	I.27		048-70	I.27	
048-39	I.27		048-71	I.27	
048-40	I.8.1		048-72	I.27	
048-41	I.27		048-73	I.27	
048-42	I.12.3		048-74	I.27	
048-43	I.12.3		048-75	I.27	
048-44	I.12.2		048-76	I.27	
048-45	I.27		048-77	I.27	
048-46	I.12.3		048-78	I.27	
048-47	I.12.2		048-79	I.23.2	
048-48	I.12.3		048-80	I.27	
048-49	I.13.4		048-81	I.27	
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048-97	I.27	
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048-99	I.15	
051-1	I.2	Kathi Bearden
051-2	I.2	
052-2 <sup>a</sup>	I.2	Karen Stevens
053-1	I.2	Jennifer L. Jordon
053-2 <sup>a</sup>	I.2	
054-1	I.2	Ben A. Kendrick
054-2 <sup>a</sup>	I.2	
054-3 <sup>a</sup>	I.2	
058-1	I.2	Donald E. Bratton
058-2	I.2	
059-2 <sup>a</sup>	I.2	Hermilo Ojeda
060-1	I.2	Representative
061-2 <sup>a</sup>	I.2	John Good
061-3 <sup>a</sup>	I.2	
062-1	I.2	Gay G. Kernan
062-2 <sup>a</sup>	I.2	

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062-4 <sup>a</sup>	I.2	
062-5 <sup>a</sup>	I.2	
062-6	I.2	
063-1	I.2	Olav Amundsen
065-2 <sup>a</sup>	I.2	Glenn Pipes
065-3 <sup>a</sup>	I.2	
066-1 <sup>a</sup>	I.2	James Brown
066-2 <sup>a</sup>	I.2	
066-3 <sup>a</sup>	I.2	
067-1 <sup>a</sup>	I.2	Jeff Bingaman
067-2 <sup>a</sup>	I.20.4	
067-3 <sup>a</sup>	I.20.5	
068-1 <sup>a</sup>	I.2	Stevan Pearce
068-2 <sup>a</sup>	I.2	
069-1 <sup>a</sup>	I.2	Bob Carter
069-2 <sup>a</sup>	I.2	
070-1 <sup>a</sup>	I.2	Joan Tucker
070-2 <sup>a</sup>	I.2	
071-1 <sup>a</sup>	I.2	Janice Spence
072-1 <sup>a</sup>	I.2	Robert Zap
072-2 <sup>a</sup>	I.2	
072-3 <sup>a</sup>	I.12.2	
073-1 <sup>a</sup>	I.2	James Ferland
073-2 <sup>a</sup>	I.2	
073-3 <sup>a</sup>	I.2	
074-1 <sup>a</sup>	I.2	Kathi Bearden
075-1 <sup>a</sup>	I.12.5	Dennis Holmberg
076-1 <sup>a</sup>	I.2	Rick Ferguson
077-1 <sup>a</sup>	I.2	Gene Strickland
078-1 <sup>a</sup>	I.2	Gary Schubert
079-1 <sup>a</sup>	I.2	Hector Ramirez

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080-1 <sup>a</sup>	I.2	Robert Wallach
080-2 <sup>a</sup>	I.2	
080-3 <sup>a</sup>	I.2	
081-1 <sup>a</sup>	I.2	Ray Betzen
082-1 <sup>a</sup>	I.2	Johnny Cope
082-2 <sup>a</sup>	I.2	
082-3 <sup>a</sup>	I.17.1	
082-4 <sup>a</sup>	I.2	
083-1 <sup>a</sup>	I.12.5	Buster Goff
084-1 <sup>a</sup>	I.2	Ron Abousleman
084-2 <sup>a</sup>	I.2	
084-3 <sup>a</sup>	I.2	
085-1 <sup>a</sup>	I.2	Pat Lyons
085-2 <sup>a</sup>	I.2	
085-3 <sup>a</sup>	I.2	
086-1 <sup>a</sup>	I.2	Richard Dolgener
086-2 <sup>a</sup>	I.2	
087-1 <sup>a</sup>	I.2	Lana Bavel
088-1 <sup>a</sup>	I.2	Jerry Harper
088-2 <sup>a</sup>	I.2	
089-1 <sup>a</sup>	I.2	Mike Bundick
089-2 <sup>a</sup>	I.2	
090-1 <sup>a</sup>	I.2	Marilyn Dill
090-2 <sup>a</sup>	I.2	
090-3 <sup>a</sup>	I.2	
091-1 <sup>a</sup>	I.2	Gary Dill
091-2 <sup>a</sup>	I.2	
092-1 <sup>a</sup>	I.2	Justin McGrath
093-1 <sup>a</sup>	I.2	Pat McCasland
093-2 <sup>a</sup>	I.12.1	

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093-4 <sup>a</sup>	I.3.1	
093-5 <sup>a</sup>	I.19.1	
094-1 <sup>a</sup>	I.2	Brian Norwood
095-1 <sup>a</sup>	I.2	Will Palmer
095-2 <sup>a</sup>	I.2	
096-1 <sup>a</sup>	I.2	Twillia Preston
096-2 <sup>a</sup>	I.2	
097-1 <sup>a</sup>	I.2	Scott Smith
097-2 <sup>a</sup>	I.2	
097-3 <sup>a</sup>	I.2	
098-1 <sup>a</sup>	I.2	Lynn White
098-2 <sup>a</sup>	I.2	
099-1 <sup>a</sup>	I.2	Lee White
100-1 <sup>a</sup>	I.2	Kim Fulfer
100-2 <sup>a</sup>	I.2	
102-1	I.19.2	Fletch Williams
102-2	I.18.2	
102-3	I.17.3	
103-1	I.5.3	Pam O. Inmann
103-2	I.5.3	
103-3	I.4	
103-4	I.4	
103-5	I.4	
103-6	I.20.5	
103-7	I.5.3; I.21; I.24.1	
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103-14	I.20.4	
103-15	I.20.2; I.20.4	
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103-17	I.27	
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103-19	I.10.2	
103-20	I.17.1	
103-21	I.24.1	
103-22	I.18.2	
103-23	I.17.4	
103-24	I.19.1	
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103-26	I.24.1	
104-1	I.20.2; I.20.4	Sandy Rogers
104-2	I.17.3; I.20.1	
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105-1	I.17.3	Phil Silberman
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105-6	I.5.1	
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105-8	I.1	
109-1	I.2	Randall D. McCormick
149-1	I.2	Paula B. Hayes & Family
149-2	I.2	
151-1	I.17.2	John Grove
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151-3	I.3.2	
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151-7	I.8.1; I.12.5	
151-8	I.6	
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151-10	I.3.2	
185-1	I.5.4	Charles Hersh
245-1	I.1	John F. Galbraith Jr.
245-2	I.1	
284-1	I.26	Richard Simpson
284-2	I.26	
284-3	I.7.1	
284-4	I.15	
284-5	I.5.1	
284-6	I.3.5	
284-7	I.20.7	
284-8	I.20.4	
284-9	I.22	
284-10	I.10.1	
284-11	I.12.2	
284-12	I.18.2	
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284-14	I.1	
295-1	I.3.5	Janet Greenwald
316-1	I.3.5	Joseph Malherek and Michael Mariotte
316-2	I.22	
316-3	I.3.4	
316-4	I.7.1	
316-5	I.5.1	
316-6	I.7.2; I.7.3	
316-7	I.7.2	

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316-9	I.22	
316-10	I.24.3	
316-11	I.25	
316-12	I.7.1; I.25	
316-13	I.4	
316-14	I.14.4	
316-15	I.14.1	
316-16	I.15	
316-17	I.15	
316-18	I.22	
316-19	I.12.5	
316-20	I.12.5	
316-21	I.12.2	
316-22	I.12.2; I.12.3	
316-23	I.12.2	
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316-25	I.12.2	
316-26	I.20.7	
316-27	I.20.4	
316-28	I.20.4	
316-29	I.20.7	
316-30	I.20.3	
316-31	I.20.7	
316-32	I.20.5	
316-33	I.20.6	
316-34	I.24.1	
316-35	I.20.4; I.20.8	
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316-37	I.20.4	
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316-41	I.9	
316-42	I.8.2	
316-43	I.11.1	
316-44	I.10.2	
316-45	I.22	
316-46	I.10.2	
316-47	I.5.5	
316-48	I.5.1	
316-49	I.21	
316-50	I.13.2; I.13.3	
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316-52	I.13.3	
316-53	I.19.1	
316-54	I.19.1	
316-55	I.20.3	
316-56	I.27	
316-57	I.1	
343-1	I.1	Patricia Birnie
343-2	I.4	
343-3	I.7.3	
343-4	I.12.5	
343-5	I.10.2; I.12.3; I.20.7; I.20.8;	
343-6	I.19.1	
343-7	I.14.4	
343-8	I.9	
343-9	I.3.6	
355-1	I.10.1	Cyrus Reed
355-2	I.12.2	
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356-1	I.1	Margot Clarke
356-2	I.4	
356-3	I.3.5	
356-4	I.20.4; I.20.7	
356-5	I.12.2; I.12.3	
356-6	I.7.3	
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356-9	I.3.4	
358-1	I.3.5	Donald Hancock
358-2	I.3.1; I.3.5	
358-3	I.3.1	
358-4	I.3.5	
358-5	I.3.5	
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358-7	I.4	
358-8	I.5.3; I.7.1	
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358-16	I.20.3; I.20.5; I.20.6	
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358-20	I.12.5; I.27	

Comment No.	Appendix H Section	Commenter
358-21	I.12.5	Donald Hancock
358-22	I.12.5	
358-23	I.12.1	
358-24	I.12.5	
358-25	I.24.1	
358-26	I.24.1	
358-27	I.24.1	
358-28	I.3.1; I.3.5	
358-29	I.3.5	
358-30	I.17.4	
358-31	I.19.2	
358-32	I.19.1	
358-33	I.22	
358-34	I.1; I.4; I.14.4	
358-35	I.3.2	
358-36	I.3.1; I.3.2	
358-37	I.3.5	
358-38	I.3.1	
358-39	I.3.1	
365-1	I.9	Jan Saecker
365-2	I.11.2	
365-3	I.7.1	
365-4	I.12.5	
365-5	I.14.4	
365-6	I.10.2	
365-7	I.19.2	
365-8	I.3.5	
365-9	I.1	

\* Verbal comment received during the Louisiana Energy Services Public Meeting held on October 14, 2004.

**APPENDIX I**  
**PUBLIC COMMENTS ON THE DRAFT ENVIRONMENTAL**  
**IMPACT STATEMENT AND NRC RESPONSES**

**I.1 General Opposition**

**Comment: M-1; 031-6**

Several commenters referred to environmental impacts associated with other U.S. enrichment facilities, and one commenter specifically referred to the Paducah Gaseous Diffusion Plant. The commenter indicated that several cancer-causing and other contaminants were found in the environment and wildlife around the Paducah plant (such as polychlorinated biphenyls, dioxin, plutonium, neptunium, trichloroethylene, technetium, lead, and other heavy metals). Several commenters stated that many potential effects of the proposed National Enrichment Facility (NEF) cannot be estimated in an Environmental Impact Statement (EIS) and recommended that the U.S. Nuclear Regulatory Commission (NRC) pursue the no-action alternative.

*Response: As discussed in sections 2.1.2 and 2.2.2.3 of the draft EIS, the proposed NEF would use different technologies for enriching uranium from the Portsmouth and Paducah Gaseous Diffusion Plants. The proposed NEF would use centrifuges, while the Paducah and Portsmouth plants use a gaseous diffusion process. The Paducah plant produced enriched uranium for several decades and supported both the commercial nuclear power industry and nuclear weapons production. The proposed NEF operations would not require the types or quantities of chemicals needed at Paducah. Polychlorinated biphenyls, dioxin and trichloroethylene, and a number of heavy metals (cesium, beryllium, cadmium, copper, lead, nickel, silver, zinc, and vanadium) are not proposed for use at the proposed NEF. The proposed NEF would comply with NRC, State, and U.S. Environmental Protection Agency (EPA) standards for the protection of health and safety and the environment.*

*The NRC staff believes the Draft EIS presents a complete analysis of the impacts of the proposed action. As discussed in section 2.2.1 of the Draft EIS, the no-action alternative would occur if the NRC concludes based on its safety review that a license for the proposed NEF should not be issued. The impacts of the no-action alternative are discussed in section 4.8 of the EIS.*

**Comment: 032-13; 032-18; 043-6; 245-1; 245-2**

Several commenters expressed opposition to the proposed NEF and requested that the NRC deny the license application. Commenters also expressed opposition to the nuclear power industry.

*Response: The NRC staff recognizes that some commenters are opposed to the proposed NEF and to nuclear power. These comments are beyond the scope of the EIS.*

**Comment: 032-50**

A commenter expressed frustration with the residents and other individuals who support the proposed NEF.

*Response: The credentials or credibility of other commenters is outside the scope of the EIS.*

**Comment: 033-5**

A commenter stated that Louisiana Energy Services (LES) and local government officials have failed to provide full disclosure on the effects of the proposed NEF.

*Response: LES has provided the following documents for NRC staff review: a Safety Analysis Report, an Environmental Report, an Emergency Plan, and an Integrated Safety Analysis Summary. The NRC recognizes that while all of these documents are not publicly available, the staff is evaluating them as part of the safety and environmental reviews and made publicly available all information that does not represent a security or business proprietary concern. LES and local government officials participated in public meetings held as part of the EIS development process. The Draft EIS analyzes impacts and actions considered to be within the scope of the proposed action as described in section 1.2. The NRC staff revised the EIS to incorporate information provided in public comments on the Draft EIS, as well as information provided during the hearings, and updated information about the proposed NEF.*

**Comment: 105-8; 358-34; 365-9**

Commenters stated that the proposed NEF is too dangerous to be constructed and that the EIS should conclude the same.

*Response: The proposed NEF would only be licensed if the NRC finds that public health and safety and the environment would be adequately protected. The conclusions regarding environmental impacts provided in section 2.4 of the Draft EIS have not changed. Safety issues that are not within the scope of the EIS are addressed in the NRC's Safety Evaluation Report (SER).*

**Comment: 284-14; 316-57; 343-1; 356-1**

Commenters provided general statements that the Draft EIS is inadequate and requested that the inadequacies be addressed before continuing the licensing process.

*Response: Consistent with the requirements of the National Environmental Policy Act of 1969 (NEPA), the NRC staff evaluated and compared the environmental impacts of the proposed action and its alternatives. The Draft EIS described the proposed action (Chapters 1 and 2), the purpose and need for the action (Chapter 1), alternatives to the proposed action (Chapter 2), potentially affected environment (Chapter 3), the direct and indirect environmental impacts of the proposed action (including depleted uranium hexafluoride [DUF<sub>6</sub>] waste disposition) and proposed mitigation (Chapters 4 and 5), and the cumulative impacts of the proposed action (Chapter 4). The analysis contained in the Draft EIS fully considered the environmental impacts of the proposed action and was consistent with the types of analyses performed in other NEPA documents prepared by the NRC. The NRC staff reviewed the Draft EIS and concluded that the environmental analysis adequately met NEPA requirements in the NRC regulations. The Commission will not make a final decision on whether to grant a license for the proposed NEF until after the NRC conducts a public hearing.*

**I.2 General Support**

**Comment: A-1; A-2; B-1; C-1; C-2; D-1; D-2; E-1; E-2; F-1; F-2; G-1; H-1; H-2; I-1; I-2; J-1; J-2; K-1; K-2; 001-4; 001-19; 002-1; 002-2; 005-2; 005-3; 006-1; 007-1; 007-2; 007-3; 007-4; 007-5; 007-6; 007-7; 009-1; 010-1; 010-2; 010-3; 011-2; 011-3; 016-1; 016-2; 018-2; 018-3; 020-2; 021-1; 021-2; 022-1; 022-2; 022-3; 022-4; 024-1; 025-1; 025-2; 025-4; 026-1; 026-2; 026-4; 026-5; 027-1; 027-2; 027-3; 027-4; 028-1; 028-2; 028-3; 028-4; 029-1; 029-2; 029-4; 030-2; 045-1; 046-1; 046-2; 046-3; 046-5; 046-6; 047-1; 047-3; 047-4; 047-5; 047-6; 051-1; 051-2; 052-2; 053-1; 053-2; 054-1; 054-2; 054-3; 058-1; 058-2; 059-2; 060-1; 061-2; 061-3; 062-1; 062-2; 062-3; 062-4; 062-5; 062-6; 063-1; 065-2; 065-3; 066-1; 066-2; 066-3; 067-1; 068-1; 068-2; 069-1; 069-2; 070-1; 070-2; 071-1; 072-1; 072-2; 073-1; 073-2; 073-3; 074-1; 076-1; 077-1; 078-1; 079-1; 079-2; 079-3; 080-1; 080-2; 080-3; 081-1; 082-1; 082-2; 082-4; 084-1; 084-2; 084-3; 085-1; 085-2; 085-3; 086-1; 086-2; 087-1;**

088-1; 088-2; 089-1; 089-2; 090-1; 090-2; 090-3; 091-1; 091-2; 092-1; 093-1; 094-1; 095-1; 095-2; 096-1; 096-2; 097-1; 097-2; 097-3; 098-1; 098-2; 099-1; 100-1; 100-2; 109-1; 149-1; 149-2

Commenters made general statements of support for the proposed NEF. Some reasons provided for the support include: diversification and improvement of the local economy, introduction of high-technology in southeastern New Mexico, the level of safety and low environmental impacts, quality of life improvements, proposed LES partnerships with local community initiatives (such as education), and improvement in the reliability of domestic energy supply and security. Many commenters encouraged the NRC staff to approve the license application.

*Response: The NRC developed this EIS in accordance with its NEPA-implementing regulations in 10 Code of Federal Regulations (CFR) Part 51. The NRC would only approve the license application after the EIS and SER are complete and it has concluded that the construction, operation, and decommissioning of the proposed NEF would meet its environmental and safety requirements.*

### **I.3 NEPA Process**

#### **I.3.1 Document Availability**

**Comment: 034-1**

A commenter asked if the Draft EIS is available in Spanish.

*Response: Only the Executive Summary is available in Spanish. It can be obtained through the NRC's Agencywide Documents Access and Management System (ADAMS), available via the NRC's web site.*

**Comment: 037-1; 358-28**

A commenter noted that an important document on waste disposal costs was unavailable, and many other documents cited as sources were not available to the commenter. The commenter noted that there is no public document room in New Mexico and the electronic public document room was unavailable for much of the comment period. Another commenter expressed a concern that EIS supporting documentation was not conveniently available for review.

*Response: The information provided in the reference (i.e., cost of disposal) was reflected in section 7.2.3 of the Draft EIS. To access supporting documents, anyone may contact the NRC's Public Document Room by telephone, email, or fax and submit a request. The Public Document Room staff is available to supply documents (electronic or hard copy) to anyone who asks for them.*

**Comment: 093-4**

A commenter asked when the safety evaluation would be conducted and when it would be available.

*Response: The safety evaluation has been completed and the SER should be published by June 2005.*

**Comment: 358-2**

The commenter stated that the NRC should publish a supplemental Draft EIS for public comment that would address the redaction process.

*Response: If significant new information or considerations are identified concerning the proposed NEF and related operations, it is possible that a supplement to the EIS would need to be prepared in accordance with 10 CFR § 51.72. A supplement to the Draft EIS for the redaction process will not be prepared because the redaction did not hinder the NRC's evaluation of impacts associated with the*

proposed NEF. Furthermore, the NRC staff has determined that the supplementation criteria in 10 CFR § 51.72 were not met.

**Comment: 358-2; 358-36; 358-38; 358-39**

A commenter asked whether the NRC would make publicly available all comments on redacted portions of the Draft EIS and, if not, what the NRC's legal authority is to withhold such comments. The commenter asked how the NRC will respond to comments on redacted portions of the Draft EIS. The commenter requested that the NRC's criteria for removing sensitive information also be made public.

*Response: The NRC staff responses to comments on redacted portions of the EIS are presented in this appendix. The NRC did not withhold any comments; comments are provided in Appendix J of the EIS. The NRC staff's review criteria to identify sensitive information in fuel cycle documents are publicly available on the NRC's web site (<http://www.nrc.gov/materials/fuel-cycle-fac/review-criteria-fuel-cycle.html>).*

**Comment: 358-3**

The commenter asked about the NRC's legal authority to redact the information. The commenter indicated that 10 CFR § 2.390 does not mention NEPA; hence, it is an inadequate basis for redacting information under NEPA. The commenter also stated that the specific paragraph in that regulation (paragraph [d]) does not apply to much of the information redacted.

*Response: In issuing a redacted version of the Draft EIS, the NRC was acting within its authority under NEPA. As discussed in section H.4.1.4 of Appendix H, agencies have a duty to balance the need for public disclosure of relevant information with the need to protect sensitive information that could, in the wrong hands, pose a danger to the public. To this end, 42 U.S.C. Section 4321 et. seq. of NEPA contemplates that, in a given situation, a Federal agency may withhold portions of the relevant NEPA document from public disclosure. Section 102(2)(c) of NEPA provides that public disclosure of documents prepared pursuant to NEPA is governed by the provisions of the Freedom of Information Act, 5 U.S.C. Section 552. Congress intended the Freedom of Information Act to balance the public's need for access to official information with the need to protect certain information from public disclosure.*

### **I.3.2 Comment Period**

**Comment: 037-1; 037-2; 358-35; 358-36**

Several commenters requested that the NRC extend the Draft EIS comment period for at least 30 days beyond the final deadline. One commenter stated that the comment period should be extended from the time the NRC makes publicly available its criteria for removing sensitive information from public view.

*Response: The NRC reviewed the comments requesting additional time to comment and concluded that the participation process had provided sufficient time and opportunities for the public to bring forward issues and concerns for the NRC's consideration. The NRC provided a 113-day comment period on the Draft EIS, a period which exceeds the 45-day period generally provided under NRC regulations (10 CFR § 51.73). In view of the expanded opportunities for public comment on the Draft EIS, earlier NRC staff efforts to solicit public involvement in the EIS scoping process, and public meetings held during the comment period, the NRC staff concluded that an additional extension of the comment period was not warranted. The NRC received thousands of comments from several hundred commenters by the January 7, 2005, comment period closing date. The NRC staff concluded, therefore, that the short length of time during which the EIS was not available did not preclude meaningful and substantial public*

*comment on the Draft EIS. Additional information on the opportunity for comment during the public comment period is provided in section H.2.4 in Appendix H.*

**Comment: 041-5; 151-3; 151-10**

Commenters expressed disappointment that the public participation process was hindered by the NRC's effort to remove sensitive information from its publicly available document library. One commenter noted that the written notice of deadline extension was received on January 3, 2004, and that this was insufficient notification. A commenter also noted that the link to the NRC's web site provided out-of-date information concerning the deadline extension. The commenter stated that the unavailability of this information effectively served to "confuse and deflect additional public scrutiny of this project."

*Response: The NRC staff extended its public comment period until January 7, 2005. This extension allowed for a 113-day comment period. The NRC staff recognizes that deadline notifications transmitted via regular mail were indeed slower to reach their recipients. However, the NRC staff also published a notice in the Federal Register (69 FR 76485; December 21, 2004) and issued press releases on the extension of the public comment period. Further, all concerned were encouraged to call or email the staff directly with any questions regarding the EIS process. The NRC staff regrets that the web site was not updated immediately to reflect the change in status of the EIS comment period. It was not the NRC staff's intent to deflect public scrutiny. The staff considered comments received after the January 7, 2005, deadline and concluded that none had raised issues not already captured in timely comments or considered in the EIS.*

**Comment: 151-2**

A commenter stated that there was inadequate notification and solicitation of comment. The commenter questioned whether due consideration was provided to the solicitation of input from stakeholders, tribes, or regional authorities.

*Response: Section H.2 of Appendix H discusses public participation opportunities. The publication of the Draft EIS was announced in the Federal Register. Since publication, any party who wished to comment on the Draft EIS could receive a copy of the report and submit comments. The Draft EIS was also available on NRC's web site and in NRC's ADAMS, which is also available through the web site. State agencies were consulted on an as-needed basis.*

### **I.3.3 Public Meetings**

**Comment: 041-5**

A commenter expressed disappointment in the public meeting on the Draft EIS in Eunice, New Mexico, and in the lack of opportunity to address the meeting participants in person. The commenter stated that the meeting was too long and no effort was made to allow far-traveled individuals to speak first.

*Response: The NRC staff intends that those who wish to be heard during NRC public meetings are given a chance to speak. The NRC staff provided an opportunity for interested members of the public to register to speak in advance of the meeting. In addition, members of the public could also sign up to speak at the meeting. The NRC staff encourages people who wish to speak first at public meetings to notify the meeting facilitator of their time and travel constraints. Everyone who requested to speak at the meeting was given this opportunity.*

### **I.3.4 Completeness (General)**

#### **Comment: L-1; 316-3**

Many commenters stated that the Draft EIS does not fully meet the NEPA requirement that an EIS must consider the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity. The commenters stated that the cumulative impacts of the nuclear fuel cycle, nuclear power generation, and nuclear waste management should be analyzed in the EIS.

*Response: The assessment of the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity is presented in section 4.7 of the Draft EIS. The NRC staff determined that the discussion in section 1.4.3 of the Draft EIS adequately addresses the impacts of the proposed NEF in the fuel cycle. Impact assessments of the nuclear fuel cycle, nuclear power generation, and nuclear waste management are presented in the NEPA-required documents when those separate licensing actions are undertaken.*

#### **Comment: L-16; 151-6; 356-9**

Many commenters stated that the Draft EIS does not include a complete evaluation of the environmental impacts of the proposed facility. Until the comments are adequately addressed and resolved, commenters suggested that the NRC staff's recommendation that the license for the proposed NEF be approved is premature. One commenter stated that the license application process for the proposed NEF has segmented activities that are directly connected to the proposed action. (The commenter cited as an example a lack of detail concerning management plans for interstate transportation of nuclear materials and wastes.) The commenter asked how affected communities are expected to provide input if the no-action alternative is not available.

*Response: The NRC staff believes the Draft EIS presents a complete analysis of the impacts of the proposed action. The EIS has been revised in light of public comments, information provided during the hearings, and updated information about the proposed NEF. Changes to the EIS as a result of these sources of input are summarized in Chapter 1 of the EIS. If the NRC determines that the license application for the proposed NEF sufficiently satisfies regulatory requirements for safe operation and protection of health, safety, and the environment, then the NRC would issue a license following a hearing before the licensing board. The no-action alternative remains a possibility because the NRC could determine that a license should not be issued for the proposed NEF. In this case, the proposed NEF would not be constructed, operated, or decommissioned.*

*All of the impacts associated with activities under the proposed action (construction, operation, and decommissioning of the proposed NEF) are addressed in the EIS. The NRC staff believes that the EIS does not segment activities that are directly connected to the proposed action. Connected actions are considered regardless of whether they are within the licensing scope or are regulated by the NRC. For example, impacts associated with the transportation of feed material, product, and waste are analyzed in section 4.2.11 of the EIS. The NRC regulates the packaging of transported materials, but such activities are licensed separately. Transportation routes and modes are under the jurisdiction of other agencies (such as the U.S. Department of Transportation [DOT]).*

#### **Comment: M-10**

Several commenters requested that the phrases "short-term uses of the environment" and "long-term productivity" be defined. The commenters suggested that if 30 years is considered long-term, then many of the environmental effects of the proposed NEF, particularly emissions of uranium to air and water,

should also be considered long-term. The commenters requested that the NRC identify areas in the EIS where this is considered.

*Response: The NRC staff revised section 4.7 of the EIS to define short-term and long-term to be consistent with the Council on Environmental Quality's definition as well as the definition provided in section 5.8 of NUREG-1748, "Environmental Review Guidance for Licensing Actions Associated with NMSS Programs." Short-term represents the period from start of construction to end of the proposed action, including decommissioning (NRC, 2003). Long-term represents the period beyond license termination.*

**Comment: 031-4; 032-8**

Commenters requested that the NRC allow the New Mexico Attorney General and the New Mexico Environment Department to participate in the LES hearings on the issues of terrorism, national security, LES financial qualifications, decommissioning funding, and waste disposal.

*Response: The hearing process is explained in section H.4.1.1 of Appendix H. Contentions from the New Mexico Attorney General and the New Mexico Environment Department were reviewed by the NRC's Atomic Safety and Licensing Board (ASLB) independently from the EIS and licensing processes, and the appropriate contentions were allowed into the hearings. Terrorism and national security are discussed in section H.4.1.5 of Appendix H.*

**Comment: 031-5**

A commenter requested that the NRC include in the Draft EIS a clear statement of why the license for the Almelo Urenco plant in the Netherlands was revoked twice.

*Response: The NRC does not regulate foreign facilities including the Almelo Urenco plant. This comment is beyond the scope of the EIS.*

**I.3.5 Completeness (Redaction)**

**Comment: 151-9; 284-6; 356-3**

Commenters expressed a concern that the redaction of portions of the EIS due to security concerns is contradictory to NRC's policy not to consider issues of terrorism in an EIS. One commenter recommended that the license proceeding be halted until a consistent policy is defined. Another commenter stated that issues raised previously concerning security were not addressed. The commenter also expressed concerns about Urenco's handling of sensitive technical information. Another commenter stated that the NRC must exercise caution in its consideration of the license application, especially in light of challenges such as waste disposal and security threats.

*Response: As the commenters noted, the NRC has determined that issues of terrorism in the context of NEPA (NRC, 2002) should not be addressed. The decision to withhold sensitive information in the Draft EIS from public view addresses a need to ensure security with regard to currently available information about existing facilities and operations. This issue is separate from the NRC's decision to license the proposed NEF. The licensing decision will be based on an assessment of the applicant's license application and consideration of the environmental impacts of the proposed action. Security issues associated with the proposed NEF will be evaluated in the NRC staff's safety review. The results of that evaluation will be documented in the SER.*



*Any facility licensed by the NRC is required to fully comply with NRC regulations and license conditions, including those that relate to security. The NRC agrees that it needs to be cautious in its decision making, and takes seriously its responsibility to protect public health and safety and the environment. The NRC would not issue a license for the proposed NEF without a strategy for managing the depleted uranium wastes, which is discussed in section 4.2.14.*

**Comment: 295-1; 316-1; 358-1; 358-2; 358-4; 358-5; 358-28; 358-29; 358-37; 365-8**

Several commenters asked about the status of the original (unredacted) Draft EIS and stated that the redacted Draft EIS contains less information about some issues, hindering a thorough review of the document. Commenters indicated they wished to comment on the redacted information and listed a number of areas in the Draft EIS where they were not able to comment adequately. One commenter stated the redacted EIS does not include a "hard look" analysis of impacts.

*Response: The September 2004 Draft EIS was replaced by the redacted Draft EIS in December 2004. The NRC believes the redacted Draft EIS provides a complete discussion of the environmental impacts stemming from the proposed action. Where possible, information previously redacted in the Draft EIS has been made available with modifications as necessary to protect sensitive information. However, if part of a NEPA document, such as an EIS, would be exempt from public disclosure under the Freedom of Information Act, the Agency has the authority to restrict public access to that part of the EIS.*

#### **I.3.6 Role of the NRC**

**Comment: 025-3**

A commenter stated that the NRC should monitor the construction and operation of the proposed NEF to ensure that it meets standards and specifications necessary to maintain the existing quality of life.

*Response: The NRC would monitor the proposed NEF against the terms of the license, if a license is issued.*

**Comment: 343-9**

The commenter stated that there are many objections to locating the proposed NEF in Lea County. The commenter stated that the NRC must protect the public and not be an advocate for the nuclear industry.

*Response: The NRC agrees that its mission is to protect public health and safety and the environment. The NRC's mandate is to ensure the safe use of nuclear materials and, as such, it must consider the issuance of licenses to applicants who wish to conduct operations involving these materials. Because LES submitted an application for a license at a facility to be located in Lea County, the NRC staff must evaluate that application as submitted. As discussed in section 2.2.2.1 of the EIS, LES evaluated other sites before submitting its license application. These were eliminated from further consideration.*

#### **I.4 Purpose and Need**

**Comment: L-5; 316-13; 343-2; 356-2**

Several commenters questioned how the NRC justifies its statement that nuclear-generating capacity is expected to increase in the United States. The commenters stated that (1) no new nuclear power reactor has been ordered in a quarter of a century and many reactors are reaching the end of their operating licenses; (2) no company has received a license to build a new reactor; (3) no company has expounded an explicit plan to build a new nuclear reactor; and (4) Wall Street does not seem to have an interest in funding a new generation of nuclear reactors, even with government support.

*Response: Section 1.3 of the Draft EIS states that current nuclear-generating capacity in the United States is projected to increase. The approximate 5-percent increase in nuclear-generating capacity that is expected to occur through 2025 is primarily based on the ongoing reviews and approvals of uprate licensing requests for existing nuclear plants. Plant uprates (i.e., the process of increasing the maximum power level at which a commercial nuclear power plant may operate) are expected to add approximately 3.9 gigawatts of nuclear-generating capacity. Some plants are also expected to submit applications to install additional reactors at existing sites (e.g., Dominion Power has submitted an early site permit application to expand its plant by up to two reactors). The nuclear-generating capacity is therefore currently increasing and is projected to continue to do so.*

**Comment: M-4; M-9; Z-1; 048-1; 103-5; 103-11**

Several commenters noted the following statements in the Draft EIS should be clarified because they appear to be inconsistent with respect to the percent of separative work units (SWUs)/enrichment services provided by domestic services.

- Section 1.3 - The following statement refers to SWUs purchased by U.S. nuclear reactors: "In 2003, the domestic enrichment services provided 14 percent of the 12 million SWUs purchased."
- Section 1.3 - "United States Enrichment Corporation (USEC) provides approximately 56 percent of the U.S. enrichment market."
- Section 4.8 - "In the domestic market, USEC currently supplies approximately 56 percent of enriched uranium needs while foreign suppliers provide the remaining 44 percent."

Several commenters asked for the total yearly percentage of U.S. enriched uranium supply that the proposed NEF would produce.

*Response: The NRC staff revised and clarified sections 1.3 and 4.8 of the EIS regarding the percentage of enrichment services provided by domestic services. USEC operates the Paducah Gaseous Diffusion Plant which is able to produce approximately 14 percent of the current U.S. demand for low-enriched uranium. USEC also imports down-blended (diluted) weapons grade uranium from Russia which is used to satisfy an additional 42 percent of the U.S. demand. The combination of low-enriched uranium from U.S. production plants and low-enriched uranium from down-blended Russian weapons provides about 56 percent of the low-enriched uranium required by the U.S. market. Beginning production in 2008 and achieving full production output by 2013, the proposed NEF would provide roughly 25 percent of the current and projected U.S. enrichment services demand.*

**Comment: M-8**

Several commenters stated that the EIS should explain how the proposed NEF is anticipated to increase U.S. independence from foreign enriched uranium sources. In addition, the commenters requested that a table be provided to show the total estimated amount of enriched uranium that would be required for U.S. energy production by year, in comparison with the amount that would be produced by the proposed NEF.

*Response: As discussed in section 1.3 of the Draft EIS, although the proposed NEF would increase the quantity of domestically produced low enriched uranium, it would not totally eliminate the need to import low enriched uranium from foreign sources. Any increase in domestically produced product would correspondingly reduce the need for imported material. Table 1-1 provides the projected uranium enrichment demand in the U.S. for 2002 to 2025; beginning production in 2008 and achieving full*

*production output by 2013, the proposed NEF would provide roughly 25 percent of the current and projected U.S. enrichment services demand.*

**Comment: S-1; 151-4**

Commenters stated that definitive uses for all material produced by the proposed NEF must be provided, and it should be made clear if any material produced would be used outside the United States or for any other purpose than power generation within the United States. One commenter stated that basic questions arise regarding actual production from U.S. enrichment facilities in comparison with actual demand from existing generating facilities. The commenter asked whether unstated administration policy exists to expand the construction of nuclear power plants in the near future.

*Response: Although it is possible that LES could export enriched product, LES has not committed to the export of low-enriched uranium UF<sub>6</sub> from the proposed NEF. Any export from the proposed NEF would require a NRC export license in accordance with 10 CFR Part 110. Shipments of low-enriched uranium in the form of UF<sub>6</sub> must be made in accordance with DOT and appropriate NRC regulations. As stated in section 1.3 of the Draft EIS, "the Administration's energy policy...called the expansion of nuclear energy dependence "a major component of our national energy policy."*

**Comment: 038-9**

A commenter stated that the NRC needs to carefully consider the need of the facility given alternatives at USEC.

*Response: Section 1.3 of the Draft EIS discusses the need for the proposed NEF. Based on an assessment of the need, it is expected that sufficient demand exists for the proposed NEF. Alternatives to the proposed action were discussed in section 2.2 of the Draft EIS. The NRC staff considered alternatives at USEC, including the more energy-intensive gaseous diffusion technology and the proposed American Centrifuge Plant, which would support the demand for enriched uranium.*

**Comment: 103-3; 103-10**

A commenter stated that the NRC should consider the need for the proposed NEF in light of several considerations, such as the supply that could be provided by mixed oxide fuel (MOX), the disposition of the surplus of weapons plutonium, any additional enriched uranium from Russia, increased burnup of fuel at the power reactors, relative costs of domestic and foreign provided SWUs, and cost of uranium, among others. The commenter suggested that the EIS evaluate plausible scenarios relating to these important economic variables.

*Response: Increased burnup of fuel at commercial nuclear power reactors and the current increasing cost of uranium are too speculative to reasonably consider at this time. The use of MOX fuel and downblending of Russian highly enriched uranium were considered in the assessment of need for the proposed NEF in section 1.3 of the Draft EIS.*

**Comment: 103-4**

A commenter referred to a statement in the Draft EIS indicating that only 15 and 14 percent of enrichment services purchased by U.S. nuclear power plants in 2002 and 2003, respectively, were provided by U.S. enrichment facilities. The commenter asked why this is so and stated that the EIS should clarify the reason for the specified percentages.

*Response: As stated in section 1.3 of the EIS, the only operating enrichment plant in the United States is operated by the USEC in Paducah, Kentucky, which is able to produce about 14 percent of the U.S.*

demand. USEC also down-blends (dilutes) high-enriched uranium from Russian atomic weapons to furnish an additional 42 percent of the U.S. demand. The remainder of the U.S. demand is met by importation from foreign suppliers. This importation is required because the United States does not have sufficient production capacity. Construction and operation of the proposed NEF would provide the United States with additional production capacity and another supplier of low enriched uranium.

**Comment: 103-5**

A commenter stated that the EIS should specify what fraction of uranium to uranium hexafluoride (UF<sub>6</sub>) conversion services were provided by domestic facilities as opposed to foreign facilities. The commenter stated this should be compared with the fraction of oil consumed in the United States that is refined in domestic facilities.

*Response: As discussed in section 2.1.7 of the Draft EIS, the United States has one operating uranium conversion facility in Metropolis, Illinois. The closest foreign source for uranium to UF<sub>6</sub> conversion is Port Hope, Ontario, Canada. These two facilities would be the primary suppliers of the feed material for the proposed NEF. A percentage breakdown would depend on supply and cost of the feed material and is beyond the scope of this EIS. The ratio of oil consumed in the United States versus oil refined in the United States is beyond the scope of the EIS.*

**Comment: 358-7**

A commenter stated that the Draft EIS should consider the alternative of purchasing low-enriched uranium from foreign sources, an alternative which the Draft EIS rejects. The commenter stated that the U.S. Department of Energy's (DOE's) "Report to Congress on Maintenance of Viable Domestic Uranium, Conversion and Enrichment Industries" does not support the development of the proposed NEF.

*Response: As discussed in section 1.3 of the Draft EIS, utilities in the United States want alternative domestic sources of enrichment. DOE supports use of Urenco technology in the United States (DOE, 2002).*

**Comment: 358-34**

A commenter stated that the proposed NEF is not needed or financially viable, and the EIS should reach the same conclusion.

*Response: Section 1.3 of the Draft EIS discusses the purpose and need for the proposed action. Issues related to safety and financial qualifications that are not within the scope of the EIS are addressed in the NRC staff's SER. The issue of financial viability is beyond the scope of the EIS.*

## **I.5 Scope of the Analysis**

### **I.5.1 General**

**Comment: 031-10**

A commenter requested that the NRC include in its EIS a statement that the NRC has investigated Citizens' Nuclear Information Center's web site and found no false information regarding the NRC.

*Response: The NRC does not verify the credibility or factual content of privately-held individual web sites.*

**Comment: 032-25; 047-7; 316-48**

Commenters stated that the proposed NEF could remain in operation longer than 30 years and asked about the likelihood that this would occur. One commenter asked how long comparable European Urenco facilities operate.

*Response: 10 CFR § 70.33 allows a licensee to file an application to extend the duration of the license. If LES chooses to apply for NRC approval to continue operations beyond 30 years, the NRC would perform a separate safety and environmental review. The NRC cannot project the likelihood that LES would apply for an extension. Uranium enrichment using gaseous centrifuge technology in Europe began in the 1970's at the Urenco-Capenhurst and Almelo facilities, which are currently operating.*

**Comment: 032-49**

A commenter expressed concern regarding issues that were identified as being outside the scope of the EIS by the NRC.

*Response: The NRC staff included a discussion of out of scope issues in section H.4.1 of Appendix H.*

**Comment: 105-6**

A commenter stated that it is necessary to fully evaluate every contingency of operation that has not yet been decided upon.

*Response: The NRC staff performs detailed safety and environmental reviews that inform any decision to issue a license. If a license is granted to LES for construction, operation, and decommissioning of the proposed NEF, the NRC staff would ensure that public health, safety, and security would be protected. The NRC staff would also ensure that emergency situations are accounted for in the proposed NEF's comprehensive emergency response plan.*

**Comment: 284-5**

A commenter expressed concern that the EIS uses different levels of analysis (local, regional, State, national, global) without accounting for problems that arise when shifting from one level to another.

*Response: The scope of the analysis of impacts is specific to the resource being reviewed. For example, land use impact is primarily a local issue and does not have national or global implications. Air quality is typically a regional issue because regulators primarily manage air quality on a regional basis. Impacts to water resources is a local and regional issue, but does not have national implications. The need for the facility is presented nationally because the proposed NEF is needed to supply fuel production facilities and, ultimately, power plants nationwide; but the need is not impacted by local influences because there are no nuclear power plants in the area.*

**Comment: 316-5**

A commenter noted that Chapter 4 of the Draft EIS is limited in scope and vision. As an example, the commenter stated that section 4.7, "Relationship Between Local Short-Term Uses of the Environment and the Maintenance and Enhancement of Long-Term Productivity," fails to adequately consider the long-term hazards created by depleted uranium waste (or irradiated fuel rods) upon the long-term productivity of natural resources.

*Response: Section 4.7 discusses short term uses and long-term productivity with respect to the proposed NEF, as required under NEPA and NRC's implementing regulations. The NRC staff believes the Draft*

*EIS presents a complete analysis of the direct, indirect, and cumulative impacts of the proposed action. The impacts associated with the management of DUF<sub>6</sub> are presented in section 4.2.14.3 of the Draft EIS.*

## **I.5.2 Safety Review Process**

### **Comment: M-11**

Several commenters stated that the NRC's inspection program must be outlined in either the EIS or the SER. If in the SER, the commenters also requested that the public be allowed to review and comment on the SER to make certain that the NRC is adequately ensuring the health and safety of community members through proper and timely inspections.

*Response: Inspections would be addressed during the safety review; however, details of the inspection program would not be included in the SER. Inspection schedules and procedures would be developed and implemented by the NRC regional office (Region II) responsible for conducting inspections. The purpose of these inspections is to ensure the licensee meets regulatory requirements and licensee commitments. Inspection procedures for routine inspections during operations are available to the public on the ADAMS, which is accessible via the NRC's web site. Section H.4.1.3 of Appendix H discusses the NRC staff's safety review process. The NRC's standard practice is not to issue a Draft SER for public comment. However, the NRC intends to hold a public meeting after the SER is published.*

### **Comment: M-62; M-63**

Several commenters requested that the SER address the funding and emergency preparedness of first responders, fire departments, and police departments in Lea and Eddy Counties in New Mexico and Andrews County in Texas. The commenters requested that the analysis address the capability of the Lea County Regional Medical Center to respond to an emergency at the proposed NEF.

*Response: Issues of emergency preparedness at the proposed NEF are not directly related to the EIS but to the NRC staff's safety evaluation. LES's emergency plan is intended to address emergency response activities for the proposed NEF. The NRC staff's review of the emergency response plan is documented in the SER. Additional information about NRC's emergency preparedness and response program is available on the NRC's web site.*

### **Comment: M-64**

Several commenters asked what the NRC's rationale is for not releasing the SER for public comment. The commenters asked whether the SER is required by a regulation and, if so, which regulatory agency would authorized the SER. The commenter asked if the information contained in the SER would be sensitive or classified and requested that the SER be released for a public comment period.

*Response: The SER is generated by the NRC staff to document the staff's evaluation of the safety aspects of the proposed facility. It provides the technical basis for issuing a license, and is not required by regulations. Section H.4.1.3 of Appendix H discusses the NRC's safety review process. The NRC's standard practice is not to issue a Draft SER for public comment. However, the NRC's staff intends to hold a public meeting after the SER is published.*

### **I.5.3 Ownership**

**Comment: 031-1; 032-22; 033-4; 358-8**

Several commenters expressed concern that LES would be foreign-owned and that the proposed NEF should not be considered a domestic enrichment source. Other commenters questioned the reputation of LES or Urenco.

*Response: The comments raise issues that are beyond the scope of the EIS. As discussed in section 1.6 of the Draft EIS, the issues of foreign influence and control will be addressed in the NRC staff's SER. Regardless of ownership, the proposed NEF would be fully subject to NRC regulations for uranium-enrichment facilities.*

**Comment: 103-1; 103-2; 103-7; 103-25**

A commenter stated that the EIS should specify what organization would own the proposed NEF, special nuclear material, source material, and byproduct material during various stages. The commenter asked when ownership would transfer from the customer to LES, if LES would own the DUF<sub>6</sub>, at any stage.

*Response: The NRC staff revised section 3.1 of the EIS to clarify that LES would own the proposed NEF operations, while the property and facilities would remain under Lea County ownership until they are deeded over to LES at license termination. As discussed in section 1.2 of the Draft EIS, a license for the proposed NEF would allow LES to possess feed and product materials so that it could process its own materials. As a general rule, however, the utility would own the feed material (classified as source material) and the enriched uranium (special nuclear material). LES would own the waste (source material) and byproduct material (in the form of sealed sources and residual contamination from processing). The NRC staff revised section 2.1.9 of the EIS to reflect this information.*

### **I.5.4 Nuclear Fuel Cycle**

**Comment: 185-1**

A commenter expressed concern about uranium mining and enrichment and stated that spent nuclear fuel should be reprocessed and used.

*Response: The United States did not develop a policy to reprocess spent nuclear fuel because of concerns that plutonium from reprocessed civilian spent nuclear fuel potentially could be used for nuclear weapons production. Also, natural uranium is relatively abundant. On April 7, 1977, President Carter announced that the United States would defer indefinitely the reprocessing of spent nuclear fuel from commercial nuclear power reactors and discourage reprocessing of spent nuclear fuel abroad. President Clinton reiterated the United States' position on reprocessing in a statement on Nonproliferation and Export Control Policy, saying that, "the United States does not encourage the civil[ian] use of plutonium and, accordingly, does not itself engage in plutonium reprocessing for either nuclear power or nuclear explosive purposes" (White House, 1993). Since the consideration of a reprocessing alternative would require a change in U.S. nonproliferation policy and could introduce foreign policy and national security concerns, the NRC staff did not consider reprocessing to be a reasonable alternative and, therefore, did not discuss it in the EIS.*

## **I.5.5 Proposed NEF Facilities**

### **Comment: 048-16**

A commenter stated that the EIS should also discuss the Separations Building gaseous effluent vent system in section 2.1.7 of the Draft EIS.

*Response: The NRC staff revised section 2.1.7 of the EIS to include the Separations Building gaseous effluent vent system.*

### **Comment: 316-47**

A commenter requested that the EIS indicate whether any chlorofluorocarbons would be used, produced, or released by the proposed NEF as is the case at other uranium enrichment plants.

*Response: Table 4-21 of the EIS provides the process chemicals and gases to be used at the proposed NEF. No chlorofluorocarbons or hydrochlorofluorocarbons would be used at the proposed NEF. The expected emissions at the proposed NEF are summarized in section 4.2.4 of the EIS.*

## **I.5.6 Licensing Period**

### **Comment: 048-9**

A commenter suggested the title of Table 2-5 of the Draft EIS may not accurately reflect the values given. The term "Maximum" should be removed from the table because the information provided in the 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 operating period).

*Response: As discussed in section 2.1.7 of the Draft EIS, the "Maximum" production column shown in Table 2-5 provides an upper limit bounding guide for the operation of the proposed NEF. Since the information in the table under the heading "Maximum" is based on the facility operating with all available equipment up to the 30-year time limit, the NRC staff believes the title "Maximum" is more appropriate than "Nominal."*

### **Comment: 048-10**

A commenter stated the information in the last three lines of Table 2-5 under the heading "Anticipated" should be deleted to be more consistent with a 30-year license period and the response provided by LES based on the NRC staff's request for additional information.

*Response: The production totals in Table 2-5 of the Draft EIS are the same as the numbers shown in Table ER RAI 2-4A.2, which was submitted to the NRC in a letter dated May 20, 2004 (LES, 2004). The production figures are consistent with the 30-year license period, which includes the scheduled time period for decommissioning. The current operating license calls for decommissioning the proposed NEF in a staged progression.*

## **I.6 Cooperating Agencies and Consultation**

### **Comment: M-60**

Several commenters noted that Chapter 8 of the Draft EIS indicates that ConverDyne and U.S. Ecology were not consulted in the production of the Draft EIS. The commenters stated that, if these facilities are considered options for conversion and disposal, they should be consulted and their responses to LES's proposals discussed in the EIS.



*Response: Consultation was not necessary because information could be obtained through open sources regarding the potential that the mentioned facilities would be considered for conversion and disposal.*

**Comment: M-61; W-1; 035-1; 036-8; 151-8**

Many commenters asked why the Western Interstate Energy Board was not consulted during the development of the EIS. Other commenters asked why the Western Governors' Association, Western States, and other regional entities were not consulted or given a copy of the Draft EIS. Commenters requested that the NRC consider the input of these organizations in developing the EIS.

*Response: The NRC staff consulted with all appropriate agencies and groups, as noted in Chapter 8 of the EIS. The Western Interstate Energy Board serves as the energy arm of the Western Governors' Association. The Western Interstate Energy Board has three committees for high-level radioactive waste, mine reclamation, and regional electric power cooperation. The committee on regional electric power cooperation works to improve the efficiency of the western electric power system. The proposed NEF would be licensed to possess and use source, byproduct, and special nuclear material. Since the license, if granted, is not for the generation of electricity and the subsequent distribution, the NRC staff did not identify a need to consult with the Western Interstate Energy Board. However, the NRC did provide the Western Governors' Association copies of the Draft EIS requesting their comments. The Western Governors' Association provided comments to the NRC. (The Western Interstate Energy Board was assigned commenter number 103. See original letter in Appendix J or comments and responses in this appendix for commenter 103.) The NRC has not precluded any of the mentioned entities, or any other groups or persons, from commenting on the Draft EIS or participating in the NEPA process. Comments received from any of these entities have been catalogued and responses incorporated into the EIS text, as appropriate.*

**Comment: 034-7**

A commenter stated the State of New Mexico should be listed as an organization involved in the proposed action because the State owns the fee interest in the land upon which the proposed NEF would be sited.

*Response: The NRC staff added the State of New Mexico and Lea County as involved organizations listed in section 1.6 of the EIS.*

**Comment: 034-69**

A commenter stated that the EIS should describe the time frame for completion of tribal consultation. The commenter requested a copy of any report generated as a result of the consultation process.

*Response: In the consultation process required by Section 106 of the National Historic Preservation Act (NHPA), the NRC has consulted with the Apache Tribe of Oklahoma, Kiowa Tribe of Oklahoma, Comanche of Oklahoma, Mescalero Apache, and Ysleta del Sur Pueblo as well as Federal and State agencies including the New Mexico State Historic Preservation Office and the New Mexico State Land Office, regarding cultural and historical resources in the vicinity of the proposed NEF. A Memorandum of Agreement on archaeological sites eligible for inclusion on the National Register of Historic Places and a Treatment Plan for the archeological sites have been developed. The consultation process with the affected tribes is ongoing until the stipulations of the Memorandum of Agreement are fulfilled and the parties concur on the final report. The NRC staff included the final Memorandum of Agreement to Appendix B of the EIS.*

**Comment: 042-45**

The commenter stated that the New Mexico Environment Department and Office of the State Engineer should be contacted during the development of the EIS regarding impacts to water quality and quantity.

*Response: As stated in section 1.5.3 of the Draft EIS, the New Mexico Environment Department was not contacted regarding surface waters because the National Pollutant Discharge Elimination System (NPDES) program is administered by the EPA in New Mexico, although the State is in the process of obtaining authorization to manage the permitting process. As stated in Chapter 8 of the Draft EIS, the NRC staff contacted the Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department to obtain information regarding possible nearby lagoons and land farms. The NRC staff also met with the Office of the State Engineer to gather more information concerning water quality and quantity impacts. Information from that meeting has been incorporated into the EIS, as appropriate. The NRC staff also reviewed and considered New Mexico Environment Department scoping comments and any contentions admitted to the licensing proceeding that are relevant to the water resources analyses.*

**Comment: 043-4**

A commenter noted that the Draft EIS was released without complete consultation with the U.S. Fish and Wildlife Service (FWS) regarding the northern aplomado falcon and black-footed ferret.

*Response: Section 1.5.6.1 of the EIS discusses the consultation process with the FWS as mandated by the Endangered Species Act. The NRC transmitted to the FWS a copy of the Draft EIS with a letter stating its determination of "no effect" (see Appendix B). The NRC has completed consultation with the FWS.*

**Comment: 044-1**

The EPA submitted a statement indicating it has a "lack of objection" to the Draft EIS.

*Response: The NRC staff acknowledges the EPA's conclusion.*

## **I.7 Alternatives Considered but Eliminated**

### **I.7.1 General**

**Comment: 032-20; 032-31; 284-3; 316-4**

Several commenters stated that the EIS should discuss a broader range of alternatives such as wind and solar power. Another commenter stated that the Draft EIS does not identify negative impacts (or opportunity costs) of a taxpayer-supported revival of the nuclear power industry at the expense of emerging renewable energy sources.

*Response: National energy policy issues are not within the scope of the EIS for the proposed NEF. The proposed action is intended to satisfy the need for an additional reliable and economical domestic source of uranium enrichment services. The alternatives in the comments raise national policy issues (e.g., finding other sources of energy) that would not satisfy the need of the proposed action and therefore, such alternatives are beyond the scope of the EIS.*

**Comment: 316-12**

A commenter stated that the discussion of the no-action alternative should evaluate the benefits to public health (e.g., from deferred mining) from purchases of highly enriched uranium and from the use of other down-blended reactor fuel, including fuel from the U.S. surplus of highly enriched uranium.

*Response: The proposed action in this EIS is limited to the construction, operation, and decommissioning of the proposed NEF. The impacts associated with the no-action alternative, which is discussed in section 2.2.1 of the Draft EIS, would include only the impacts associated with not constructing, operating, or decommissioning the proposed NEF (i.e., direct, indirect, and cumulative environmental impacts and local socioeconomic impacts). Section 4.8 discusses these impacts.*

**Comment: 358-8**

A commenter stated that if the NRC's position is that a domestic uranium enrichment plant is necessary, the NRC should consider the proposed American Centrifuge Plant at Portsmouth as a reasonable alternative to the proposed NEF.

*Response: The NRC staff considers that the proposed NEF would satisfy the need for an additional, reliable, and economical domestic source of enrichment services. The NRC staff recognizes the proposed American Centrifuge Plant as contributing to domestic enrichment services in section 1.3 of the Draft EIS. In addition, section 4.8 of the Draft EIS recognizes USEC's intentions to construct and operate the proposed American Centrifuge Plant that could supplement domestic and international demand. The section also discusses the impacts of these additional domestic enrichment facilities in the future.*

**Comment: 365-3**

A commenter stated that the safety and widespread promise of wind and solar power makes nuclear reactors obsolete, and that the United States is not capable of safely handling nuclear reactor wastes.

*Response: Alternative energy sources are beyond the scope of the EIS. Further, the commenter's statement regarding U.S. capability to safely handle nuclear wastes is beyond the EIS scope.*

## **I.7.2 Site Selection Process**

**Comment: L-2; 316-6**

Commenters stated that the description of LES's site selection process is misleading because it refers only to objective criteria and neglects the political context that led to the selection of the site in New Mexico. Commenters stated that Senator Pete Domenici of New Mexico "wooded" the company to the State of New Mexico. Commenters stated that the EIS does not mention that officials at the Federal, State, and local level in New Mexico were generally favorable to the proposed NEF.

*Response: The political context in the comment is beyond the scope of this EIS.*

**Comment: M-21**

Several commenters noted that section 2.2.2.1 of the Draft EIS states that sites under consideration by LES were disqualified if they were in proximity to operating nuclear power plants because they would require additional security measures. The commenters questioned how this rationale does not disqualify the Lea County site given that it is approximately 97 kilometers (60 miles) from the Waste Isolation Pilot Plant.

*Response: As discussed in section 2.2.2.1 of the Draft EIS, the disqualified sites were adjoining existing nuclear power plants. The distance between the proposed NEF and the Waste Isolation Pilot Plant site is over 73 kilometers (45 miles) and these locations, therefore, are not adjoining sites. The Draft EIS, as required by NEPA, provides an analysis of cumulative impacts of other past, present, and reasonably*

*foreseeable future actions, including, where appropriate, the presence of other industrial facilities in the region to determine cumulative impacts. Due to the distance of separation, the mentioned historical activities within the State of New Mexico and the proposed NEF would not have significant cumulative impacts associated with each other.*

**Comment: 316-7**

A commenter stated that the location of the proposed NEF is isolated from other related nuclear fuel cycle facilities, requiring the shipment of radioactive and hazardous materials over great distances. The commenter stated that none of the waste processing/disposal facilities cited by LES is closer than 1,609 kilometers (1,000 miles) from the site, yet proximity to these sites does not appear to have been a criterion considered in the selection of the Lea County site. The commenter stated that previously evaluated sites in Louisiana and Tennessee would have been closer to waste processing/disposal facilities, and asked if it would be correct to assume that distance was a factor for these sites, but not for the Lea County site.

*Response: As discussed in section 2.2.2.1 of the Draft EIS, LES undertook a site selection process to identify viable locations for the proposed NEF. Among the criteria applied by LES in its site selection process were availability of good transportation routes and issues related to the disposal of low-level radioactive waste. Based on its evaluation, LES selected the proposed NEF site as its preferred site. The purpose of the NRC staff's review of the LES's site selection process was to determine whether an alternative site the applicant considered was obviously superior to the proposed NEF. The NRC staff has determined that none of the candidate sites were obviously superior to the LES preferred site in Lea County, New Mexico; therefore no other site was selected for further analysis.*

### **I.7.3 Candidate Sites**

**Comment: L-3; L-4; 316-6; 343-3; 356-6**

The commenters stated that seven sites were eliminated because of the risk of an earthquake, but that the proposed NEF site is in a seismically active area.

*Response: The NRC staff's analysis of the site-specific seismic characteristics and the proposed NEF's design to withstand an earthquake are documented in the SER. The Lea County site does not lie in a seismically active area. According to the United States Geological Survey, the area around the proposed NEF site in Lea County has a low historical incidence of seismic activity and a low probability of future seismic activity. A map of the seismic regions of New Mexico is provided at [http://neic.usgs.gov/neis/states/new\\_mexico/hazards.html](http://neic.usgs.gov/neis/states/new_mexico/hazards.html) (USGS, 2003).*

**Comment: L-4; M-1; M-22; N-1; 036-2; 316-6; 343-3**

Many commenters questioned the evaluation and elimination from further consideration of the Bellefonte, Alabama, site in comparison with the Lea County site. Some commenters noted that the Bellefonte site was eliminated because a historic preservation assessment may have been required, but seven archaeological sites were identified at the Lea County site. Commenters also stated that the relocation of high-voltage transmission lines was a reason for lowering Bellefonte's rating, but a high-pressure carbon-dioxide gas line at the proposed NEF site would have to be relocated. One commenter stated that the EIS should outline the methods by which the relocation of a high-pressure CO<sub>2</sub> pipeline would be funded and the potential environmental impacts from this relocation.

*Response: As discussed in section 1.5.6.2 of the Draft EIS, the seven archaeological sites identified at the Lea County location have been evaluated by the New Mexico State Historic Preservation Office and New*

*Mexico State Land Office. Consultation with Federally recognized Indian Tribes identified no traditional cultural properties or other culturally significant resources at any of the seven sites. A Memorandum of Agreement among LES, the NRC, Lea County, the New Mexico State Land Office, affected Indian Tribes, and the New Mexico State Historic Preservation Office has been prepared to document the sites and describe the actions taken to minimize adverse impacts on the sites (see Appendix B). Chapter 4 of the Draft EIS discusses the environmental impact of relocating the line for construction of the proposed NEF (e.g., section 4.2.1.1 discusses the land use impacts resulting from relocating the CO<sub>2</sub> pipeline). Chapter 7 of the Draft EIS also discusses the cost of relocating the high-pressure carbon dioxide line on the Lea County site, which is included in the cost of construction of the facility.*

*As discussed in section 2.2.2.1 of the Draft EIS, the Bellefonte, Alabama, site contained multiple transmissions lines as well as archaeological sites that did contain traditional cultural properties or other culturally significant resources and would have required more costly preservation efforts to minimize adverse impacts on the sites. For these reasons, LES ranked the Bellefonte, Alabama, site third just behind the Lea County Site.*

**Comment: M-5; X-1; 036-1**

Commenters asked why the formerly proposed Claiborne facility in Homer, Louisiana was not addressed in the site-selection process and stated that the Draft EIS does not provide a reason for its rejection.

*Response: In January 1991, the NRC received an application from LES to construct and operate a proposed facility in Homer, Louisiana. As a result of an extended licensing hearing process, LES decided to withdraw its application in 1998. Therefore, the Claiborne facility was never constructed and LES did not consider the site in its current application to construct and operate an enrichment facility.*

**Comment: M-23; M-24; M-29; M-30**

Several commenters identified reasons eliminating the Carlsbad, New Mexico, site from further consideration that they believe should also apply to the Lea County site, including groundwater contamination and the installation of transmission lines and a new substation. The commenters asked whether the determination to eliminate Carlsbad was based on groundwater and surface water contamination as well as soil contamination. The commenters stated that the Draft EIS does not discuss the effects of the oil and gas industry in Lea County and requested that the EIS include a soils chemistry analysis for the proposed NEF site that would address potential oil and gas contamination.

*Response: As discussed in section 3.2 of the Draft EIS, the Lea County site is undeveloped. The groundwater contamination at the proposed NEF site affected the ranking of the Lea County site.*

*The Carlsbad, New Mexico, site received a low site score in part due to the potential for soil contamination from former potash mining and oil-field welding services. It is not known whether there is actually soil, surface water or groundwater contamination, but groundwater contamination is less likely because groundwater is expected to be deep and no surface water is present except in the form of a dry arroyo. Section 2.2.2.1 of the Draft EIS notes there are abandoned structures on the Carlsbad, New Mexico, site that at one time housed a potash mine and a company involved in rehabilitating oil well drilling and pipeline equipment. Additionally, an operating oil field service and welding company is on an adjacent parcel of land. For these reasons, LES ranked the Carlsbad, New Mexico, site sixth behind the Lea County Site.*

**Comment: 034-2**

A commenter noted that the EIS considers only the preferred alternative and the no-action alternative. The commenter stated that the EIS may fail to comply with NEPA and suggested the NRC revisit the issue of selection and analysis of alternative sites.

*Response: NEPA does not specify the number of alternatives that must be addressed in an EIS. As discussed in section 2.2.2.1 of the Draft EIS, LES undertook a site selection process to identify viable locations for the proposed NEF. The purpose of the NRC staff's review of the LES's site selection process is to determine whether an alternative site the applicant considered is obviously superior to the proposed NEF. The NRC staff has determined that the LES site selection process has a rational, objective structure and appears reasonable and that none of the candidate sites were obviously superior to the LES preferred site in Lea County, New Mexico; therefore no other site was selected for further analysis.*

**I.8 Land Use**

**I.8.1 Offsite Actions**

**Comment: M-14; 048-40; 151-7**

Several commenters stated that the EIS should address the installation of and impacts associated with natural gas supply piping, water supply piping, and power transmission lines. One commenter also asked about plans for water supply and wastewater systems.

*Response: The NRC staff evaluated the environmental impacts of installation of the necessary utility pipelines and electric transmission lines in section 4.2.1.1 of the EIS. As presented in Chapter 5 of the EIS, Table 5-1, LES has committed to working with the utility companies to ensure mitigative measures that would be employed during trenching activities on the proposed NEF site are extended as much as possible to offsite trenching activities. Table 5-1 also notes that LES has committed to working with the electric utility to mitigate any impacts. Water supply and wastewater systems and associated impacts are discussed throughout the EIS (for example, see sections 1.5.4, 2.1, 3.7, 3.8.2, 3.10.4.3, and 4.2.6).*

**Comment: M-16**

Several commenters noted that Chapter 2 of Draft EIS indicates that the proposed NEF would require 30 megawatts of electricity that would be supplied through two new overhead transmission lines. The commenters requested that the NRC discuss environmental impacts from the construction of the transmission lines and two independent substations, and from the installation of additional power support structures.

*Response: In section 4.2.1 of the EIS, the NRC staff evaluated the environmental impacts of installing the transmission lines, which would result in temporary land use impacts. Section 4.2.7 of the EIS discusses the impacts of installation of the lines on ecological resources. As presented in Chapter 5 of the EIS, Table 5-1, LES has committed to working with the utility company and the New Mexico Department of Game and Fish to ensure mitigative measures and guidelines for the protection of birds are implemented. Two onsite transformers would be constructed on the proposed NEF property. Impacts from construction of these onsite transformers are assessed under overall facility construction impacts. The NRC staff has revised section 2.1.6 of the EIS to clarify that the two transformers would be installed on the proposed NEF site.*

**Comment: 048-7**

A commenter provided additional information on the natural gas supply to the proposed NEF. As reflected in section 4.1.2 of the Environmental Report, a separate pipeline would be provided to supply natural gas to the proposed NEF. This separate pipeline would be designed and located such that the existing analysis provided in the natural Gas Pipeline Hazard Risk Determination Calculation remains bounding.

*Response: The NRC staff revised section 2.1.6 of the EIS to indicate the natural gas line feeding the site would connect to an existing, nearby line. This would minimize impacts of short-term disturbances related to the placement of the tie-in line.*

**I.8.2 Commitment of the Land**

**Comment: M-65**

Several commenters stated that the U.S. Department of Interior identified several Urban Park and Recreation Recovery Programs in the Eunice and Hobbs area that may be adversely affected by the proposed NEF. The commenter asked whether LES has addressed these concerns and how potential effects on the programs would be mitigated.

*Response: As described section 3.2 of the EIS, no significant recreational areas are located within eight kilometers (five miles) of the proposed NEF site. The NRC staff revised the section to clarify that a picnic table and historical marker are located 3.2 kilometers (2 miles) west of the proposed site. The NRC staff concluded land use impacts would be SMALL.*

**Comment: 034-58**

A commenter stated that it is unclear whether the commitment of 81 hectares (200 acres) of natural land is inclusive of the footprint for the proposed NEF that would constitute a long-term commitment of terrestrial resources. The commenter suggested that the EIS identify the amount of land that would be subject to a long-term commitment.

*Response: The NRC staff revised section 4.7 of the EIS to clarify the meanings associated with short term uses and long term commitments. The commitment of 81 hectares (200 acres), which includes all of the land that would contain the footprint of the proposed NEF facilities, is a long-term commitment.*

**Comment: 316-42**

A commenter asked whether the area of the proposed NEF site that would not be disturbed by construction activities (discussed in section 2.1.4 and shown in Figure 2-6) is necessary for the operation of the facility. The commenter asked about the likelihood that, after the lease term, ownership of the land would transfer from the State to LES and the land would be subject to industrial development. The commenter asked whether the site would be classified as a brownfield and wanted to know the potential uses of any structures remaining after decommissioning.

*Response: During operations, the unused area adds to the security of the site and helps protect offsite resources from impacts associated with operations. As discussed in section 3.1 of the EIS (which the NRC staff revised to discuss the land exchange process), Lea County currently owns the site. Once the lease term ends, LES would purchase the land from Lea County. LES could use or sell the land for other industrial purposes, but the likelihood of such uses cannot be determined at this time. Remaining structures on the site could be used for other industrial purposes or commercial purposes. Brownfields, as defined by the EPA, are real property, the expansion, redevelopment, or reuse of which may be*

*complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. If the site is shown to meet State and Federal regulatory standards after decontamination and decommissioning, then the site would not be considered a brownfield.*

## **I.9 Historic and Cultural Resources**

**Comment: L-15; M-36; 316-40; 316-41; 343-8; 365-1**

Many commenters questioned the NRC's assessment of the proposed NEF's impact on cultural resources as small and requested a description of the terms of the Memorandum of Agreement and the historic properties treatment plan. The commenters asked whether a comprehensive archaeological investigation and excavation would be conducted prior to construction activities. The commenters also asked about the nature and preservation of the artifacts discovered, expressing concern that some of the artifacts could not be removed from the site intact. Commenters asked how the NRC justifies its conclusion that under the no-action alternative, cultural resources at the site could be exposed to possible human intrusion.

*Response: Sections 3.3 and 4.2.2 of the Draft EIS discuss the NRC staff's assessment of cultural resources. In accordance with the NHPA and the implementing regulation, 36 CFR Part 800, potential impacts to all identified and evaluated cultural resources would be mitigated through implementation of an intensive and thorough treatment undertaking. This approach would include both surface and subsurface data recovery efforts at each of the seven sites, along with additional monitoring of construction activities at those archaeological sites located near proposed NEF features. Recovery of all relevant data, along with detailed reports and long-term maintenance of all cultural resources items and recovery records, would adequately mitigate potential impacts to resources. Therefore, the overall impact from the proposed activities is considered SMALL.*

*A Memorandum of Agreement and supporting cultural resources treatment plan have been approved by the NRC, New Mexico State Historic Preservation Office, New Mexico State Land Office, Lea County, the Advisory Council on Historic Preservation, LES and affected Indian tribes (see Appendix B). Due to the present sensitivity regarding the precise nature and locations of the cultural resource properties, only the Memorandum of Agreement is included in Appendix B. The NRC staff revised section 1.5.6.2 of the EIS to update the discussion of the NHPA consultation process. In the collective opinion of the organizations listed above, the proposed treatment, once implemented, would satisfactorily mitigate potential impacts at each of the resource properties, and further preservation consideration would not be necessary.*

*Under the no-action alternative, the proposed NEF would not be constructed. Now that these resources have been identified, they could remain protected through a similar agreement involving one or more of the organizations listed above. Without any protective actions, the identified sites would be subjected to continued weathering and, if the locations become known, potential human intrusion or vandalism. Therefore, the NRC staff concludes in section 4.8.2 of the EIS, that impacts from the no-action alternative would be SMALL to MODERATE.*



## **I.10 Climatology, Meteorology, and Air Quality**

### **I.10.1 Climatology and Meteorology**

#### **Comment: M-27**

Several commenters requested that the NRC include data collected from Andrews County, Texas, in its analysis of tornado frequency and effects. The commenters stated that Andrews County is very close to the proposed NEF site, and high winds generated by a tornado in Andrews County may affect the proposed site.

*Response: Winds from tornados are highly localized and the winds from a tornado in Andrews County, Texas, even if located on the state/county line, would not be expected to impact the proposed NEF. Andrews County is located east of the proposed NEF site. Because prevailing weather patterns influence tornado movement generally from west to east, any tornado that forms in Andrews County would be expected to move east, away from the proposed NEF.*

#### **Comment: M-28**

Several commenters referenced a National Oceanic and Atmospheric Administration's web site indicating that there have been 88 tornadoes in Lea County, New Mexico since 1954, and that these tornadoes have caused more than \$26,000,000 in damage. The commenters stated that the NRC should justify the statement in section 3.5.2.5 of the Draft EIS that "All the reported tornadoes were associated with very light damage."

*Response: According to the referenced web site (NCDC, 2004), the 88 tornadoes caused approximately \$27 million in damage, of which \$25 million was caused by a single class F2 tornado on May 27, 1982. No other information is available regarding this tornado. A total of 26 tornadoes caused measurable property damage in Lea County, New Mexico since 1950. The NRC staff revised section 3.5.2.5 of the EIS to reflect this information.*

#### **Comment: 284-10; 355-1**

Two commenters stated the rainfall data described in Table 3-3 of the Draft EIS is not reflective of annual trends over the last 20 years. One commenter stated that rainfall in the area is either generally increasing or that earlier recordkeeping was faulty, and that the 90-year Hobbs Station average may not be scientifically correct. The commenter suggested that the NRC augment the rainfall measurements with data from other nearby stations, and potentially "weight" the analysis toward newer readings suggesting higher rainfall measurements. The commenter noted that rainfall measurements impact interpretations of runoff, surface, and below-surface hydrology.

*Response: Calculating rainfall averages over a long period of time is standard practice. Rainfall can fluctuate not just year-to-year, but over decades. The design of the retention/detention basins is based on a 24-hour, 100-year storm event and not on average rainfall. Any effects on hydrology from increasing historical rainfall trends would be reflected on a regional basis regardless of the presence of the proposed NEF. Because onsite runoff and drainage would be controlled within the proposed NEF site, any increasing trends in annual rainfall would not result in significantly different impacts.*

## I.10.2 Air Quality and Air Emissions

### **Comment: L-13; 103-12; 103-19; 316-44**

Commenters stated the Draft EIS should indicate the source(s) of hydrogen fluoride air emissions. The commenters asked about environmental and health impacts and mitigation measures associated with emissions of helium, argon, nitrogen, methylene chloride, ethanol, volatile organic compounds, carbon monoxide, and nitrogen dioxide.

*Response: The NRC staff revised section 2.1.7 of the EIS to clarify that hydrogen fluoride would be produced through the chemical reaction between  $UF_6$  and water vapor. The chemical reaction generates uranium oxyfluoride, and hydrogen fluoride.*

*Because the pollutants listed in the comment are not emitted in quantities that would require a Clean Air Act Title V permit and the nitrogen dioxide emissions would be 10 to 100 times below the allowable limits under the National Ambient Air Quality Standards (NAAQS) (Table 4-1 of the EIS), mitigation measures would not be required. LES would have a maintenance program to help ensure proper operation of equipment which would help limit emissions. Since the emissions would be well below regulatory limits as described in section 4.2.4.2 of the EIS, environmental and health impacts would be SMALL.*

### **Comment: M-37; M-38; 032-46; 316-46**

Several commenters referred to the discussion of diesel generators in section 4.2.4 of the Draft EIS. The commenters requested that the NRC identify the pollutant and the quantity emitted from the generators, the basis and how verified, disciplinary measures should LES exceed its 91-metric ton (100-ton) standard, and the entity responsible for enforcement. Commenters requested that LES be required to have a Title V permit. Another commenter inquired about comparable uranium enrichment plants and their use of emergency generators.

*Response: Pollutants emitted by the emergency generators are provided in manufacturer technical specifications. If both emergency diesel generators operated continuously for 1 year (24 hours per day for 365 days), the maximum atmospheric discharge from both units could be more than 90,700 kg (100 tons) of pollutants such as nitrous oxide, carbon monoxide, volatile organic compounds, and particulate matter. However, the generators are for emergency use and would be operated for periodic testing and during power outage only. They would be used to protect equipment associated with the proposed NEF and would not be regulated by the NRC (they would not be safety-related). Assuming monthly testing of the generators and up to two electrical power outages per year, the NRC staff estimated that the total atmospheric discharge from the two emergency diesel generators would be approximately 12,300 kg (13.5 tons) of regulated air pollutants, over 90 percent of which would be nitrous oxide. The New Mexico Environment Department Air Quality Bureau would have jurisdiction, as indicated in Table 1-3 of the Draft EIS, and could issue penalties for any enforcement action. The use of generators by other enrichment plants is not within the scope of this EIS.*

### **Comment: 032-14**

A commenter stated that the EIS does not clearly discuss the gaseous effluent vent system emissions and requested that the EIS clearly state the regulatory limits for each of the discharges.

*Response: Section 4.2.4.2 of the Draft EIS discusses the gaseous effluent vent system' allowable emissions. Specifically, the released quantities and appropriate regulations (Clean Air Act and National Emissions Standards for Hazardous Air Pollutants [NESHAP]) are described under the overall air-*

quality impacts. Occupational impacts of emissions and the related regulatory standard (e.g., Occupational Safety and Health Administration (OSHA) and National Institute for Occupational Safety and Health) are provided in section 4.2.12.2 of the Draft EIS.

**Comment: 032-17; 032-38; 040-5**

A commenter stated that Eunice residents breathe air already polluted with hydrogen sulfide gas and other emissions. The commenter questioned why residents would be additionally exposed to radiation and other emissions from the proposed NEF. The commenter stated that the additional potential exposures would not be worth the jobs that would be created, and that specially-qualified, full time employees would be employed for less than 15 years. Another commenter stated that cumulative impacts for emissions should be analyzed in conjunction with other nearby industrial facilities.

*Response: Section 3.5 of the Draft EIS discusses the air quality at the proposed NEF. The impacts to human health and environment are analyzed in Chapter 4 of the Draft EIS. The NRC staff determined that most impacts would be SMALL or SMALL-to-MODERATE. While peak operations would occur over a 14 year period, operations would actually be conducted over approximately a 25-year period. According to section 4.2.4 of the Draft EIS, the impact on the local and regional air quality would be SMALL. Section 4.4.4 of the Draft EIS addresses the cumulative impacts of air quality, and Table 4-20 shows the current emissions from all industries in the area. Because the proposed NEF would not contribute significantly to the existing airborne emissions from nearby oil and gas activities, the cumulative impacts to air quality would be SMALL.*

**Comment: 033-2; 033-6**

A commenter stated that seasonal winds would blow contaminated soil and other radioactive pollutants north over Hobbs and west over Eunice, New Mexico. The commenter stated that the State and Federal governments should be financially responsible for all new cancer cases in the "contaminant field."

*Response: As stated in section 4.2.12.2 of the Draft EIS, the NRC staff determined that the quantity of radioactivity in the soils of the proposed NEF site would be minimal. This assessment accounts for residual sediments in the ponds when they are dry. Public exposure to radiological emissions from the proposed NEF were estimated to result in 8.4 in 1 million (or  $8.4 \times 10^{-6}$ ) latent cancer fatalities per year from normal operations (see section 4.2.12.2 of the EIS). This means that all of the population within 80 kilometers (50 miles) of the proposed NEF (including Eunice) would receive a total dose of 0.00014 sievert (0.014 person-rem) (or 14 millirem for all persons). This total dose to all of the population in that area would be less than 5 percent of the dose each U.S. citizen typically receives just from naturally occurring radioactivity (about 3 millisieverts [300 millirem]). Additionally, the radiation dose to the nearest resident (Table 4-11) would be about 0.000013 millisievert (0.0013 millirem) per year from normal operations. This would be about 0.0004 percent of the dose that the average U.S. citizen receives per year from naturally occurring radioactivity. Therefore, public health impact from the normal operation of the proposed NEF would be SMALL.*

*Under 10 CFR § 140.13b, a uranium enrichment facility licensee is required to carry liability insurance to cover public claims arising from any occurrence within the United States that results from the radioactive, toxic, explosive, or other hazardous properties of chemicals containing licensed material and causes, within or outside the United States, the losses and injuries enumerated in the regulation. The SER discusses how LES would fulfill the liability insurance requirements listed in section 140.13b.*

**Comment: 034-15; 034-16; 042-32; 042-33**

Commenters stated the following concerns with regard to particulate matter impacts on air quality:

- The Draft EIS states incorrectly that there have been no instances where particulate matter has exceeded NAAQS. An exceedance of particulate matter 10 microns or less in diameter (PM<sub>10</sub>) has been recorded in Hobbs, New Mexico. The EIS should contain a more detailed explanation of how an exceedance for PM<sub>10</sub> would be prevented.
- The EIS should address how the proposed NEF would address Best Available Control Measures identified in the New Mexico Environment Department's Natural Events Action Plan for Lea County.
- The Draft EIS conclusion that the potential impact to air quality is small is unsupported. The 24-hour maximum of 144 micrograms/cubic meter of PM<sub>10</sub> is close to the primary regulatory limit of 150 micrograms/cubic meter. This limit could be exceeded when NEF emissions are added to other nearby sources, such as the nearby quarry. The EIS should include a discussion of cumulative impacts associated with PM<sub>10</sub>.
- Table 3-6 of the Draft EIS erroneously identifies the PM<sub>10</sub> standard as secondary. The standard is primary.

*Response: The NRC staff revised sections 3.5.3 and 4.2.4.3 of the EIS to include a discussion of the exceedance of the NAAQS in Hobbs, New Mexico, and the related Natural Events Action Plan. The exceedance was the result of a dust storm. The impacts from the proposed NEF would be SMALL because the impacts would be localized to within the proposed NEF property boundary. Fugitive dust emissions could occur for short time periods during construction. Mitigative measures would be employed to limit the emission of fugitive dust during construction. No fugitive dust emissions are anticipated during operations because soils would not be disturbed.*

*The predicted maximum modeled concentration of PM<sub>10</sub> would remain below the standard and would occur inside the property boundary. Section 4.2.4.1 of the EIS has been revised to state that the concentration from an event that generated a 144 micrograms/cubic meter reading would result in a concentration of 48 micrograms/cubic meter at a distance of 1 kilometer (0.6 mile). These are conservative estimates, since fugitive dust emissions were assumed to occur throughout the year without implementation of mitigation measures. As stated in section 4.4.4 and shown in Table 4-20, the proposed NEF would not be expected to have a noticeable impacts on PM<sub>10</sub> concentrations in the area. Table 3-6 of the Draft EIS identifies the standard for PM<sub>10</sub> as primary and secondary, because the Federal standards are equivalent.*

*Best Available Control Measures for the Lea County Natural Events Action Plan are still under development. LES would review Lea County best available control measures as they become available and implement those that are applicable for the proposed NEF facility during construction and operation to minimize dust and particulate emissions. Tables 5-1 and 5-2 of the EIS provides current proposed NEF mitigation methods to minimize dust and particulate emissions during construction and operation activities.*

**Comment: 034-50**

A commenter stated that the EIS does not identify what solvents would be used during the decommissioning and decontamination of the site and whether these solvents would be classified as hazardous air pollutants. The commenter stated that, if they are so classified, the EIS should analyze whether the proposed NEF would have the potential to emit more than 9 metric tons (10 tons) per year of any single pollutant or more than 23 metric tons (25 tons) per year of any combination of pollutants. The commenter stated that the EIS appears to rely erroneously on an estimate of actual emissions.

*Response: As noted in section 4.1 of the Draft EIS, because decommissioning would take place many years in the future, it is not possible to predict all the technological changes that could improve the decommissioning process, and the quantity of solvents to be used during decommissioning cannot be determined at this time. The specific type and quantities of solvents that would be used during decommissioning and the specific environmental impacts would be determined at that time. The NRC staff expects that appropriate equipment, sealed rooms, treated ventilation systems, and management controls would be applied to maintain any solvent releases within the current regulatory requirements of the Clean Air Act. The NRC staff revised section 4.3.4 of the EIS to clarify the expected solvent emissions.*

**Comment: 040-4**

A commenter stated that construction emissions would consist of pollutants in addition to dust, depending on equipment and fuels used.

*Response: The NRC staff agrees that other emissions would be associated with construction. Table 2-2 of the Draft EIS identifies the anticipated average vehicle emissions for hydrocarbons, carbon monoxide, nitrogen oxides, sulfur oxides, and particulates (from fuel and fugitive dust). Additionally, section 4.2.6.1 of the Draft EIS identifies potential effluent releases, such as spills, during construction activities. A NPDES construction permit would be obtained from Region 6 of the EPA and all construction activities would comply with permit requirements for construction emissions.*

**Comment: 042-34**

A commenter stated that the EIS should address New Mexico State Ambient Air Quality Standards outlined in Title 20, Chapter 2, Part 3 of the New Mexico Administrative Code. The commenter also suggested that Table 3-6 should be expanded to include the State standards for hydrogen sulfide, total reduced sulfur, and total suspended particulates.

*Response: The State standards for total suspended particulates are included in the listing for PM<sub>10</sub> in Table 3-6 and the impacts are presented in section 4.2.4 of the Draft EIS. The NRC staff revised Table 3-6 to include State standards for hydrogen sulfide and total reduced sulfur; however, the proposed NEF would not be expected to have sources of hydrogen sulfide or total reduced sulfur.*

**Comment: 048-17**

A commenter stated that the hydrogen fluoride gaseous effluent annual release quantity should be included in the listing of non-radioactive gaseous effluents.

*Response: The NRC staff updated section 2.1.7 of the EIS to reflect the commenter's suggestion.*

**Comment: 343-5**

A commenter expressed concern about toxic emission of the proposed plant, both air and water discharges, and disposition of toxic solid wastes. The commenter asked if there have been adequate studies conducted about the health impact of the atmospheric emissions and whether their impact affects minority residents (or workers). In addition, the commenter asked if there are plans to mitigate these toxic emissions.

*Response: The environmental impacts due to emissions from the proposed NEF to residents and workers are presented in Chapter 4 of the Draft EIS, with supporting information in Appendix C. The health and environmental justice analysis demonstrate the small impacts due to the low quantities of radioactive or hazardous materials in atmospheric emissions.*

**Comment: 365-6**

A commenter stated that the contamination of land, air, and water by the emission of tons of carbon monoxide, nitrogen dioxide, and volatile compounds is not acceptable to American citizens.

*Response: As discussed in section 1.5 of the Draft EIS, all emissions, whether to the air or water, must meet Federal and State regulations to ensure the safety and health of the public. As presented in section 4.2.4 of the Draft EIS, releases from the proposed NEF would be within regulatory limits and would not endanger members of the public.*

**I.10.3 Regulatory Compliance**

**Comment: T-1; T-2**

Several commenters noted that the Draft EIS does not identify the regulatory agency that would be in charge of effluent monitoring. Currently, there are no mechanisms in place to revoke an operating license pursuant to unacceptable levels. The commenters suggested that the EIS address specific safety measures to protect citizens from dangerous materials exceeding Federal or State standards.

*Response: Both Federal and State agencies would have enforcement authority over various aspects of the proposed NEF, as described in section 1.5.4 of the Draft EIS. The NRC would have jurisdiction concerning radiological monitoring. Further, under its authority to regulate the safe use of nuclear materials (Atomic Energy Act and Energy Reorganization Act), the NRC has the authority to suspend or revoke a license to ensure public health and safety. As discussed in section 1.4, while the EIS is the result of the NRC staff's environmental review of the LES license application and Environmental Report, the SER is the vehicle through which the NRC staff addresses safety concerns.*

**Comment: 042-35; 042-36; 048-3; 048-18**

Several commenters stated that Table 1-3 of the Draft EIS should be updated with information provided in the Environmental Report Table 1.3-1, Revision 2, dated July 2004. In particular, commenters noted that the New Mexico Environment Department Air Quality Bureau has determined that the proposed NEF would not need a construction or operation air permit.

*Response: The NRC staff updated Table 1-3 and sections 2.1.7 and 4.2.4.2 of the EIS, to reflect the commenters' suggestions. Section 2.1.7 of the EIS has been revised to state that the boilers would not require an air quality permit for operation because NESHAP does not apply. The New Mexico Environment Department Air Quality Bureau acknowledged receipt of the Notice of Intent in accordance with 20.2.73 NMAC. The New Mexico Environment Department Air Quality Bureau also notified LES of its determination that an air quality permit under 20.2.72 NMAC is not required and that New Source Performance Standards and NESHAPs do not apply to the proposed NEF. Lastly, the New Mexico Environment Department Air Quality Bureau 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.*

## I.11 Geology, Minerals, Soils and Seismic Issues

### I.11.1 Geology, Minerals, and Soils

#### **Comment: M-13**

Several commenters requested that the NRC specify inspection plans for the earthwork operations required to construct the proposed NEF to ensure its structural stability. These commenter also requested that the contractors performing the construction perform the greatest oversight possible. These commenters are concerned that there may be structural instability because a portion of the proposed NEF would be constructed on fill and excavated areas.

*Response: Inspection schedules and procedures would be developed by the NRC's regional office (Region II) responsible for conducting inspections. Their purpose is to ensure the licensee meets regulatory requirements and licensee commitments. Inspection procedures for routine inspections are available to the public.*

#### **Comment: M-39; 034-18; 316-24**

Several commenters expressed concern about the effect of onsite activities on the integrity of underlying geology. Some commenters referred to a statement in section 4.2.5.1 that if final design studies indicate a need to extend footings into the Chinle Formation, the clay layer could be penetrated. Another commenter stated that preparations for construction of the proposed NEF would require surface grading, excavation into the caliche layer, and the relocation of a subsurface carbon dioxide pipeline crossing the site. The commenters suggested that the EIS explain how disturbance of site geology and penetration of the clay layer could affect its permeability and create new pathways for contaminants to enter and migrate through groundwater.

*Response: Although there is a possibility that the clay layer could be penetrated, LES does not plan to penetrate this layer under the site (as described in section 2.1.4, with the deepest cut being 4 meters [13 feet]). Penetration of this clay would not be expected to result in the introduction of new pathways of water or contaminant transmission. As described in section 3.8.1 of the EIS, this clay layer is thick (over 305 meters [1,000 feet]) and continuous, with few fracture planes.*

*Section 3.6.2 of the Draft EIS states that site borings indicate the presence of a limited amount of scattered caliche beneath the site. All grading and excavation would be expected to be in the alluvium. It is likely that the permeability of the alluvium would decrease because of the compaction associated with filling operations. Further, areas of the site developed with buildings or pavement would reduce any opportunities for surface water to penetrate underlying soils. Disturbances due to construction activities would not be expected to result in the creation of new pathways for groundwater or contaminant migration.*

#### **Comment: 034-19; 316-43**

A commenter questioned the NRC staff's determination that impacts to geology and soils during site preparation and construction would be small, and suggested they would be at least moderate. The commenter added that construction of the proposed NEF would require grading the site and introducing a large industrial facility that may require penetrating subsurface soils and the Chinle clay layer. The commenter also stated that because the proposed NEF would alter the geology and soils of the site beyond the preparation and construction phase, it is inappropriate to consider the impacts of site preparation and construction separate from the operational phase. This approach ignores the long-term effects of the initial development of the proposed NEF. Another commenter stated that the effects on

geology and soils of site preparation and construction would be long-term, not short-term as concluded in the Draft EIS.

*Response: As discussed in Section 4.2.5.1 of the Draft EIS, site preparation and construction activities for the proposed NEF would disturb only 81 hectares (200 acres) of the 220-hectare (543-acre) site. These activities would modify the gently sloping terrain in the affected area so that the resulting terrain would be flat. Construction is not expected to penetrate the Chinle Formation, and penetration of the surface soils is not expected to change the local geology. The composition of the soils affected by the construction activity would not change; and although these soils could be more prone to erosion due to wind or water, LES would implement mitigation measures during construction to minimize soil erosion and control fugitive dust. For these reasons, the NRC staff considered impacts to soils and geology during site preparation and construction to be SMALL.*

*The NRC staff considers it appropriate to evaluate impacts to soils and geology from site preparation and construction separately from those associated with operations, because the activities and the associated impacts are markedly different for site preparation and construction as compared to operations.*

*As discussed in section 4.7 of the Draft EIS, the NRC staff recognizes that construction and operation of the proposed NEF would require a long-term commitment of terrestrial resources. Because LES plans to leave the building shells and site infrastructure in place following decommissioning, these long-term commitments would include the permanent footprint of the proposed NEF facility and the soils in the area of the footprint.*

**Comment: 034-20**

A commenter questioned the basis of the NRC staff's conclusion in section 4.2.5.2 of the Draft EIS that the rate of wind and water erosion of exposed surface soils surrounding the proposed NEF site would likely be small.

*Response: Section 4.2.5 of the Draft EIS indicates that most of the site surface soils would not be disturbed by the construction of the proposed NEF. The rate of erosion of such soils would, therefore, not be impacted by site operations. Mitigating actions described in Chapter 5 of the Draft EIS, such as the use of earthen berms and sediment fences, would be enacted during construction; therefore, the NRC staff determined that impacts would be SMALL.*

**Comment: 042-7**

A commenter noted that the reference on page 3-26 of the Draft EIS (lines 33-36) to "Cretaceous Antlers Formation" is incorrect and that Table 3-8 indicates the Antlers Formation is of the Tertiary Age. If correct, the commenter suggested that the sentence be rewritten to explain the evidence of a reverse fault in Triassic Beds, and that there is no fault displacement through the younger Antlers Formation.

*Response: The age of the Antlers Formation is identified in various sources as either Cretaceous or Tertiary, although the latter is referenced more frequently. The NRC staff revised section 3.6.1 of the EIS to indicate that the Antlers Formation is of the Tertiary Age.*

**Comment: 042-8**

A commenter suggested that the geologic cross section shown in Figure 3-16 of the Draft EIS be revised to indicate how many drilling locations were used to delineate the cross section and asked whether there is a plan that shows the control points for the cross section.



*Response: The geologic cross-section in Figure 3-16 of the Draft EIS (Figure 3-17, section 3.6.1 of this EIS) illustrates the strata underlying the proposed NEF site. The figure was derived from information associated with the WCS site; LES drilling locations were not included.*

**Comment: 042-9**

A commenter stated that the EIS should provide a discussion of petroleum resources, exploration drilling, and existing or former petroleum wells on the proposed NEF site. Improperly sealed or abandoned drill holes would provide conduits for contamination.

*Response: Section 3.1 of the Draft EIS describes the proposed NEF site. The site consists of mostly undeveloped land that is used for cattle-grazing. No abandoned petroleum drill holes or existing or former well locations for petroleum have been found within the site boundaries. The NRC staff revised section 3.6.1.2 of the EIS to state that no petroleum resources occur at the proposed site.*

**I.11.2 Seismic Issues**

**Comment: 039-1; 365-2**

A commenter referred to a 1996 study (Hill, 1996), which differs in its conclusions from the Draft EIS regarding tectonic earthquake potential in the area of the proposed NEF. The commenter suggested that Chapter 4 include a discussion of the potential for earthquakes, as well as measures to mitigate potential earthquake activity. Another commenter stated that Lea County is potentially over a fault and that it is in a seismically vulnerable area.

*Response: Faults in the vicinity of the proposed NEF are identified in section 3.6.1 of the Draft EIS. The NRC staff revised section 3.6.1.1 of the EIS to clarify the discussion of regional seismicity and included a reference to the 1996 Hill report. In the SER, the NRC staff evaluated the applicant's proposed NEF design features that would reduce the risk of a release of licensed material caused by a postulated earthquake. A summary of the environmental impacts of such a release is provided in section 4.2.13.2 of the EIS.*

**Comment: 042-42**

A commenter suggested that the EIS identify the magnitude associated with seismic events that are considered of low to moderate size.

*Response: The NRC staff revised section 3.6 of the EIS to clarify that a low to moderate size earthquake would range from 3 to 5.9 on the Richter scale (USGS, 2005).*

**I.12 Water Resources**

**I.12.1 Surface Water**

**Comment: 032-27**

A commenter stated that sludge from the Treated Effluent Evaporative Basin must be removed on a regular basis because the area receives periodic heavy rainfalls. The commenter noted that section 2.1.7 of the Draft EIS states sludges would be removed only once, during the decommissioning phase.

*Response: The Treated Effluent Evaporative Basin would be designed to have adequate volume not to overflow in the event of heavy rains. The quantity of sludges expected to accumulate in the basin would*

*not be expected to affect liquid storage capacity to a noticeable degree. As stated in section 4.2.6.2 of the Draft EIS, in the unlikely event of consecutive years of very heavy precipitation, it could become necessary for site operators to develop strategies to prevent basin overflows.*

**Comment: 042-29**

A commenter noted that because the proposed NEF site exceeds 0.4 hectare (1 acre) (including staging areas), it would require a NPDES permit or waiver prior to beginning construction. A permit would require that a Stormwater Pollution Prevention Plan be prepared and appropriate Best Management Practices (BMPs) be implemented throughout construction.

*Response: Section 1.5.4 of the Draft EIS identifies the need for a Stormwater Pollution Prevention Plan and a NPDES Construction Stormwater General Permit. Chapter 5 includes the use of BMPs under proposed mitigation measures.*

**Comment: 042-30**

A commenter noted that once all associated construction activities are terminated and final stabilization is achieved, the proposed NEF may require coverage under Sector F, Chemical and Allied Products, under the NPDES multi-sector general permit.

*Response: Section 1.5.4 of the Draft EIS identifies the potential need for multiple Federal and State permits (include the above-referenced permit) during construction and operation of the proposed NEF.*

**Comment: 042-31**

A commenter noted that the Draft EIS stated that LES is in the process of deciding whether to submit a "No Exposure Certification for Exclusion from NPDES Stormwater Permitting." While the EPA makes this exclusion available to most industries that may otherwise require permit coverage under the multi-sector general permit, the commenter noted that such an exclusion is rarely granted for facilities of the size proposed in the Draft EIS.

*Response: LES is responsible for applying for and receiving the required permits and approvals prior to construction or operation. As stated in Table 1-3 of the Draft EIS, LES has the option of claiming no exposure or filing for coverage under the multi-sector general permit.*

**Comment: 093-2**

A commenter referred to discussions of surface water features in sections 3.2 and 3.7.1 of the Draft EIS, indicating that the EIS appears to imply that these features provide a significant amount of surface water to the Wallach Concrete, Inc., property. The commenter requested that the EIS clarify that the source of water for the fish pond on the Wallach Concrete, Inc., property be identified as municipal water supply. The commenter also noted that a shallow surface depression located at the base of a sand and gravel pit does not contain sufficient water to supply quarry operations. Water is perennially present in the pit due to a seep at the tip of the Chinle formation clay.

*Response: The seep in the shallow surface depression located at the base of one of the gravel pits, as stated in section 3.7.1 of the Draft EIS, is insufficient to supply quarry operations. The NRC staff revised section 3.2 of the EIS to state that the stocked fish pond is recharged using municipal water. The seep and the fish pond are in two separate locations on the Wallach Concrete, Inc., property.*

**Comment: 358-23**

A commenter noted that the Draft EIS does not discuss the impacts on LES operations of a reduction or cutoff of water supply for hours or days.

*Response: If water supply temporarily halts, then proposed NEF operations that require water may be halted. The cessation of operations would not cause any environmental releases exceeding those that would occur during normal operations.*

**I.12.2 Groundwater**

**Comment: L-10; 034-3; 284-11; 284-13; 316-21; 355-4; 356-5**

Many commenters stated that the proposed NEF site lies in the vicinity of several geologic faults, and that earthquakes frequently occur around the proposed NEF site. The commenters noted that characterization of the hydrogeology is complicated by the presence of numerous wells and fault pathways that connect widely separated strata. The commenters noted that the NRC has not conducted an investigation of the possible effects of earthquakes on ground water flow and has not considered the possibility of contaminant infiltration into ground water due to seismic activity. One commenter noted that the Draft EIS does not adequately explore possible subsurface connections between Monument Draw and the West Platform Fault Zone to the south.

*Response: As discussed in section 3.6.1 of the Draft EIS, no active faults have been identified within the immediate area of the proposed NEF site. A fault was identified at the nearby WCS site, but a detailed geologic investigation determined that movement on the fault last occurred over 135 million years ago, and that the fault does not result in increased vertical flow through the approximately 305-meter (1000-foot) thick, impervious Chinle clay formation (Cook-Joyce, 2004). In the SER, the NRC staff evaluated the applicant's proposed NEF design features that would reduce the risk of a release of licensed material caused by a postulated earthquake. A summary of the environmental impacts of such a release is provided in section 4.2.13.2 of the EIS. Any subsurface connections between Monument Draw and underlying strata would not be relevant to impacts from the proposed NEF because of the distance along Monument Draw to the West Platform Fault Zone.*

**Comment: M-40**

Several commenters asked whether penetrating the Chinle Formation and possibly creating fractures in the formation could change the estimate of vertical groundwater velocity through the clay.

*Response: Although there is a possibility that the clay layer could be penetrated, LES does not plan to penetrate this layer under the site (as presented in section 4.2.5.1 of the Draft EIS). Penetration of this plastic clay would not be expected to result in the introduction of new pathways of water or contaminant transmission. As described in section 3.8.1 of the EIS, this clay layer is thick (over 305 meters [1,000 feet]) and continuous, with few fracture planes. Vertical travel times through the formation would not be significantly altered if the very top of the Chinle Formation were to be penetrated for facility foundations.*

**Comment: 029-5**

A commenter stated that because the water table is 244 meters (800 feet) below the proposed NEF site and has a thick layer of impervious red clay, the groundwater would be adequately protected.

*Response: As stated in the Draft EIS, the NRC staff concludes that the proposed NEF impacts to water resources would be SMALL.*

**Comment: 034-3; 041-1; 316-23; 355-2; 355-4; 356-7**

Several commenters stated that the hydrogeologic assessment considers the potential impacts of the site in the immediate area, but does not look at cumulative, regional hydrogeologic impacts on the New Mexico and Texas areas in which the site and other industries are located, including oil and gas operations, Waste Control Specialists (WCS), and other industries. Another commenter requested that the NRC specifically assess whether the proposed NEF basins would have an effect on regional hydrogeology with respect to impacts from neighboring activities. Additionally, a commenter stated the Draft EIS does not adequately explore contamination of the Ogallala Aquifer to the east or the impacts of the proposed NEF on the fresh water sources of Texas. The commenters suggested that the EIS include a discussion of the potential pathways for transmission of contaminants to deeper groundwater.

*Response: The NRC staff performed a thorough analysis of the impacts of the proposed NEF on hydrogeology, as described in section 4.2.6 of the Draft EIS and in the cumulative impacts discussion (section 4.4.3). Sections 3.8.1 and 3.8.3 of the Draft EIS state that groundwater on adjacent properties are either localized or is transported to the southeast, away from the proposed NEF. However, the NRC staff revised sections 3.2 and 3.8.3 to provide the following additional information: There is no evidence of either oil exploration or exploration wells at the site. The operations at Wallach Concrete, Inc., have not affected the conditions at the proposed NEF site, nor have they affected the geohydrology downgradient from the site. The WCS site is east of the proposed NEF site, and WCS impacts are not expected to accumulate with any hydrogeologic impacts from the proposed NEF. Any potential leakage from ponds at WCS would be transported to the southeast, away from the proposed NEF site. The Wallach Concrete, Inc., site to the north is partially upgradient. This is a sand and gravel operation with no potential for groundwater contamination. Sundance Services, Inc., is located between Wallach Concrete, Inc., and the proposed NEF site. Sundance Services, Inc., is using ponds to recover oil. There are over 100 monitoring wells around the Sundance Services, Inc., site. Contamination from these ponds has not been detected in the outer monitoring wells, which are located on the Sundance Services, Inc., property. If any contamination is detected in the future, mitigating actions would be taken by Sundance Services, Inc. Neither DD Landfarm nor the Lea County Landfill are expected to impact the proposed NEF site because they are downgradient from the proposed NEF site.*

*The Ogallala Aquifer diminishes at Red Bed Ridge, north and upgradient of the proposed NEF site. The alluvial gradient from the proposed NEF site is to the southwest, away from the Ogallala Aquifer. Therefore, site groundwater would not be expected to impact the Ogallala Aquifer. No groundwater pathways have been identified that could hydraulically connect the proposed NEF site to other sources of fresh water in New Mexico or Texas.*

**Comment: 034-4**

A commenter stated that the Draft EIS fails to discuss exceedances of groundwater contaminant limits or impacts to human health and the environment in the event of offsite transport of contaminants.

*Response: As discussed in section 4.2.6.2 of the Draft EIS, impacts to groundwater quality from the proposed NEF would be expected to be SMALL. In addition, LES would abide by any requirements imposed by the groundwater discharge permit issued by the State of New Mexico. If exceedances are found, the New Mexico Environment Department could require abatement programs.*

**Comment: 042-4; 042-5; 042-12; 042-21**

A commenter stated that because groundwaters in the area of the proposed NEF site have total dissolved solids less than 10,000 milligrams per liter, these waters are subject to protection under New Mexico

Water Quality Act and Water Quality Commission Regulations (20.6.2 NMAC), which address permitting prior to construction, during operation, closure, postclosure, and abatement. The commenter noted that shallow groundwater occurrences or perched zones on adjacent properties are considered groundwater if there are usable quantities of water regardless of whether the aquifer is of limited horizontal or vertical extent. Also, some shallow groundwater zones may recharge other aquifers or discharge to ephemeral drainages. Finally, the commenter noted that it is not a certainty that groundwater downgradient of the proposed NEF would not be used in the future.

*Response: The NRC staff revised Table 1-2 of the EIS to indicate that groundwater would be subject to the New Mexico Water Quality Act and regulations. Sections 3.8.1 and 3.8.3 of the Draft EIS stated that groundwater on adjacent properties would not impact (or be impacted by) operations associated with the proposed NEF. Concerning the potential for future uses of downgradient groundwater, it is not expected that proposed NEF groundwater discharges would affect the quality of groundwater downgradient of the site. LES is in the process of obtaining a groundwater discharge permit to ensure that its discharges are in compliance with State regulations.*

**Comment: 042-8; 042-10**

Referring to Figure 3-16 of the Draft EIS, a commenter asked whether the dune sands recharge areas are located to the north and south of the proposed site. The commenter stated that the EIS should address whether the dunes and alluvial deposits are part of a recharge area for shallow or deep aquifers south of the site. The commenter also wanted to know the distance of the cut and fill area from the Ogallala Formation.

*Response: The dune sands recharge areas are associated with the Ogallala Aquifer, which exists only north of Red Bed Ridge, north of the site. As stated in section 3.7.1 of the Draft EIS, the area downgradient (southwest in the alluvium) of the proposed site to Monument Draw is an intermittent stream, typically dry, and does not constitute a recharge area for the Ogallala Aquifer. Likewise, the dune sands shown in Figure 3-16 of the Draft EIS (Figure 3-17 of this EIS) south of the site are not associated with the Ogallala. Because the Ogallala Aquifer is located approximately 1.6 to 3.2 kilometers (1 to 2 miles) miles north and east of the site, onsite cut and fill operations would not affect the Ogallala Aquifer.*

**Comment: 042-13**

A commenter noted that a discussion in section 3.8.1 of the Draft EIS, which states that field investigations and computer modeling show that no precipitation recharge occurs in desert vadose zones, may conflict with subsequent paragraphs in that section.

*Response: The NRC staff revised section 3.8.1 of the EIS to specify that localized, shallow groundwater can occur only under certain circumstances. The Draft EIS discussed the conditions under which such groundwater would be present, and that these conditions are not present on the proposed NEF site.*

**Comment: 042-14**

A commenter requested that the EIS state indicate the distance from the proposed site of the nearest domestic and livestock wells.

*Response: The NRC staff revised section 3.8.2 of the EIS to discuss the purpose and status of wells downgradient of the proposed NEF.*

**Comment: 042-15**

A commenter stated that according to the Draft EIS, chemical analyses of groundwater in the area of the proposed NEF incorrectly indicate that the concentration of total dissolved solids is less than the sum of the combined concentrations for chloride and sulfate.

*Response: The NRC staff verified with LES that the value for total dissolved solids provided earlier and presented in Table 3-11 of the Draft EIS is likely inaccurate (LES, 2005b). The staff revised the table to indicate that total dissolved solids are present in concentrations of 6,000-6,400 milligrams per liter.*

**Comment: 042-16**

A commenter requested that field pH and laboratory results for sodium, potassium, magnesium, calcium, alkalinity (bicarbonate and carbonate) be included in future analyses.

*Response: The NRC staff determined that information in Table 3-11 of the EIS is adequate to describe the environment of the proposed NEF.*

**Comment: 042-17**

A commenter stated that the existing regulatory standard for uranium in New Mexico groundwater is 0.030 milligram per liter, not 0.005 milligram per liter. The existing regulatory standard for copper in New Mexico groundwater is 1.0 milligram per liter, not NS (no standard).

*Response: The NRC staff revised Table 3-11 in the EIS to reflect the information in the comment.*

**Comment: 042-19**

A commenter noted that the Site Stormwater Detention Basin is predicted to infiltrate and form a perched aquifer in the alluvium above the Chinle Formation. The resultant episodic recharge events may cause some groundwater to migrate downgradient and discharge at Custer Mountain or southeast of Monument Draw. The commenter stated that LES must monitor the alluvium both for groundwater quality and water levels to determine if the water is present or may move offsite. The commenter also stated that a system of alluvial dry wells would be necessary to serve as an early detection system.

*Response: Section 4.2.6 of the Draft EIS describes the potential for offsite migration of stormwater. The detention basin water would consist of site runoff from non-process areas similar to any other industrial facility stormwater runoff. If perched water accumulates in the shallow alluvium, this water could travel downgradient to the south-southwest. As it travels, it would be subject to evapotranspiration and soil adsorption. Based on information on groundwater use in the region, the NRC staff determined there are no groundwater users downgradient in the alluvium. As discussed in section 1.5.4 of the Draft EIS, LES has submitted a groundwater discharge permit application to the New Mexico Environment Department Water Quality Bureau. If granted a permit, LES would implement requirements regarding alluvial monitoring as specified by the State of New Mexico.*

**Comment: 042-22**

A commenter noted that the term "nonrenewable water source" may not be appropriate for an aquifer that has the potential to receive recharge or recover from reduced demand.

*Response: The NRC staff revised section 3.8.2.1 of the EIS to clarify that the Ogallala aquifer is being "depleted."*

**Comment: 048-44; 048-47**

A commenter stated that the EIS should include a qualifier that explains the conservative nature of the hypothetical groundwater plume analysis and that the volume of the assumed groundwater plume is overestimated.

*Response: The NRC staff revised section 4.2.6 of the EIS to note the conservative nature of the plume analyses. Discussions of the conservative assumptions of not accounting for evapotranspiration, soil storage capacity, and evaporation from the ponds are also included.*

**Comment: 072-3**

A commenter stated that, based on a water study performed by Texas Tech University, the commenter is confident that the proposed NEF would not adversely impact groundwater.

*Response: The NRC staff reviewed the water study performed by Texas Tech University and found it to be generally supportive of the conclusions reached in the EIS (Rainwater, et al., 2000).*

**Comment: 316-22**

A commenter asked whether transpiration of water by native vegetation (section 3.8.1 of the Draft EIS) would be compromised if the existing vegetation is removed to construct the proposed NEF. The commenter asked what would be done to restore disturbed vegetation by the construction of the proposed NEF. The commenter stated that the effectiveness of transpiration at the site appears to be questionable, and cited examples of moist and slightly moist conditions found in well borings. The commenter stated well MW-2, which showed recharge throughout the monitoring period, appears to be very near the proposed site of the uranium byproduct cylinder (UBC) Storage Pad. The commenter further noted that section 3.8.1 of the Draft EIS reports site groundwater at a depth of 67 meters (220 feet) within the Chinle Formation and a water-bearing sandstone layer at 183 meters (600 feet) below the surface.

*Response: As discussed in sections 2.1.4 and 4.2.5 of the Draft EIS, most of the site surface soils would not be disturbed. The developed portion of the site would undergo soil disturbance. LES has committed to revegetating disturbed areas that would not be developed. The Site Stormwater Detention Basin and the UBC Storage Pad Stormwater Retention Basin would collect precipitation runoff from the developed areas of the site, including the UBC Storage Pad, minimizing infiltration. The soil both above and below the slightly moist boring at 2 to 4 meters (6 to 14 feet) is very dry, consistent with the mechanism of an upward gradient due to evapotranspiration. If precipitation recharge were present at the proposed site, moisture would be present at various locations and depths. The single moist boring (note that moistness does not represent available groundwater) among the more than 70 strata logged does not indicate precipitation recharge. The water within the Chinle Formation present at 67 meters (220 feet) and 183 meters (600 feet) is not indicative of infiltration at the site. In addition, well MW-2 ends in the 67-meter (220-foot) zone; therefore, the water in this well is expected.*

**Comment: 316-25**

A commenter noted that the NRC staff concluded that the proposed NEF's impact on water resources would be small and that groundwater resources under the proposed NEF site are not considered potable (Draft EIS, Table 2-8). The commenter stated that this conflicts with a description of the Santa Rosa aquifer as the principal source of groundwater for domestic and livestock uses in the southwestern portion of Lea County. The commenter further stated that section 3.11.3 of the Draft EIS observes that people in the area of the proposed NEF site depend on groundwater supplied from personal wells. The commenter requested that the EIS address or resolve this apparent contradiction.

*Response: The determination of small impacts on water resources was not dependent on the potability of the Santa Rosa Aquifer, but on the existence of the thick (over 305 meters [1,000 feet]) and impervious Chinle Formation, which forms a barrier between the surface alluvium and the Santa Rosa. In addition, the groundwater found in the Chinle Formation beneath the proposed NEF site is not potable due to its high total dissolved solids (see Table 3-11 of the EIS), nor would it be available in sufficient amounts for general use. There are no domestic groundwater wells in the vicinity of and downgradient from the proposed NEF site that could be impacted by any site releases.*

### **I.12.3 Detention/Retention Basins**

#### **Comment: M-17**

Several commenters asked whether the State of New Mexico has authority over permitting and/or regulating the waste treatment systems, treatment basins, or lagoons associated with the proposed NEF.

*Response: As discussed in section 1.5.3 of the Draft EIS, the State of New Mexico regulates water-discharge sources under the New Mexico Water Quality Act regarding the management and operation of waste treatment system, basins, and lagoons. The State is currently obtaining authorization to issue wastewater and stormwater permits from Region 6 of the EPA. Stormwater and wastewater permits would be issued either by the EPA or the State, depending on whether this transfer of authority is complete when construction of the proposed NEF begins.*

#### **Comment: M-41**

Several commenters noted that section 3.7.1 of the Draft EIS states that net evaporation/transpiration associated with the onsite basins is estimated to be 165 centimeters (65 inches) per year, but section 4.2.6.2 shows an evaporation rate of 17 centimeters (6.7 inches) per month. The commenters stated that the latter figure is incorrect and that evaporation would be 13.7 centimeters (5.4 inches) per year, assuming that the NRC estimated the inches per month by dividing 165 centimeters (65 inches) per year by 12 months. The commenters also stated that rainfall is not evenly distributed throughout the year. The commenters requested that the EIS state the expected quantity of cooling tower blowdown water to be discharged to the UBC Storage Pad Stormwater Retention Basin. The commenters requested that monthly averages for cooling tower blowdown be compared to anticipated monthly evaporation, taking into consideration low evaporation rates during wetter months.

*Response: The 165 centimeters (65 inches) per year of evaporation noted in section 3.7.1 of the Draft EIS is based on rates at Red Bluff Dam, approximately 97 kilometers (60 miles) southwest of the proposed NEF site, and is a net evaporation rate. LES chose to use a gross evaporation rate of 80 inches per year for basin water-balance calculations. Once the annual rainfall of 43 centimeters (17 inches) is subtracted from the gross evaporation rate, the net site evaporation rate would be 160 centimeters (63 inches), which is equivalent to the value noted in the Draft EIS. The monthly evaporation rate of 17 centimeters (6.7 inches) is based on the gross rate of 203 centimeters (80 inches) per year. The water-balance calculations were performed on a month-to-month basis and included monthly variations in both evaporation and precipitation rates. The fraction of the inflow to the UBC Storage Pad Stormwater Retention Basin that is from the cooling tower blowdown varies from 7 percent for the maximum precipitation scenario in late summer to 65 percent for the minimum precipitation scenario in winter.*



**Comment: M-42**

Several commenters stated that the NRC should require a shielding structure around each evaporative basin and basin to ensure that dry solids remaining in those basins and basins on the proposed NEF site are not vulnerable to scattering by winds.

*Response: Due to the low concentrations of dry solids expected in the proposed NEF basins, little or no scattering would be expected. The proposed NEF basins would also be monitored over the life of the facility to ensure any buildup of dry solids would not result in adverse health effects.*

**Comment: 031-2**

A commenter asked what design requirements, precautions, and procedures the NRC would require to guarantee that contaminated water would not overflow from the basins due to frequent flash flooding in Lea County.

*Response: As discussed in section 4.2.6.2 of the Draft EIS, the proposed NEF would have three surface basins. Each basin would be designed with sufficient extra capacity to retain potentially contaminated waters from a 100-year rainfall.*

- *The Treated Effluent Evaporative Basin would collect and contain wastewater discharges from the Liquid Effluent Collection and Treatment System. The total annual discharge to that basin would be approximately 2,540 cubic meters per year (670,000 gallons per year). Evaporation would provide the only means of liquid disposal from this basin. Because New Mexico's climate is normally arid, the basin would be dry and empty most of the time. In the unlikely event that heavy rainfall occurs for several consecutive years, site operators may be required to develop strategies to prevent basin overflow.*
- *The Site Stormwater Detention Basin would be designed to contain site runoff for a volume equal to that for the 24-hour, 100-year return frequency storm (a 15.2-centimeter or 6.0-inch rainfall). The basin would have approximately 123,350 cubic meters (100 acre-feet) of storage capacity.*
- *The UBC Storage Pad Stormwater Retention Basin would be designed to contain runoff for a volume equal to twice that for the 24-hour, 100-year return frequency storm. This basin would be designed to contain approximately 77,700 cubic meters (63 acre-feet). The NRC staff concluded there would be no potential for the basins to overflow and no mitigation measures are required.*

*The NRC staff revised Chapter 5 of this EIS to indicate that LES plans to conduct regular visual inspections of the basins to verify proper functioning.*

**Comment: 033-3**

A commenter stated that the use of liners in the basins is inadequate for safety reasons, and if the water table becomes contaminated, the State and Federal governments should be financially liable.

*Response: As stated in the comment, both the Treated Effluent Evaporative Basin and the UBC Storage Pad Stormwater Retention Basin would be lined (and designed in accordance with State of New Mexico guidelines). If any leakage were to occur from either of these basins, any contaminants in that leakage would tend to adsorb on the clay underlining the basin liners, and the leaked water would go into storage in the alluvium. If any leakage were to travel in the shallow alluvium to the south-southwest, it would be subject to evapotranspiration and any contaminants would tend to adsorb on the soil. Under 10 CFR § 140.13b, a uranium enrichment facility licensee is required to carry liability insurance to*

*cover public claims arising from any occurrence within the United States that results from the radioactive, toxic, explosive, or other hazardous properties of chemicals containing licensed material, and causes, within or outside the United States, the losses and injuries enumerated in the regulation. The SER discusses how LES would fulfill the liability insurance requirements listed in section 140.13b.*

**Comment: 034-5**

A commenter expressed concern that stormwater from the proposed NEF that would contain the highest concentration of radionuclides would be discharged to a single-lined retention basin. The commenter stated that a discharge of radioactive stormwater to a single-lined basin could increase any risks associated with offsite migration of wastewater and stormwater. The commenter stated that the EIS should quantify these risks and provide further discussion of the threats to groundwater and surface water.

*Response: The NRC staff described the impacts of the proposed NEF on water resources in section 4.2.6 of the Draft EIS. Radionuclides are not expected to be present in site stormwater. The single-lined UBC Storage Pad Stormwater Retention Basin drains the UBC Storage Pad. The UBCs would be surveyed and external contamination would be removed prior to cylinder placement on the UBCs Storage Pad.*

**Comment: 034-22**

A commenter stated that the Draft EIS assumes that water buildup in the evaporative basin would be gradual. The commenter stated that the EIS should discuss how overflows would be prevented in instances of rapid buildup, such as a valve failure or burst pipe, or how a rapid water buildup would be prevented under such circumstances.

*Response: As discussed in section 4.2.6.2 of the Draft EIS, based on a water balance of the basin, the probability of an overflow of the Treated Effluent Evaporative Basin would be SMALL. The basin is designed with a capacity of 2,540 cubic meters (670,000 gallons). The maximum flow through a 20-centimeter (8-inch) diameter water line is approximately 7.5 cubic meters (2,000 gallons) per minute. In the unlikely event of a complete rupture of a 20-centimeter (8-inch) diameter water line, and assuming all of the water drains directly into the basin, it would take over 5½ hours to fill the basin. This is sufficient time for the plant operators to isolate the burst pipe and take suitable overflow preventive measures.*

**Comment: 034-23**

A commenter stated that the EIS should consider whether seepage from the Site Stormwater Detention Basin has the potential to contaminate groundwater. The commenter noted that there is no legal constraint, other than State Engineer permitting, that would prevent the construction of a shallow groundwater well adjacent to the proposed NEF property line.

*Response: As discussed in section 4.2.6.2 of the Draft EIS, water in the Site Stormwater Detention Basin would consist of typical site runoff. The contaminants in this water would be no different from those found at any industrial facility of similar size to the proposed NEF. Any leakage from this basin would be reduced by evapotranspiration, soil-water capacity, and adsorption of contaminants. There is no shallow groundwater underneath or downgradient of the site. Therefore, it is unlikely that a shallow groundwater well would be constructed adjacent to the site.*

**Comment: 034-24; 034-25; 042-3**

Commenters stated that the Draft EIS conclusion that Site Stormwater Detention Basin seepage and the septic systems would have a small impact on water resources of the area are contradicted by statements

in the Draft EIS that there is a potential for migration of seepage to a location 3.2 kilometers (2 miles) from the site.

*Response: Section 4.2.6.2 of the Draft EIS describes the potential impacts from the Site Stormwater Detention Basin and septic systems. The detention basin water would be normal site runoff from non-process areas similar to any industrial facility site runoff. The septic system water would receive only sanitary wastewaters and would not be impacted by site operations. Both of these systems would have the potential to form perched water in the shallow alluvium. This water could travel downgradient in the shallow alluvium to the south-southwest. As it travels, it would be subject to evapotranspiration and any contaminants would tend to adsorb on the soil. Based on information on groundwater use in the region, the NRC staff determined there are no groundwater users downgradient in the alluvium.*

**Comment: 042-11**

A commenter noted that net evaporation is cited as 165 centimeters (65 inches) per year and stated that the EIS should address whether design measures considered the concentration of salts and other contaminants in the proposed NEF basins.

*Response: The NRC staff revised the calculations reflected in section 4.2.6 of the EIS to include consideration of the effect of buildup of salts on evaporation rates.*

**Comment: 042-18**

A commenter recommended the use of "synthetic liner" to avoid confusion with the term "geosynthetic liner," and included specific liner specifications and requirements.

*Response: The NRC staff determined the term "geosynthetic liner" is commonly used and appropriate in this EIS. As discussed in section 2.1.7 of the Draft EIS, the liner would meet New Mexico Environment Department specifications.*

**Comment: 042-24**

A commenter stated that effluent concentrations for the Treated Effluent Evaporative Basin would be 0.225 milligram per liter for uranium. The uranium concentration would rise as a result of evaporation of the water. The commenter stated that the EIS should evaluate the concentration as affected by evaporation.

*Response: As discussed in section 4.2.6.2 of the Draft EIS, the levels of uranium in the Treated Effluent Evaporative Basin would be SMALL and would not impact area water resources. In addition, because of uranium's strong affinity to clay, when the Treated Effluent Evaporative Basin water evaporates, the concentrated uranium remaining would tend to be bound to the clay soil layer lying above the upper synthetic liner.*

**Comment: 042-28**

A commenter recommended the use of precipitation measurements from the meteorological station to verify in a timely fashion the adequacy of stormwater basin design and management. For example, rainfall events above 0.6 centimeter (0.25 inch) would trigger a visual inspection for the proper functioning of the site stormwater systems and evaporation basin.

*Response: The NRC staff revised Chapter 5 of the EIS to indicate that LES plans to conduct regular visual inspections of the basins to verify proper functioning.*

**Comment: 042-41**

A commenter stated that the EIS should address what measures would be in place to prevent windborne transport of concentrated salts and other contaminants from the Treated Effluent Evaporative Basin and the stormwater detention/retention basins.

*Response: As discussed in section 4.2.12.2 of the EIS, windborne contaminants from the Treated Effluent Evaporative Basin would have SMALL impacts on the surrounding population. This is in part due to uranium's strong affinity to clay, when the Treated Effluent Evaporative Basin water evaporates, the concentrated uranium remaining would tend to be bound to the clay soil layer lying above the upper synthetic liner. LES would monitor the water levels and accumulation of solids in the stormwater detention/retention basins as presented in Chapter 6 of the EIS.*

**Comment: 048-5; 048-42; 048-86**

A commenter noted that sections 2.1.4, 4.2.6.2, and 6.1.1 of the Draft EIS should be revised to reflect that the UBC Storage Pad Stormwater Retention Basin also receives heating boiler blowdown.

*Response: The NRC staff revised sections 2.1.4, 4.2.6.2, and 6.1.1 and other relevant sections of the EIS to include heating boiler blowdown discharges.*

**Comment: 048-14**

A commenter stated that runoff and stormwater from the UBC Storage Pad would be routed to a lined basin for evaporation. The commenter suggested that the EIS be revised to specify that the UBC Storage Pad Stormwater Retention Basin would receive this runoff and stormwater.

*Response: The NRC staff revised section 2.1.7 of the Draft EIS to provide the requested clarification.*

**Comment: 048-43**

A commenter recommended revising section 4.2.6.2 of the Draft EIS to indicate that the basin would be dry for 12 months of the year for the minimum scenario and would have on average 0.3 meter (1 foot) or less of standing water for 10 months of the year for the maximum scenario.

*Response: The NRC staff revised section 4.2.6.2 of the EIS to reflect the most recent information provided.*

**Comment: 048-46; 048-48**

A commenter requested clarification of the word "portions" in section 4.2.6.2 of the Draft EIS. Since little, if any, basin waters would be expected to recharge the shallow groundwater system, any water originating at the proposed NEF that discharges at these locations would be negligible.

*Response: The text in section 4.2.6.2 of the Draft EIS describes these potential discharges as "minor seeps."*

**Comment: 048-65**

A commenter stated that section 4.5 of the Draft EIS, which discusses water releases from the two lined basins, is not correct. The commenter suggested that the NRC clarify the pathways for water releases from the stormwater and effluent basins and from the septic systems.

*Response: The NRC staff revised section 4.5 of the EIS to more accurately reflect water release pathways.*

**Comment: 316-22; 343-5; 356-5**

Commenters stated that the Draft EIS contains no estimate of the likelihood of liner corruption and subsequent leakage. The commenters asked how long the liners for wastewater basins would retain their integrity and on what basis this assumption is made.

*Response: Estimates of the probability and frequency of leakage through a liner depend on the specific liner material used, the type of the basin so lined, the techniques employed when installing the liner, and additional site-specific conditions; as a result, such estimates are highly uncertain. As discussed in section 2.1.7 of the Draft EIS, the Treated Effluent Evaporative Basin and UBC Storage Pad Stormwater Retention Basin would be equipped with synthetic liners above a layer of highly impermeable clay. The Treated Effluent Evaporative Basin would be double-lined and equipped with a leak-detection system. LES would select and install the liners for both basins in accordance with New Mexico Environment Department specifications and guidelines.*

**Comment: 355-3**

A commenter expressed concern that the clay layer relied upon to prevent substantial movement of material could be undermined both by the onsite water retention facilities as well as by the possible disposal of mixed waste at the WCS facility. The commenter stated that the Draft EIS fails to identify these potentials.

*Response: Onsite water detention/retention basins would not disturb the red clay soil (Chinle red beds) beneath the proposed site. The disposal of waste at the WCS facility is considered in the context of cumulative impacts to the soil. As discussed in section 4.4.2 of the Draft EIS, WCS activities do not impact the Chinle red beds at the proposed LES site.*

#### **I.12.4 Septic Systems**

**Comment: 042-2**

A commenter noted that wastewaters from the septic systems could result in contamination of groundwater associated with an ephemeral drainage or an aquifer recharge area. The commenter stated that if any groundwater contamination occurred under this or another scenario, abatement would be required under the New Mexico Water Quality Act.

*Response: The NRC staff revised Table 1-2 in the EIS to reflect that the New Mexico Water Quality Act also applies to abatement of groundwater contamination.*

**Comment: 042-26; 042-27**

A commenter noted that the New Mexico Environment Department Groundwater Quality Bureau discharge permit would likely require annual sampling of the septic system for total Kjeldahl nitrogen, nitrate, total dissolved solids, and chloride. The permit would also include major ions (e.g., chloride, sulfate, total dissolved solids, fluoride, sodium, calcium, magnesium, and potassium) and field parameters of electrical conductance, temperature, and pH.

*Response: The NRC staff recognizes that LES would be required to comply with the groundwater discharge permit for the proposed NEF.*

**Comment: 042-20; 042-21; 042-26; 042-27**

The commenter stated that the septic system should be designed consistent with New Mexico Environment Department Groundwater Quality Bureau Guidelines for Design Criteria, Operation and Maintenance. The commenter stated that it may be necessary to consider an alternate design to reduce the potential for the formation of perched groundwater body and contaminant transport offsite. The commenter noted further that the discharge permit issued by the New Mexico Environment Department Groundwater Quality Bureau would likely require annual sampling of the septic system for total Kjeldahl nitrogen, nitrate, total dissolved solids, and chloride. The permit would also include major ions (e.g., chlorine, total dissolved solids, sulfate, fluorine, sodium, calcium, magnesium, and potassium) and field parameters of electrical conductance, temperature, and pH.

*Response: As discussed in section 4.2.6.2 of the Draft EIS, the proposed septic systems are included in the LES groundwater discharge permit application filed with the New Mexico Environment Department Groundwater Quality Bureau. The NRC staff expects that offsite impacts from the septic system would be reduced by evapotranspiration of any perched water that may form as well as by adsorption to soil of the contaminants. The NRC staff recognizes that LES would be required to comply with the groundwater discharge permit for the proposed NEF.*

#### **I.12.5 Water Supply and Use**

**Comment: L-9; Q-2; 032-4; 032-10; 032-15; 032-34; 032-39; 151-7; 316-20; 343-4; 356-8; 365-4**

Many commenters stated that the Draft EIS neglects the severe long-term water shortage problem of Lea County, as documented in the Lea County Regional Water Plan. According to the water plan, groundwater in the county is being withdrawn at a greater rate than it is being recharged. The report projects a doubling of water usage by 2040 and warns that "there is physically not enough water in the Basin to maintain an annual diversion of this magnitude." One of the commenters also stated that the Draft EIS does not compare the proposed NEF's lifetime water usage to capacities in the Lea County Underground Water Basin, which is part of the Ogallala Aquifer. The commenter asked how the NRC can justify the conclusion that impacts to water resources would be small, considering that projected water shortages may force LES to comply with a drought management plan. The commenter asked that the NRC consider the long-term effects of further depleting the Ogallala Aquifer by diverting water for use by the proposed NEF.

Several commenters asked if the source of the municipal water system is groundwater. The commenters asked whether studies have been conducted that assure that underground water sources would not be depleted.

*Response: The municipalities of Hobbs and Eunice, which would supply the water to the proposed NEF, withdraw their water from the Ogallala Aquifer, north of the city of Hobbs. As described in section 4.2.6.3 of the EIS, the water that would be used for the proposed NEF would constitute a very small portion of the water rights and capacity of the municipal systems. The amount of water used is also a very small fraction of the water available from the Ogallala Aquifer reserves in the State of New Mexico. The NRC staff revised section 4.2.6.3 of the EIS to include an additional analysis of water usage on the withdrawal wells used by the municipalities. The additional analysis confirms the small impact of the proposed NEF on water usage. In addition, constructing, operating and decommissioning the proposed NEF would not change the manner in which the drought management plan is implemented by Lea County, since the water that would be used by the proposed NEF would be a small percentage of the capacity of the municipal systems.*

*While the Lea County Regional Water Plan projects a doubling of water usage by 2040 if growth is unrestrained, the rate of water use by the city of Hobbs has been level over the past 10 years (LCWUA, 2000). The proposed NEF would not be a water-intensive project. Section 4.2.6.4 of the EIS discusses mitigative measures to further minimize water consumption such as use of a closed cycle cooling tower; low-water-consumption landscaping techniques; low-flow toilets, sinks, and showers; and other efficient water-use techniques. The proposed NEF would use approximately one-quarter of the water used by the Hobbs Country Club and one-third of the water used by the Eunice Golf Course.*

**Comment: M-15; M-45; 358-20; 358-21; 358-22; 358-24**

Several commenters asked how much water from the Ogallala Aquifer the proposed NEF would use over its lifetime. One commenter stated that annual water use estimates provided in the Draft EIS are not limits, and that the NRC should analyze the maximum amount of water the proposed NEF could use. The commenter estimates that since LES must operate continuously, peak use for a year would be about four times the lifetime usage provided in the Draft EIS. The commenter also stated that the EIS should analyze the impacts of peak NEF water use on the Eunice system since there is no current requirement that LES receive its water from both Hobbs and Eunice. The commenter also requested that the EIS state what measures would be taken to ensure a redundant water supply as well as any regulatory requirements and impacts. A commenter stated that the EIS must include a detailed, yearly water usage plan that incorporates the impacts of the proposed NEF according to its actual usage and future water demand and availability.

*Response: Section 4.2.6 of the Draft EIS provides detailed information concerning water use by the proposed NEF. The proposed NEF would use approximately 2.63 million cubic meters (695 million gallons) of water over its lifetime. The NRC staff revised section 4.2.9.3 of the Draft EIS to reflect this more precise estimate provided in section 4.2.6.3. Section 4.2.6.3 presents the impacts to the Eunice and Hobbs, New Mexico, water supply systems separately. The Draft EIS water use impacts are based on the average proposed NEF water use rate. The peak rates describe only the operation of filling the water tanks used to fight fires. The peak rates would occur only while the tanks are being filled. The average water use rate more accurately describes the annual site usage. Section 4.2.6.3 of the Draft EIS notes that over its lifetime, the proposed NEF would use 0.0004 percent of the Ogallala Aquifer reserves. A redundant water supply would not be required for the proposed facility because plant safety is not dependent on external water supplies.*

**Comment: 034-21; 316-19**

Two commenters questioned the basis for using the Claiborne Enrichment Center design estimates to estimate proposed NEF annual water usage for dust suppression during construction (section 4.2.6.1 of the Draft EIS). One of the commenters noted that the proposed Claiborne Enrichment Center was designed to be half the size of the proposed NEF. The second commenter noted that estimates of water usage for dust suppression at Claiborne are only applicable to the extent that climate and soil conditions are similar, unless adjustments to account for differences have been made.

*Response: Although the Claiborne Enrichment Center was designed to be smaller than the proposed NEF, the techniques used in constructing either facility would be similar. The NRC staff's estimate of water use during construction for the proposed NEF was increased from the Claiborne Enrichment Center quantity by a factor of 3.3 to account for the larger size of the proposed NEF and the need for additional water for dust suppression for the Lea County location.*

**Comment: 034-55**

A commenter suggested that the EIS either explain why it is appropriate to analyze only the WCS site for cumulative impacts to water resources or include analyses of impacts from other nearby sites.

*Response: The water needs of other nearby facilities such as Wallach Concrete, Inc., Sundance Services, Inc., and the Lea County landfill are already accounted for in water use estimates of the region as provided in section 4.2.6.3 of the Draft EIS. Therefore, cumulative impacts in section 4.4.3 additionally consider only proposed or new activities such as construction of the WCS disposal cells and the casino/hotel/racetrack. The NRC staff revised section 4.4.3 of the EIS to state that the impacts of nearby facilities on water resources is accounted for through consideration of the Eunice and Hobbs municipal water-supply systems.*

**Comment: 042-6**

A commenter suggested that LES provide a comprehensive water balance to illustrate projected water supply, demand, and losses. The commenter noted that it would be easiest to evaluate a single figure each for the construction phase and the operations phase.

*Response: In its Environmental Report, LES supplied the normal and peak water consumption and liquid flows expected from the proposed NEF. This information was used to perform the analyses contained in section 4.2.6 of the Draft EIS.*

**Comment: 075-1; 083-1**

One commenter stated that the Lea County Regional Water Plan not only addresses supply and demand but also alternatives such as conservation, water rate structure, development of deep aquifers, treatment and use of lower-quality water, imported water, aquifer recharge, weather modification, interstate alternatives, groundwater flow modeling, and the water monitoring program. Another commenter stated that the aquifer can easily meet the water requirements of the proposed NEF.

*Response: Chapter 8 of the Lea County Regional Water Plan describes water-supply alternatives including water conservation, development of additional water supplies, and improvement of water management. Alternative supplies could include development of deep aquifers, treatment of lower quality water, importing water, aquifer recharge, and cloud seeding. None of these possible alternatives would be negatively impacted by proposed NEF operations. Section 4.2.6.3 of the Draft EIS describes the SMALL impacts that the proposed action would have on water supply. Should any of the alternative water supplies be implemented, these SMALL impacts would decrease.*

**I.13 Ecological Resources**

**I.13.1 General**

**Comment: 034-26**

A commenter stated that section 4.2.7.1 of the EIS fails to discuss the impacts on ecological resources from the use of pesticides, the use of which is indicated in Table 4-15.

*Response: Section 4.2.7.1 of the Draft EIS provided a general description of the proposed actions that could occur during site preparation and construction. The specific quantity of pesticides used during construction could vary from none to a maximum of 380 liters (100 gallons) as identified in Table 4-15 of the Draft EIS. The pesticides would be applied on the proposed NEF site according to State and Federal*



requirements, and the impacts would be SMALL. The NRC staff revised section 4.2.7.1 of the EIS to include the use of pesticides.

**Comment: 034-27**

A commenter stated that the EIS should explain why the level of safety required for the protection of humans is adequate for animals and plants, since different species use natural resources and react to environmental toxins in very different ways.

*Response: The NRC established standards for radiological exposures to humans on the basis that limits established for the exposed members of the public would provide adequate protection for other species. No standards were established for radiological exposure to biota other than humans. The validity of the assumption that radiation guidelines, which are protective of the public, would also provide adequate protection to plants and animals has been upheld by national and international bodies that have examined the issue, including the National Council on Radiation Protection and Measurement (NCRP, 1992) and the International Atomic Energy Agency (IAEA, 1992). Both of these studies were conducted in part to evaluate the original assumption presented in 1977 by the International Commission on Radiological Protection (ICRP, 1997). In all of these cases, it has been emphasized that such radiation levels may adversely affect non-human species, but effects at the population level are not detectable.*

**Comment: 043-5; 043-7**

A commenter stated that the NRC staff is not taking seriously the mandate to promulgate conservation plans for listed species, as required in Section 7(a)(1) of the Endangered Species Act. The commenter expressed concern about proposed NEF impacts on threatened and endangered species, and incorporated by reference the commenter's EIS scoping comments, dated March 18, 2004.

*Response: The NRC staff carefully reviewed all scoping comments in preparing the Draft EIS. As stated in section 1.5.6.1, no threatened or endangered species were identified at the proposed NEF site. The NRC staff fulfilled its obligations under Section 7 of the Endangered Species Act to consult with the FWS and other appropriate agencies, and has concluded that the proposed NEF would have no effect on such species. The New Mexico Department of Game and Fish has concurred with this conclusion. The proposed NEF would be required to follow all Federal and State laws and regulations regarding emissions, and would implement mitigation measures that would minimize impacts to wildlife from construction, operations, and decontamination and decommissioning as stated in section 4.2.7.3 of the EIS.*

**Comment: 048-32**

A commenter stated that the EIS should be updated to reflect the ecological field surveys conducted in October 2003 and July 2004.

*Response: The NRC staff revised section 3.9 of the EIS to update the listing of ecological studies to include surveys conducted in October 2003 (Sias, 2003) and June 2004 (Sias, 2004).*

### **I.13.2 Endangered Species Act**

**Comment: M-31; M-32; 316-50**

Several commenters stated that the EIS did not appear to address a February 23, 2004, comment by the New Mexico Department of Game and Fish that questioned the adequacy of field surveys. The commenters stated that the Draft EIS does not indicate that further surveys were conducted to address the comment.

*Response: An additional survey was performed in the spring of 2004, as stated in section 3.9.1.2 of the Draft EIS. In a letter dated November 1, 2004, the New Mexico Department of Game and Fish commented to the NRC that it is now "satisfied that surveys [for the lesser prairie chicken and the sand dune lizard] have been adequate to document absence of both species from the site, and support the conclusion of no significant adverse impact."*

**Comment: 038-3**

A commenter requested that the use of "nearest known breeding area" in the Draft EIS be changed to "nearest known lek site."

*Response: The NRC staff revised section 3.9.1.2 of the EIS to reflect the suggestion in the comment.*

**Comment: 038-10**

A commenter stated that the New Mexico Department of Game and Fish had previously expressed concern about the sufficiency of LES's survey efforts for the sand dune lizard and the lesser prairie chicken. The commenter stated that the New Mexico Department of Game and Fish is now satisfied that surveys have been adequate to document absence of both species from the site, and support the conclusion of no significant adverse impact.

*Response: The NRC staff revised sections 1.5.6.1 and of the EIS to reflect the conclusion of the New Mexico Department of Game and Fish.*

### **I.13.3 Habitat Loss and Flora**

**Comment: 038-7**

A commenter stated that the Draft EIS implies that the kit fox is less susceptible to habitat loss. The kit fox population is susceptible to effects of cumulative habitat loss.

*Response: The NRC staff revised section 3.9.1.3 of the EIS to reflect the information provided in the comment.*

**Comment: 040-6**

A commenter suggested that the proposed NEF site be monitored for weeds.

*Response: The NRC staff revised Chapter 5 of the EIS to state that LES would use native vegetation in restored landscaped areas and has committed to implementing weed control measures if a significant intrusion of non-native plants were to develop.*

**Comment: 043-1**

A commenter stated that the sand shinnery communities should be safeguarded, given that they are finite and host a highly specialized suite of wildlife. The commenter listed several threats to the sand shinnery ecosystem, including habitat destruction associated with the proposed NEF, and stated that the repercussions of habitat destruction would impact associated wildlife. The commenter stated that the destruction of shinoak causes virtually permanent reduction of the sand shinnery community.

*Response: Section 4.2.7.1 of the Draft EIS evaluated the impacts of the proposed NEF on plants (including the sand shinnery community) and animals and concluded the impacts would be SMALL. Shinnery oak (or shinoak) covers tens of thousands of acres in southeast New Mexico, parts of western*

*Texas and the Texas Panhandle, and western Oklahoma. The total site area of the proposed NEF is 220 hectares (543 acres), of which only 81 hectares (200 acres) would be disturbed by construction. The site has been disturbed already by a highway, cattle grazing and nearby industrial operations that include a railroad and an access road. The undisturbed portion of the site would remain covered with native vegetation such as the shinnery oak. The proposed NEF would also be located in an area where there is significant industrial development and agricultural uses, so the proposed NEF would not significantly increase the cumulative ecological impacts already occurring from these other facilities. There would be no cumulative impacts because the proposed NEF site would be a small fraction of the total acreage encompassed by the shinoak habitat, and the incremental ecological impact in comparison to impacts from other nearby industrial/agricultural operations would be SMALL. To some extent, the ecological conditions could improve on undeveloped portions of the proposed site as a result of proposed active management of onsite native species, which includes planting of native vegetation, reduction in non-native vegetation that may be present, and routine ecological surveys.*

**Comment: 043-3; 043-7**

A commenter stated that despite the proposed NEF site not being occupied by certain species, potential habitats are becoming harder to find and any loss of habitat would reduce the ability of these species to return.

*Response: Impacts to ecological resources were found to be SMALL as stated in sections 4.2.7.1 and 4.2.7.2 of the Draft EIS. The proposed site is located in an area where there already is extensive industrial development, and the overall size of the site as compared to the tens of thousands of acres of similar habitat is small.*

**Comment: 316-50**

A commenter indicated that the conclusion in section 3.9.3 of the Draft EIS concerning a lack of habitat stresses for various species of concern appears to contradict a statement in section 4.2.7 that the habitats of the swift fox and the western burrowing owl may be threatened by the construction and operation of the proposed NEF.

*Response: The NRC staff disagrees that the Draft EIS is contradictory on the discussion of ecological resources. As stated in section 4.2.7 of the Draft EIS, the swift fox requires 518 to 1,296 hectares (1,280 to 3,200 acres) of appropriate habitat to support a pair. The proposed NEF site alone does not have enough acreage to provide a habitat for a swift fox pair and the presence of other facilities surrounding the proposed NEF site and their operations would discourage extensive use of their land. Given the availability of neighboring open land in the immediate area of the proposed NEF site and the low population density of the swift fox, the proposed NEF site is marginally attractive to the swift fox, as stated in section 3.9.1.3 of the Draft EIS. In addition, the swift fox is highly mobile and can adjust to human activities. Thus, while there may be some habitat loss that could be used by the swift fox, its mobility and low population density, the availability of more open land, and the presence of other industry facilities would mean there would be a SMALL impact to any swift fox that may be in the area.*

*The statement in section 4.2.7 of the Draft EIS that the western burrowing owl is generally vulnerable to construction activities is not specific to the proposed NEF site. The western burrowing owl requires burrows and the presence of prairie dogs for prey. As stated in section 4.2.7, burrows are not currently present at the proposed NEF site. Further, no prairie dog towns were identified at the site to attract the burrowing owl. Therefore, the NRC staff concludes that the burrowing owl would not be impacted by proposed construction and operation of the proposed NEF.*

**Comment: 316-51**

A commenter referred to the discussion in section 4.2.7.1 of the Draft EIS indicating that highly mobile resident wildlife currently located within planned disturbed areas of the proposed NEF site would be able to relocate to undisturbed areas of the site. The commenter asked that these species be identified. The commenter stated that the proposed NEF site would be unsuitable as habitat if species that could not subsist solely within the site boundaries were not provided access to pass through, under, or over the perimeter fence.

*Response: Table 3-12 in the Draft EIS summarizes the mammals, birds, and amphibians/reptiles that could be inhabiting the proposed NEF site. Two surveys were conducted in 2004 to determine if any of these animals were present on the proposed NEF site. The only animals detected during these surveys were birds, which are highly mobile and would not be hindered by the presence of a fence. Should any non-avian animals be identified at the proposed site, animal-friendly fencing would help mitigate any impact to their ability to migrate off the site. Small reptiles and mammals could be impacted due to their more limited range, but, as stated in section 4.2.7.1 of the Draft EIS, these impacts would be SMALL because of the limited diversity and limited amount of disturbed land.*

**Comment: 316-52**

A commenter questioned why section 4.3.7 of the Draft EIS considered the permanent elimination of 73 hectares (180 acres) of wildlife habitat a small impact.

*Response: The definition of small impact, as provided in section 4.1 of the Draft EIS, is that "the environmental effects are not detectable or are so minor that they would neither destabilize nor noticeably alter any important attribute of the resource." The context in which the impact is analyzed is the relationship between the amount of land permanently removed to the amount of land with similar habitat remaining. Because 73 hectares (180 acres) is a small portion of the thousands of hectares/acres of similar habitat available to the wildlife in the area, the impact of permanently altering the 73 hectares (180 acres) would not destabilize nor noticeably alter the ecological resources in the area.*

**I.13.4 Mitigation Measures**

**Comment: 034-28; 040-1; 048-13; 048-49; 048-50**

A commenter requested that the EIS explain why netting would not be installed over the UBC Storage Pad Stormwater Retention Basin. Another commenter stated that the EIS should be revised to state that "surface netting or other similar material" would be used for the Treated Effluent Evaporative Basin. A commenter expressed concern that the ponded wastewater may attract wildlife. This commenter stated that migratory birds often do not distinguish between wastewater lagoons and natural water bodies, and that migratory birds are protected under the Migratory Bird Treaty Act.

*Response: The stormwater retention/detention basins are not anticipated to pose a risk for birds, and currently would not include netting or other material, as discussed in section 4.2.7.3 of the Draft EIS. As stated in sections 2.1.7, 4.2.7.3, and 5.1, surface netting would be installed over the Treated Effluent Evaporative Basin. The NRC staff revised these sections to indicate that other suitable material could be used. The NRC staff also revised section 4.2.7.3 of the EIS to state that LES would consult with the New Mexico Department of Game and Fish and incorporate appropriate measures to limit or prevent wildlife access to onsite basins, as discussed in sections 4.5.12, 4.5.13, and 5.2.5 of the Environmental Report. LES would also monitor the basin waters during plant operations to ensure the risk to birds and wildlife would be minimized.*

**Comment: 034-59**

A commenter stated that Table 5-1 of the Draft EIS makes conflicting statements concerning mitigation measures for impacts to ecological resources (e.g., trenches would not be left open overnight; animals would be removed from trenches left open overnight).

*Response: Table 5-1 of the Draft EIS indicates that during construction LES would work to avoid leaving trenches open overnight. While it is desirable to minimize the number of trenches left open overnight, construction operations may that require some trenches be left open; those that are would be checked for trapped animals prior to backfilling.*

**Comment: 038-1; 040-3**

A commenter (New Mexico Department of Game and Fish) suggested that mitigation actions planned for onsite construction also be implemented during the construction of new water and natural gas supply pipelines. The commenter also provided its guidelines for minimizing harm to perching birds, recommending the guidelines for use during the construction of a new overhead power line. Another commenter noted that overhead power lines pose a threat to birds of prey. The commenter provided a reference to guidance published by the Avian Power Line Interaction Committee to mitigate impacts.

*Response: The State of New Mexico has regulations for trenching and installation of buried pipelines. Compliance with these regulations would be the responsibility of the contractor installing the buried pipelines. LES would consult with the water supply utility responsible for the new water line to address as applicable New Mexico Department of Game and Fish guidance for the protection of wildlife during trenching operations. LES would direct that all trenching work on-site follow the mitigation measures discussed in the Environmental Report. The NRC staff revised Chapter 5 of the EIS to reflect these actions.*

*The State of New Mexico has regulations for the installation of overhead power lines. Compliance with these regulations would be the responsibility of the electrical energy supplier (Xcel Energy). The NRC staff revised section 4.2.7.3 and Chapter 5 of the EIS to state that LES has committed to working with the electric utility and the State of New Mexico to incorporate mitigative measures that could include those suggested by the guidance referred to in the comment.*

**Comment: 038-2**

A commenter recommended that LES install down-shielding on security lights to minimize interference with avian navigation.

*Response: Chapter 5 of the EIS has been revised to state that the down-shielding of security lights would be considered by LES consistent with security plan requirements.*

**Comment: 038-8**

A commenter suggested that fencing should limit access by reptiles, amphibians, and small mammals, since large animals would likely not be present in developed areas of the proposed NEF. The commenter provided specific design criteria for the fencing.

*Response: The NRC staff revised section 4.2.7.3 of the EIS to state that LES has committed to consulting with the New Mexico Department of Game and Fish during detailed design of mitigating features, such as fencing.*

**Comment: 040-2**

A commenter noted that ponds may be stagnant, allowing mosquitoes to thrive. The commenter proposed mitigation measures (e.g., integrated pest management and predators) and engineering solutions to keep water moving (e.g., aerators or aerating fountains).

*Response: The NRC staff revised Chapter 5 of the EIS to reflect that LES would take mitigative actions if a significant mosquito population develops.*

**I.14 Socioeconomics**

**I.14.1 Employment**

**Comment: L-7; M-34; 316-15**

Many commenters stated that the job benefits described by the EIS contradict other information in the document. For example, the percentage of people in the region currently in professions similar to those that would be created by the proposed NEF (scientific, management, administration, and waste management fields, as listed in Table 3-15 of the Draft EIS) is less than half the averages for New Mexico and Texas. Another commenter stated that the EIS should indicate that most of the higher-wage jobs created by the proposed NEF would go to people outside the region, and possibly outside the United States.

Several commenters stated that the U.S. Census of 2000 states that, on average, 65.4 percent of the populations of Hobbs, Eunice, and Jal have completed high school and 10.4 percent have obtained at least a Bachelor's degree. The commenters noted that this is lower than the respective statewide averages. The commenters suggested that the EIS include a discussion of the level of education required for each job type expected to be created by the proposed NEF (e.g., construction, management, professional, skilled, and administrative).

*Response: Approximately 70 percent of jobs at the proposed NEF would require only a high school diploma in addition to basic knowledge of the operation of the NEF. The remaining 30 percent are in the professional category (engineering, scientific, and technical) and would require undergraduate and graduate degrees in addition to advanced knowledge of the operation of the proposed NEF. It is likely that during startup and initial production many of the positions requiring advanced understanding of operations would be held by people outside the region. However, LES has stated that it expects most, if not all, of the 210 operations positions to be filled by people living within the region once the facility is fully operational. LES has stated that it intends to provide basic and advanced training for employees, with much of this training to be provided in partnership with local educational institutions. The NRC staff revised sections 4.2.8.2 and 4.2.8.3 of the EIS to reflect this information.*

**Comment: M-34; M-43; U-1; 036-4**

Several commenters stated that 60 percent of the workforce would be expected to come from outside the area of influence, and this would influence the 1 percent figure cited in section 4.2.8.2 of the Draft EIS. The commenters asked how many NEF jobs would be filled by people from surrounding communities, and how this would affect the overall socioeconomic impacts of the proposed NEF. One commenter noted that a 120-kilometer (75-mile) radius around the site would include Eddy and Chavez Counties in New Mexico and Cochran, Culberson, Davison, Ector, Hockley, Loving, Lynne, Martin, Midland, Reeves, Terry, Yoakum, and Winkler Counties in Texas. The commenter stated that these counties could provide the majority of the workforce and must be included in the analysis of socioeconomic impacts.

*Response: Section 4.2.8.2 of the Draft EIS states that the impact on local employment during operations would be moderate (approximately 1 percent of the jobs in Lea, Andrews, and Gaines Counties). This impact is associated with the total labor force in the 8-county area, regardless of whether any new jobs created by operations of the proposed NEF are occupied by local workers or new workers moving into the area surrounding the proposed facility. During construction, LES estimates that 15 percent of the workforce would move into the surrounding community as new residents. There are no estimates for the percentage of the operations workforce who may move into the region of influence. As stated in section 4.2.8.2 of the Draft EIS, approximately 60 percent of the employment positions are described as skilled positions, but the number of skilled positions that would be filled by workers moving into the area from outside the region of influence is undetermined. However, with appropriate training all operations positions could eventually be filled with workers from the 8-county area. The NRC staff revised section 4.2.8.2 to further clarify this information.*

**Comment: 032-26**

A commenter stated that Table 2-3 of the Draft EIS reflects projected earnings for the temporary construction workers, but the Draft EIS does not provide information concerning pay and description of the proposed NEF workers.

*Response: Section 4.2.8.2 of the Draft EIS provides some information regarding plant worker salaries (average salary of approximately \$50,100). The NRC staff also revised section 2.1.7 of the EIS to include a table containing more detailed salary information.*

**Comment: 034-51**

A commenter stated that if the NEF were to become the major employer in the Eunice, New Mexico, area, then the EIS conclusion that closure of the proposed NEF would have a small to moderate socioeconomic impact is not justifiable. The commenter stated that the impact should be characterized as moderate to large.

*Response: Section 4.2.8.2 of the Draft EIS concludes that the impact would be SMALL to MODERATE because employment during operations at the NEF would represent approximately 1 percent or less of the jobs in Lea, Andrews, and Gaines Counties.*

#### **I.14.2 Community Outreach and Training**

**Comment: M-44; U-2; 026-3; 036-5; 041-4**

A Commenter noted that LES has met with officials from New Mexico Junior College to discuss training issues. The commenter stated that training concerns could be mitigated if Lea County provides training and support services through infrastructure and emergency response. Other commenters asked whether LES has communicated or initiated partnerships with local colleges or high schools. The commenters asked whether local colleges have the capacity to train students in sensitive nuclear materials handling.

*Response: LES plans to provide extensive training for employees by working in partnership with local educational institutions. Discussions and planning with leaders of the public and higher education institutions in Eunice and Hobbs are ongoing. LES has partnered with the New Mexico Junior College to develop technical and other programs at the college and to sponsor scholarships for the students. Additionally, the Eunice public school system is implementing a science curriculum, and a similar curriculum is being considered by the Hobbs public school superintendent. The courses developed from the combination of partnerships could provide the basic technical training for a skilled position at the proposed NEF or for any other nuclear facility. LES would need to provide position-specific technical*

training appropriate for each position. The NRC staff revised section 4.2.8.3 of the EIS to add this information.

#### **I.14.3 Local and Regional Resources**

##### **Comment: M-33**

Several commenters stated that Figure 3-29 of the Draft EIS appears to indicate that there is a population density of 110,000 to 120,000 people in a small area in the North-Northwest sector around the proposed NEF site. The commenters stated that this is incorrect and requested that the figure be corrected.

*Response: The NRC staff revised Figure 3-29 of the Draft EIS (Figure 3-30 of this EIS) to clarify the graphics used in the legend.*

##### **Comment: 032-35**

A commenter noted that section 3.10.3 of the Draft EIS refers to Prime Care Health Clinic, which has been abandoned by its parent hospital. The commenter stated that there currently is no clinic open for business in Eunice.

*Response: The NRC staff verified that the Eunice Health Clinic is closed. However, a new clinic has recently opened in Eunice—the Eunice Medical Clinic. The NRC staff updated section 3.10.3 of the EIS to include this new facility.*

##### **Comment: 032-36**

A resident of Eunice expressed concern about the ability of the Eunice Fire and Rescue Service to sufficiently respond to an emergency at the proposed NEF.

*Response: Section 3.10.3 of the Draft EIS provides a description of community services and infrastructure for local emergency services. Issues relating to emergency response are not directly related to the environmental review in the EIS, but are related to the NRC staff's safety evaluation for the proposed facility. The SER assesses the safety review of LES' emergency management plan, including onsite and offsite emergency facilities. The NRC would not issue a license to the proposed NEF without assurance of sufficient emergency preparedness.*

#### **I.14.4 Economic Impacts**

##### **Comment: L-6; 316-14; 358-10; 358-34**

Many commenters noted that, per the terms of the agreement between LES and Lea County on the industrial revenue bonds, LES would not pay property taxes during the operational life of the proposed NEF and it may be exempt from other taxes. The commenters asked what the NRC expects to be the total property tax exemption for the proposed NEF. The commenters indicated that this figure should be compared with the \$177 million the county is expected to earn from taxes on the proposed NEF, also considering that construction of the proposed NEF would cost \$1.2 billion (Draft EIS, Table 2-8). A commenter stated that such a calculation should be integral to any assessment of socioeconomic benefits of the proposed NEF. Another commenter stated that the proposed NEF should not be constructed because it would not be economically viable without the Industrial Revenue Bond, and that the EIS should discuss how the proposed NEF is a financially viable alternative.

*Response: The industrial revenue bond is not a vehicle for financing the construction, operation, and decommissioning of the proposed NEF. It is a procedural mechanism under New Mexico law required*



for tax abatement purposes. LES would be fully responsible for financing of the proposed facility. The industrial revenue bond provides LES with a number of tax incentives, including exemption from property taxes in exchange for locating in Lea County and making payments in lieu of taxes. LES estimates payments in lieu of taxes to be about 20 percent of what it would normally pay in property taxes to Lea County, ranging between \$10 and \$14 million over the life of the facility. Assuming payments in lieu of taxes represent 20 percent of property taxes, the NRC expects the total property tax exemption to range between \$40 and \$56 million over the operational life of the facility. The NRC staff revised section 7.2 of the EIS for clarification. The issue of financial viability is not within the scope of the EIS.

**Comment: 343-7; 365-5**

A commenter stated that the proposed NEF would be tax exempt and would create few jobs. Another commenter stated that since the proposed NEF would be tax exempt, the main benefit to the community would be from salaries. The commenter noted that the number of jobs generated appears to be half of what other types of businesses would create. The commenter expressed concern about potential health effects and stated that locating the proposed NEF in Lea County would amount to an undesirable cost to the community rather than an economic benefit.

*Response: A cost-benefit analysis was performed and is summarized in Chapter 7 of the EIS. Table 7-2 summarizes the socioeconomic benefits, concluding there would be moderate benefits to employment/economic activity. The environmental and health impacts were determined to be SMALL, or SMALL to MODERATE, as summarized in Chapter 4. Taking into consideration the costs and benefits, the NRC staff concludes that the benefits outweigh the costs.*

**I.15 Environmental Justice**

**Comment: L-8; M-35; Y-1; 034-57; 036-3; 316-16**

Many commenters stated that, although the NRC staff concludes that environmental justice impacts would be small, the data are skewed by comparing the minority and low-income population percentages of the area to State averages rather than to national averages. The commenters stated that Hispanics are 42.1 percent of the population of New Mexico and 39.6 percent of the population of Lea County, but only 12.5 percent of the US. population at large.

Additionally, a commenter referenced a discussion in section 4.2.9.5 of the Draft EIS concerning the impacts of an accident involving the release of UF<sub>6</sub>. The commenter disagreed with the conclusion in the Draft EIS that minority and low-income populations would not be more obviously at risk from such an accident. The commenter further stated that the proposed NEF would be located in an area with a disproportionately large minority population.

*Response: The NRC staff used both demographic data and scoping to identify minority and low-income populations. The analysis used to identify the location of minority and low-income persons clearly found concentrations of low income and minority individuals in the area surrounding the proposed NEF site. The environmental justice guidance provided by the Executive Order 12898, the NRC, or the Council on Environmental Quality does not require that regions with high minority populations be avoided; rather, that any disproportionate risks to minority and low-income populations near the site be identified and addressed. The NRC staff also examined environmental pathways to determine if any minority or low-income populations appear to be disproportionately at risk. None of the impacts that were greater than SMALL were found to disproportionately affect minority or low income populations.*

*In the case of the hypothetical UF<sub>6</sub> accident referenced in the comment, estimated latent cancer fatalities apply to the entire population, which would include both Environmental Justice populations and non-Environmental Justice populations. Since it is highly unlikely that such an accident would occur, the risk to any population, including low-income and minority communities, is considered to be low. The EIS also discusses mitigation actions. At a distance of 32 kilometers (20 miles), it did not appear that the minority community in Hobbs—while slightly closer to the proposed NEF site—was any more at risk than higher income majority neighborhoods nearby, and mitigation actions to prevent such an accident were discussed.*

**Comment: 032-37; 316-17**

Two commenters requested more information concerning NRC's efforts to consider the impacts to minority groups in greater detail (such as holding additional meetings). One of the commenters asked who the meeting participants were and wanted to know where the meetings were held. The commenter was not contacted about these meetings, and expressed concern that other African-American or Hispanic residents of the Eunice area were not contacted. The second commenter asked if the meetings were recorded and requested that the EIS describe in detail the content of the meetings, as well as other methods by which the NRC staff considered environmental justice in greater detail.

*Response: The NRC staff revised section 3.11.1 of the EIS to discuss the efforts that were made to meet with representatives of the African-American and Hispanic groups and to describe the issues raised. The NRC staff held a meeting in Hobbs with a group of residents considered knowledgeable about the concerns of the Hispanic Community in Lea County. This meeting took place on the morning of March 4, 2004, and was attended by seven representatives of the Hispanic community. During the afternoon of the same day, also in Hobbs, the NRC staff met with two Lea County residents acquainted with issues in the African-American community. To assemble these meetings, the NRC staff contacted elected and appointed public officials in Lea County and requested the names of authoritative contacts on the concerns of the minority community. The NRC staff then called many of these contacts and, working with some of the contacts, assembled the meetings to which both they and the NRC staff invited participants. The meetings were not transcribed.*

**Comment: 034-31**

A commenter referenced section 4.2.9.5 of the Draft EIS, stating that the EIS should include a discussion of relevant infant mortality rates, if available, and that these rates should be broken down by race and ethnicity.

*Response: The referenced paragraph in section 4.2.9.5 of the Draft EIS refers the reader to Chapter 3. Infant mortality rates are provided in Table 3-19 of the EIS.*

**Comment: 034-32**

A commenter stated that potential impacts to socioeconomic and community resources for recreation is identified in Table 4-3 but not discussed in the text. The commenter stated that text should include a discussion of this impact.

*Response: Section 4.2.9.2 of the Draft EIS includes impacts to recreational resources, and states that the proposed NEF site is currently used for cattle grazing, is zoned for industrial purposes, and has very little other productive economic, cultural, or recreational uses. Impacts on recreation resources would, therefore, be SMALL.*

**Comment: 034-52**

A commenter suggested that the statement regarding the proposed NEF's environmental justice impacts during decommissioning is a conclusion. The EIS should explain how this conclusion was reached.

*Response: The NRC staff revised section 4.3.9 of the EIS to provide a basis for the conclusion.*

**Comment: 048-35**

A commenter requested further explanation of the rationale for expanding the area for the environmental justice impact assessment.

*Response: As stated in Appendix C of NUREG 1748, the geographic scale should be commensurate with the potential impact area and should include a sample of the surrounding population (e.g., at least several block groups). Because of the rural nature of the area and the scope of the potential impacts, the environmental justice impact assessment area was expanded to an 80-kilometer (50-mile) radius. The NRC staff revised section 3.11 of the EIS to clarify the area used for the environmental justice impact assessment.*

**Comment: 048-99**

A commenter pointed out that 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 Table DP-1, the referenced US. Census Bureau Table. The commenter specified that an explanation of the basis for the differences should be provided.

*Response: The NRC staff revised Table G-1 of the EIS to correct the reference. The correct reference should be Table DP-3 from the 2000 U.S. Census of population, dataset SF-1.*

**Comment: 284-4**

A commenter stated that it is difficult in the Draft EIS to discern disparate impacts on geographic regions with relatively high ratios of disadvantaged populations from the benefits that accrue to already privileged groups in national and international contexts.

*Response: NEPA does not require that the geographic distribution of the benefits and costs of a proposed action be identical. The EIS clearly states that the benefits of the project are national while the environmental costs are primarily local (see Chapter 7 of the EIS). However, the local costs are SMALL and there are some SMALL to MODERATE socioeconomic benefits.*

**I.16 Noise**

**Comment: 034-33; 034-35**

A commenter stated that the discussion in section 4.2.10.1 of the Draft EIS of noise impacts during construction should define the term "normal daytime working hours" listing hours of the day and days of the week, and explaining how holidays are applicable. The commenter asked whether any exceptions to these hours would apply, since the Draft EIS states that short-term noise impacts may be limited to workday mornings and afternoons.

*Response: As shown in Table 2-2 of the Draft EIS, construction activities are expected to occur over a 10-hour workday. The 10-hour workday was used in section 4.2.10.1 as a basis for estimating noise impacts. The NRC staff expects that, under normal construction work schedules, Saturdays, Sundays, and holidays would be non-working days. It may be necessary to perform some construction work on*

*Saturdays, Sundays, or holidays to complete specific activities within schedule, but these activities would be kept to a minimum.*

**Comment: 034-34**

A commenter referred to the statement in section 4.2.10.1 of the Draft EIS that some noise levels during construction would be within the U.S. Department of Housing and Urban Development unacceptable sound pressure level guidelines. The commenter stated that the Draft EIS concludes that the impact of noise levels from site preparation and construction would be small, but that these levels would continue for several years. The commenter stated that the EIS conclusion that impacts would be small is erroneous if hearing loss were likely to occur to the maximally exposed individual. The commenter requested that the EIS provide additional discussion of noise impacts.

*Response: As discussed in section 4.2.10.1 of the Draft EIS, the highest noise levels are predicted to be in the range of 84 to 98 decibels A-weighted at the south fence line during construction of the Site Stormwater Detention Basin. These noise levels are expected to be intermittent and would attenuate dramatically with distance from the site boundary. Additionally, the highest noise levels would not last for years. The noise would be generated by the use of specialized equipment, such as pile drivers and earth compactors, during certain construction activities lasting a few weeks. The maximally exposed individuals would be the construction workers operating the equipment. These workers would be provided with suitable hearing protection.*

**Comment: 034-53**

A commenter referred to the discussion of noise impacts during decommissioning in section 4.3.10 of the Draft EIS. The commenter expressed confusion by the statement that impacts from decommissioning would last for a few months, stating this appears to conflict with statements elsewhere in the EIS that the decommissioning process would take nine years.

*Response: As discussed in section 4.3.10 of the Draft EIS, the majority of the decommissioning work would generate approximately the same noise levels as would be expected for normal operation of the proposed NEF. The operation of heavy construction equipment would generate the higher noise levels, which would only occur on an intermittent basis during decommissioning activities. The total estimated duration of the higher noise levels would be a few months out of the multi-year decommissioning program. The NRC staff revised section 4.3.10 of the EIS to clarify that the duration of higher noise levels would be intermittent during decommissioning.*

**I.17 Transportation**

**I.17.1 Traffic and Traffic Volume**

**Comment: 034-29**

A commenter stated that impacts from increased traffic would span at least 30 years and that section 4.2.9.1 of the EIS should not describe as short the period of impacts from increased traffic.

*Response: The phrase "short period of inconvenience" being questioned by the commenter refers only to the 3-year peak construction period when traffic on New Mexico Highway 234 would approximately double. The impact on traffic from construction activities is described in section 4.2.11.1 of the Draft EIS as SMALL to MODERATE. Although road traffic would be increased during operations (see section 4.2.11.2) compared with current circumstances, it is anticipated that the extra traffic would have a SMALL impact.*

**Comment: 034-36; 034-43; 082-3**

A commenter referred to the discussions of construction transportation impacts in sections 4.2.11.1 and 4.2.11.3 of the Draft EIS. The commenter stated that a 188-percent increase in vehicular traffic on New Mexico Highway 234 should not be characterized as a small to moderate impact, but as moderate to large. The commenter stated the EIS should further analyze this traffic increase (e.g., quantifying the additional expense to the State of New Mexico for increased road maintenance and discussing mitigation measures). The commenter asked whether LES could contribute funds to the State to assist in the maintenance of Highway 234. Another commenter stated that the New Mexico Department of Transportation (NMDOT) is evaluating when to perform maintenance on New Mexico Highway 234. The commenter stated that NMDOT could wait until after construction is completed or improve roads first to address traffic safety during construction.

*Responses: A SMALL to MODERATE impact to New Mexico Highway 234 was determined for the increase in traffic because the increased traffic volume is only 40 to 50 percent of the design capacity of a two-lane road, which is an average of 6,000 to 8,000 vehicles throughout each day or 1,500 to 2,000 vehicles per hour (NMDOT, 2005a). The NRC staff conducted further analyses to determine impacts on Highway 18, and revised section 4.2.11.1 of the EIS to summarize these impacts (which would be SMALL).*

*It is not standard practice for an industry to compensate the State for maintenance of State roads (NMDOT, 2004; and NMDOT, 2005b). However, NMDOT does sometimes work with industrial facilities to determine how best to fund specific road improvements that would apply to that facility (e.g., traffic lights and associated electric wiring, turning lanes, and signage). Currently, highway funds have not been obtained for road improvements to New Mexico Highway 234. Highway 234 was originally included in Governor Richardson's Investment Partnership, but was removed by the State legislature. Funding for maintenance activities on Highway 234 would have to be obtained from the Statewide Transportation Improvement Plan. These maintenance activities would be necessary regardless of whether the proposed NEF is approved.*

*If the license application for the proposed NEF is approved, then the NMDOT would work with the local communities and LES to determine what upgrades specific to the proposed NEF would be required (based primarily on the amount of truck traffic stated in section 4.2.11.1 of the Draft EIS) and how funding for these improvements would be obtained (NMDOT, 2005b). This work would be performed in compliance with New Mexico Administrative Code Chapter 18, Title 31, Part 6. This regulation requires a traffic study to be performed and submitted to the NMDOT with an access permit application. An access permit would likely stipulate any safety enhancements necessary to state highways before access roads to the proposed NEF site could be constructed (NMDOT, 2005a). Funding for any safety enhancements could be a combination of local, State, or Federal funding and/or private funding as negotiated and coordinated among these parties. The NRC staff revised Tables 1-2 and 1-3, and sections 4.2.11.3 and 4.2.11.4 to discuss the access permit requirements in the New Mexico Administrative Code.*

**Comment: 034-37; 034-39**

A commenter suggested that sections 4.2.11.1 and 4.2.11.2 of the Draft EIS explain the basis for the assumption that a truck would have an average round-trip distance of 64 kilometers (40 miles) during construction and operation, respectively.

*Response: The NRC staff assumed that the average round-trip distance for a truck delivering supplies during construction and operation would be twice the distance from Hobbs, New Mexico, to the*

*proposed NEF. This is assumed during construction because Hobbs, New Mexico, is the closest principal business center to the proposed NEF site. This is also assumed during operations because primarily janitorial and laboratory chemical supplies would be delivered by truck, which would probably originate from businesses in and around Hobbs, New Mexico. Sections 4.2.11.1 and 4.2.11.2 of the EIS have been revised to state the assumptions associated with the round-trip distance estimate.*

**Comment: 034-38**

A commenter stated that the EIS needs to explain the conclusion of small impacts from construction access roads (section 4.2.11.1 of the Draft EIS). The commenter noted that the temporary construction access roads would be converted to permanent access roads, and that conversion of the roads would not cause a decrease in the amount of vehicular traffic on New Mexico Highway 234. The commenter further noted that the access roads essentially would be constructed twice, and this does not decrease other human health and environmental impacts.

*Response: Activities associated with construction of the access roads include clearing, grading, and converting to permanent roads. The phased construction of these roads would have a SMALL impact; the construction of the roads was included in the NRC staff's analysis of overall construction impacts, which were determined to be SMALL.*

**Comment: 034-45**

A commenter stated that the EIS should discuss whether LES would be required to install dedicated turning lanes (section 4.2.11.4 of the Draft EIS). The commenter suggested that construction of dedicated turning lanes may be inadequate to mitigate the impacts of increased traffic on New Mexico Highway 234.

*Response: The NRC staff revised Tables 1-2 and 1-3, and sections 4.2.11.3 and 4.2.11.4 of the EIS to discuss the consultation process among the State of New Mexico, local governments, and private landowners for assessing traffic safety needs. According to New Mexico Administrative Code Chapter 18, Title 31, Part 6, NMDOT could require LES and/or Lea County government to perform a traffic study and coordinate with NMDOT to determine the specific safety improvements to be taken if approved by NMDOT. The construction of turning lanes is an example of possible safety enhancements that could be implemented through this process.*

**Comment: 103-18**

A commenter noted that Table 3-21 of the Draft EIS lists traffic volume per day. The commenter stated that average volume per day includes evening, nighttime, and weekend traffic. The commenter stated that a more meaningful measure would be the average volume per hour for the peak-load traffic period (6 a.m. to 6 p.m. Monday through Friday), because the reported traffic volume would not be diluted by off-hours and low weekend traffic. The commenter stated that the EIS should use this measure, which would reflect traffic volume during the time construction-related traffic and school busses are on the road.

*Response: The NRC staff reviewed hourly traffic volume data for New Mexico Highway 18 near south Hobbs, which has a higher traffic volume than New Mexico Highway 234. The hourly traffic volume during peak periods is considered well within the capabilities of the highway without causing noticeable delays. Additionally, the South Bypass, which is currently lightly used, provides another route around Hobbs (Hobbs, 2005). The NRC staff revised section 4.2.11.1 of the EIS to discuss construction traffic impacts during peak traffic volume periods during the day.*

**Comment: 103-20**

Referring to the discussion in section 4.2.8.1 of the Draft EIS on employment rates during construction, a commenter stated that the EIS should provide an analysis indicating the local roads can handle increased vehicle traffic (construction workers, deliveries to the site) during normal work hours (6 a.m. to 6 p.m., Monday through Friday) in the fourth year of construction, which is the year of highest construction employment.

*Response: A transportation analysis that shows the peak traffic volume during the construction period is provided in section 4.2.11.1 of the Draft EIS. The peak volume would be 3,423 vehicle trips per day. The NMDOT would review the need to expand New Mexico Highway 234 to four lanes once the daily volume exceeds 6,000 to 8,000 vehicles per day, or 1,500 to 2,000 vehicles per hour (NMDOT, 2005a). In addition, the NRC staff reviewed traffic volume on New Mexico Highway 18 between Eunice and Hobbs. The NRC staff revised section 4.2.11.1 to add the analysis of traffic impacts on New Mexico Highway 18 and the design basis of New Mexico Highway 234. The NRC staff also revised Tables 1-2 and 1-3, and section 4.2.11.3 to discuss the potential need for an access permit that could require a traffic study. The NMDOT would likely stipulate any safety enhancements to state highways in the area if a traffic study supports such enhancements.*

**I.17.2 Transportation Impacts**

**Comment: M-46**

Several commenters stated a paragraph discussing DUF<sub>6</sub> conversion in section 4.2.11.2 of the Draft EIS is not well written. The commenters stated that this illustrates that the proposed NEF is not timely or well planned, and that LES has no plans for disposal of the waste to be generated by the proposed NEF. Although options are outlined in the Draft EIS, not a single option has been identified as a realistic solution to the thousands of tons of waste to be generated by the facility.

*Response: The paragraph cited provides an overview of transportation by rail options. The NRC staff revised section 4.2.11.2 in the EIS to separate the shipments for each option for greater clarification. As presented in the Draft EIS, there are several options for the waste management of the DUF<sub>6</sub>. These issues are addressed in the main body of the EIS and in section I.20 of this appendix.*

**Comment: 034-41**

A commenter stated that the last paragraph on page 4-37 in section 4.2.11.2 of the Draft EIS is not written well.

*Response: The NRC staff revised this paragraph for clarification in the EIS.*

**Comment: 151-1**

A commenter expressed concern that the NRC staff relied on dated references that are not readily available to members of the public. As an example, the commenter stated that within the transportation analysis sections, the need for additional analysis of several potentially relevant issues was dismissed based on existing NRC EIS documents prepared in 1977 and 1980.

*Response: The NRC staff applied such analyses in support of the regulatory action being taken at that time. The specific issue cited by the commenter refers to the elimination from detailed study of existing transportation routes between other nuclear fuel cycle facilities that were previously analyzed in a prior EIS. The NRC staff considers this a valid use of previous EISs, especially when regulatory actions were based on those studies. While not directly available from the NRC's web site, past studies, such as*

*NUREG-0170, Final Environmental Statement on the Transportation of Radioactive Material by Air and Other Modes, are available to members of the public through the NRC's Public Document Room.*

### **I.17.3 Routes and Shipping Requirements**

#### **Comment: 048-90**

A commenter stated that transportation regulations in 49 CFR § 173.420 have been modified and the following statement in Appendix D is no longer correct: "With the exception of the product material, all shipments can be transported in Type A shipping containers without additional requirements."

*Response: The transportation regulations changed just prior to issuance of the Draft EIS, as noted in the comment, but too late to be incorporated into the Draft EIS. The NRC staff revised Appendix D, section D.2 of the EIS to reflect the revised NRC (10 CFR Part 71) and DOT (49 CFR Parts 171-173) shipping regulations. New tests include 173.420(a)(3)(I), which requires a hydraulic test without leakage; 173.420(a)(3)(ii), which requires a 173.465(c) free drop test without loss or dispersal of UF<sub>6</sub>; and 173.420(a)(3)(iii), which requires a 10 CFR § 71.73(c)(4) fire test without rupture of the containment system. Shipments of the enriched uranium are required to have fissile controls per 49 CFR §173.417 and 10 CFR § 71.55. Although the regulations may require overpacks for thermal and/or fissile protection of feed, product, or waste material, the EIS assessment of radiological impacts was conservative in that no credit was taken for any reduction in exposures due to the presence of a thermal and/or fissile overpack.*

#### **Comment: 102-3**

A commenter stated that many trucks currently use New Mexico Highway 234 to transport wastes to the WCS plant and the local landfill. The commenter stated that additional shipments of radioactive materials and wastes to sites around the country would increase local traffic and significantly impact the commenter's life.

*Response: The transportation analysis in section 4.2.11 of the Draft EIS took into account the current amount of traffic. After analyzing the additional traffic that would be created due to construction and operation of the proposed NEF, the NRC staff determined the impacts would be SMALL to MODERATE. The projected total traffic would be within the design capacity of New Mexico Highway 234 (NMDOT, 2005a).*

#### **Comment: 104-2**

A commenter expressed concern that supply and waste transport routes for the proposed NEF remain to be determined. The commenter stated that, as a resident of a state outside the State of New Mexico, it is the commenter's opinion that LES be required to disclose definitive plans for regional nuclear transportation.

*Response: The routes analyzed in the EIS were chosen to be representative of the impacts associated with transportation of feed, product, and waste materials to and from the proposed NEF. Selection of specific routes is not needed to provide a reasonable estimate of these impacts.*

#### **Comment: 105-1**

A commenter stated if the proposed NEF is constructed, about three shipments per day of raw, enriched, and waste depleted uranium and other wastes would be shipped via truck and train along Interstate-25 through Denver, Colorado. The commenter expressed concern that, in light of the potential for dirty



bombs, three truckloads per day of this material could be permitted for transport through a major metropolitan area.

*Response: Specific routes for UF<sub>6</sub> shipments have not been determined, nor are there specific routing constraints imposed on such shipments by either NRC or DOT regulations (as there are for higher risk radiological or chemical hazardous sources). The representative routes used in this analysis were chosen to provide estimates of the risks associated with transport of feed, product, and waste materials to and from the proposed facility (as discussed in Appendix D, section D.6.1 of the Draft EIS). With regard to concerns about terrorism, the Commission has held that the NRC staff is not required to address terrorism in its EISs. The NRC staff provided a discussion on terrorism in section I.25 of this appendix.*

**Comment: 105-2**

A commenter asked if the trucks transporting waste would travel with a military escort.

*Response: There are no specific NRC regulations that would require armed or unarmed escorts for feed, product, and waste materials from the proposed NEF facility. Additional security measures are only required for higher-risk materials, including certain quantities of special nuclear material and spent nuclear fuel. For information about the types of radioactive material that would require additional security measures, please visit the NRC's web site at [www.nrc.gov](http://www.nrc.gov).*

**I.17.4 Accidents**

**Comment: 032-42**

A commenter referred to the summary in section 4.2.11.3 of the Draft EIS of transportation accident impacts. The commenter requested that the calculation of latent cancer fatalities be explained in more detail and in a layperson's terms.

*Response: A text box explaining the use of "latent cancer fatalities" is provided in section 4.2.11 of the Draft EIS. A population dose, also known as a collective dose, can be estimated for incident-free and accident scenarios. The collective dose is calculated as the sum of the products of individual doses and the number of people receiving those doses. For example, using units of rem, if one person receives 1 rem and 10 people receive 0.1 rem, the population or collective dose to the eleven people is calculated as:*

$$1 \text{ person} * 1 \text{ rem (or 1 person-rem)} + 10 \text{ people} * 0.1 \text{ rem (or 1 person-rem)} = 2 \text{ person-rem.}$$

*For a given unit collective-dose (e.g. person-rem), there could be an effect on the population in the form of radiologically-induced Latent cancer fatalities. The EPA has suggested a conversion factor that for every 100 person-Sievert (10,000 person-rem) of collective dose, approximately 6 individuals would ultimately develop a radiologically induced cancer (Eckerman et al., 1999). For this analysis, the computer code RADTRAN developed by Sandia National Laboratories was used to estimate the risk of latent cancer fatalities based on the expected doses to individuals (e.g. crew, passengers, members of the public along transportation routes) during incident-free transportation, due to external radiation exposure, and from internal (inhalation from plume passage and resuspension) and external (cloudshine and groundshine) radiation exposure during potential accident scenarios. Individual and collective doses were calculated and the expected number of latent cancer fatalities were estimated for the exposed population using the EPA risk factor referenced above.*

**Comment: 034-40**

A commenter stated that the EIS should explain why an assumption of stable meteorological conditions during a transportation accident is appropriate for the proposed NEF as stated in section 4.2.11.2 of the Draft EIS.

*Response: Stable meteorological conditions would tend to minimize the dispersion of contaminants in the atmosphere and thereby provide for higher downwind concentrations; thus, all other parameters being equal, stable meteorological conditions are expected to produce higher impacts than would be produced by neutral or unstable atmospheric conditions. Although site-specific meteorological data were not utilized in the study, the results of the analysis reported in the Draft EIS are expected to provide a conservative estimate of the potential human health impacts associated with this accident scenario.*

**Comment: 034-42; 358-30**

A commenter stated that section 4.2.11.2 of the Draft EIS fails to explain how the probability of occurrence of a transportation accident factors into the conclusion that the impacts could be small to moderate. The commenter stated potential impacts to as many as 28,000 people should not be considered small to moderate, unless the chances of such an accident are small. Another commenter stated that the estimate of 28,000 people potentially affected by a severe railroad accident is generic, too low, and not specific to proposed NEF waste or to railway and meteorological conditions in New Mexico.

*Response: The NRC staff agrees that both consequence and probability information are important in assessing risk. U.S. regulations are compatible with international transportation regulations and provide performance requirements on a wide range of potential accident scenarios. These performance requirements necessitate radioactive material package designs that are able to withstand severe accident conditions to prevent criticality events and/or the inadvertent release of radioactivity into the environment. To date there have been millions of radioactive material transports in the United States without a significant release of radioactive material to the environment or radiological exposure. As the EIS states in section 4.2.11.2, the chance of occurrence of this accident scenario is "very remote" and is provided in the EIS to provide a conservative estimate of the potential chemical risks associated with UF<sub>6</sub> shipments. It is also important to note that the nature of the potential adverse health effects (consequences) to the larger portion of the population (e.g. respiratory irritation or skin rashes), are much less severe than the irreversible adverse health effects also reported.*

*The estimates for the consequences were calculated using industry-accepted computer codes, methods, and assumptions for weather conditions to obtain a conservative estimate, measuring the highest potential consequences. The urban population density used in the calculations would be considered representative of most urban areas. The transportation routes selected for analysis are representative routes and may not be the actual routes used. Finally, the frequency of such a transportation accident would be very unlikely. Therefore, the likely public health effects presented in the transportation analysis would overestimate the impacts. Small, moderate, and large impacts are defined in a text box in section 4.1 of the Draft EIS. Adverse health effects are temporary and would not be expected to result in permanent injury. After considering both the range of potential number of people affected by transportation accidents (i.e., 0 to 28,000 people) and the temporary nature of potential health effects (which would noticeably alter but not destabilize public health), the NRC staff concluded that the range of potential impacts would be SMALL to MODERATE.*

**Comment: 034-44**

A commenter stated that it is misleading to discuss only cancer fatalities in connection with summarizing the potential impacts to human health for transportation accidents (section 4.2.11.3 of the Draft EIS).

The commenter stated that other impacts could be significant and should also be mentioned in the summary.

*Response: The NRC staff revised the summary of transportation impacts in section 4.2.11.3 of the EIS to include other impacts from sections 4.2.11.1 and 4.2.11.2, such as chemical impacts.*

**Comment: 103-23; 105-4**

A commenter stated that the EIS should evaluate transportation scenarios that include a range of countermeasures and times after the accident when the countermeasures are initiated. The commenter stated that the EIS should require the applicant to provide annual training to first responders along the routes. Another commenter asked what training or information/disclosures have been made to notify first responders of the problems associated with accidents or attack.

*Response: States are responsible for providing emergency response for transportation accidents involving hazardous materials. Although OSHA has requirements in 29 CFR § 1910.120(q) for emergency response personnel (first responder) training that is applicable to transportation events for UF<sub>6</sub>-related shipments, there are no requirements for prenotifications or NRC or State approval of routes. The DOT has published an emergency response guidebook that summarizes potential health, fire, or explosion hazards, public safety, and emergency response actions for hazardous materials such as UF<sub>6</sub>. In the United States, OSHA (29 CFR § 1910.120) and EPA (40 CFR Part 311) require that first responders be trained regarding the use of this guidebook. Additionally, vehicle placards, package labels, and shipping papers communicate information about the hazardous material to first responders arriving on an accident scene. Shippers are required to provide an emergency response number with the shipping papers that accompany the shipment. Emergency notification requirements are found in 49 CFR Part 172, subpart G. For example, 49 CFR § 172.602 requires information about the hazardous materials and immediate precautions to be taken in the event of an accident, and 49 CFR § 172.604 requires a 24-hour emergency response telephone number. Although the NRC recognizes that states are primarily responsible for protecting the public against health and safety hazards (such as a transportation accident involving radioactive materials), the NRC and other Federal agency assistance is available to states upon request. The NRC is prepared to assist any state or local government responding to such an event.*

*The Draft EIS presents accident scenarios that assume countermeasures are not employed, so that the results of the accident analyses would be conservative. The chemical hazard associated with a transportation accident involving UF<sub>6</sub> greatly exceeds the radiation hazard.*

## **I.18 Public and Occupational Health—Normal Operations**

### **I.18.1 Source Term**

**Comment: M-49**

Several commenters stated that Table 4-12 of the Draft EIS indicates that empty used UF<sub>6</sub> shipping cylinders would release less radioactivity than full UF<sub>6</sub> shipping containers. The commenter stated that this is counter-intuitive and asked the NRC to explain in the EIS why this is the case.

*Response: The NRC staff believes the commenter meant to use the word "more." Table 4-12 indicates that empty used UF<sub>6</sub> shipping cylinders would release more radioactivity than full UF<sub>6</sub> shipping containers. This occurs for two reasons. First, after UF<sub>6</sub> is vaporized and removed from a cylinder, the radioactive uranium daughter products that build up due to the radioactive decay of uranium collect at*

the bottom and form a "heel." The radiation emitted from the uranium daughter products consists of a greater quantity of gamma radiation than that produced by only uranium. Second, uranium is a good shield material for gamma radiation. When the cylinder is full of  $UF_6$ , the uranium daughters are distributed throughout the cylinder and must pass through a significant amount of uranium (thus can be stopped or absorbed by the uranium). It is only the uranium daughters near the inner surface of the cylinder that can readily escape from the cylinder and contribute to a nearby person's radiation exposure. Because the empty cylinder no longer has the high shielding capability of the  $UF_6$  and the heel concentrates the more highly radioactive uranium daughters near the inner cylinder surface, the radiation levels of the empty  $UF_6$  cylinders are higher than the levels of full cylinders. The NRC staff revised Appendix C to include this explanation and has added a footnote to Table 4-12 referencing the new discussion in Appendix C.

**Comment: M-66**

Several commenters noted that Table C-2 of the Draft EIS seems to be inaccurate in the same way as Figure 3-29 of the Draft EIS (discussed in section I.14.3). That is, the table appears to indicate a greater than expected population density in the north-northwest sector.

*Response: Figure C-2 is consistent with Figure 3-29 of the Draft EIS (Figure 3-30 of this EIS), which indicates that the population in the north-northwest sector between approximately 20 and 30 miles from the proposed NEF site is about 3,000 to 4,000 people. The NRC staff revised the legend for Figure 3-29 (Figure 3-30 of this EIS) for clarification.*

**Comment: 033-1**

A commenter stated that the proposed NEF should not be licensed because the emissions would expose over 30,000 people to radioactive substances (such as uranium isotopes and decay products, gross alpha radiation,  $DUF_6$ , triuraniumoctoxide [ $U_3O_8$ ], and uranyl fluoride [ $UO_2F_2$ ]) and nonradioactive substances (such as volatile organic compounds, carbon monoxide, nitrogen dioxide, and particulates). The commenter stated that the NRC is ignoring this fact and that licensing the plant would put many people at risk.

*Response: As discussed in the Draft EIS, no significant adverse impacts are expected to occur from normal operation of the proposed facility. Emissions of the radioactive substances the commenter listed would occur in amounts that are well below regulatory limits for radiation protection. Emissions of nonradioactive substances would be regulated by the EPA or the State of New Mexico, and would also be within regulatory limits.*

**Comment: 034-46**

A commenter noted that section 4.2.6.2 on the UBC Storage Pad Stormwater Retention Basin states that the basin would likely remain dry 11 to 12 months per year, but does not discuss impacts from resuspension of contaminated soil in the basin. The commenter noted that, because the UBC Storage Pad Stormwater Retention Basin would not be covered with netting, the resuspension factor for soils could be higher than for the Treated Effluent Evaporative Basin. The commenter further noted that Chapter 6 does not discuss whether either of the basins would be monitored for impacts to air quality. The commenter suggested that the EIS address these issues and discuss how the liner might be affected by remaining dry most of the year.

*Response: The UBC Storage Pad Stormwater Retention Basin would not be expected to contain radioactive material and would contain only trace nonradiological contaminants, (principally oily discharges from the cooling tower and heating boiler blowdown). As presented in Chapter 6 of the Draft*

*EIS, the basin would be sampled to monitor any chemicals in the basin soil and LES would have three continuous airborne particulate samplers, with two located adjacent to receptors of concern (nearby workers to the north of the proposed NEF and the nearest residential area). Any resuspension of soil during periods when the basin is dry would not be expected to result in human health impacts. The liner would not be expected to degrade as a result of remaining dry for most of the year. Soil would be present above the liner, and the drying of this soil also would not be expected to affect the liner's performance.*

**Comment: 048-36**

A commenter noted that the text on page 3-68 of the Draft EIS states that Figure 3-31 of the Draft EIS depicts major sources and levels of background radiation near the proposed NEF site. The commenter suggested that the text be clarified to indicate that the figure actually depicts major sources and average levels of background radiation for the United States.

*Response: The NRC staff revised section 3.14.1 of the EIS to clarify that Figure 3-31 of the Draft EIS (Figure 3-32 of this EIS) depicts the major sources and levels of background radiation in the United States, and that this reflects the conditions near the proposed NEF. The NRC staff also changed the title of the figure for clarification.*

**Comment: 048-85**

A commenter noted that section 6.1.1.1 of the Draft EIS requires clarification that the actual expected gaseous release source term would be less than 10 grams (0.4 ounces) of uranium or approximately 35 times less radioactivity than the 8,886 kilobecquerels per year (240 microcuries per year) value used in the bounding routine dose impact assessment for demonstrating expected compliance with regulatory limits.

*Response: The NRC staff revised section 6.1.1.1 of the EIS to clarify the conservative nature of the value used in the bounding routine dose impact assessment.*

## **I.18.2 Impacts**

**Comment: M-6**

Several commenters stated that the text box in the executive summary of the Draft EIS ("Determination of the Significance of Potential Environmental Impacts") should indicate the number of latent cancer fatalities associated with small, moderate, or large impacts. The Draft EIS indicates there would be two latent cancer fatalities over the lifetime of the proposed NEF as a result of vehicle emissions during shipment of materials. The commenter stated that some may disagree with the EIS conclusion that two latent cancer fatalities from vehicle emissions over the lifetime of the proposed NEF represents a small impact. The commenter requested that the NRC explain how this determination is made, providing methodology used.

*Response: The text box in section 4.2.11 of the Draft EIS provides an explanation of Latent cancer fatalities. Two latent cancer fatalities over the lifetime of the facility would result in an annual risk of less than 0.5, which means the potential for cancer fatalities from the proposed NEF would not be distinguishable from cancer fatalities expected to occur in the general population. Thus, as defined in the text box in the executive summary (and section 4.1), such impacts would be SMALL.*

**Comment: M-12**

Several commenters noted that section 2.1.3 of the Draft EIS indicates that the proposed NEF would include a Visitor Center near the boundary of the facility. The commenters requested that the NRC either specify more clearly which exposure estimates are associated with patrons of the Visitor Center or include dose estimates related to the Visitor Center.

*Response: As provided in Table 4-11 of the EIS, the radiological impacts are presented for an individual expected to receive the maximum exposure (highest boundary). Exposures to all other members of the public or workers at the Visitor Center would be less than exposures to this individual.*

**Comment: M-67**

Several commenters requested clarification of the heading of the fourth column ("Holdup Time") in Table C-3 in Appendix C of the Draft EIS.

*Response: "Holdup Time" is a term that defines the time between harvest and consumption of the food. This time includes processing, transportation, and storage of the food. The NRC staff added a clarifying footnote to the table.*

**Comment: 032-12**

A commenter expressed concern about cancer rates in the area and stated that the Draft EIS has many references to Latent cancer fatalities. The commenter asked why the community of Eunice should be subjected to negative health effects from the proposed NEF.

*Response: Section 4.2.12.2 of the Draft EIS states that public exposure to radiological emissions from the proposed NEF are estimated to result in  $8.4 \times 10^6$  latent cancer fatalities per year from normal operations. (See the response to comment M-6 below and the text box in section 4.2.11 for further explanation of the use of Latent cancer fatalities.) All of the population within 80 kilometers (50 miles) of the proposed NEF would receive a total dose of 0.00014 person-sievert (0.014 person-rem). This total dose to all of the population in that area is less than 5 percent of the dose each U.S. citizen typically receives just from naturally occurring radioactivity (about 3 millisieverts [300 millirem]). Additionally, the radiation dose to the nearest resident (Table 4-11) would be about 0.000013 millisievert (0.0013 millirem) per year from normal operations. This is about 0.0004 percent of the dose that the average U.S. citizen receives per year from naturally occurring radioactivity. Latent cancer fatalities are also mentioned in relation to accidents. Tables 4-5 and 4-14 indicate that associated latent cancer fatalities are small, particularly after mitigation measures are taken (such as that described in footnote e of Table 4-14). Therefore, the NRC staff concluded from the analysis that public health impact from the normal operation of the proposed NEF would be SMALL.*

**Comment: 032-43; 032-47**

A commenter referred to the discussion in section 4.2.12.2 of the Draft EIS on public exposure to the radioactive material released to the atmosphere and the expected exposure of radioactive materials to people through livestock and locally grown vegetables. The commenter stated that such exposures are unacceptable, citing "zero emissions" as the only acceptable option. The commenter suggested that high efficiency particulate air emissions be recirculated into the proposed NEF rather than released outside the facility.

*Response: The analysis in section 4.2.12.2 of the Draft EIS demonstrates that at the bounding levels of airborne emissions, the exposure to humans and animals through all food pathways would be a tiny fraction of natural background radiation levels. Any food grown in the region of the proposed NEF*

would not have detectable levels of radioactivity, and the purpose of the proposed NEF monitoring program would be to ensure that remains true. Emissions, whether radioactive or chemical, are regulated according to limits established by appropriate regulatory agencies. The NRC's regulations for protection against radiation have been determined to be protective of public health and the environment. The limits for radiological emissions are also protective of workers and account for the possibility that a facility's airborne emissions could also be inhaled by the workers.

**Comment: 033-7**

A commenter stated that Valley Fever (coccidiomycosis), which is caused by the inhalation of a fungus known as *C. immitis*, is commonly found in the soil of the southwestern United States and other areas. The commenter stated that radioactive emissions from the LES plant could sterilize the soil, eliminating competition from other organisms and potentially allowing this fungus to thrive. The commenter stated that seasonal high winds blowing towards the north can be over 80 kilometers per hour (50 miles per hour). The commenter further noted that over 30,000 people live within 40 kilometers (25 miles) to the north of the proposed NEF site. The commenter expressed concern that allowing the proposed NEF to operate would increase the public risk of contracting this disease.

*Response: The small quantities of radioactive material that would be released during normal operations or as a result of accidental discharges from the proposed NEF site would not be sufficient to sterilize soil (LES, 2005a). Soil sterilization would require millions of Rad per hour, which is many orders of magnitude greater than would be released by the proposed NEF (Labeda, et al., 1975).*

**Comment: 034-30**

A commenter stated that EIS discussions of the nearest existing residence (4.3 kilometers or 2.6 miles from the proposed NEF) divert attention from the potential for new residences to be established closer to the proposed NEF. The commenter stated that the EIS should analyze the potential human health and environmental impacts to the general public with respect to the maximally exposed individual. The commenter stated that references to the existing nearest residence could create confusion regarding an appropriate benchmark.

*Response: Section 4.2.12 of the Draft EIS presents the impacts to a maximally exposed individual located at the proposed NEF site boundary during normal working hours.*

**Comment: 102-2**

A commenter stated that if the proposed NEF is constructed, toxic emissions and radioactive materials would be associated with the site for at least 30 years, and that contaminated detention/retention basins would be subject to overflow or flooding as a result of rains. The commenter stated that this environment would not be acceptable for raising children and asked what impacts would occur to children.

*Response: Based on the low effluent releases from all sources to the atmosphere or from the onsite basins, there would be no long-term health effects to children from normal operations. The estimates for releases from the proposed NEF are within NRC regulatory limits and conform with internationally accepted research by the International Committee on Radiation Protection.*

**Comment: 103-22**

A commenter stated that the EIS should specifically define the maximally exposed individual. The commenter stated that if the maximally exposed individual is an adult male, the consequences of the analyzed accidents (potential health effects and irreversible adverse health effects) should reflect a representative population that includes females, the embryo-fetus, children, infants, the elderly, and the

infirm. The commenter also stated that occupational exposure levels should not be used for assessing exposure of the public to hydrogen fluoride, because many segments of the public do not have the characteristics of Reference Man.

*Response: The maximally exposed individual for chemical impacts can be any individual. As presented in Appendix F of the Final Environmental Impact Statement for Construction and Operation of a Depleted Uranium Hexafluoride Conversion Facility (DOE, 2004a), the computer codes that were used to calculate the risks of adverse and irreversible effects referenced the Emergency Response Planning Guidelines published by the American Industrial Hygiene Association. These Guidelines were developed to be inclusive of nearly all types of individuals. For this EIS, the overall risks from transportation were estimated by summing over all shipments and routes. Section D.5 of Appendix D presents consequences of chemical exposures from transportation accidents, not occupational exposure levels.*

**Comment: 284-12**

A commenter stated that the Draft EIS identifies several facts about area geology that should be explored further, but that the EIS assumes that chemical and radiological pollutants in airborne emissions and leachate would not affect the regional environment. The commenter noted that pollutants from the facility could travel long distances in the air and that fast flow paths for water could undermine reliance on root system uptake and evapotranspiration as mitigation for water contaminants. The commenter suggested that if disposal of depleted uranium near the site is a possibility, longer term geologic characteristics of the area could take on new significance.

*Response: The conclusion concerning the impacts on public health were determined based on the radiological analysis presented in section 4.2.12 of the EIS. The quantities being released are low and would not result in a build up of uranium or other hazardous chemicals, either over the surrounding land or in any groundwater due to infiltration from the Site Stormwater Retention Basin or septic systems.*

## **I.19 Public and Occupational Health—Accidents**

### **I.19.1 Scope of Analysis and Source Term**

**Comment: L-14; 316-53; 343-6**

Many commenters expressed concern about releases of UF<sub>6</sub> gas during an accident. The commenters stated that the Draft EIS identifies an accidental release of UF<sub>6</sub> as the most significant accident scenario, and that the exposure risk of such a release would increase if winds were from the south at the time of the accident. The commenters noted that local wind patterns documented in section 3.5.2.4 and represented in Figures 3-8 and 3-10 show that southerly winds prevail in the area, increasing the likelihood of this scenario.

*Response: The accident analysis included meteorological data and the surrounding population distribution for calculating the potential consequences. The accident analysis assumed that the wind direction would be from the south in order to maximize the impact of the accident. The seven latent cancer fatalities would occur assuming the probability of the accident is 100 percent. However, as noted in Table 4-14, footnote (e) of the Draft EIS, LES has incorporated design features to make the likelihood of such an accident highly unlikely and the risks, therefore, would be low.*

**Comment: M-26**

Several commenters requested that the NRC expand the meteorology discussion in section 3.5.2.5 to an 80-kilometer (50-mile) radius surrounding the proposed NEF site, stating that storm events and their



effects are not limited to their immediate vicinity. The commenters noted that flash flooding and high winds resulting from tornadoes could adversely affect the proposed site.

*Response: Section 3.5 of the Draft EIS provides both site and regional information regarding climatology, meteorology, and air quality. The regional information extends up to 161 kilometers (100 miles) from the site. Section 3.5.2.5 ("Severe Weather Conditions") includes data from Midland-Odessa, Texas, which is 103 km (64 miles) from the site. Tornado data are taken from all of Lea County as well as the entire State of New Mexico. Data on wind speed and direction are taken from Roswell, Hobbs and Eunice, New Mexico, which are located 161 kilometers (100 miles), 32 kilometers (20 miles), and 8 kilometers (5 miles), respectively, from the site as well as from Midland-Odessa, Texas.*

**Comment: M-68; 316-54**

Several commenters stated that Appendix C, section C.4.1.1 of the Draft EIS should evaluate effects of tornadoes within the vicinity of the proposed NEF, given that there have been 120 tornadoes in Lea and Andrew Counties since 1954. Another commenter asked whether the effects of a class F5 tornado had been evaluated.

*Response: To address the environmental impacts of potential accidents in this EIS, the NRC staff selected a representative sample from the range of accident scenarios. An earthquake was selected as one of a subset of accidents chosen to represent both natural phenomena hazards and man-made hazards of high and low consequence. Although a tornado-related accident was specifically identified in the Draft EIS as a credible event (section 4.2.13.1 and Appendix C, section C.4), the NRC staff chose an earthquake as a representative natural hazard.*

*As noted in 3.5.2.5 of the Draft EIS, tornadoes are classified as F0 through F5 severity levels, with F5 being the most severe. Over the past 50 or more years, 87 tornadoes have been reported in Lea County with severity levels of F0 to F2 and one tornado with a severity level of F3. No tornadoes of severity levels of F4 or F5 were reported during this time. The worse-case tornado reported during this time is the single F3 tornado that occurred about 50 years ago. NEPA does not require the assessment of worst case scenarios when evaluating adverse environmental impacts. Scenarios that exceed the worst case, such as a potential F5 severity tornado, are not deemed credible. The NRC staff revised section 3.5.2.5 to enhance the discussion of tornadoes. Additional information (i.e., the consideration of tornado hazards in the design of the proposed facility), is provided in the NRC staff's SER.*

**Comment: M-70**

Several commenters referred to the discussion in Appendix C, section C.4.2.1 of the Draft EIS concerning releases from an inadvertent nuclear criticality. Specifically, the discussion indicates that the west sector of Eunice would be most affected because it is closest to the facility, and short-lived radionuclides would not have completely decayed before reaching the west sector. The commenters requested that the NRC provide more information on the types and decay rates of radionuclides that would be released during this event. The commenters noted that uranium 234, 235, and 238 have half-lives of 4.46 billion, 704 million, and 245,000 years, respectively and that uranium decay product half-lives can range in the tens of thousands of years. The commenter requested that the NRC revise its estimate regarding the short-lived radionuclides.

*Response: For an inadvertent nuclear criticality event, the material at risk is estimated using a computer code to evaluate the fission products that would be generated by a specific fissile material. The radionuclides of concern for this event are the fission products themselves, not uranium or uranium*

decay products. The types and decay rates of the important isotopes that would be released during an inadvertent nuclear criticality, which the NRC staff used in its evaluation of this event, are as follows:

<u>Isotope</u>	<u>Half-life</u>	<u>Isotope</u>	<u>Half-life</u>	<u>Isotope</u>	<u>Half-life</u>
Kr-83m	1.8 hr	Ba-139	82.7 min	I-131	8.0 days
Kr-85m	4.5 hr	Ba-140	12.7 days	I-132	2.3 hr
Kr-85	10.7 hr	Ce-143	33.0 hr	I-133	20.8 hr
Kr-87	76.3 min	Xe-133	5.2 days	I-134	52.6 min
Kr-88	2.8 hr	Xe-133m	2.2 days	I-135	6.6 hr
Kr-89	3.2 min	Xe-135	9.1 hr		
Sr-91	9.5 hr	Xe-135m	15.3 min		
Sr-92	2.7 hr	Xe-137	3.8 min		
Ru-106	368 days	Xe-138	14.2 min		
Cs-137	30.0 yr				

A population located near the proposed NEF would be affected to a greater degree than would a population located farther away, because a nearby population would be exposed to both long-lived and some short-lived radionuclides. All population areas (near and far) would be affected by long-lived radionuclides because the time to reach all areas would be relatively short compared to the very long decay times. No population areas would be affected by radionuclides with very short decay times (minutes, as opposed to hours or days). This is because virtually all of the radionuclides would decay into harmless constituents before reaching the closest population center. However, certain short-lived radionuclides would not have decayed substantially upon reaching the nearest population, but would have decayed substantially before reaching populations farther away. Such radionuclides would, therefore, increase radiological impacts to closer populations, such as the west sector of Eunice. Based on this discussion, there is no need for the NRC to revise its estimate regarding the short-lived radionuclides.

**Comment: 034-47; 042-37**

A commenter stated that the probabilities of occurrences should be calculated and indicated for each of the accident scenarios discussed in Appendix C, section C.4.2 of the Draft EIS to communicate the likelihood of such occurrences. Another commenter asserted that EIS discussions of the severity of accidents and their consequences appear inconsistent. Specifically, the commenter noted that section 4.2.13.1 of the Draft EIS identifies selected accident sequences as high to intermediate in severity, yet section 4.2.13.2 concludes that these accident scenarios pose acceptably low risks and would result in small-to-moderate impacts. The commenter stated that the EIS does not clearly indicate whether accident sequence probabilities were factored into the assessment of impacts resulting from those sequences. The commenter stated that the decisionmaker and the public cannot make an informed decision regarding the acceptability of these risks without a full discussion of probabilities of occurrence and how these probabilities factor into a conclusion regarding the magnitude of impacts.

*Response: The accident analyses (Appendix C, section C.4.2 of the EIS) evaluates the consequences of various accidents, assuming the accident would, in fact, occur. Because the accident is assumed to occur (that is, the probability of occurrence is 100 percent), the environmental consequences are maximized. However, the results of these analyses is that the respective environmental consequences would be low due to various preventive and mitigating measures to be employed by the applicant. Further, as it is not likely an accident would occur, the risk or expected value of an accident actually would be lower than described in Appendix C, section C.4.2 of the Draft EIS.*

*The NRC staff revised section 4.2.13.1 of the EIS to state that results of the impact analyses assume that the accidents occur (i.e., the probability is 100 percent) to maximize the possible environmental consequences. The staff also revised section 4.2.13.2 to state that the probability of occurrence (or impacts after occurrence) would be low for each accident because certain features would be employed to prevent or mitigate the impacts of accidents.*

**Comment: 042-46**

A commenter stated that LES should indicate a specific magnitude of earthquake used for the design basis.

*Response: The proposed NEF would be designed to a specific ground acceleration. The magnitude of an earthquake epicenter would not indicate the distance of the epicenter to the proposed NEF site. The value for peak horizontal and vertical accelerations is 0.15g, as stated in the Integrated Safety Analysis Summary provided in the license application. The NRC staff revised Appendix C, section C.4.2.3 of the EIS to indicate this design basis.*

**Comment: 048-89**

The commenter stated that it (LES) would provide a bounding evaluation for worker exposure limits and eliminate the use of time scaling of acute exposure guideline levels (and as a result, worker 5-minute exposure limits) to define consequence categories. The commenter stated that this change would potentially impact Tables C-13 and C-15 through C-19 of the Draft EIS.

*Response: The accident analyses in section 4.2.13 and Appendix C of the EIS were revised to reflect the use of acute exposure guideline levels and the change in worker exposure time from 5 minutes to 10 minutes.*

**Comment: 093-5**

A commenter stated that the Draft EIS does not address the accident scenarios that concerned the commenter, while the application does address them.

*Response: As noted in section 4.2.13 and Appendix C, section C.4.1, of the Draft EIS, the staff selected a subset of potential accident scenarios for detailed evaluation to encompass the range of possible accidents. The five accidents evaluated are a representative selection of the types of accidents that are possible at the proposed NEF. The accident scenarios selected vary in severity from high to low consequence events and include accidents initiated by natural phenomena, operator error and equipment failure.*

**Comment: 103-24**

A commenter stated that Table 5A-6 from EPA's General Factors Exposure Factors Handbook (EPA, 1997) provides a summary of reasonable assumptions regarding breathing rates for various activities. The commenter stated that, based on this table, the NRC should use a greater breathing rate for the analysis in Appendix C to reflect the rate expected for a worker involved in an accident and not a worker involved in light activity.

*Response: The breathing rate used by the staff is 20 liters per minute, which is the Reference Man value cited in 10 CFR Part 20, Appendix B, for light work. This value is the same value as that recommended by EPA in Federal Guidance Report No. 11, "Limiting Values of Radionuclide Intake and Air Concentration and Dose Conversion Factors for Inhalation, Submersion, and Ingestion." Regarding the report cited by the commenter, the breathing rate used by the staff is actually greater than the value cited*

in EPA/600/P-95/002Fa, Table 5-2, for a healthy adult performing medium activity, and only 10 percent smaller than the 50<sup>th</sup> percentile values for laborers, which is shown in Table 5-8. Therefore, the NRC staff believes a breathing rate of 20 liters per minute is a reasonably conservative value for estimating health effects during the early phase of a postulated emergency at the proposed NEF.

**Comment: 358-32**

A commenter stated that the actual effect of accidents (such as a hydraulic rupture of a UF<sub>6</sub> cylinder) would be a strong public outcry to shut down the facility. The commenter suggested that the EIS consider the economic impacts of a hydraulic rupture and compare them with other accidents that have occurred at licensed NRC facilities (including Three Mile Island-II).

*Response: Generally, the EIS discusses costs and benefits and various socioeconomic issues related to facility construction and operation. Additionally, the Emergency Plan contains memoranda of understanding that address cost recovery related to the provision of services by state and local governments. Further, under 10 CFR § 140.13b, a uranium enrichment facility licensee is required to carry liability insurance to cover public claims arising from any occurrence within the United States that results from the radioactive, toxic, explosive or other hazardous properties of chemicals containing licensed material, and causes, within or outside the United States, the losses and injuries listed in the regulation. A comparison of the proposed NEF to facilities such as Three Mile Island-II is inappropriate because of the significant differences between enrichment facilities and nuclear power reactors.*

**I.19.2 Impacts**

**Comment: M-69**

Several commenters referred to Appendix C, section C.4.2.1 of Draft EIS and asked what the probability would be of the occurrence of an inadvertent nuclear criticality. The commenters asked whether such an accident has ever occurred in similar existing facilities.

*Response: The probability assumed for an inadvertent nuclear criticality in this EIS is 100 percent, to maximize the potential impacts that could occur. However, as discussed in Appendix C, section C.4.2.1 of the Draft EIS, LES has incorporated certain design features to make the likelihood of such an accident highly unlikely. The NRC staff also assesses inadvertent nuclear criticality as part of the development of the SER.*

**Comment: M-72**

Several commenters noted that Appendix D of the Draft EIS states that acute effects evaluated were assumed to estimate a threshold nonlinear relationship, or quadratic approximation, with exposures (i.e., some low level of exposure can be tolerated without inducing a health effect).

The commenters noted that although the theory of a nonlinear relationship between exposure and health effects has been validated by some studies, it has yet to be proven accurate for human subjects. According to the Committee Examining Radiation Risks of Internal Emitters, the United Nations Scientific Committee on the Effects of Atomic Radiation reported in 2000 that some animal data show linear dose-response relationships for cancer induction by alpha-emitting radionuclides over the dose ranges studied (Cerrie, 2004). The commenters stated that, given this disagreement among experts, the NRC should not assume that the threshold theory is applicable when considering radiation exposures to members of the public during transportation of materials to and from the proposed NEF.

*Response: This section of the Draft EIS concerns chemical impacts, not radiological impacts. Thus, the comment which states that the "NRC not assume that the threshold theory is applicable when considering radiation exposures to members of the public during transportation of materials to and from the NEF" is not applicable. Furthermore, the findings of scientific organizations discussed in the comment are for stochastic effects, not deterministic (acute or immediate) effects referred to in this section of the EIS. For radiological, deterministic effects, it is widely accepted by the scientific community that there is a threshold, although the exact value of the population threshold doses is disputed.*

**Comment: 032-1; 365-7**

Commenters expressed concern about the dangers associated with a release of UF<sub>6</sub> gas.

*Response: The risks from the release of UF<sub>6</sub> are addressed in the Draft EIS. The NRC staff will assess in the SER the safety issues associated with accidents, including facility safety controls to address the release of UF<sub>6</sub>.*

**Comment: 032-21**

A commenter referenced the discussion of public and occupational health and safety in the executive summary of the Draft EIS. The commenter stated that the expected impacts are unacceptable, that presently there are no radiation sources or accidents involving radioactive materials, and that the most severe accident would be caused by ruptured and overfilled or overheated cylinders. The commenter stated that regular, low doses of radiation over time could be associated with carcinogenic effects.

*Response: As discussed in sections 4.2.12 and 4.2.13 of the Draft EIS, the NRC staff considered potential human health impacts of ionizing radiation from the proposed NEF. The NRC staff concluded that the EIS adequately addressed the human health impacts of the proposed NEF. Studies by international agencies and organizations such as the International Committee on Radiation Protection and the International Atomic Energy Agency have concluded that risks from the exposure to low-levels of radiation are low and that such exposures represent a tiny fraction of any single person's natural background radiation exposure.*

**Comment: 032-40**

A commenter referenced a discussion in section 4.2.11.2 of the Draft EIS on the latent cancer fatality values from accidents as compared with the values associated with incident-free transportation. The accident values are expected to be approximately 2 orders of magnitude greater than the incident-free values due to inhalation of radiation during accidents. The commenter requested more details on the symptoms and other effects of an accident.

*Response: While the risks of latent cancer fatalities due to radiation from postulated accidents is about 2 orders of magnitude greater than the risks from incident-free transportation, the total latent cancer fatality values are nevertheless low, at 0.5 latent cancer fatalities or less. As described in the text box in section 4.2.11.2 of the EIS, with latent cancer fatality values this low, no latent cancer fatalities would be expected to occur to members of the public. The NRC staff revised section 4.2.11 to state that, as a result of the low total latent cancer fatalities values from transportation accidents (less than 0.5), the NRC staff does not expect any radiation-induced latent cancer fatalities for members of the public. Symptoms of radiation exposure are described on the NRC's web page (<https://www.nrc.gov>) for radiation protection.*

**Comment: 032-41**

A commenter referenced the discussion in section 4.2.11.2 of the Draft EIS of potential chemical impacts to the public from an accident by rail or truck. The commenter requested more information regarding the

consequences of such an accident. The commenter stated that all governors and officials of involved states should be notified that LES assumes that wastes or enriched uranium could be shipped anywhere.

*Response: Table 4-7 of the EIS provides the potential consequences to the population from severe transportation accidents, in addition to the discussion in section 4.2.11.2. Section 4.2.12.2 of the EIS also discusses other chemical impacts from operations. The assumptions used in the assessment of the transportation impacts are provided in Appendix D, section D.5 of the EIS. To provide more detail regarding transportation related chemical accidents, the EIS also lists references DOE, 2004a and DOE, 2004b. These references are DOE EISs that address similar potential accidents at the DOE DUF<sub>6</sub> conversion facilities located at Paducah, Kentucky, and Portsmouth, Ohio, respectively. These EISs address the results of chemical impact analyses from transportation accidents.*

*Shipments of uranium product, wastes, or feed material would be subject to NRC regulations for packaging and to DOT regulations for shipments. No routing restrictions or notification requirements apply for shipments in the United States of the materials associated with the proposed NEF. Section I.17 of this appendix addresses comments relating to the transportation of radioactive materials.*

**Comment: 032-45**

The commenter referenced section 4.2.13.2 of the Draft EIS and asked how the NRC determined that an accident resulting in injuries or fatalities could represent a small to moderate impact. The commenter noted that families of the injured or deceased would likely disagree with the NRC's conclusion. The commenter asked whether victims' families would receive monetary compensation.

*Response: The accident analysis in section 4.2.13.2 of the EIS evaluates the consequences of various accidents, assuming the accident would, in fact, occur. Because the accident is assumed to occur (that is, the probability of occurrence is 100 percent), the environmental consequences are maximized. However, the results of these analyses is that the environmental consequences would be low due to various preventive and mitigating measures to be employed by the applicant.*

*Under 10 CFR § 140.13b, a uranium enrichment facility licensee is required to carry liability insurance to cover public claims arising from any occurrence within the United States that results from the radioactive, toxic, explosive, or other hazardous properties of chemicals containing licensed material, and causes, within or outside the United States, the losses and injuries listed in the regulation. The SER discusses how LES would fulfill the liability insurance requirements listed in section 140.13b.*

**Comment: 042-38**

A commenter requested that the NRC provide details of remediation measures to include recommended actions, anticipated costs, funding sources, and efforts to minimize adverse biotic effects and public radiation dose in the event of a cylinder rupture.

*Response: The accident analyses in Appendix C, section C.4.2 of the Draft EIS evaluates the consequences to the public and the fact that certain design features have been incorporated to reduce the risks of accidents. Section C.4.3 of the Draft EIS evaluates consequences to biota. Section 4.2.13 of the EIS also discusses representative accident scenarios, consequences and mitigation measures. Other relevant information, including costs, is addressed in the NRC staff's SER and are not within the scope of the EIS.*

**Comment: 102-1**

A commenter expressed opposition to the construction of the proposed facility and concern about the potential for an accident or release of emissions during daily operation. The commenter's home is in close proximity to the site (4.3 kilometers or 2.6 miles).

*Response: As discussed in section 4.2.12 of the Draft EIS, airborne effluent emissions from normal operations, even at levels 35 times greater than estimated by LES, would not result in radiation exposures that could affect the long-term health of any nearby residents. The impacts from accidents at the proposed NEF would be that no member of the public would receive a radiation dose in excess of the performance requirements in 10 CFR Part 70 Subpart H, and that no chemical exposures from the site boundary and beyond would be expected to result in permanent injury. Additionally, LES would identify certain structures, systems, and components to reduce the risks to the proposed NEF workers, the public, and the environment. LES has also committed to an Emergency Plan that includes certain mitigation actions to reduce the consequences of the accident. These design features and the Emergency Plan would be evaluated in the NRC staff's SER.*

**Comment: 358-31**

A commenter referred to Table 4-14 of the Draft EIS, which indicates that a hydraulic rupture of a UF<sub>6</sub> cylinder would result in a 120 person-sievert (12,000 person-rem) collective dose. The commenter stated that a release of this size would be one of the largest in the history of New Mexico. The commenter noted that the public and State of New Mexico would consider it a major impact, in contrast to the EIS conclusion in section 4.2.13.2 that such a release would represent small to moderate impacts. The commenter suggested that the EIS compare a release of this size with releases from other nuclear facilities within the State to assess relative impacts and provide context.

*Response: Table 4-14 of the Draft EIS indicates that the effects from a hydraulic rupture would result in 120 person-sievert (12,000 person-rem) and seven Latent cancer fatalities, assuming such an accident were to occur (probability = 100 percent). However, as noted in footnote (e), LES has incorporated into the design redundant heater controller trips to make the likelihood of such an accident highly unlikely. Therefore, the impacts are characterized as SMALL to MODERATE.*

### **I.19.3 Mitigation Measures**

**Comment: M-71**

Several commenters noted that Appendix C of the Draft EIS states that LES would rely on administrative controls to reduce the magnitude of fires resulting from the presence of transient combustible material. The commenters stated that the information provided in the Draft EIS is vague and requested more information concerning the administrative controls.

*Response: Details regarding fire (or combustible loading) controls are evaluated in the Integrated Safety Analysis Summary for the proposed NEF. Generally, the combustible loading controls consist of an approval or permitting system and routine inspections to verify that no unapproved combustibles would be present. Lists of approved/unapproved combustibles and surveillance intervals would be refined as needed based on operational experience.*

**Comment: 032-44**

A commenter referred to the discussion in section 4.2.12.2 of the Draft EIS on high-consequence and intermediate-consequence events. The commenter requested that the NRC provide details on the dangers of such events and response actions that would be required. The commenter also asked whether and how

the public would be notified in the event of an emergency. The commenter asked who would notify the public and how quickly notifications would be provided.

*Response: The potential radiological and chemical effects from accident releases of UF<sub>6</sub> are presented in section 4.2.11.2 for transportation impacts and section 4.2.13 for other accidents. LES would incorporate into the facility certain design features that would significantly reduce the likelihood or effects of intermediate- and high-consequence accidents. LES's Emergency Plan addresses the coordination of Federal, State, and local officials to respond to a number of radiological and nonradiological accidents (including and in addition to the accident scenarios described in the EIS). Emergency notifications after an accident are also discussed in the NRC staff's SER. Further information about the NRC's emergency response programs is available on the NRC's web page (<https://www.nrc.gov>) on emergency preparedness and response.*

## **I.20 Waste Management**

### **I.20.1 General**

#### **Comment: 032-23**

A commenter stated that the New Mexico Governor may not agree with issues relating to the proposed NEF. As an example, the commenter stated that the Governor had decided to withhold the groundwater discharge permit.

*Response: The NRC staff revised section 1.5.4 of the EIS to indicate that the New Mexico Environment Department Water Quality Bureau has deemed the LES groundwater discharge permit application complete and assigned it a number identification of 1481.*

#### **Comment: 032-48; 042-1; 355-5**

A commenter requested the NRC deny the license for the proposed NEF due to the inadequate analysis of the waste disposition alternatives and the growing public opposition to the proposed NEF. Another commenter stated that the uncertainty of depleted uranium disposition presents an unacceptable risk to the citizens of New Mexico and to the environment. Another commenter stated that the Draft EIS is setting a low standard of environmental protection by assuming that shallow land burial of depleted uranium byproduct would have no significant impact upon the environment.

*Response: Reasonable alternatives for the disposition of waste that would be produced by the proposed NEF are evaluated in the EIS. It is likely that LES would pursue one of the options discussed in the EIS. The NRC staff believes its conclusions regarding the impacts of shallow land disposal are correctly reflected in the EIS. Any land disposal facility chosen for disposing of the depleted uranium wastes from the proposed NEF would need to meet NRC or Agreement State requirements for such disposal. Responses to comments on waste disposition below provide additional information.*

#### **Comment: 034-6**

A commenter stated that the EIS should analyze the impacts to human health and the environment associated with a failure to implement the disposal options discussed in the EIS. The commenter stated that, under NEPA, a potential effect may be analyzed if it is reasonably foreseeable.

*Response: If LES is unable to develop a disposition pathway through a private company, disposition through a DOE facility in accordance with the USEC Privatization Act is a plausible strategy (NRC, 2005a). Therefore, if LES were to default prior to the completion of a private company disposition*



pathway, the NRC could direct the use of decommissioning funds to implement the USEC Privatization Act options for DOE disposition of the DUF<sub>6</sub>.

**Comment: 104-2**

The commenter stated that, as a resident of a state outside the State of New Mexico, it is the commenter's opinion that LES be required to disclose comprehensive waste management plans.

*Response: The NRC staff has provided additional information concerning the management of wastes associated with the proposed NEF in section 4.2.14 of the EIS.*

**I.20.2 Waste Disposal Strategy**

**Comment: M-19; P-1; 036-7**

Several commenters stated that shipping converted waste to Envirocare and U.S. Ecology are not viable options because no negotiations between LES and these facilities are being pursued.

*Response: As discussed in section 2.1.9 of the Draft EIS, both the Envirocare of Utah and U.S. Ecology in Richland, Washington can dispose of Class A low-level radioactive waste. Because the NRC determined that depleted uranium would be low-level radioactive waste (see LES vs. NIRS and Public Citizen Memorandum and Order, [NRC, 2005a]), these two sites would be potential disposal sites for depleted U<sub>3</sub>O<sub>8</sub>.*

**Comment: M-25; M-47; R-1; 032-30; 032-33; 032-46; 103-8; 358-15; 358-17**

Several commenters stated that no viable private sector alternatives exist for handling depleted uranium wastes from the proposed NEF. The commenters stated that no basis exists for the discussion in the EIS of a conversion facility and that the discussion should be removed. One commenter stated that the EIS should discuss plans for any facilities and explain why there would be comparable impacts to DOE conversion facilities.

*Response: The proposed NEF must be decommissioned and all DUF<sub>6</sub> properly disposed of prior to license termination. As discussed in section 2.1.9 of the Draft EIS, two options are available for converting the depleted uranium wastes. These include conversion at planned DOE conversion plants at its facilities in Portsmouth, Ohio, and Paducah, Kentucky, or at a private conversion facility. Regarding the latter, the NRC staff has revised section 2.1.9 of the EIS to indicate that LES has signed a memorandum of understanding with AREVA, Inc. to construct and operate a conversion plant near the proposed NEF. The disposal options presented in the Draft EIS satisfy the Commission rulings concerning a disposal strategy and the classification of DUF<sub>6</sub>.*

**Comment: 032-28; 032-29; 032-31; 103-15; 104-1**

Commenters noted that section 2.1.9 of the Draft EIS discusses disposal options that do not meet the criteria for a viable waste disposal option. The commenters specifically noted that none of the existing waste disposal facilities identified in the EIS can accept proposed NEF waste.

*Response: The discussion on disposal options in section 2.1.9 of the EIS provides the status of existing low-level radioactive waste disposal facilities and their potential for the disposal of depleted U<sub>3</sub>O<sub>8</sub>. The disposition of the depleted U<sub>3</sub>O<sub>8</sub> generated from the DOE conversion facilities at Paducah and Portsmouth would be either at the Envirocare site (DOE's proposed disposition site) or at the Nevada Test Site (DOE's optional disposal site). Depleted U<sub>3</sub>O<sub>8</sub> generated from the adjacent or offsite private conversion process would be disposed at a site licensed to accept this material. For example, under its*

*Radioactive Materials License issued by the State of Utah, Envirocare is authorized to accept for disposal the quantities of depleted uranium oxides expected to be generated by the conversion of the proposed NEF's DUF<sub>6</sub>. The NRC staff updated sections 2.1.9 and 4.2.14.4 of the EIS to reflect this information. Further action by LES would be required in coordination with either AREVA, Inc. (as summarized in the recent memorandum of understanding) or DOE in accordance with the USEC Privatization Act.*

### **I.20.3 Storage of DUF<sub>6</sub>**

**Comment: M-48; Q-1; 358-6; 358-9; 358-11; 358-12; 358-16**

Several commenters noted that the Draft EIS does not state the maximum amount of time that UBCs would be stored onsite. Several other commenters noted that UBCs could be left at the proposed NEF site beyond the end of the 30-year license term, and that the EIS should describe associated impacts and the actions that would be taken to avoid this possibility. Another commenter stated that the EIS should consider the alternative of limiting the amount of UBC storage to one year of production (627 cylinders) to ensure that waste does not remain onsite indefinitely. This commenter stated that New Mexicans are concerned about the potential for long-term storage or disposal sites in the State, based on New Mexico's history.

*Response: Section 4.2.14.3 of the Draft EIS states that storage of UBCs at the proposed NEF could occur for up to 30 years. The EIS analyzes storage impacts for a 30-year storage period, which bounds the impacts for shorter storage periods. As discussed in section 4.2.14.3 of the Draft EIS, storage of UBCs at the proposed NEF could occur for up to 30 years during operations and before removal of DUF<sub>6</sub> from the site through one of the disposition options. However, LES has committed to a disposal path outside of the State of New Mexico which would be utilized as soon as possible and would aggressively pursue economically viable paths for UBCs as soon as they become available (LES, 2005a).*

**Comment: 029-3; 029-6**

The commenter requested assurance that only a minimum quantity of DUF<sub>6</sub> cylinders would be stored onsite, and that the majority would be shipped for disposition off site.

*Response: LES has committed to dispose of the UBCs in a timely manner, as stated in its Environmental Report. The company also announced that it has signed a memorandum of understanding (LES, 2005d) with AREVA, Inc., concerning the development of a DUF<sub>6</sub> conversion facility. The NRC staff's SER and the license, if issued, would specify possession limits for radioactive materials at the proposed NEF. The NRC staff updated section 2.1.9 of the EIS to include additional information with regard to depleted uranium disposition.*

**Comment: 042-43**

A commenter stated that the EIS should address whether the cylinder management program considers climatic differences at Eunice, New Mexico (e.g., evaporation that may concentrate corrosive salts, heat that may increase reaction rates).

*Response: While the active cylinder management program described in the EIS is similar to the current programs at Portsmouth, Ohio and Paducah, Kentucky, it is not identical. A cylinder management program developed for the proposed NEF would address local climate and conditions in the Lea County area.*

**Comment: 047-2**

A commenter noted that the onsite storage of depleted uranium hexafluoride since the mid-1940s (as a result of diffusion plant enrichment processes) has posed no hazard, and the risk of harm to people or the environment is small. The commenter expressed doubt that any radiation could be detected through the steel containers.

*Response: As provided in Table D-7 of the Draft EIS, the dose rate at 1 meter (3.3 feet) from a Type 48Y cylinder containing DUF<sub>6</sub> would be approximately 0.0028 millisieverts per hour (0.28 millirem per hour), which is within the detectable range of some dose rate meters.*

**Comment: 048-4; 048-19; 048-58**

The commenter suggested the following changes in the EIS:

- Table 1-3 of the Draft EIS should be revised to reflect that the proposed NEF would need its waste activity EPA ID number for the storage and use of hazardous chemicals other than DUF<sub>6</sub>.
- For consistency with Safety Analysis Report Table 10.1-10, Draft EIS Table 2-6 should include 83 cubic meters (2,930 cubic feet) of miscellaneous, low-level radioactive waste resulting from other NEF buildings.
- The statement in section 4.3.6 that spent citric acid would be sent to the Treated Effluent Evaporative Basin during the operation phase is incorrect and should be revised. The Liquid Effluent Collection and Treatment System would remove citric acid from the waste stream before discharge to the basin.

*Response: The NRC staff revised the EIS to reflect the suggested changes.*

**Comment: 093-3**

A commenter stated that the rate of inspection of the UBCs identified in Table 5-2 of the Draft EIS is more frequent than annual.

*Response: Table 5-2 states that cylinders would be inspected prior to being placed on the UBC storage pad and re-inspected annually for damage or surface coating defects. This statement is correct.*

**Comment: 316-30**

A commenter suggested housing the UBCs to decrease the chances of corrosion from exposure to the elements and reduce public exposure to direct and scatter radiation. The commenter also asked whether Table 5-2 of the EIS could include this housing as a mitigative measure to isolate the cylinders from wildlife.

*Response: As discussed in section 4.2.14.3 of the Draft EIS, proper and active cylinder management, which includes routine inspections and maintaining the anti-corrosion layer on the cylinder surface, has been shown to limit exterior corrosion or mechanical damage necessary for the safe storage of DUF<sub>6</sub>. As discussed in Section 4.2.7.2 of the Draft EIS, periodic surveys of the UBCs would prevent nesting and lengthy stay times for wildlife on the UBC Storage Pads. While small animals occupying the storage pad could be exposed to radiation, radiation levels would be low and would not adversely affect small animals. No additional mitigation measures other than those proposed by LES in Chapter 5 of the EIS are required.*

**Comment: 316-55**

A commenter asked whether LES could engage in cleaning and decontamination of empty UF<sub>6</sub> cylinders at the proposed NEF. The commenter stated that the EIS should consider the environmental effects of cleaning and decontaminating Type 48X or Type 48Y cylinders that have contained UF<sub>6</sub>.

*Response: The NRC staff revised section 2.1.7 to state that LES would not conduct internal cleaning or decontamination of the UF<sub>6</sub> cylinders at the proposed NEF site. Cylinders containing DUF<sub>6</sub> would be shipped to a conversion facility, where empty cylinders would be shipped to the feed material suppliers. Any empty cylinders stored at the proposed NEF would be eventually returned to the feed material supplier or properly disposed of at a licensed disposal facility.*

**I.20.4 Disposal Site**

**Comment: M-20**

Several commenters asked whether the NRC considered Senator Domenici's initiative that would require DOE to take ownership of the proposed NEF depleted uranium waste. If so, the commenters requested that the NRC discuss the initiative and analyze its environmental impacts.

*Response: Senator Domenici's initiative is beyond the scope of this EIS. However, for DOE to assume control of the proposed NEF wastes, LES would be required to make a request for DUF<sub>6</sub> conversion and disposition under the USEC Privatization Act. Section 4.2.14.3 of the Draft EIS discusses the environmental impacts of this option.*

**Comment: M-20; 316-35; 358-18**

Several commenters asked whether the proposed NEF could ship depleted uranium indirectly to Barnwell, the Nevada Test Site, or WCS. For example, the commenters wanted to know whether the waste could be shipped to the Nevada Test Site if DOE were to assume ownership of the waste. Other commenters stated that disposition of NEF depleted uranium wastes by DOE, Barnwell and WCS cannot be considered plausible and should be eliminated from the EIS. One commenter also stated that Envirocare or Hanford could not take the waste if no viable private conversion facility exists.

*Response: For DOE to assume control of the proposed NEF wastes, LES would be required to make a request for DUF<sub>6</sub> conversion and disposition under the USEC Privatization Act. If LES were to make this request, DOE would be required to take the proposed NEF wastes. The disposition of the depleted U<sub>3</sub>O<sub>8</sub> generated from the DOE conversion facilities would be either at the Envirocare site (DOE's proposed disposition site) or at the Nevada Test Site (DOE's optional disposal site). The Nevada Test Site could only receive depleted uranium from the proposed NEF if ownership of the depleted uranium was first transferred to DOE.*

*With respect to Compact organizations, wastes from the proposed NEF could not be shipped directly to Barnwell unless other regulatory arrangements were made. WCS has applied for a license from the State of Texas to dispose of low-level radioactive waste at its Andrews, Texas facility. A separate licensing process could be required to obtain approval from the State of Texas and agreements must be obtained from the relevant Compact organizations if disposal at WCS is pursued by either DOE or LES. The proposed NEF waste could also be shipped to Hanford if it meets the facility's waste acceptance criteria.*

*Under its Radioactive Materials License issued by the State of Utah, Envirocare is authorized to accept for disposal the quantities of depleted uranium oxides expected to be generated by the conversion of the*

*proposed NEF's DUF<sub>6</sub>. Section 2.1.9 of the Draft EIS has been revised to clarify the conditions under which waste could be shipped to the various disposal sites.*

**Comment: 031-3**

A commenter asked whether Governor Richardson would withdraw his support for the proposed NEF if the NRC refused to allow representatives from the State of New Mexico to participate in the hearings on waste disposal and other issues.

*Response: On July 19, 2004, the NRC's ASLB issued a Memorandum and Order that allowed participation in the hearing process by two State of Mexico entities—the New Mexico Environment Department and the Attorney General of New Mexico.*

**Comment: 032-3; 032-7; 032-9; 032-16; 036-6; 067-2; 105-7**

Several commenters asked about the disposition of the waste and demanded assurance that the waste would be removed from the State of New Mexico. The commenters referred to the responsibility of state and local officials to protect citizens who could be affected by the proposed NEF.

*Response: As stated in section 4.2.14 of the Draft EIS, hazardous wastes would be shipped offsite to licensed facilities for processing and disposal in accordance with Federal and State regulations. LES has publicly committed to the removal of DUF<sub>6</sub> from the proposed NEF as soon as practicable. To this end, LES and AREVA, Inc., signed a memorandum of understanding (LES, 2005d) to pursue the licensing, design, and construction of a private DUF<sub>6</sub> conversion facility specifically for the proposed NEF. The depleted uranium would be converted at this private facility and then disposed of at a licensed facility for radioactive waste outside of the State of New Mexico. The location of the private conversion facility would not affect plans for final disposition outside New Mexico. Further, no disposal facilities currently exist within the State.*

*Should a licensee violate the terms of its license, which includes compliance with all applicable laws and regulations pertaining to uranium enrichment operations and environmental protection, then the NRC, as the Federal oversight agency, may impose penalties, including financial and civil penalties and license revocation. Other Federal and State agencies can also impose requirements and penalties for violations of laws and regulations under their purview.*

**Comment: 032-31; 103-13; 103-14; 103-15**

Commenters noted that no abandoned mines are available and that mines should be eliminated as a disposal option. One commenter stated that the EIS should clarify that costs are the reason underground mines were not considered viable and state why costs are high for this low technology alternative. Another commenter stated that disposal in mines seems to be inconsistent with DOE's preferred alternative discussed in the Depleted Uranium Programmatic Environmental Impact Statement (DOE, 1999).

*Response: As discussed in sections 2.1.9 and 4.2.14.4 of the Draft EIS, one of the options proposed by LES is to dispose of the converted wastes as U<sub>3</sub>O<sub>8</sub> in an abandoned mine. The NRC staff believes this is a viable option and evaluated the environmental impacts associated with this option. Therefore, the NRC staff did not eliminate mine disposal from further consideration. Section 4.2.14.4 of the EIS contains a discussion of the impacts of disposal in an abandoned mine. DOE's preferred alternative in the Programmatic EIS for depleted uranium is beneficial use. However, the site-specific conversion facility EISs, using more recent information and data, concluded that there is not a significant market for*

*beneficial use of depleted uranium, and that disposal in a licensed disposal facility is the preferred alternative. The NRC staff agrees with the disposition assessment of the conversion facility EISs.*

**Comment: 034-13**

A commenter noted that the last sentence in the first paragraph of Table 2-8 states that there would be enough existing national capacity to accept low-level radioactive waste generated at the proposed NEF. The commenter stated that the EIS should clarify whether the statement is inclusive of  $\text{DUF}_6$  disposal and should address the national capacity for converting and disposing of  $\text{DUF}_6$ .

*Response: As presented in section 4.2.14.4 of the Draft EIS regarding existing disposal capacity,  $\text{DUF}_6$  cannot be disposed of without first being converted into an acceptable form (such as  $\text{U}_3\text{O}_8$ ).  $\text{DUF}_6$  would be disposed of in a form processed to meet Class A low-level radioactive waste requirements, and for which there is sufficient national capacity. Section 4.2.14.3 of the Draft EIS discusses options for private or DOE conversion of  $\text{DUF}_6$ .*

**Comment: 103-13**

The commenter stated that the NRC acknowledges LES proposals for  $\text{DUF}_6$  disposition beyond U.S. borders, but does not indicate that such options are not viable.

*Response: The NRC staff revised section 2.2.2.4 of the EIS to clarify that overseas locations were eliminated from further consideration due to high costs.*

**Comment: 104-1**

A commenter asked whether states other than the State of New Mexico would have any authority with regard to the disposition of proposed NEF wastes.

*Response: The authority for waste disposition rests with the relevant Compact organizations, as described in section 2.1.9 of the EIS.*

**Comment: 284-8; 316-36; 355-5; 356-4; 358-19**

Several commenters stated concerns about disposing of depleted uranium waste at the WCS facility. One commenter stated that there is no basis for including WCS as an option in the EIS. Other commenters stated that the EIS does not evaluate the potential that proposed NEF wastes could be processed, stored and disposed of in the vicinity of the proposed NEF site. Some commenters asked about the regulatory process and whether an intermediary could take possession of the proposed NEF's waste for ultimate transfer to the WCS site. One commenter asked whether LES would transfer possession of its waste to DOE, which would qualify it for disposal at the WCS facility if the facility receives a license for Federal waste.

*Response: All wastes to be disposed of at a licensed low-level radioactive waste disposal facility would be required to meet all of the facility's operating license requirements. WCS applied for a license from the State of Texas to dispose of low-level radioactive waste at its Andrews, Texas facility. A separate licensing process could be required to obtain approval from the State of Texas and agreements must be obtained from the relevant Compact organizations if disposal at WCS is pursued by either DOE or LES.*

**Comment: 316-27; 316-37**

A commenter asked why the Draft EIS assumes disposal of depleted uranium may occur at a near-surface site and does not account for the NRC's historical position on this issue. The commenter listed examples of previous NRC statements indicating that near-surface disposal may not be appropriate for depleted

uranium disposition. The commenter also asked whether it would be necessary to amend the operating licenses of the facilities so they may legally accept depleted uranium for disposal. The commenter asked whether an EIS would be necessary to evaluate the impacts associated with a license amendment.

*Response: As discussed in section 4.2.14.4 of the EIS, the environmental impacts at shallow disposal sites considered for disposition of low-level radioactive wastes would have been assessed at the time of the initial license approvals of these disposal facilities or as a part of any subsequent amendments to the license. For example, under its Radioactive Materials License issued by the State of Utah, the Envirocare disposal facility is authorized to accept depleted uranium for disposal with no volume restrictions. Therefore, the State of Utah considers the disposal of depleted uranium at the Envirocare site to be acceptable. Several site-specific factors contribute to the acceptability of depleted uranium disposal at the Envirocare site, including a lack of potable groundwater, extremely low annual precipitation, and land use controls by Tooele County.*

**Comment: 316-28**

A commenter stated that Table 4-19 of the Draft EIS fails to disclose the models or parameter values used in its modeling of releases expected from a disposal site. The commenter noted that the text in the Draft EIS suggests that models developed for the Claiborne Enrichment Center were used, but that Table 4-19 results are unlike results for the Claiborne facility. The commenter stated that the performance of a disposal site is highly site-specific; the model addresses two hypothetical sites but no actual disposal sites.

*Response: The models and the analysis that are the basis for the values in Table 4-19 are presented in Appendix A of the Claiborne Enrichment Center EIS. The NRC staff added a footnote to Table 4-19 to indicate this. To demonstrate the potential environmental effects of disposal, the NRC staff conducted a generic analysis of potential impacts from disposal in a geologic disposal site. If geologic disposal is pursued, site selection and site-specific environmental analyses also would be conducted by appropriate regulatory authorities.*

**Comment: 358-18**

A commenter stated that the EIS does not recognize that the States of Utah and Nevada have previously prohibited 11e.(2) waste (uranium mill tailings) from Fernald from being shipped to Envirocare and the Nevada Test Site, respectively, and that the proposed NEF waste may not be accepted.

*Response: Depleted uranium from an enrichment facility is not classified as 11e.(2) byproduct material. The 11e.(2) byproduct material from Fernald was not disposed of in Utah or Nevada for reasons that are not applicable in this case. As discussed in section 4.2.14.4 of the EIS, under its Radioactive Materials License issued by the State of Utah, Envirocare is authorized to accept for disposal the quantities of depleted uranium oxides expected to be generated by the conversion of the proposed NEF's DUF<sub>6</sub>.*

## **I.20.5 Conversion Facility**

**Comment: M-18; O-1**

Several commenters stated that the option of constructing an adjacent conversion facility is too speculative to be considered viable. The commenters stated that this option would not address concerns that the waste be removed from the State of New Mexico.

*Response: As stated in Section 2.1.9 of the Draft EIS, the NRC staff recognizes the possibility that the private conversion facility could be located close to the proposed NEF. Section 1.20.2 responds to comments on a strategy for the proposed NEF waste management.*

*Section 2.1.9 of the Draft EIS has been revised to describe the regulatory actions needed before the proposed NEF could ship its DUF<sub>6</sub> to a private conversion facility that could be located in Texas. A series of legal procedures and approval processes would need to be successfully addressed before the depleted uranium generated by the proposed NEF could be disposed at the proposed WCS Compact Facility. These procedures and processes include:*

- Approval by the State of Texas of WCS's application, including State authorization for the WCS Compact Facility to accept for disposal depleted uranium oxides of the type and quantities expected to be generated as a result of the proposed NEF's operations.*
- Approval by the Rocky Mountain Compact (in which the proposed NEF would be located) for the export of the depleted uranium oxides from the Compact.*
- Approval by the Texas Compact for the import and disposal of the depleted uranium oxides generated as a result of the proposed NEF's operations.*

**Comment: 067-3**

A commenter stated that LES's option to convert depleted uranium wastes using a commercial facility is preferable to using DOE facilities, because it would allow flexibility without relying on the Federal Government. The commenter encouraged LES to meet with DOE to discuss their lessons learned in designing and building such a plant.

*Response: The comment is not applicable to the environmental review conducted for the proposed NEF.*

**Comment: 103-6; 316-32; 358-16**

Several commenters stated that deconversion of DUF<sub>6</sub> at DOE conversion facilities cannot be considered a plausible strategy; the magnitude of DOE's DUF<sub>6</sub> stockpile is such that the queue for conversion would preclude acceptance of the proposed NEF waste. One commenter stated the EIS should justify its implication that DOE conversion would be available for the proposed NEF wastes. Commenters also stated that section 4.2.14.3 of the Draft EIS does not account for processing waste from the American Centrifuge Plant. (Section 4.2.14.3 states that processing NEF waste could extend the operational life of the Portsmouth conversion facility by 15 years.)

*Response: Under the USEC Privatization Act, DOE must accept the waste. DOE would have options for the management of DUF<sub>6</sub> conversion from outside sources. If pursued by LES under the USEC Privatization Act, DOE could apply both the Paducah and Portsmouth conversion facilities to process the DUF<sub>6</sub> from the proposed NEF. The Portsmouth conversion facility could process 129,600 metric tons (142,860 tons) of DUF<sub>6</sub> waste from 2024 to 2036 at its planned capacity of 10,800 metric tons (11,800 tons) per year. The Paducah conversion facility could process 71,500 metric tons (78,815 tons) of DUF<sub>6</sub> from 2031 to 2036 at its planned capacity of 14,300 metric tons (15,800 tons) per year. Combined, both DOE conversion facilities could process over 200,000 metric tons (220,500 tons), which exceeds the 197,000 metric tons (217,000 tons) from the proposed NEF. Therefore, DOE could process the DUF<sub>6</sub> prior to the end of the proposed NEF license of 2036 if DOE processed only the proposed NEF wastes. If DOE must also process USEC-generated DUF<sub>6</sub>, then DOE would have to install additional conversion lines at either or both the Paducah and Portsmouth conversion facilities.*



## I.20.6 Conversion Technology

### **Comment: 316-33**

A commenter stated that the Draft EIS reliance on EISs for conversion plants at Paducah, Kentucky, and Portsmouth, Ohio, is erroneous because the DOE plants are unlike the private conversion facility contemplated by LES. The commenter stated that the EISs for DOE plants do not consider the environmental impacts of the distillation process chosen by LES to generate anhydrous hydrogen fluoride. The commenter stated that this distillation process is not commercially established and projection of its impact would be speculative.

*Response: The Draft EIS presents environmental impacts of the construction and operation of a conversion plant for the depleted uranium wastes based on information provided in DOE's Programmatic EIS on management of depleted uranium, as well as the EISs for the Paducah and Portsmouth conversion facilities. The impacts associated with these facilities would be very similar to those expected from the private conversion facilities analyzed in the EIS, because the operations involve the same chemical process (though the steps within the process could vary). These processes result in  $U_3O_8$  and aqueous hydrofluoric acid. As discussed in the new section 2.2.2.5 of the EIS, LES has committed to not pursuing a private conversion process that employs a process that results in the production of anhydrous hydrofluoric acid.*

### **Comment: 358-14; 358-16**

A commenter stated an adequate basis does not exist for the NRC to assume that the proposed conversion facility would use the same technology adapted for use by DOE in its conversion facilities. The commenter stated that the EIS must consider the possibility that a conversion facility for NEF wastes would use a different technology, describe the conversion technology for the proposed NEF waste, and compare such technology to the existing U.S. enrichment plants. The commenter stated that the EIS must discuss any changes to conversion technology that would be required for DOE conversion facilities to process the proposed NEF wastes.

*Response: The operating nuclear fuel fabrication facilities in the United States, the operating Cogema  $DUF_6$  to  $U_3O_8$  conversion facility in France, and the two DOE conversion facilities under construction all apply very similar processes based on a dry conversion process. While some of the steps within the process may vary (e.g., hydrolysis of  $DUF_6$  by steam followed by defluorination with hydrogen and oxygen gases), the chemical reactions are the same, resulting in  $U_3O_8$  and aqueous hydrofluoric acid. A conversion process for the proposed NEF wastes would be similar to these processes. LES has already committed to using a conversion process that does not produce anhydrous HF and has also signed a memorandum of understanding with Areva, which operates the Cogema facility in France. The dry conversion process used at the Cogema facility in France would be applied for converting  $DUF_6$  to  $U_3O_8$  and to neutralize aqueous HF to  $CaF_2$  for potential disposal in a solid waste landfill. DOE conversion facilities would not need to significantly change their processes to accommodate wastes from the proposed NEF.*

## I.20.7 Classification of $DUF_6$

### **Comment: L-11; L-12; 034-8; 284-7; 316-26; 316-29; 316-31; 343-5; 355-5; 356-4; 358-13**

Many commenters stated that the depleted uranium wastes have not been classified by the NRC as a Class A low-level radioactive waste as defined in 10 CFR § 61.55(a)(6) and that this should not be assumed in the EIS. Some commenters noted that shipping the depleted uranium to DOE for conversion cannot be considered a plausible strategy until the waste is classified.

*Response: On January 18, 2005, the Commission issued a Memorandum and Order, CLI-05-05, concluding that depleted uranium is a low-level radioactive waste (NRC, 2005a). Accordingly, pursuant to Section 3113 of the USEC Privatization Act, disposal of the LES depleted uranium tails at a DOE facility represents a "plausible strategy" for the disposition of the tails. The NRC staff revised section 2.1.9 of the EIS to reference the Commission's ruling.*

**Comment: 343-5**

The commenter stated that  $DUF_6$  is considered a radioactive waste and must be disposed of in a manner consistent with regulations for other radioactive waste.

*Response: The NRC agrees with the commenter that depleted uranium must be disposed of in a manner consistent with regulations.*

**I.20.8 Beneficial Use of  $DUF_6$**

**Comment: 047-8; 343-5**

A commenter asked whether  $DUF_6$  is being considered a resource and requested that this be clarified. Another commenter stated that depleted uranium will be used in fast neutron reactors and, therefore, should be referred to as a resource.

*Response: Sections 2.1.9 and 2.2.2.4 of the Draft EIS discuss the consideration of depleted uranium as a resource or a waste. As stated in section 2.1.9 of the Draft EIS, the NRC considered depleted uranium from the proposed NEF to be low-level waste for the purpose of developing the EIS.*

**Comment: 316-35**

A commenter stated that the U.S. inventory of depleted uranium cannot be assumed to have a potential beneficial use since, as stated in section 2.2.2.4 of the Draft EIS, it "far exceeds the existing and projected demand for the material."

*Response: Section 2.2.2.4 of the Draft EIS indicates that while some depleted uranium may be used for commercial purposes, most of this material would require conversion and disposal by either a commercial facility or DOE conversion facilities.*

**Comment: 316-38**

A commenter referred to the text box in section 2.2.2.4 of the Draft EIS, which discusses the potential beneficial uses of depleted uranium. The commenter asked whether the NRC considers this a viable use of depleted uranium and whether the EIS would assess the impacts of the military application of the uranium tails from the proposed NEF, if LES also identifies such uses as viable. The commenter stated that the text box should be removed if the NRC does not consider beneficial uses of  $DUF_6$  as an option.

*Response: The NRC issues licenses to the military for peace-time use of depleted uranium for research and development. Further information concerning the impacts of military applications of depleted uranium is provided in a U.S. Army document entitled "Health and Environmental Consequences of Depleted Uranium Use in the U.S. Army: Technical Report" (AEPI, 1995). The text box in section 2.2.2.4 of the Draft EIS regarding beneficial uses of  $DUF_6$  is for informational purposes to support the discussion regarding  $DUF_6$  disposition alternatives.*

## **I.20.9 Non-DUF<sub>6</sub> Wastes**

### **Comment: 034-49**

A commenter requested clarification of the statement in section 4.2.14.2 of the Draft EIS regarding the generation of radiological and mixed wastes.

*Response: As presented in section 4.2.14.2 of the Draft EIS, approximately 87,000 kilograms (191,800 pounds) of radiological and mixed waste would be expected to be generated. This figure includes 50 kilograms (110 pounds) of mixed waste. The NRC staff revised this section to clarify that approximately 87,000 kilograms (191,800 pounds) of radiological and mixed waste would be generated annually, of which approximately 50 kilograms (110 pounds) would be mixed waste.*

### **Comment: 316-39**

A commenter asked whether LES has a specific plan to recycle its nonradioactive wastes, such as paper and scrap metal. The commenter noted that section 2.1.7 of the Draft EIS states that nonradioactive materials would be disposed of in a commercial landfill. However, Table 5-2 lists as a mitigation measure the development of a "waste recycling plan" and Figure 2-11 identifies one of the waste disposal pathways as "recycle."

*Response: While LES has not yet developed its waste recycling plan, the EIS presents some of the possible materials that could be included in the plan. Waste recycling would be limited by what is cost effective and the presence or availability of community waste recycling programs and recycling industries.*

## **I.21 Decontamination and Decommissioning**

### **Comment: M-57; T-2; 036-10; 048-59**

Many commenters stated that the EIS should identify the party responsible for long-term stewardship of the proposed NEF site. One commenter referred to a statement in section 4.3.6 indicating that certain structures and components would revert to State ownership at the end of facility operations. The commenter stated that LES does not plan to turn structures and components over to the State at the end of facility operation. Another commenter asked whether environmental monitoring at the proposed NEF site would continue beyond decontamination and decommissioning activities.

*Response: LES would be responsible for properly decommissioning the proposed NEF and has proposed to decommission to levels suitable for unrestricted release. Once any licensed site has been verified to be properly decontaminated and decommissioned in accordance with applicable NRC regulations, the license would be terminated and the site could be released. After release for unrestricted use, the NRC would not impose further requirements (such as monitoring). That is, no long-term stewardship would be necessary. The NRC revised section 4.3.6 of the EIS to remove the statement that structures and components would be turned over to the State of New Mexico after decommissioning.*

### **Comment: 042-23**

A commenter stated that during the decommissioning plan development and implementation, LES must involve the New Mexico Environment Department to ensure that closure activities meet State regulations in addition to the NRC's requirements.

*Response: As stated in 10 CFR § 70.38(1)(5) (addressing the expiration and termination of licenses and decommissioning of sites), the NRC should factor into the decommissioning schedule other regulatory*

requirements of other government agencies. The NRC staff revised section 4.3 of the EIS to state that LES would comply with regulatory requirements of the NRC and other government agencies.

**Comment: 103-7**

A commenter requested that the EIS identify who would own the waste and cylinders.

*Response: The depleted uranium wastes and UBCs would be owned by LES, as a general rule.*

**Comment: 316-49**

A commenter asked how the NRC would monitor the decommissioning process to assure that all radioactive wastes are disposed of properly and not shipped to unlicensed landfills or recycling facilities.

*Response: The NRC implements an inspection program to help ensure that licensees are fulfilling commitments and meeting the terms and conditions of their license. This program is described in the NRC's Inspection Manual, Chapter 2602, for decommissioning and waste disposal. During decommissioning of the proposed NEF, the NRC would oversee onsite activities. As discussed in sections 2.1.9 and 4.2.14.4 of the Draft EIS, waste would be shipped to a low-level radioactive waste disposal facility located in an Agreement State, such as Envirocare of Utah. The states in which disposal facilities are located implement a regulatory program compatible with the NRC's regulatory program to ensure that incoming waste is acceptable for disposal and meets the requirements in the regulations. Licensees may also use Subpart K of 10 CFR Part 20 to manage low-level radioactive waste (e.g., see 10 CFR § 20.2002).*

**I.22 Cumulative Impacts**

**Comment: M-50**

Several commenters expressed opposition to the NRC's conclusion that a conversion facility adjacent to the proposed NEF would be a viable waste conversion strategy, stating it should not be considered in the Draft EIS. The commenters stated further that if the NRC retains a discussion of the conversion facility in the EIS, its environmental effects must be considered cumulatively with those of the proposed NEF. The commenters stated that environmental impacts from the facility would not occur independently of the environmental effects of the proposed NEF.

*Response: LES has indicated that its primary strategy for DUF<sub>6</sub> conversion is through a private conversion facility, as discussed in news articles (LES, 2005d). The NRC staff recognized this strategy as plausible; as such, the EIS must discuss the impacts of this connected action on the proposed NEF. The memorandum of understanding between LES and AREVA to develop a conversion facility represents an initial step in the process for siting, licensing, construction, and operation of a private conversion facility. An evaluation of potential impacts for this facility would need to make a reasonable assumption regarding possible sites. Since there are no legal restrictions on the siting of a DUF<sub>6</sub> private conversion facility adjacent to the proposed NEF, this location was determined to be reasonable. The impacts of an adjacent conversion facility are presented in section 4.2.14.3 of the Draft EIS and need not be addressed separately under cumulative impacts.*

**Comment: 032-5; 032-11; 316-2; 316-18**

Several commenters suggested that the NRC staff should take into account all industrial facilities and land uses that surround the proposed NEF site that may contribute to cumulative health effects that would be compounded by the proposed NEF. One commenter did not agree with the NRC's conclusion of a small to moderate impact. Another commenter expressed concern about latent cancer fatalities and stated

that existing hydrogen sulfide and other pollutants from the oil and gas industry would combine with radioactivity from the proposed NEF to increase cancer and death rates in the area.

*Response: As discussed in sections 4.2.12 and 4.4.8 of the Draft EIS, the quantity of radiological releases would not result in any distinguishable increase in cancers. In addition, the NRC staff did not specifically evaluate the current human health impacts of pre-existing facilities that could pose risks not associated with the proposed NEF. Such an evaluation is outside the scope of the EIS. However, some of the impacts discussed throughout Chapter 4 of the EIS do encompass impacts from other surrounding facilities, as do some of the cumulative impacts in section 4.4 of the EIS (e.g., impacts to the municipal water supply indirectly address other facilities that use the municipal water supply). WCS plans for new operations and other planned facilities in the local area were specifically addressed in section 4.4. The NRC staff concluded that the additional impacts from the proposed NEF to the existing environment would still be considered SMALL to MODERATE for the reasons provided in the Draft EIS.*

**Comment: 034-54; 043-2**

A commenter stated the EIS should explain why there would not be cumulative impacts to cultural and historical resources, visual/scenic resources, ecological resources, noise, and waste management. Another commenter stated that cumulative impacts to native plants and wildlife are not addressed in the EIS, and that cumulative impacts to land use should be addressed in more detail.

*Response: The NRC staff has revised section 4.4 of the EIS either to describe why each of the areas (cultural and historical resources, visual/scenic resources, ecological resources, noise, and waste management) do not have cumulative impacts or to refer to the appropriate subsection in section 4.2 where cumulative impacts are included in the analysis of the impacts from the proposed action. For example, section 4.2.3 of the Draft EIS includes the impact of the presence of nearby facilities as part of the analysis. Waste management impacts, specifically DUF<sub>6</sub> disposition, are addressed as connected actions.*

**Comment: 284-9; 355-6**

A commenter stated that existing and proposed activities involving radioactive materials in the area (e.g., Waste Isolation Pilot Plant, Modern Pit Facility) could interact with the proposed NEF and the WCS facility. The commenter stated that it is reasonable to assume that WCS would apply for a license to initiate fuel fabrication or other NRC-licensed activities. The two commenters stated that the pattern of development reflected by the proposed NEF and WCS in Andrews, Texas, and southeast New Mexico suggests that cumulative impacts would be greater than those discussed in section 4.4 of the Draft EIS.

*Response: The NRC staff evaluated the cumulative impacts for activities that are known or have a reasonable likelihood of occurring in the future. The impact of the proposed NEF would be low and would not adversely affect the health of the surrounding population or the environment, even when combined with any potential activities at WCS that could involve radioactive materials. Section 2.1.9 of the Draft EIS has been revised to describe the regulatory actions needed before the proposed NEF could ship its DUF<sub>6</sub> to a private conversion facility in Texas. The depleted U<sub>3</sub>O<sub>8</sub> could be disposed of at the WCS facility if the facility were to receive a license to accept this material.*

**Comment: 316-8**

A commenter referred to Table 3-11 of the Draft EIS, stating that samples taken at the proposed NEF site indicate that the EPA's maximum contaminant levels are exceeded for several substances. The commenter asked what cumulative health effects would be expected as a result of combining the existing

contamination at the site with proposed NEF activities, which would produce large quantities of uranium-238. The commenter also asked what impact these substance would have on water resources.

*Response: Table 3-11 of the Draft EIS presents the chemical analysis of groundwater that exists approximately 67 meters (220 feet) below the proposed NEF. The results show that this groundwater naturally exceeds EPA maximum contaminant levels for specific chemicals or analysis categories. There are no plans to use this water in proposed NEF activities. Likewise, the operation of the proposed NEF and associated low releases to the environment would not interact with this groundwater. Thus, there would be no additional or cumulative impact associated with this groundwater.*

**Comment: 316-9**

A commenter referred to a statement in section 3.6.4 of the Draft EIS indicating that Cesium-137 is prevalent around the NEF site. The commenter asked what cumulative health effects would be expected as a result of combining radiological impacts from the proposed NEF with the Cesium-137.

*Response: The measured level for Cesium-137 is very low (approximately 2.9 becquerels/kilogram) and cannot be considered pervasive. The purpose of the referenced text is to note that the Cesium-137 is not naturally occurring and was a result of past atmospheric weapons testing. The very low quantities of Cesium-137 would not have any measurable health effects, even if combined with the small releases from the proposed NEF.*

**Comment: 316-45**

A commenter referred to a discussion in section 4.2.4.2 of the Draft EIS regarding expected air emissions from the proposed NEF. The commenter asked how the NRC staff regards the cumulative impact of these emissions.

*Response: The methodology for judging cumulative impacts for air quality is presented in section 4.4.4 of the Draft EIS. The proposed NEF emissions are presented in Table 4-20 in comparison with similar emissions for Lea County, Andrews County, and WCS. As shown in the table, proposed NEF emissions would be several orders of magnitude smaller than these other sources. In addition, the region is in attainment for all criteria pollutants. Because the amount of emissions from the proposed NEF would be so small when added to other past, present, and reasonably foreseeable future actions within the region, the cumulative impact would also be SMALL.*

**Comment: 358-33**

A commenter stated that the EIS should include a cumulative effects analysis for accidents that would address chemical and radioactive health effects, as well as socioeconomic impacts.

*Response: As discussed in section 1.4 of the Draft EIS, the EIS addresses the environmental impacts that could result should an accident occur. Section 4.2.13 of the Draft EIS discusses the public and occupational health impacts from potential accidents during operation of the proposed NEF. In addition, section 4.4.8 of the Draft EIS addresses the cumulative impacts to public and occupational health from the proposed NEF.*

## **I.23 Environmental Measurements and Monitoring Program**

### **I.23.1 Proposed NEF Facilities**

#### **Comment: M-51**

Several commenters noted that section 4.2.6.2 of the Draft EIS states that the evaporative pond and retention basins around the site would create pools of perched water in the ground beneath the site. The commenters stated that Chapter 6 of the EIS should include a discussion of monitoring the perched water.

*Response: Any perched water could be monitored under the State groundwater discharge permit program. As presented in Table 1-3 of this EIS, LES has submitted a Groundwater Discharge Permit/Plan application to the New Mexico Environment Department Water Quality Bureau that includes groundwater monitoring wells. The New Mexico Environment Department Water Quality Bureau has deemed the application administratively complete and is reviewing the application.*

#### **Comment: M-52**

Several commenters asked whether an independent NRC contractor or LES would be collecting and analyzing environmental samples from the proposed NEF site. The commenters expressed concern about the independence and credibility of the results, and asked who would be responsible for quality control and assurance.

*Response: LES would conduct the required sampling in accordance with its quality assurance commitments made in its license application. The NRC staff would review radiological sample data as part of its regulatory responsibilities throughout the license term.*

#### **Comment: M-54**

Several commenters asked whether any monitoring would be required for groundwater in the Santa Rosa Formation.

*Response: Because no contamination is expected in the Santa Rosa Aquifer, no sampling would be required. No contamination is expected, because over 305 meters (1,000 feet) of highly impermeable clay separates the aquifer from surface activities.*

#### **Comment: M-55**

Several commenters stated that the Draft EIS does not specify administrative action levels for physiochemical constituents. The commenters stated that LES must consult with EPA Region 6 and the New Mexico Environment Department to determine these administrative action levels, and that NRC must consider the levels in its licensing evaluation.

*Response: The NRC's jurisdiction associated with the proposed NEF would be limited to radiological constituents. Further, the NRC's licensing review considers the design of the facility and not permit limits, which could be several times greater than actual emissions or effluents from the proposed NEF.*

#### **Comment: M-56; 034-62; 036-9**

One commenter stated that the EIS should identify and differentiate between the minimum monitoring requirements and monitoring that would be optional. Several commenters asked that the NRC discuss safeguards in place if emissions of radioactive and hazardous constituents exceed Federal and/or State regulatory standards. The commenters asked which agency would oversee corrective actions and whether an operating license can be suspended or revoked.

*Response: The NRC regulations focus on monitoring radiological releases from licensed facilities, as specified in 10 CFR Part 70. As stated in section 6.2 of the EIS, physiochemical monitoring would be conducted to monitor nonradiological discharges in relation to, and in compliance with, environmental permits that are issued by the EPA and the State of New Mexico, such as NPDES wastewater discharge permits and air quality permits. The NRC staff revised section 6.2 to indicate that changes to these monitoring programs would be contingent on regulatory approval.*

*Both Federal and State agencies would have enforcement authority over various aspects of the proposed NEF. NRC enforcement actions concerning radiological releases include fines, more frequent inspections, corrective actions, and other actions in accordance with enforcement policy. The NRC could suspend or revoke a license to ensure public safety; such a decision would be made on a case-by-case basis.*

*The New Mexico Environment Department or EPA would have jurisdiction associated with air, ecological, and water permits, as described in Table 1-3 of the Draft EIS. These agencies would review and oversee any corrective actions that could be required through the applicable permits. Specific corrective actions cannot be defined at this time because the corrective actions are dependent on the nature of the violation. If administrative action levels are exceeded, but not permit levels, then LES may institute corrective actions without oversight from a regulatory agency, depending on the permit/license requirements. Section 6.1.1 of the Draft EIS describes possible steps that could be taken if an administrative action level is exceeded. These agencies also have the authority through permits and licenses to impose penalties, including revoking or suspending the appropriate permit or license. Should regulatory standards be exceeded, safeguards could include suspension of operations, establishment of penalties, increased monitoring, or other actions.*

**Comment: 034-63**

A commenter stated that an assumption in section 6.1.1.1 of the Draft EIS indicates that the proposed NEF would have twice the gaseous emissions of the proposed Claiborne enrichment facility because the NEF would be twice the size of the proposed Claiborne facility. The commenter stated that the EIS should provide a justification for considering this assumption to be conservative.

*Response: The amount of radioactive airborne effluents estimated in the Draft EIS is approximately thirty-five times greater than the estimated annual release of 10 grams (0.4 ounce) of uranium and, therefore, conservative. The NRC staff revised section 6.1.1.1 of the EIS to clarify this statement.*

**Comment: 034-65**

A commenter stated that there should be a requirement for periodic chemical sampling of the septic systems. The commenter stated a risk could be posed by not requiring such sampling merely because no process-related effluents would be expected to be introduced into the septic systems.

*Response: Monitoring of the septic systems is under the jurisdiction of the New Mexico Environment Department. LES would conduct sampling and analysis as required by the New Mexico Environment Department.*

**Comment: 036-12**

A commenter stated that the NRC should require the installation of plutonium-detection equipment, because the proposed NEF could receive UF<sub>6</sub> contaminated with plutonium.



*Response: To ensure that the proposed NEF does not process uranium contaminated with plutonium, LES intends to review and regularly audit the suppliers' practices. Detection equipment would not be installed at the proposed NEF site, because such equipment would not be able to detect contamination levels (i.e., very small amounts) of plutonium in the full cylinders. LES has requested a possession limit (if a license is issued) to account for the inadvertent receipt of plutonium contamination in uranium feed cylinders.*

**Comment: 041-2**

A commenter noted that proposed monitoring would not be frequent enough, and should be on a monthly basis.

*Response: Most of the monitoring would be conducted continuously or at least monthly. The gaseous effluent vent systems associated with the Separations Building and the Technical Services Building would be monitored continuously with additional grab samples taken periodically. Radiological sampling frequency along the proposed property boundary for radiological exposure, vegetation/soil, and groundwater is specified as quarterly or semi-annually in Table 6-6 of the Draft EIS. In addition, LES has committed to calculating public doses on a monthly basis (LES, 2005c). Air-monitoring stations along the site boundary and at nearby residential areas and businesses would operate continuously with sample retrieval on a biweekly basis as specified in Chapter 6 of the Draft EIS. Liquid releases to the Treated Effluent Evaporative Basin would be analyzed prior to release to the basin. The septic system would be monitored according to State requirements. Physiochemical sampling is conducted quarterly as specified in Tables 6-8 and 6-9. Ecological monitoring would be conducted annually. If LES or the NRC (or another regulatory agency), through review of the monitoring data, finds that it is necessary to change the sampling frequency or methods, then revisions to the monitoring program could be required.*

**Comment: 042-25**

A commenter stated that the New Mexico Environment Department would likely require LES to add three alluvial wells, which would be completed in the alluvium at the top of the Chinle Formation, to monitor any leakage or changes in water quality from the ponds or septic system. The commenter suggested that the alluvial wells be monitored quarterly for water levels and sampled when water is present.

*Response: LES would meet all requirements imposed by the New Mexico Environment Department in the groundwater discharge permit for the proposed NEF.*

**Comment: 042-44**

A commenter stated that the EIS should discuss the frequency of visual inspections and whether there would be inspections following hail, lightning, or other severe weather at the proposed NEF.

*Response: The information provided in Tables 5-1 and 5-2 of the EIS are summaries of LES's proposed programs for mitigation during construction and operation of the facility. The mitigation programs are in compliance with current NRC and EPA regulations.*

**Comment: 048-83**

A commenter noted that the discussion of the administrative action levels for sample parameters only applies to physiochemical monitoring and should be relocated to section 6.2 to be consistent with the Environmental Report. The commenter also stated that the discussion of administrative action levels applicable to radiological effluent monitoring sample parameters in section 6.1.1 of the Environmental Report should instead be included in section 6.1.1 of the EIS.

*Response: The NRC staff revised sections 6.1.1. and 6.2 of the EIS to reflect the commenter's suggestion.*

**Comment: 048-87**

A commenter noted that the location of the septic tank samples and sampling and collection frequency should be revised to be consistent with Table 6.1-4 of the Environmental Report. The commenter stated that the location should be revised to "one from each affected tank" and the sampling and collection frequency should be revised to "1 to 2 kilograms (2.2 to 4.4 pounds) sludge samples collected from each affected tank prior to pumping."

*Response: The NRC staff revised Table 6-6 to reflect the commenter's suggestion.*

**I.23.2 Ecological**

**Comment: M-53; V-1; 036-11; 041-3**

Several commenters stated that Environmental Sampling Program report submitted annually to the NRC should be made public. The commenters asked how this information would be made available.

*Response: The environmental monitoring report discussed in the EIS refers to ambient and media-specific radiological monitoring. The NRC would make the annual reports publicly available through its ADAMS. Nonradiological monitoring, sampling, and enforcement would be overseen by the State of New Mexico or EPA, as applicable.*

**Comment: 034-67; 034-68**

A commenter stated that the EIS should explain why there is little detail regarding monitoring of mammals in comparison with reptiles and amphibians; and why replicated sample sites beyond the proposed NEF would be used for reptiles and amphibians, but not for other ecological resources, such as vegetation, birds, and mammals.

*Response: The basis for selecting the use of replicate sample sites for reptiles and amphibians and not other types of ecological media is that these two species are very sensitive to climatic conditions (e.g., the amount of moisture an area receives in a given year). Because the climate in New Mexico is variable and can exhibit dramatic changes within a few kilometers, LES would use nearby replicate sampling locations to obtain more representative reptile and amphibian population samples in the area around the proposed NEF. Onsite sampling for other ecological media (e.g., vegetation, birds, or mammals) would be considered sufficient to characterize changes in the composition of these media associated with the operation of the proposed facility.*

**Comment: 048-79; 048-82**

A commenter stated that the sampling location in Figure 6-2 of the Draft EIS should be deleted because it is not consistent with the sampling and monitoring commitments provided in the Environmental Report, section 6.1, Radiological Monitoring, and section 6.2, Physiochemical Monitoring.

*Response: The NRC staff revised Figure 6-1 of the EIS accordingly. In particular, the soil sampling location at the west stormwater diversion ditch outfall was removed from the figure and associated text.*

## I.24 Cost Benefit Analysis

### I.24.1 DUF<sub>6</sub> Disposition

**Comment: M-59; 103-7; 358-26**

Several commenters requested more information concerning the \$5.50 per kilogram estimate for decommissioning funding. One commenter asked whether this figure is presented in 2002 dollars. The commenter requested that inflation be considered in the SER evaluation of disposition costs. Another commenter requested that the EIS include an estimate and basis of the disposal costs, assuming the DUF<sub>6</sub> would be first converted. Another commenter stated that the references provided in the EIS associated with this cost were not accessible, but that it appears the estimate is based on Urenco's European experience and does not include all conversion and disposal costs. The commenter noted that European costs and regulatory requirements are different from those in the United States.

*Response: As discussed in section 7.2.3 of the Draft EIS, LES is required to put in place a financial surety bonding mechanism to assure that adequate funds would be available to dispose of all DUF<sub>6</sub> generated by the proposed NEF. The NRC staff evaluated the adequacy of the proposed funding in the SER.*

**Comment: 031-7; 358-25**

Two commenters expressed concern that funding for decommissioning and waste disposal associated with the proposed NEF could fall to taxpayers. One commenter stated that private uranium mines, mills, and tailings operations in New Mexico have not adequately funded decommissioning and waste disposal activities in the past, and that Federal and State funding was required for these sites. Another commenter asked about the proposed NEF's status with regard to the EPA list of Superfund sites. The commenter asked how much time would be required for the proposed NEF waste cleanup, and what would be the taxpayer cleanup costs.

*Response: The uranium milling and tails sites referred to in the comment operated prior to the promulgation of NRC's decommissioning funding requirements. The NRC's objective now is to ensure that NRC-licensed sites (unlike Superfund sites) never require taxpayer funds to complete decommissioning. The NRC does this through its decommissioning financial assurance requirements (see 10 CFR § 40.36 and 70.25). In the event that the licensee is unable to carry out decommissioning through bankruptcy or other reason, the financial assurance provisions provide the funding for decommissioning, and the NRC would ensure that proper site remediation takes place. For uranium enrichment facilities, applicants must provide a decommissioning funding plan consisting of a site-specific cost estimate for decommissioning and a financial instrument, such as a surety bond or letter of credit. LES has chosen to use a surety bond for its financial mechanism. Further, as stated in 10 CFR § 40.36(d) and 70.25(e), decommissioning cost estimates must be adjusted at intervals not to exceed 3 years. The NRC staff has addressed this issue in the SER..*

**Comment: 031-8; 031-9; 103-26**

Commenters expressed concern about sufficient funding for decommissioning and waste disposal. One commenter stated that the proposed NEF cleanup bonds appear to be only one-tenth of what the actual cleanup costs would be as compared with taxpayer-funded cleanup efforts. The commenter wanted to know who would guarantee that the proposed NEF bonds would be sufficient for cleanup costs in 30 years, with no cost to taxpayers. Another commenter asked whether sufficient funds would be available for DUF<sub>6</sub> disposal in the event that the proposed NEF were to stop enrichment activities earlier than expected. The commenter also asked if the potential conversion and disposal facilities discussed in the

Draft EIS would be available in such a situation. The commenter stated that the EIS should discuss these contingencies.

*Response: Funding for decommissioning must be provided before the NRC staff could issue a license for the proposed NEF. Further, as stated in 10 CFR § 40.36(d) and 70.25(e), decommissioning cost estimates must be adjusted at intervals not to exceed 3 years. The periodic adjustments would account for inflation, changes in the costs of goods and services (e.g., waste disposal), changes in facility conditions or operations, and changes in expected decommissioning procedures. Periodic updates to the decommissioning funding plan would ensure that there is sufficient funds to decommission the facility throughout its lifetime. The SER provides more detailed information regarding the decommissioning funding plan.*

**Comment: 103-21**

A commenter stated that to determine the commercial practicality of DUF<sub>6</sub> disposal options, the EIS should include a cost estimate and basis for each element of the options discussed on page 4-34 of the Draft EIS. The commenter suggested that a letter from an existing facility indicating it can accept U<sub>3</sub>O<sub>8</sub> and CaF<sub>2</sub> at a range of costs for service would be acceptable documentation.

*Response: As stated in section 7.2.3 of the Draft EIS, a cost estimate for the disposal of the DUF<sub>6</sub> generated by the proposed NEF is evaluated in the NRC staff's safety review. The NRC would require that LES demonstrate it has sufficient financial resources to fully fund the proposed NEF. The NRC staff has documented its review of LES's decommissioning financial surety and decommissioning cost estimates in the SER.*

**Comment: 316-34**

A commenter stated that the conversion plant for the DUF<sub>6</sub> from the proposed NEF would be of a smaller scale than the DOE conversion facilities, with different economics of operation and needed rates of return. The commenter stated that a Lawrence Livermore National Laboratory report estimated that a conversion plant such as that proposed by LES would have costs nearly as high as the cost of operating a plant with four times the throughput. The commenter asked what cost reductions would be attempted, and at what price to safety and the environment.

*Response: The issues raised by the commenter are beyond the scope of the EIS and would be addressed in the review of any such private conversion facility.*

**Comment: 358-27**

A commenter stated that the EIS (and not only the SER) should include a complete description and analysis of waste disposal costs. The commenter also stated that more realistic and higher cost estimates must be used and justified in detail, so that the public can fully comment on the adequacy and reliability of those estimates and the funding mechanisms that would be required.

*Response: The provision of a detailed cost analysis of alternative disposal options is not within the scope of this EIS. Detailed construction cost information has been reviewed by the NRC staff as part of the safety evaluation.*

## **I.24.2 Construction Costs and Revenues**

### **Comment: M-58**

Several commenters stated that to accurately gauge the benefit of the proposed NEF, the NRC must include the estimate of enriched uranium to be produced by the proposed NEF, as well as the expected profit on its sale per pound.

*Response: At full production, the proposed NEF would produce up to 800 metric tons (1,764 million pounds) of enriched UF<sub>6</sub> product annually. LES profits on the sale of this enriched product is not within the scope of this EIS. As discussed in section 7.2.3 of the Draft EIS, the NRC staff reviews LES's decommissioning financial surety and decommissioning cost estimates for disposal of DUF<sub>6</sub> and decommissioning. The NRC staff has documented its review in the SER.*

### **Comment: 103-9**

A commenter noted that the Draft EIS construction cost estimate of \$1.2 billion does not include escalation, contingencies, and interest. The commenter requested that the EIS provide a complete estimate, including contingencies and interest.

*Response: Detailed construction cost information has been reviewed by the NRC staff as part of the safety evaluation and addressed in the SER.*

## **I.24.3 Nuclear Power Industry**

### **Comment: 316-10**

A commenter requested that the EIS include a calculation of the length of time and the quantity of electricity consumed by the proposed NEF before the fuel it produces creates electric power in excess of that which was used to enrich the fuel. The commenter stated that this calculation is necessary to judge the value of this fuel over others that may more efficiently recover the energy lost in attaining, capturing, refining, or exploiting a fuel.

*Response: Calculation of power efficiencies is beyond the scope of the EIS. However, a comparison of the cost to enrich the uranium hexafluoride is provided in section 2.2.2.3 of the Draft EIS. The current U.S. uranium enrichment program uses the gaseous diffusion process, which consumes approximately 2,200 kilowatt hours of electricity per kilogram of SWU of enriched uranium hexafluoride. In comparison, the gas centrifuge technology planned for the proposed NEF uses approximately 40 kilowatt hours per kilogram of SWU produced. Therefore, the gas centrifuge technology planned for the proposed NEF is approximately 55 times more energy efficient than the enrichment process currently being used in the United States.*

## **I.25 Terrorism, Security and Nonproliferation**

### **Comment: AA-1**

Several commenters stated that constructing the facility in phases and bringing cascades on-line in stages would create a security vulnerability. The commenters asked how LES would assure that construction workers have sufficient security clearances when working adjacent to operational facilities.

*Response: The proposed NEF would be housed in multiple buildings. Each building would be fully constructed and tested before being brought on-line. Once operational, the construction crews would be excluded from the completed building and assigned to the next portion of the facility being constructed.*

*Entry to the operational portions of the facility would require special keys and other security measures to which construction crews would not have access.*

**Comment: 032-2; 032-6; 032-19; 046-4; 046-7; 104-3; 105-3; 105-5; 151-5; 316-11; 316-12**

Several commenters expressed concern that terrorism and related security concerns were not addressed in the Draft EIS. Commenters stated that environmental and health and safety impacts related to terrorism and security issues are valid areas for analysis under NEPA. One commenter stated that production from the proposed NEF could threaten the Megatons to Megawatts program, negatively impacting nonproliferation efforts and U.S. security. Another commenter asked if the Department of Homeland Security had been contacted for its input on the Draft EIS. One commenter indicated that the proposed NEF would not contribute to the threat of terrorism and stated several examples to support this conclusion.

*Response: These comments raise issues which are beyond the scope of the EIS: As discussed in sections H.4.1.5. and H.4.1.6 of Appendix H, nonproliferation is a national U.S. policy issue and terrorism is not appropriately addressed in the context of NEPA. Nevertheless, the NRC is devoting substantial time and attention to terrorism-related matters. For example, as part of fulfilling its mission to protect public health and safety and common defense and security pursuant to the Atomic Energy Act, the NRC staff is conducting security assessments of commercial uses of radioactive material. The NRC has issued interim compensatory measures and a number of other orders imposing enhanced security requirements on its licensees. Also, the NRC has acted to increase security awareness in its applicants.*

*The NRC did not receive comments from the Department of Homeland Security on the Draft EIS.*

## **I.26 Conflict of Interest**

**Comment: M-2**

Several commenters stated that the preparation of the Draft EIS by Advanced Technologies and Laboratories International, Inc. (ATL) results in a conflict of interest. The commenters noted that Advanced Technologies and Laboratories International, Inc. listed among its clients Westinghouse and Oak Ridge National Laboratories, to which British Nuclear Fuels Limited and Westinghouse are contractors. The commenters stated that Westinghouse and British Nuclear Fuels Limited are members of the LES consortium and that ATL would benefit from the licensing of the proposed NEF through its various associations with these organizations. The commenter stated that ATL should not have been contracted to prepare the Draft EIS without a disclosure statement. The commenter recommended that, because no disclosure statement was released, the Draft EIS be rejected and rewritten by another organization.

*Response: The NRC staff does not believe that ATL should be disqualified from developing the EIS for the proposed NEF. The work of ATL for Westinghouse was completed in 1998. The work at Oak Ridge National Laboratory was conducted to support Bechtel Jacobs and the University of Tennessee and was completed in 2001. Neither of these jobs involved activities that could be construed to present any direct, indirect, or implied conflict of interest with the development the EIS for the proposed NEF. The task to develop the EIS was not issued to ATL until 2002. ATL has kept the NRC informed of all work provided to other clients since being awarded the contract in 2000.*

**Comment: M-3**

Several commenters stated that Paul Abramson, one of the associate chief administrative judges on the ASLB, is a former partner of the Winston and Strawn law firm. The commenter noted that Winston and Strawn is currently the legal representative for LES, and that Mr. Abramson, therefore, should be disqualified from deciding whether to issue a license to LES.

*Response: Conflicts of interest with regard to the ASLB are beyond the scope of the EIS and are not within the NRC staff's purview.*

**Comment: 032-24**

A commenter identified a possible conflict of interest, referring to information about LES contributions to a program of New Mexico Governor Richardson's according to the web site, [www.MoveOn.org](http://www.MoveOn.org).

*Response: LES's financial contributions to the activities of the Governor of New Mexico are beyond the scope of the EIS.*

**Comment: 284-1; 284-2**

A commenter stated that a potential conflict of interest exists when public figures associate with private interests. The commenter indicated that relationships among political, legal and regulatory institutions and self-interested corporations and individuals affect the selection of facts deemed relevant to the license application and influence the NRC's decision whether to issue a license for the proposed NEF.

*Response: The NRC is an independent agency whose mission is to protect public health and safety and the environment. The NRC conducted the review of the proposed NEF in accordance with all applicable Federal regulations. As stated in the Draft EIS, the discussion on whether to grant a license to the applicant would be made by the NRC in accordance with 10 CFR Parts 30, 40, and 70. These regulations define several steps in the decisionmaking process, including a safety review. The NRC conducted a safety review and an environmental review that are documented in the SER and the EIS, respectively.*

**I.27 Editorial Comments**

**Comment: M-7; M-45; 034-9; 034-10; 034-11; 034-12; 034-14; 034-17; 034-48; 034-56; 034-60; 034-61; 034-64; 034-66; 038-4; 038-5; 038-6; 042-39; 042-40; 048-2; 048-6; 048-8; 048-11; 048-12; 048-15; 048-20; 048-21; 048-22; 048-23; 048-24; 048-25; 048-26; 048-27; 048-28; 048-29; 048-30; 048-31; 048-33; 048-34; 048-37; 048-38; 048-39; 048-41; 048-45; 048-51; 048-52; 048-53; 048-54; 048-55; 048-56; 048-57; 048-60; 048-61; 048-62; 048-63; 048-64; 048-66; 048-67; 048-68; 048-69; 048-70; 048-71; 048-72; 048-73; 048-74; 048-75; 048-76; 048-77; 048-78; 048-80; 048-81; 048-84; 048-88; 048-91; 048-92; 048-93; 048-94; 048-95; 048-96; 048-97; 048-98; 103-16; 103-17; 316-56; 358-20**

Commenters suggested corrections for typographical errors, misspellings, and grammatical mistakes in the Draft EIS. Several commenters also proposed text to clarify discussions in the Draft EIS.

*Response: Proposed changes were made when appropriate and when they did not alter the impact assessment. Where proposed changes were intended to correct inaccuracies or inconsistencies, they were checked for accuracy prior to incorporation in the EIS.*

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**APPENDIX J**  
**PUBLIC COMMENTS LETTERS AND TRANSCRIPTS**

This Appendix contains a copy of the transcript of the Louisiana Energy Services (LES) Public Meeting in Eunice, New Mexico, on Thursday, October 14, 2004, followed by copies of individual public comment letters the NRC staff received. All have been reviewed and comments have been identified.

**Official Transcript of Proceedings**  
**NUCLEAR REGULATORY COMMISSION**

Title: Louisiana Energy Services  
Public Meeting

Docket Number: (not applicable)

Location: Eunice, New Mexico

Date: Thursday, October 14, 2004

Work Order No.: NRC-025 Pages 1-128

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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PUBLIC COMMENT MEETING On  
THE LOUISIANA ENERGY SERVICES  
PROPOSED NATIONAL ENRICHMENT FACILITY

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Thursday, October 14, 2004  
Cafeteria  
Eunice Community Center  
1115 Avenue I  
Eunice, New Mexico

The meeting convened at 8:00 p.m.

PANEL MEMBERS:

FRANCIS X. "CHIP" CAMERON, Facilitator

PRESENTERS:

SCOTT FLANDERS  
TIMOTHY JOHN JOHNSON  
ANNA BRADFORD

OTHER NRC STAFF:

BRIAN SMITH  
JAMES PARK  
LINDA MARSHALL

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PROCEEDINGS

MR. CAMERON: Good evening, everyone. It's nice to see all of you again. I would just like to welcome you to the Nuclear Regulatory Commission's public tonight.

My name is Chip Cameron, and I'm the special counsel for public liaison at the Nuclear Regulatory Commission. And it's my pleasure to serve as facilitator for tonight's meeting.

In that role I'll just try to help all of us to have a productive meeting and maybe to get out of here before the sun rises tomorrow morning.

But our discussion is going to be on the draft environmental statement that the NRC staff has prepared to help the NRC evaluate an application that we received from the Louisiana Energy Services, LES, to build and operate a uranium enrichment facility in Eunice.

I just want to say a couple words about meeting process before we get into the substance of tonight's discussion.

First of all the format for the meeting. We have a two-part format.

The first part is going to consist of some relatively brief NRC presentations by NRC staff to give you some background not only on what our review process is

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15

1 for this license application, but specifically to talk  
2 about the findings in the draft environmental impact  
3 statement that we prepared.

4 And then we're going on to you for any  
5 questions that you might have on those background  
6 presentations, because we want to make sure that  
7 everything is as clear as we can possibly make it for you.

8 The second part of the meeting is an  
9 opportunity to listen to all of you and for you to give us  
10 your advice, concerns, recommendations on the draft  
11 environmental impact statement that we've prepared.

12 Now we're also taking written comments. And  
13 the staff will tell you the process for submitting written  
14 comments.

15 But we wanted to be with you tonight to meet  
16 with you personally on these issues. I just want to  
17 emphasize that anything that's said tonight will carry as  
18 much weight as anything that's submitted in writing.

19 In terms of ground rules when we get to the  
20 question and answer session, I would ask you to hold your  
21 questions until all of the three presentations are  
22 finished.

23 When we go on to you for questions just give me  
24 a signal, and I'll bring you with cordless microphone.  
25 Introduce yourself to us and any affiliation that you

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1 would like to add. And we'll try to answer your question  
2 as best we can.

3 I would ask that only one person speak at a  
4 time during the meeting tonight, not only most importantly  
5 so that we can give our full attention to whomever has the  
6 floor, but also so we can get a clean transcript of the  
7 meeting. That's our record of the meeting.

8 Joan is with us who is our court report  
9 tonight, and she will be taking down everything that is  
10 said. That will be a public document that we can make  
11 available to whomever would like a copy of that.

12 I would like us when we're in the  
13 question/answer session to just focus on questions. I  
14 know it's hard to not offer a comment at the same time  
15 about things that feel passionately about.

16 But if you could just keep to questions. Then  
17 we'll go to comments when we get to the comment part of  
18 the meeting.

19 When we get to comments I guess I would like to  
20 have you hold your comments to five minutes maximum and  
21 perhaps less, because we do have a lot of people who want  
22 to talk. We do want to hear from everyone who has  
23 something to say tonight.

24 I know five minutes can sometimes not be enough  
25 time for you to say all that you want to say. But at

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1 least it gives us an idea of what your concerns are.

2 It also gives others in the audience a feeling  
3 for concerns that may stimulate them to submit a written  
4 comment or may help to inform the written comment that  
5 they submit.

6 So five minutes is short, but we do want to  
7 hear from you. Please send us written comments. We do  
8 have something called a feedback form that, with a lot of  
9 other good material, is on the table over there.

10 If you just have a short written comment, put  
11 it on that form, leave it with us tonight, or send it in.  
12 It already is ready to go in the mail. You don't have to  
13 put a stamp on it.

14 And use that form also if you want to give us  
15 any comments about how the meeting went -- any suggestions  
16 for improvement on that.

17 I also want to make sure, hopefully during the  
18 first part of the comment session, that we hear from those  
19 of you who have comments on specific parts of the  
20 environmental impact statement or specific comments on  
21 issues in the environmental impact statement.

22 We want to hear from everyone who wants to  
23 talk. I know there may be just some general expressions  
24 of concern, either in support of the facility or perhaps  
25 against the facility.

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1 We want to hear those, but the thing that will  
2 help us the most are the specific comments. So we'll try  
3 to that done first. We'll just try to manage our time.

4 I think we'll have a very interesting meeting  
5 tonight, and we'll look forward to hearing you.

6 I would just ask -- we've always been really  
7 appreciative of the courtesy that we've had from Eunice,  
8 Lea County, Hobbs, the whole area when we've been here.

9 I'd just would ask everyone to just extend that  
10 courtesy to people who might be talking tonight, who might  
11 have a different view one way or the other about these  
12 particular issues.

13 With that, let me introduce the speakers  
14 tonight so that you know a little bit about their  
15 background.

16 First of all we're going to start with just  
17 sort of an overview of the licensing process. And we're  
18 going to go to Mr. Scott Flanders, who is sitting right  
19 down here.

20 Scott is the Deputy Director of the Division of  
21 Waste Management and Environment Protection in our office  
22 of Nuclear Materials Safety and Safeguards at the NRC

23 His staff is responsible for preparing the  
24 environment review. Not only on this license application  
25 but on any other license applications that come in for

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1 these and similar types of facilities.

2           Scott has been with the Agency for 14 years.  
3 He's been a technical assistant to the Director of the  
4 Office of Nuclear Materials Safety and Safeguards. He's  
5 been responsible for the environmental review on the  
6 private fuel storage facility that is being proposed for  
7 Utah for the storage of spent fuel.

8           He's also been responsible for the environment  
9 review for the Wats Bar nuclear reactor. In fact, he  
10 served as project manager for the NRC on operating  
11 reactors, so he has a great breadth of experience. He has  
12 a bachelor's degree in mechanical engineering from the  
13 University of Maryland.

14           Then we're going to go Mr. Tim Johnson, who I  
15 think a lot of you know. Tim's going to go into more  
16 specifics on the safety aspect of the review of this  
17 license application.

18           Tim has been with the Agency for 27 years.  
19 He's been involved with a lot activities there: low-level  
20 waste disposal, decommissioning.

21           He has a bachelor's in mechanical engineering  
22 and a master's in nuclear engineering from Ohio State  
23 University.

24           Then our last speaker is going to get really to  
25 the heart of the discussion tonight, and that is the

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1 findings in the draft environmental impact statement.

2           Ms. Anna Bradford is with us; she's the project  
3 manager on the environment review of the LES license  
4 application. She's been with the NRC about four years,  
5 and before that she was responsible for environment  
6 reviews, working in the private sector on these types of  
7 energy projects.

8           She has a bachelor's in mechanical engineering  
9 from Virginia Tech, and she also has a master's in  
10 environment engineering from [inaudible] University.

11           So we have some really well-qualified people  
12 working to review this license application.

13           Let me introduce one other person. Brian Smith  
14 is here. He's the section chief of the Gas Centrifuge  
15 Facilities Licensing section at the NRC. That's the  
16 safety review. And Tim Johnson works in Brian's section,  
17 safety review. Anna Bradford works in Scott's division,  
18 Environmental Review.

19           We also have other staff expert consultants  
20 here tonight with us. So after the meeting I would just  
21 encourage you to get other questions to talk to this.

22           Finally I just want to give you a couple of  
23 thank yous: one to Mayor Brown and the City of Eunice for  
24 the use of this great facility for this type of meeting.

25           I also want to thank the Eunice school system

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1 for video taping this meeting. Superintendent Toni  
2 Trujillo and also Gene Strickland at the high school, and  
3 the students obviously for doing that for us.

4 With that I'm going to stop, and I'm going to  
5 ask Scott Flanders to get you an overview. Scott?

6 MR. FLANDERS: Thank you, Chip, for the  
7 introduction. Good evening.

8 On behalf of the NRC staff that are here  
9 tonight, we'd like to welcome you to our meeting. We are  
10 very pleased to be here to discuss the environmental  
11 impact statement with you. We look forward to hearing  
12 your comments and questions on the document.

13 Before we get started I just want to spend a  
14 few minutes going over the meetings objectives. Some of  
15 this will be a little bit redundant to what Chip touched  
16 on his opening of the meeting. But I think it's important  
17 to go over some of the primary objectives.

18 The first objective in our primary objectives  
19 tonight is to listen. We rely want to hear from you. We  
20 want to hear your comments. We want to listen to you  
21 comments.

22 Your comments are important to us. The are  
23 important to the process. Your comments will be used to  
24 decide how best to modify or to clarify the environmental  
25 impact statement before we issue it as a final document,

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1 so these comments are very important. It's a very vital  
2 part of the process.

3 We also want to share some information with you  
4 that we believe will be helpful to you in formulating  
5 comments that you either give us tonight or, as Chip  
6 mentioned, that you can send in to us in writing as well.

7 I'm going to spend just a few minutes going  
8 over the NRC's role and responsibilities and provide a  
9 general overview of the licensing process. When I'm done,  
10 Mr. Tim Johnson will discuss the safety review specific  
11 for the LES project.

12 And after Mr. Johnson is done, then Ms. Anna  
13 Bradford will discuss the environmental review process and  
14 identify some specific findings in the draft environmental  
15 impact statement.

16 Who is the NRC? The NRC an independent agency.  
17 We report directly to Congress.

18 We're not a part of the Department of Energy.  
19 Often we are mistaken to be a part of the Department of  
20 Energy. The Department of Energy is an executive branch  
21 entity which reports directly to the President.

22 Our mission is to regulate the civilian use of  
23 nuclear materials to ensure that the public health and  
24 safety, the environment and the common defense and  
25 security are adequately protected. So that's our mission.

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1           How do we carry out this mission? To carry out  
2 this mission in various phases. One, we issue regulations  
3 that we believe that are adequate to protect the public  
4 health and safety, the environment, the common defense,  
5 and security for the various activities that we regulate.

6           We also inspect licensed facilities and inspect  
7 facilities against those regulations. And when we find  
8 out a facility is not in compliance with those  
9 regulations, then we also have the authority to enforce  
10 action as well.

11           So that's the principal way in which we carry  
12 out our mission.

13           I'm going to spend a few minutes going through  
14 the safety review and parts: the safety evaluation  
15 review, the environmental review, and a hearing.

16           The safety evaluation is a review that is going  
17 to assess the adequacy of a proposed design, construction  
18 and operation of a facility to ensure that it complies  
19 with our regulations.

20           So these are technical reviews and that review  
21 is documented in a safety evaluation report which is made  
22 publicly available.

23           The environment process is a process by which  
24 we look at the environment impacts of the construction and  
25 operation of a proposed facility.

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1           And that environment review is a part of the  
2 environmental impact statement, which we've issued a draft  
3 and which is the subject of our meeting tonight.

4           The third component of the licensing process is  
5 the hearing. And the hearing is different than what many  
6 of us would think of as a hearing where people get an  
7 opportunity to come express their views and concerns about  
8 a particular issue.

9           The hearing process is a process that is  
10 formal; it is a courtroom style proceeding in which  
11 parties are admitted, and the subject of the hearing is  
12 focused on contentions that are presented by the parties.  
13 Contentions are another word for concerns or issues  
14 identified by certain parties.

15           So the hearing process is overseen by an  
16 independent Atomic Safety Licensing Board, which is made  
17 up of three administrative law judges. And they hear all  
18 the evidence; it includes taking depositions; it includes  
19 formal testimony, cross-examination of witnesses, all of  
20 the information that's taken in by the Atomic Safety and  
21 Licensing Board, and then they will make a decision on the  
22 contentions that that are subject of a hearing.

23           Once all three of these components of the  
24 licensing review is complete, then the NRC will make a  
25 decision on the license application. So in the case of

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1 the LES proceeding, we're in the process of going through  
2 the licensing process. No decisions have been made at  
3 this time.

4 So we are proceeding along a -- once all  
5 phases of the licensing process are completed, then a  
6 decision will be made.

7 I think that's briefly the areas that I wanted  
8 to cover.

9 MR. JOHNSON: Thank you very much. I  
10 appreciate the opportunity to talk to you today about our  
11 review process. I also want to thank you for coming out  
12 tonight.

13 I know for many of you it's difficult to get  
14 away from your normal routines. But we look at this as  
15 getting your input for the environmental impact statement,  
16 an important part of our process. So thank you very much  
17 for coming out.

18 What I would like to talk about today is to  
19 provide a brief summary of the nuclear fuel cycle and how  
20 the LES project is a part of that, to talk about the  
21 proposed project and also the status of our safety review.

22 Before I begin I do want to emphasize that our  
23 safety review is conducted independently. As Scott said  
24 we're an independent regulatory agency. We're not a  
25 promoter of this project or any other nuclear project.

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1 Before LES can begin to construct and operate  
2 this facility, it needs to demonstrate to us that it can  
3 meet our public health and safety requirements, and then  
4 we will issue a license if they can demonstrate that to  
5 us.

6 But first of all the nuclear fuel cycle:  
7 Uranium is a fairly common material. It's mined. And  
8 when it is mined naturally it consists of two primary  
9 isotopes: uranium 235 and uranium 238.

10 Uranium 235 is the fissionable isotope, and  
11 that's the isotope that carries out the chain reaction in  
12 the reactor which generates energy and ultimately  
13 electricity.

14 The problem is naturally occurring U-235 is  
15 only 0.7 percent of the total amount of uranium. Almost  
16 all the rest is uranium 238.

17 In order to be used practically as nuclear  
18 fuel, that U-235 concentration has to be increased to  
19 about 3 to 5 percent. And that is done through the  
20 enrichment process, and 3 to 5 percent is a percentage  
21 that's substantially less than what would be required for  
22 weapons-grade uranium, for example.

23 What this figure is kind of depicts the nuclear  
24 fuel cycle. In the bottom right you have uranium mines  
25 and mills. Uranium is mined in a number of places around

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1 the world, primarily in Canada and in Australia. There is  
2 a small amount mined in the United States, but that amount  
3 is about 2 to 3 percent of the total production in the  
4 world.

5 After mining the uranium is separated  
6 chemically from the rest of the ore, and that material  
7 gets sent to a conversion plant where conversion through  
8 chemical process changes the uranium oxide that is the  
9 mined product into uranium hexafluoride, which is the  
10 compound that is used in enrichment.

11 That goes to the enrichment plant. There are  
12 two primary processes for enriching uranium. One is a  
13 gaseous diffusion process which has been used in our  
14 country for 50-plus years. The other is a gas centrifuge  
15 process that has been used in Europe and also in Russia.

16 After the enrichment, the material is sent to a  
17 fuel fabrication facility, where it is chemically  
18 converted again back to an oxide. It's made into pellets.

19 The pellets are loaded into fuel rods. The  
20 rods are put into fuel assemblies, and those fuel  
21 assemblies are sent to reactors, where they undergo the  
22 chain reaction, produce energy and ultimately electricity.

23 The spent fuel from those activities will  
24 ultimately go to a federal waste depository. DOE is  
25 responsible for developing this depository for spent fuel,

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1 and they are evaluating the Yucca Mountain site in Nevada.

2 What LES is proposing is to build an enrichment  
3 plant outside Eunice here using the gas centrifuge  
4 process, using technology that was developed in Europe by  
5 the company called Urenco.

6 What this process does is it uses a high-speed  
7 rotor installed in a casing. As the rotor spins, the  
8 uranium hexafluoride separates based on the isotopic  
9 weights, using centrifugal force.

10 The heavier uranium 238 isotopes tend to go to  
11 the outside of the rotor. The lighter uranium 235  
12 isotopes tend to be more towards the center.

13 And there are scoops within the rotor that  
14 scoop out the separated fractions, and those separated  
15 fractions go to further stages.

16 One particular centrifuge does not separate  
17 very much, with a relatively small separation in each  
18 stage, so hundreds of these machines are needed for a  
19 practical-sized plant.

20 Now, before LES can begin to construct and  
21 operate this facility, they need to get a license from the  
22 NRC, and our responsibility is to review this license  
23 application to ensure that it meets our health and safety  
24 requirements.

25 In our review for this we're going to be

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1 looking at worker and public health and safety areas,  
2 routine and accident conditions.

3 We'll look at effluent releases, both airborne  
4 and liquids. We'll look criticality concerns and chemical  
5 safety, and the results of our review will be documented  
6 in the safety evaluation report.

7 Now, our safety evaluation's currently under  
8 way. We received LES's application in December, and we're  
9 planning on completing that review in June of next year.

10 Now, another part of this process is also  
11 important. Scott mentioned the hearing process. We do  
12 have a formal adjudicatory hearing process that was just  
13 started. This is a process that's done under specific  
14 requirements set out in our regulations. Now, a lot of  
15 people, when they hear the word "hearing," they think of a  
16 meeting like this one, where anyone can get up and say  
17 what they want.

18 Well, this hearing is a much more formal  
19 process, and again it is dictated by specific requirements  
20 in our regulations.

21 Three parties petitioned to intervene in this  
22 licensing activity, and each of those three parties were  
23 admitting as intervenors, and those three parties are the  
24 New Mexico Environment Department, the New Mexico Attorney  
25

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1 General's office and a joint petition by the Nuclear  
2 Information Resource Services and Public Citizen.

3 And some of the issues that were admitted to  
4 the process include disposition of depleted uranium, water  
5 supply impacts, water usage, the adequacy of the radiation  
6 protection program, decommissioning costs and impacts from  
7 any gas-line explosions that may occur.

8 There's a natural gas line that runs adjacent  
9 to the proposed site.

10 Now, the preliminary activities of part of this  
11 hearing process has already begun, and the three-judge  
12 panel that is hearing this case has already set a  
13 schedule, and some of the first cross-examination of  
14 witnesses in a court-style process are going to begin in  
15 February. I expect the Licensing Board will conduct those  
16 evidentiary hearings here locally and probably here in  
17 this building.

18 So we're looking at those activities to start  
19 in February. They will be to public observation, if you  
20 wish to come in and sit in and see how this panel  
21 operates.

22 So that concludes my discussion. I've talked  
23 about the proposed project, how it fits into the fuel  
24 cycle, talked about the status of our hearing process and  
25 our new schedule. So now I'll turn it over to Anna.

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1 Thank you.

2 MS. BRADFORD: Good evening. My name is Anna  
3 Bradford, and like Chip said, I'm the NRC Project Manager  
4 for the environment review of this facility.

5 Along with Chip and Scott and Tim, we would  
6 like to thank you for being here tonight and for  
7 participating. Your input is very important to us, and  
8 it's very important to this process.

9 Tonight I'm going to talk about the NRC's  
10 environmental review process, the findings in the draft  
11 environmental impact statement, and give you information  
12 about how you can provide us with your comments.

13 The next two slides chronologically list the  
14 steps of our environmental review process. The steps  
15 shown in this slide have already been completed.

16 Like Tim said, in December 2003 the license  
17 application was submitted by LES. Ever since that time  
18 we've been doing an independent evaluation of the  
19 information contained in that application.

20 We then published a notice of intent to prepare  
21 an EIS in February 2004, and that described the general  
22 scope of the draft EIS.

23 Then during the scoping period we came here to  
24 New Mexico and had a public meeting in March and accepted  
25 comments from the public on what you thought the draft EIS

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1 needed to cover.

2 In April 2004 we then issued a scoping summary  
3 report which summarized all the comments we had received.  
4 And the scoping summary report is also an appendix in the  
5 draft EIS itself. All the comments we received during  
6 scoping period were considered in the development of the  
7 draft EIS which was published last month in September.

8 This next slide shows the steps that are still  
9 remaining in the environmental review process. And I want  
10 to emphasize these are just the steps for the environment  
11 process. The application has many other processes it  
12 needs to go through, such as the safety review.

13 As shown here, we are accepting public comments  
14 on the draft EIS until November 6. You can give us public  
15 comments here tonight, or you can mail, e-mail or fax  
16 them. I will give you some contact information at the end  
17 of my presentation.

18 We're estimating the final EIS will be  
19 completed in June of 2005, and the final EIS will take  
20 into account all of the comments that we receive during  
21 this public comment period.

22 Lastly the NRC will use the EIS along with  
23 other important information, like the safety review, to  
24 decide whether or not we should issue a license to LES.

25 This slide shows all of the environmental areas

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1 that we analyzed in the EIS. We looked for impacts on  
2 every one of these areas, including important concerns  
3 like public health and water resources. It's a pretty  
4 extensive list.

5 I want to talk for a minute about our  
6 evaluation of the resource areas that I just showed you on  
7 the previous slide. We looked at the possible impacts  
8 from construction, operation, decommissioning and  
9 accidents. When we say decommissioning, we're talking  
10 about the decontamination and eventual release of the  
11 facility.

12 Once the impacts were determined, we  
13 categorized them as being either small, moderate, or  
14 large. In a moment I'll explain those categories in a  
15 little more detail.

16 It's important to note, too, that impacts can  
17 be negative or positive. An example of a positive impact  
18 would be the creation of jobs. And for the LES facility  
19 no impacts were found to be large. In all cases we found  
20 the impacts to be small to moderate.

21 The draft EIS also described mitigative  
22 measures that LES could use. Mitigative measures are  
23 those actions they could take to help decrease the  
24 negative impact. For example, they could use fencing to  
25 keep animals out of a construction area.

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1 All of those resources areas are discussed in  
2 detail in chapter 4 of the draft EIS. They're also  
3 summarized in this handout we have here tonight, which is  
4 a table.

5 If you take one thing home with you, this would  
6 probably would be the best thing to take. It really  
7 summarizes what we found in the draft EIS.

8 As I said earlier the impacts we categorized  
9 into small, moderate or large. Definitions of those  
10 categories are here.

11 Small impacts are those that are either not  
12 detectable or so minor they would not affect any important  
13 attribute of the resource. Moderate impacts are  
14 noticeable but would not destabilize important attributes  
15 of the resource. Large impacts would be clearly  
16 noticeable and could destabilize the resource. But as I  
17 said earlier, we did not find any large impacts for the  
18 LES facility.

19 The resource areas listed here are estimated to  
20 all receive small impacts during construction, operation  
21 and decommissioning of the facility.

22 So the resource areas expected to experience  
23 small impacts are land use, historical and cultural  
24 resources, visual and scenic resources, air quality,  
25 geology and soil, water resources, ecological resources,

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1 environment justice and noise.

2 I'd like to talk in detail about water  
3 resources for a moment. We analyzed impacts to water  
4 resources by looking at both water capacity and water  
5 quality, and we looked at both groundwater and surface  
6 water.

7 There's no surface water present at the site.  
8 The first well defined source of groundwater is more than  
9 800 feet below the ground surface.

10 The draft EIS found that impacts on the local  
11 water supply would be small, because there is excess  
12 capacity in the area, and the LES facility would use less  
13 than 1 percent of the available capacity in Eunice and  
14 Hobbs per day. In addition, no processed waters would be  
15 discharged from the site.

16 During our analysis we found that four resource  
17 areas may experience larger impacts of the small-to-  
18 moderate category during some portion of the facility's  
19 lifetime but necessarily for the entire facility's  
20 lifetime. For example, an impact could be moderate during  
21 construction but then small during operations and  
22 decommissioning.

23 And these areas are socio-economics,  
24 transportation, public and occupational health, and waste  
25 management. I'm going to talk about each of these four

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1 areas in detail on the next slides.

2 Socio-economics includes a wide range of areas.  
3 We analyzed employment, population, housing, public  
4 services and finances. We found that employment would  
5 increase moderately because of the jobs that would be  
6 brought into the local area.

7 We also found that the finances of the state  
8 and county would increase moderately because of the  
9 increased tax revenue they would be receiving.

10 Finally we found that the impacts to population  
11 and housing as well as the increase in the demand for  
12 public services would be small because of the relatively  
13 small number of people we would expect to move into the  
14 area.

15 Transportation: For transportation we analyzed  
16 routine traffic, which would include construction workers  
17 driving to work. We also looked at possible  
18 transportation accidents. We looked at truck and rail  
19 transportation of materials, although LES at this time is  
20 proposing to use only truck.

21 And we analyzed both radiological impacts,  
22 which would include doses to the public as material is  
23 driven along local roads, and we also looked at  
24 non-radiological impacts which would include things like  
25 emissions from the tailpipes of the trucks.

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1 We found that the transportation impacts during  
2 operations and decommissioning would be small.

3 The two cases in which impacts may be small to  
4 moderate would be during construction, because of the  
5 increased traffic on Highway 234, and also if a possible  
6 accident occurred truck or rail shipment.

7 However, we also found that possibility of a  
8 transportation accident that would result in severe  
9 consequences is highly unlikely because of the regulations  
10 for shipping such material that help ensure the safety of  
11 those shipments.

12 As you know, LES will be handling radioactive  
13 material, so we do a careful assessment of any public  
14 health effects that could result. We look at workers at  
15 the facility as well as members of the public.

16 We found that for construction, normal  
17 operations, and decommissioning, the radiological health  
18 impacts would be small.

19 During operations it is estimated that the  
20 resident living nearest to the site would receive less  
21 than one millirem per year, and our regulatory standard is  
22 100 millirem per year, so they would be receiving less  
23 than 1 percent of our regulatory dose limit.

24 It is estimated that the maximum dose to some  
25 types of workers at the facility would be about 300

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1 millirem per year, and the regulatory dose limit for  
2 workers is 5,000 millirem per year. So they would be  
3 receiving about 6 percent of the regulatory dose limit.

4 The impacts from accidents were found to be  
5 from small to moderate, depending on the type of accident.  
6 Safety equipment at the facility makes a severe accident  
7 highly unlikely to occur.

8 I'd also like to talk in detail about waste  
9 management. The facility would generate both  
10 non-radiological waste, such as scrap lumber resulting  
11 from construction as well as radiological waste.

12 Some of this radioactive material would be  
13 depleted uranium, which would be stored onsite until it  
14 could be shipped offsite to another location.

15 We found that the impacts from the  
16 non-radiological waste and most of the radiological waste  
17 would be small, because there's adequate capacity at the  
18 appropriate disposal locations for these types of waste.

19 The impacts from the source of depleted uranium  
20 is found to be small or moderate, because the waste could  
21 be stored onsite up the 30 years. This could result in an  
22 increase in the dose to the workers at the site.

23 You may remember in the first part of my  
24 presentation I mentioned the public comment period. The  
25 public comment began when the draft EIS was published in

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1 September, and it continues until November 6. So you can  
2 provide us with your comments any time between now and  
3 November 6.

4 All of the comments that we receive during the  
5 public comment period, including the ones that you stand  
6 up and make verbally tonight, will be considered by us  
7 when you're developing the final EIS.

8 In addition, the comments we receive will be  
9 included in the final EIS as an appendix, so you can see  
10 how your comment was addressed.

11 There are several ways you can send us your  
12 comments, given on this slide. By mail you can send them  
13 to the address given here. If you like to use e-mail you  
14 could send it to nrcrep@nrc.gov. If you'd like to fax,  
15 you can use the number there, and put it to my attention.

16 Also I'd ask that you please write docket  
17 number 70-3103 on your comments. This is the number we've  
18 assigned to the facility, and it helps make sure that your  
19 comment gets to the right staff member at the NRC.

20 Here we've listed the web pages you can go to  
21 for information on the LES facility specifically, as well  
22 as gas centrifuges, also information for a public document  
23 room which has links to many useful documents related to  
24 what we do.

25 Listed here are the NRC points of contact

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1 specifically for the project. For technical or safety  
2 information associated with the proposed facility, please  
3 contact Tim Johnson.

4 If you have questions on the environmental  
5 review process, please feel free to contact me.

6 And that's it for my presentation. I thank you  
7 for your time and attention, and we look forward to  
8 hearing your comments and questions.

9 MR. CAMERON: Thank you very much, Anna. Thank  
10 you all for your patience. We've covered a lot of ground  
11 there.

12 We wanted to provide some time for questions on  
13 any of this material before we get to the public comment  
14 part.

15 Is there any question? Yes. Just please  
16 introduce yourself. I think you're probably going to have  
17 to speak pretty closely into the mike.

18 MS. FISHER: I'm Karen Fisher with New Mexico  
19 Attorney General's office, and I wonder if the safety  
20 evaluation report is subject to public comment in the same  
21 manner that the EIS is subject to public comment.

22 MR. JOHNSON: At this stage we're not planning  
23 a public comment process on a draft safety evaluation  
24 report, but we are looking into having a public meeting to  
25 talk about the safety review we publish it as a final

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1 document.

2 MR. CAMERON: Okay. Thank you very much, Tim.  
3 On a related point that might be of interest to Karen,  
4 could you talk about the technical meetings that we have  
5 with the license applicant throughout the process. If you  
6 didn't, can you just mention to people who they can tune  
7 into those discussions.

8 MR. JOHNSON: We have a number of technical  
9 meetings that we conduct with Louisiana Energy Services  
10 when we need further clarification on a particular subject  
11 or area.

12 We do notice those meetings. People are  
13 allowed to come in and attend these meetings and observe  
14 them. We can also set up phone lines, too, if you want to  
15 join in or listen in.

16 We did try to do something with Lea County in  
17 terms of setting up a videoconferencing application, but  
18 we've had trouble technically with the compatibility of  
19 our videoconferencing systems and the ones locally.

20 But if those can get solved, we'd like to try  
21 to do that. But right now the technical issues are  
22 preventing us from using that system that you have in the  
23 county.

24 MR. CAMERON: And I believe that we're going to  
25 also explore with the Eunice school system a technology

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1 that they have to provide that same type of process.

2 Thank you very much, Tim.

3 Other questions?

4 (No response.)

5 MR. CAMERON: Okay. Let's go to public  
6 comments. We're going to go to some local officials.  
7 We're going to ask Jim Ferland from LES to talk to us.

8 We're going to then go to some private citizens  
9 who have some comments on the EIS. We have some educators  
10 and some local government officials. So we're going to  
11 try to mix it up a little bit.

12 It's great to see the enthusiasm of the people  
13 who want to talk. But we're going to start with Mayor  
14 Brown of Eunice.

15 Mayor, if you can come up with the podium where  
16 you can use this.

17 MAYOR BROWN: First of all I would like to  
18 welcome the NRC here tonight. This is the second or third  
19 meeting for some of you all.

20 I really appreciate the fact that you are  
21 attending personally as opposed to sending an  
22 administrative assistant or lower staff person to conduct  
23 these meetings. It's important that the public feel like  
24 they are involved in the process.

25 I would like to extend an invitation to you in

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Comment  
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1 any of your future meetings. We would be more than happy  
2 to accommodate in any way we can.

3 Basically what I want to discuss tonight for a  
4 little while is repetition of what has already been  
5 presented by the NRC, but I would like to highlight some  
6 things.

7 The NRC has basically determined -- or the  
8 environmental impact statement that there is little  
9 negative impact on land use, air quality, water resources,  
10 public employee health and safety. In fact, the only  
11 moderate impact that I recall as a positive impact, and t  
12 hat is an increase in population and jobs.

13 For the last 20 years in Lea County and the  
14 City of Eunice, the population and economy have all been  
15 declining. Eunice actually has lost about a third of its  
16 population in the last 20 years or so. And I think most  
17 of the reason for that is our reliance on a single  
18 industry. The oil industry has been good to us, but oil  
19 is a depletable resource.

20 Over a period of time -- over the next 20 or 30  
21 years, according to studies I have read, the oil industry  
22 will no longer be able to drive our economy, which means  
23 that we have to have companies like LES move into our area  
24 to help diversify our economy.

25 There's a statement by the NRC staff in the

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1 environmental impact statement that I thoroughly agree  
2 with. I'll paraphrase it, because my memory's not that  
3 great.

4 *Comment*  
5 *#066-2*

6 But it's basically saying that unless there are  
7 safety issues that mandate otherwise, that LES should be  
8 licensed. I agree with that completely.

9 *Comment*  
10 *#066-3*

11 If there are safety issues that have to be  
12 considered, and certainly they should be -- but we have  
13 been in this process for about nine months now, and I  
14 think very rapidly we'll be getting to the point where  
15 opposition is just using stalling tactics. I would hope  
16 the NRC would recognize that for what it is.

17 The more I think about the entire process, the  
18 more I think it's a win-win situation for everybody.

19 The electric utilities, the power plants  
20 provide about 20 percent of the area's electrical needs,  
21 but they do so using the majority of their fuel from  
22 foreign suppliers. So they will benefit definitely with  
23 LES providing supply domestically.

24 LES obviously stands to benefit if it goes  
25 through, because they will have a fixed number of users.  
So they will benefit.

The companies that are going to be investing in  
it -- Urenco and Westinghouse -- if the thing is  
successful, they are definitely going to benefit.

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1 We are going to benefit. We'll have new jobs  
2 coming in. We'll have families moving into our community.  
3 I think we will benefit in every way we can imagine. I  
4 think our economy will have the tendency to turn around,  
5 and hopefully we will see some growth.

6 I would like to make one other comment before I  
7 turn the mike over to the next speaker, and that's about  
8 Jim Ferland and his staff.

9 I hope all of you have gotten to know these  
10 people. If you haven't, you need to do so. They are  
11 quality people. For those of you who do not know them, I  
12 would like to say that they are exactly the kind of people  
13 who I want to have building a uranium enrichment plant in  
14 our back yard.

15 Thank you.

16 MR. CAMERON: Thank you very much, Mayor Brown.

17 I'd like to now go to Diane Ventura from  
18 Senator Bingaman's office. Diane?

19 MS. VENTURA: Good evening. I represent, for  
20 the record, Jeff Bingaman, US Senator, New Mexico.

21 I would like to say thank you to the NRC for  
22 being here today to listen to local residents discuss  
23 their views of the uranium processing facility.

24 It is the responsibility for NRC and the Atomic  
25 Safety Licensing Board to ensure that any proposed uranium

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1 processing plant will operate safely, securely, and with  
2 low environmental impact. Your presence here today  
3 demonstrates the NRC's commitment to its job.

4 As I've stated before, I am a supporter of the  
5 proposed facility because it will introduce competition in  
6 the domestic uranium fuel market which currently has only  
7 one supplier of enriched uranium fuel.

8 This project will also create high-technology  
9 economic growth in southeastern New Mexico.

10 But, as I've stated in the past and continue to

11 believe it is imperative that any license that the NRC  
12 issues must guarantee that depleted uranium tails are  
13 removed from the state.

14 I urge LES to show its commitment to removing  
15 the tails by undertaking negotiations with the State of  
16 New Mexico to settle on a mutually beneficial plan to see  
17 that the tails are removed. It is in the best interest to

18 LES and our state to come to such an agreement.

19 It is my understanding that LES's preferred  
20 route is to deconvert tails using a commercial facility  
21 rather than relying on DOE'S facilities under construction  
22 in Paducah and Portsmouth. This appears to be a good  
23 option because it will give the needed flexibility without  
24 relying on the federal government.

25 If LES is moving in that direction, I encourage

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(cont.)

1 LES to meet with the DOE to discuss their lessons learned  
2 in designing and building such a plant.

3 Once again, thank you for being here today and  
4 for ensuring that the public's views on the proposed  
5 facility are heard and taken into consideration.

6 MR. CAMERON: Thank you, Diane. And thank you,  
7 too, Senator Bingaman.

8 We're going to go next to Bob Carter from  
9 Representative Pearce's office. Bob?

10 MR. CARTER: Thank you.

11 "Gentlemen and ladies, thanks for the  
12 invitation to you at today's meeting. I regret that I am  
13 unable to attend.

14 "From the onset after being elected to  
15 Congress, I have worked diligently to assist in any way

16 that I can to bring jobs to Lea County. I believe the  
17 National Enrichment Facility is vital to provide new jobs  
18 for our county and state. I am dedicated to continue to  
19 work and for the establish of the facility in our great  
20 state.

21 "We appreciate LES and the Nuclear Regulatory  
22 Commission for providing the opportunity for open  
23 discussions and a forum whereby people can express their  
24 opinion and concerns. If I or my staff can provide any  
25 additional information or assistance, we will continue to

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1 be available to serve you to the best of our ability.

2 "Again, thank you for inviting me to join you  
3 today. I want you to know how important you are to the  
4 State of New Mexico, and I hope to see you soon.

5 Sincerely, Stevan Pearce."

6 I wear two hats. I represent the Lea County  
7 Improvement Corporation. Will the members of the board  
8 please stand. Harry Teague, Johnny Cole, Kathi Bearden  
9 and Bob Reid are all here.

10 It with great pleasure that we stand before you  
11 today to offer the assistance of the Lea County  
12 Improvement Corporation.

13 Our board has been involved since the onset of  
14 this project. We have continually monitored the process  
15 and attended meetings to listen intently to what's being  
16 said in relationship to safety concerns as well as job  
17 opportunities.

18 We applaud you for your openness and the fact  
19 that you, the Regulatory Commission, are here holding  
20 hearings and will allow people to the opportunity to voice  
21 their concerns and to express their opinions.

22 We look forward to a continued relationship.  
23 We want you to know we support your efforts in  
24 establishing the National Enrichment Facility in Lea  
25 County. Signed, Bob Carter, Chairman.

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#069-2

1 MR. CAMERON: Thank you very much, Bob, and  
2 thank you, Congressman.

3 We're next going to go to Gay Kernan, who's a  
4 state senator. Gay.

5 SENATOR KERNAN: Thank you, Mr. Chairman,  
6 members of the Commission.

7 I'm here to offer my continued support for the  
8 National Enrichment Facility.

9 It was just little over a year ago that I had  
10 the opportunity to travel with elected officials and  
11 community leaders to Almelo to see the plant. It was an  
12 extremely informative trip and convinced me that an  
13 enrichment facility could be safely operated in  
14 southeastern New Mexico.

15 I'm pleased that the NRC has confirmed what I  
16 believe to be true, that there will be little if any  
17 impact on the environment and that it will be a positive  
18 impact on our economy in Lea County.

19 I grew up in Lea County, and I lived here most  
20 of my life. I would never support any program that is not  
21 good for this area.

22 I continue to be concerned about our dependence  
23 on foreign oil and believe that this facility will help  
24 alleviate United States's dependence on others for sources  
25 of energy.

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1 I believe the NRC is doing a good job in  
2 carefully evaluating this project and believe that all  
3 questions and concerns will be answered as this process  
4 continues.

5 Again I offer my support and encouragement and  
6 I ask you to please grant Louisiana Energy Services their  
7 license. Thank you.

8 MR. CAMERON: Thank you very much, Senator  
9 Kernan.

10 We're going to two other mayors. Mayor  
11 Claiborne from Jal.

12 MAYOR CLAIBORNE: I'm Clay Claiborne, mayor of  
13 the City of Jal, and I'm pleased to have the opportunity

14 to reiterate that our community continues to give its  
15 support to the LES project.

16 Our support was not given until we had done our  
17 own environmental impact statement. When I was given the  
18 opportunity to stand in a uranium enrichment facility  
19 compound and watch the ducks swimming in a stream that ran  
20 through the plant yard, watched cows graze along the fence  
21 line, and visit with individuals who live with their  
22 families around the perimeter, my study was complete.

23 It was gratifying to find that the NRC  
24 environmental impact statement confirms my findings.

25 Thank you.

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For those of you who still have questions, please be assured that there will be an impact on this area, a very, very positive impact. Our quality of life in this area is given but will be enriched by the opportunity that will be opening to us.

We appreciate your being concerned about those of us who live in this area. However I want to once again assure you that your concerns are unfounded. Thank you.

MR. CAMERON: Thank you very much, Mayor.

Mayor Zap; Andrews, Texas.

Comment  
#072-1

MAYOR ZAP: I'd like to thank you for including Andrews in your thinking about the region. We would like to think that we don't just operate in Texas; we operate across the border and are part of your community and part of your area.

We considered this very long and hard at the time way back when WCS came into our area. We looked at what it would mean as far as safety is concerned.

Our community has strongly supported that project, and when we talked about this one, I feel that we also strongly support you in what you're doing.

The economic good that will be done has been mentioned many times, and we're hopeful that it will be far-reaching. And we hope maybe we'll get some crumbs from the table, maybe.

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Comment  
#072-2

We really appreciate what's happening here, what it means to the area. We live in an area where safety has been a big consideration for many years. The oilfield cannot operate without safety.

Comment  
#072-3

We watched what was being done and what is being done and are comfortable with what is happening. We made a study of our waters independent of many of the studies that were made.

The community paid for a study done by Texas Tech University in our area, and we are confident that there is no bad effect in this area.

As I say we looked at many, many things along with you, and we stand with you; we support you in what you're doing, and we're glad to be included in it. Thank you.

MR. CAMERON: Thank you very much, Mayor Zap.

Next we're going to go to Jim Ferland, who's the president of Louisiana Energy Services. You already heard Mayor Brown refer to Jim and his staff. This is the license applicant, so we're going to hear a few words.

MR. FERLAND: Thank you, Mr. Chairman. I'm not going to take too long either tonight.

But nevertheless I want to thank NRC for coming to Eunice and thank you very much for doing what, in my view at least, is a very thorough and an independent look

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#073-1

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1 at how this facility will impact the environment. So  
2 thank you very much for doing that.

Comment  
#073-2

3 Almost as important as thorough independent is  
4 the fact that it was done in a timely manner. I'm sure

5 we're probably hear some more of that tonight. But that  
6 is extremely important to us as well. So independent,  
7 thorough and timely -- we at LES very much appreciate  
8 that.

9 Just a note on the environmental impact  
10 statement. LES has -- we've been here over a year now.  
11 We made the announcement that we were coming here in  
12 September of last year. Then we submitted the application  
13 in December.

14 You, the citizens of Lea County, have many  
15 times heard us say that this is a safe facility. We will  
16 operate it safely, and we will ensure that we have a  
17 minimal, small, or negligible impact on the environment.

18 You've heard us say that many, many times.  
19 Some of you folks went to Almelo, and you've taken a look  
20 at facility that we're going to build here.

21 But it still has to be very comforting to see  
22 an independent, very competent, very thorough analysis of  
23 the plant come to the same conclusion as to the  
24 environment impact.

25 It makes us feel good. It provides the backup

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45

1 for you that you should be looking for. So, again, we  
2 were very happy to not only see the environmental impact  
3 statement or draft EIS come out early, but also to see  
4 what it said.

5 Just a comment on that: We're in the draft  
6 stage. The NRC says they're going to take public comment,  
7 and they're looking to file a final environmental impact  
8 statement in June of '05.

9 Now, just a note for you folks from is LES is  
10 that's not the end of our thinking about the environment;  
11 that's just the beginning. You know, this facility, this  
12 is a lifetime commitment to the environment that we're  
13 embarking on here.

14 So we're not finished in January '05 when the  
15 NRC concludes and puts out the final environmental impact  
16 statement. That's just at the very beginning of LES's  
17 commitment to the environment, to the health and safety of  
18 the public, to the health and safety of our workers.

19 So I don't want anybody here to think that LES  
20 is thinking all about the environment until next June and  
21 then they're done. That's actually just the very, very  
22 beginning of our commitment.

23 One other topic -- and I've heard a couple of  
24 folks mention it tonight -- energy independence. We see  
25 what's happened when the United States gets overly reliant

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J-25

1 on foreign sources for our energy. We see it every day  
2 when we go to the gas pumps and when we read the  
3 newspapers, and we see the impact of that on the stock  
4 market and the economy.

5 If we take a look at electricity prices -- and  
6 I've heard other folks say this -- 85 percent of the  
7 enriched uranium that we burn in our power plant today  
8 comes from overseas. We are susceptible to the same thing  
9 is happening with oil on the fuel for our power plants.

10 And this facility will help to offset that risk  
11 by providing a secure, domestic, competitive source for  
12 enrichment for the electricity that we use every day in  
13 addition to the gasoline and the other items.

14 So I just wanted to make that note and thank  
15 everybody in the audience for coming out. We very  
16 appreciate the fact that we're taking your time and that  
17 you're giving your time to come to meetings like this. I  
18 very much appreciate your time and support. Thank you.

19 MR. CAMERON: Thank you very much.

20 We'll go next to Kathi Bearden on the board of  
21 the Economic Development Corporation.

22 MS. BEARDEN: Mr. Chairman, Commissioners. I'm  
23 Kathi Bearden, president of the Economic Development  
24 Corporation in Lea County. Thank you for the opportunity  
25 to speak tonight and welcome NRC to Lea County.

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Comment  
#074-1

1 We are thrilled at EDC to see the draft  
2 environmental impact statement that was released September  
3 3rd. The draft EIS determined that there will be minimal  
4 environment impact on this region and of course a positive  
5 socio-economic impact.

6 The draft recommends proposed license be issued  
7 unless safety issues mandate otherwise. And for that we  
8 are excited and pleased.

9 The draft concluded that this project would  
10 help form energy independence for America, as well as have  
11 small impact on land use, air quality, water usage,  
12 ecological resources, environment, if an accident does  
13 occur, and radiological exposures. All these are things  
14 that all the citizens in this part of the country have  
15 concerns about.

16 Additionally the EDC of Lea County have entered  
17 into discussions with LES as well as other interested  
18 parties, including local, state and federal legislators  
19 and elected officials about a deconversion plant. We  
20 anticipate a solution to this matter in the very near  
21 future.

22 Interest in this project has not waned. The  
23 communities in Lea County and our neighbors in West Texas  
24 continue to be optimistic about the advantages of the 400  
25 construction jobs, the \$170 million payroll during

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1 construction, the 210 permanent jobs, and LES's commitment  
2 to buy goods and services locally.

3 But as we've said before in other meetings,  
4 more important to us as citizens in Lea County and West  
5 Texas is the fact that this facility will enable the  
6 United States to have a domestic source of enriched  
7 uranium for the country's commercial nuclear power plants  
8 and will allow energy independence for America in a safe  
9 manner.

10 Thank you again for coming to Lea County and  
11 allowing all our citizens to have a voice in this  
12 procedure.

13 MR. CAMERON: Thank you, Kathi.

14 Next we're going to go to Dennis Holmberg, Lea  
15 County manager.

16 MR. HOLMBERG: I'm Dennis Holmberg, the Lea  
17 County manager. I work with the Water Industries  
18 Association and am very thankful that you found what we  
19 think was true all along, that there will be very little  
20 impact to the water supply.

21 In reading through the draft, I wanted to point  
22 out one thing, that any references have been to the water  
23 plant addressed only a small component of supply and  
24 demand.

25 There's another large component of it that

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#075-1

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1 talks about the alternative sources of water all of us are  
2 considered on a daily basis. And so instead of little  
3 impact, it may have no impact at all. If you go back to  
4 your revisit that report -- I think Chapter 8, the water  
5 plan -- it talks about the alternative sources, including  
6 conservation, water rate structure, development of deep  
7 aquifers, treatment and use of lower-quality water,  
8 imported water, aquifer recharge, weather modification,  
9 interstate alternatives, groundwater flow modeling, and  
10 the water monitoring program.

11 Many of those not only were part of the plan  
12 that have already been implemented by the various  
13 municipalities and counties, and so that would maybe even  
14 help mitigate the issue of any small water questions that  
15 you have with the draft. Thank you.

16 MR. CAMERON: Thank you for that information,  
17 Dennis.

18 Now we're going to go to Lee Cheney and then to  
19 Rose Gardner.

20 MR. CHENEY: Thank you. My name's Lee Cheney;  
21 I'm from Hobbs, and I originally just had one simple  
22 question to ask the NRC.

23 But before I start, I would like to ask Jim  
24 Ferland if he could tell me what percentage of LES is  
25 owned by Urenco.

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1 MR. CAMERON: Okay. Jim, is this an NRC  
2 meeting, and I know there's lots of information you want  
3 to get from the license applicant. I don't want to turn  
4 it into a different type of meeting but, Jim, is that  
5 something that you can --

6 MR. FERLAND: 75.5.

7 MR. CAMERON: 75.5. All right.

8 Lee, let's go back to you.

9 MR. CHENEY: Thank you for much for that  
10 information. The reason I ask that question about the  
11 percentage ownership of Urenco in LES is because of the  
12 question of problems that we're having with foreign  
13 ownership -- United States independent.

14 That takes me to my question. Will the NRC  
15 allow the New Mexico Attorney General and the New Mexico  
16 Environment Department to participate in the LES hearing  
17 on the important issue of terrorism, national security,  
18 LES financial qualifications and waste disposal?

19 One of the concerns that I have that I hope the  
20 state will be allowed to consider -- that the NRC will  
21 allow the state to consider in this hearing is the foreign  
22 ownership of LES and their responsibility, because if LES  
23 goes bankrupt, these foreign companies -- and Urenco's  
24 owned by England, France and Germany -- their  
25 responsibility for cleanup, for all these things, it's my

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1 understanding they would have none.

2 They could just simply walk away from it. The  
3 taxpayers would be stuck with it. These are issues that  
4 the State of New Mexico is being denied the opportunity to  
5 have considered in this hearing process as I understand  
6 it.

7 MR. CAMERON: Thank you very much, Lee. And as  
8 both Scott Flanders and Tim Johnson from the NRC pointed  
9 out, we are in the formal hearing stage, and some of the  
10 decisions have been made by the NRC licensing board on  
11 what issues are going to be considered. Some of them have  
12 been appealed to the Commission.

13 And there's also the -- on the additional point  
14 we do have participation from the New Mexico Attorney  
15 General and New Mexico Environment Department.

16 There's an issue there that's in front of the  
17 Commission about what the extent of the participation of  
18 those two groups can be on issues raised by other parties  
19 in the proceeding. I would like to ask Scott or Jim  
20 perhaps to address the concern that you had about  
21 financial assurance and bankruptcy.

22 Tim, is it possible for you to just give us an  
23 overview of what the financial assurance requirements are?

24 MR. JOHNSON: One of our regulatory  
25 requirements for getting a license for this type of

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Comment  
#031-4  
(cont.)

1-28

Comment  
#031-4

1 facility is the applicant has to provide what we call a  
2 decommissioning funding plan.

3 This consists of a cost estimate for  
4 decommissioning the facility as well as a financial  
5 mechanism to provide those funds in the event that the  
6 licensee ultimately is unable to deal with  
7 decommissioning.

8 Financial mechanisms that would be allowed  
9 would be things like letters of credit, surety bonds,  
10 trust accounts -- prepaid trust accounts and so on.

11 What LES has done is they have provided a cost  
12 estimate for decommissioning. It includes the cost for  
13 dispositioning the depleted uranium that will be generated  
14 at the facility. They propose to use a surety bond as a  
15 mechanism for providing those funds.

16 The surety bond is set up so that if, for  
17 example, LES goes bankrupt, the funds are separated from  
18 the Louisiana Energy Services, and the beneficiary comes  
19 out of a standby trust in which the NRC can direct its  
20 expenditure and ultimately the decommissioning of the  
21 facility, if that is needed.

22 MR. CAMERON: I guess that one of the  
23 objectives is to make sure that there are funds available  
24 even if there isn't bankruptcy.

25 MR. JOHNSON: One of the key aspects of our

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1 review is to review this decommissioning funding plan to  
2 make sure that estimates are reasonable.

3 Also a part of this is that at least every  
4 years that estimate would be updated to account for  
5 escalation, changes in the facility, et cetera, so that  
6 this is an ongoing process to keep the amount suitable for  
7 any decommissioning needs that might come during the  
8 facility lifetime.

9 MR. CAMERON: Okay. Thank you very much, Tim.

10 Lee, we do have your question on the record for  
11 those particular issues, and perhaps we can go through  
12 them with you after the meeting or sometime in terms of  
13 what was raised and how they were have been disposed and  
14 what is still pending.

15 This is Rose Gardner.

16 MS. GARDNER: I'd like to welcome everyone and  
17 the NRC Commission to the meeting this evening.

18 This is the second time I've spoken regarding  
19 these topics. Even though there's a lot that I'd like to  
20 say, I couldn't get it all on one sheet of paper.

21 Throughout the whole document there are  
22 statements made regarding the construction, operation of  
23 decommissioning of the National Enrichment Facility.  
24 Although the report does summarize the effects of the  
25 different phases of the plant and according to the NRC the

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1 impacts of the operations of construction and  
2 decommissioning would have a small impact on the  
3 environment, I found that all one has to do easily look at  
4 the subject and find the summary following.

Comment  
#032-6

5 In many of the different situations involving  
6 information many references are made to the properties of  
7 the UF-6, uranium hexafluoride, the feed gas, as well as  
8 the depleted uranium waste byproduct.

9 In all occurrences involving accidental release  
10 of the UF-6, I find dangerous situations arise. A  
11 ruptured container can cause death and excessive  
12 radioactive materials are released to the air and  
13 surrounding environment.

14 What would happen if at some point all 15,727  
15 containers ruptured due to a possible terrorist attack?  
16 This is an item not covered under the EIS. This is a  
17 state and national security issue.

18 Who will address this and give a reply as to  
19 the consequence of such a thing happening? Does this fall  
20 under safety and security, which is identified as being  
21 outside the scope of EIS and NRC? What about the  
22 disposition of the waste?

23 The viable options are discussed.  
24 Unfortunately nothing is solid or contingent upon  
25 completion of this plant.

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Comment  
#032-7

1 Where is the proof that the waste will be gone?  
2 I heard all the politicians say the governor wants the  
3 waste gone. The final disposition has only been in  
4 outlines as possible options available. No contract means  
5 no guarantee.

Comment  
#032-8

6 The State of New Mexico Environment Department  
7 and Attorney General's Office is being left out of the  
8 legal process, and this is concerning to me. The two  
9 state government entities should file contentions that  
10 should be addressed during NRC hearing starting 2005, yet  
11 appears though nothing is happening yet.

12 The Governor of New Mexico has requested the  
13 admittance of the two offices, but it looks like the  
14 governor has no real say in this matter. This is very  
15 serious, and we in those community will be lacking support  
16 if they are not admitted as important interested parties  
17 to this process.

Comment  
#032-9

18 Who will assure us that the waste is removed as  
19 soon as possible? Who will stand up for Eunice? Our city  
20 government should be asking these same questions. Why  
21 aren't they?

22 Who will protect us with the necessary laws in  
23 place should something like environmental contamination or  
24 death occur?

25 The water issue is still a concern as well. We

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1 know that communities in New Mexico are adopting water  
2 conservation policies required to be in place by next  
3 year.

Comment  
#032-10

4 We know our 40-year water plan indicated a  
5 possible shortage of water within 40 years, and yet we  
6 will allow this plant to use all the water they need and  
7 want. And then at some point a possible deconversion  
8 plant may be built, and that plant will use our water as  
9 well.

10 When will our needs be considered for the  
11 40-year plan? My community still has much work to do.  
12 According to the water study, engineers recommended that  
13 new water holes be drilled and water conservation be  
14 addressed. Water is an important and crucial part of our  
15 future here at Eunice, and I'm very concerned that this is  
16 not being taken seriously.

Comment  
#032-49

17 Other issues that concern me are in the scoping  
18 summary report and are identified as being outside the  
19 scope of this environmental impact statement drafted by  
20 the NRC, but I do intend to submit written comments in  
21 addition to these.

Comment  
#032-11

22 I personally do not support this project. I do  
23 not believe that this facility should be constructed in  
24 Eunice.

25 Our community already has more than its share

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Comment  
#032-11  
(cont.)

1 of high-risk and polluting industries with the oil and gas  
2 industry. I hasten to say that they are my bread and  
3 butter. So it's not the oil and gas industry I'm against;  
4 it's the radioactive waste and emissions.

Comment  
#032-12

5 We have more than our fair share of cancer.  
6 And in this draft environmental impact statement there are  
7 constant references to latent cancer fatalities.

8 Excessive exposure to radioactive emissions and  
9 waste cannot be good for anyone. Why must the community  
10 of Eunice be the one to suffer the ill effects which are  
11 bound to occur, and the surrounding areas will profit by  
12 our misery?

13 I live here, and I intend to be here a long  
14 time if God is willing. I ask you, as Christian brothers  
15 and sisters, would you want this done to you?

16 I would not want for anyone regardless of the  
17 monetary profit potential. It is an unhealthy environment  
18 that you supporters of this project are wanting to subject  
19 the community of Eunice to, and I will vigorously oppose  
20 the planning of this plant.

21 I am a member of Public Citizen and Nuclear  
22 Information Resources Services and am very glad that most  
23 of our contingents were admitted by the NRC. We will have  
24 our day in court, and at the end of the day who knows what  
25 might happen?

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1 .I'd like to extend a personal invitation to the,  
2 New Mexico Attorney General's office and Environment  
3 Department to join us in our contentions, which have a lot  
4 of similarities. We just want the answers. We want  
5 safety. We want good things for this community.

Comment  
#032-13

6 I request that the Nuclear Regulatory  
7 Commission deny the license application for Urenco,  
8 Louisiana Energy Services' National Enrichment Facility.  
9 Thank you.

10 MR. CAMERON: Thank you very much, Rose. Do  
11 you want us to attach those two pages?

12 MS. GARDNER: I already left a copy with you.

13 MR. CAMERON: All right. Thank you very much.

14 We're going to go to some educators now. The  
15 first person is the superintendent, Toni Trujillo. Toni?

16 SUPERINTENDENT TRUJILLO: I'm sorry I was a  
17 little late to the meeting. We had another extremely  
18 important meeting this evening -- the Jal/Eunice  
19 volleyball match. I had to leave, so I don't know who's  
20 winning. So we apologize for that.

21 Next time you are here, or any other state  
22 regulators, we're hoping you can come to our community,  
23 maybe see one of our games. So we'd like to extend that  
24 invitation.

25 I want to express my thanks and appreciation to

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1 the members from the Nuclear Regulatory Commission.

Comment  
#007-2

2 Throughout this process you have kept the citizens of Lea  
3 County informed about the permit process and have provided  
4 numerous opportunities for public comment.

Comment  
#007-3

5 A copy of the draft environmental impact  
6 statement was provided by the NRC. Because of the  
7 document's organization format -- as an educator I also  
8 have to comment on language usage -- I was able to  
9 understand the report, and I'm not a scientist nor an  
10 engineer.

11 The definitions regarding the degree of impact  
12 were very helpful and were written using a minimum of  
13 jargon. I think that's very important for an informed  
14 public.

Comment  
#007-4

15 I continue to support the National Enrichment  
16 Facility, and I continue to support the federal and state  
17 regulatory approval procedures. In this case private  
18 industry and governmental entities have worked together to  
19 ensure a safe and prosperous future for Lea County.

20 Tonight I just have one request. The next time  
21 you come to Eunice I would like to invite you to meet with  
22 our students and explain the permit approval process, not  
23 take sides, as you're not doing, neither pro nor con, but  
24 explain this process to them, because this is a wonderful,  
25 I think, example of our democracy in action. I encourage

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1 you to do that. You are invited to meet with our  
2 students.

3 We now have many students engaged in an applied  
4 physics course. I think they would understand what's  
5 going on. Also we have a new internet class entitled, an  
6 Introduction to Nuclear Energy. So the next time you're  
7 here we certainly want you to have that invitation and  
8 provide some time for you to meet with our students.

9 Again, thank you for your diligence and  
10 professional behavior. Thank you.

11 MR. CAMERON: Thank you very much, Toni. I'm  
12 just going to make a note of that request for the week,  
13 just to make sure that we respond to that. I'm going to  
14 go to the opponents, I guess, the Lady Panthers.

15 Rick Ferguson.

16 MR. FERGUSON: Welcome again to Eunice. Of  
17 course we'd like you to come on back to Jal.

18 It's great news to hear what you had to say as  
19 far as the environmental impact study; it was what we was  
20 expecting, but it was still good to hear that again.

21 Toni had to change clothes tonight. When she  
22 was at the ball game, she was wearing her Jal Panther  
23 shirt; I don't know why she changed. She really looked  
24 good in blue, but you can ask her about that.

25 We're excited about the possibility of having

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Comment  
#076-1  
(cont.)

1 LES as a neighbor. Any jobs that we can get down in Jal  
2 certainly will be welcome. We want employment  
3 opportunities for our students that are graduating, for  
4 the people who are in Jal.

5 Mayor Brown talked about Eunice, as far as the  
6 population dwindling by a third over the last 20 years.  
7 Ours has probably dwindled more than that over last 20  
8 years. Any job or employment in a safe environment that  
9 we can offer to our citizens of course is welcome.

10 I certainly appreciate again that we do live in  
11 an environment in a country where we have places where  
12 people like you working for the NRC freely can come down  
13 and help us to know that this really is a safe type of  
14 environment to work in.

15 Again, I'm looking forward to having LES as a  
16 neighbor. I think you're going to bring some good  
17 opportunities to us. I was wondering if there was one  
18 other thing you can do is -- you know, any extra revenue  
19 that Eunice schools bring in because of that, could you  
20 make sure that every school district south --

21 (General laughter.)

22 MR. CAMERON: Okay. Thank you.

23 Next we're going to go to Gene Strickland from  
24 Eunice High School. Gene?

25 MR. STRICKLAND: First I want to thank NRC for

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Comment  
#077-1

Comment  
#076-1

1-33

Comment  
#077-1  
(cont.)

1 ,doing such a superb job in providing a model for our  
2 students in what the proper process is in investigating  
3 something that will have a huge impact on our students.

4 I know you guys have a process for conducting  
5 your environmental impact statement, and I'd like to  
6 attach another acronym to that, educational impact  
7 statement.

8 I believe as an educator that this is going to  
9 provide huge opportunities for our students' education.  
10 This is an example here tonight the opportunity this  
11 provides for my students.

12 And I know I speak for all the educators in the  
13 room the benefits that go on to our students. So we  
14 appreciate LES. I continue to support them, and I  
15 appreciate you guys. Thanks.

16 MR. CAMERON: Thank you very much.

17 And we're going to go to one other educator,  
18 Steve McCleery from New Mexico Junior College. And then  
19 there's a statement that we'll read from a senator.

20 MR. McCLEERY: Mr. Chairman, Ms. Bradford, Mr.  
21 Smith. Thank you for coming to Lea County.

Comment  
#026-2

22 Number one, we appreciate the process that  
23 affords people to speak on both sides of the issue. I  
24 think that's extremely important.

25 In terms of the environmental impact statement,

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1 the issues in there -- small to moderate -- would be  
2 issues that might raise a question; however, I think that  
3 those issues that are small to moderate have a lot to do  
4 with what we in Lea County can provide.

5 You looked at the transportation issue. You  
6 looked at the accident issue, specifically with the  
7 operation of the plant facility in terms of providing a  
8 trained workforce. All of those issues play out in regard  
9 to those small to moderate impacts as you at least cited.

10 I'll tell you that I'm very confident in terms  
11 of we in Lea County can do. This is an opportunity for us  
12 to partner with what we think will be a very good company,  
13 LES.

14 But those partnerships run, I think, up and  
15 down Lea County. If you look at our emergency response  
16 abilities in Lea County, I think they are far and above  
17 what you would find in many counties our size.

Comment  
#026-5

18 If you look at the training that they are  
19 performing right now, if you look at the fact that we live  
20 in an area that causes them to constantly train in terms  
21 of the oilfield, in terms of the work facility, in terms  
22 of the WCS, I think that infrastructure piece is there. I  
23 think it's solid, and I think it addresses that small to  
24 moderate impact.

25 IN terms of the other issues, I think most of

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1 those that you would find in terms of what you did -- and.  
2 I think you did the due diligence.

3 You asked us to comment; you took our  
4 questions. You took those questions very seriously. You  
5 went back. You did the due diligence. You turned the  
6 paper. You looked, and you looked.

7 One of the issues in regards to that, though,  
8 is the operation of this facility. Prior to the  
9 announcement of LES coming Lea County, on their own they  
10 met with officials from New Mexico Junior College, and  
11 that's who I represent tonight, and I have to be present  
12 at their beck and call

13 We sat with them. One of the first concerns  
14 that they had was they wanted to make sure that the  
15 training that we provide -- meaning LES provides -- in  
16 conjunction with other schools -- New Mexico Junior  
17 College, College of the Southwest -- is second to none.

18 We want to turn all of the stones; we want to  
19 look under every corner. We want to provide that  
20 training.

21 We've employed an engineer who has a master's  
22 degree -- has a baccalaureate degree and a master's degree  
23 from the New Mexico Institute of Mining and Technology, a  
24 brilliant young man.

25 He's been ramping up; he's been providing, if

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Comment  
#026-3

135

Comment  
#026-3  
(cont.)

1 you will, a conduit to LES. We've met with the LES staff  
2 on numerous occasions to talk about the training issues,  
3 because the small to moderate concerns would be mitigated  
4 if indeed Lea County steps up to the plate and provides  
5 the training and provides the support services through the  
6 infrastructure and the emergency response.

7 That's what we're planning for, and it's all of  
8 Lea County. It's from the south end, from Jal, all the  
9 way to the north end in Taylor.

10 I would say to you that our dealings with LES  
11 have been absolutely phenomenal. They've been on our  
12 campuses up and down Lea County. They've fully disclosed  
13 to our students. They've met with our students.

14 They continue to press the issue. We want to  
15 make sure that Lea County is ready. I'm here today to  
16 congratulate you on what I think is an outstanding  
17 environmental impact statement. I know it's a draft, but  
18 also in the process. I think the process is very good.

19 I can tell you that I think as a county from  
20 one end to the other that we're ready for this facility.  
21 Thank you for coming to Lea County.

22 MR. CAMERON: Thank you very much.

23 We do have that statement from Senator Lavelle  
24 that Kim Fulfer is going to read to us. Kim?

25 MS. FULFER: My father is Senator Carroll

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1 Lavelle. He is the senator for Eddy and Lea Counties. He  
2 was unable to be here tonight. He said he was sorry he  
3 couldn't be here.

Comment  
#022-2

4 He does write, "I'm writing again in support of  
5 Louisiana Energy Services' effort to obtain a license from  
6 Nuclear Regulatory Commission for the proposed National  
7 Enrichment Facility outside Eunice, New Mexico.

8 "Lea County is very excited about the NEF. The  
9 oil and gas industry has supported Lea County and the  
10 State of New Mexico for over 75 years. My constituents  
11 know the pitfalls of the economic swing in oil and gas.  
12 It is time to diversify. The draft environmental impact  
13 statement was very positive for the NEF. I am glad the  
14 report found what I already knew.

15 "The NEF will have a minimal environmental  
16 impact on this region and a very positive socio-economic,  
17 particularly with respect to jobs and revenue added to the  
18 local economy.

19 "LES has shown itself to be a good corporate  
20 citizen by contributing to local organizations that  
21 benefit the people of southeaster New Mexico, as well as  
22 always keeping us informed and educated about the process.

Comment  
#022-3

"The draft EIS just confirms NEF is really a  
safe, environmentally sound project. I support the NEF  
and hope their licensing process continues to go smoothly,

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1 so we in Lea County can begin making plans for the future  
2 that would include the NEF. Sincerely, Carroll Lavelle."

Comment  
#100-1

3 On a personal level I also support them. My  
4 husband and I have raised our family here. We both have  
5 businesses here.

6 We feel like the oil and gas economy has been  
7 very good to our family. But we do feel like it is time  
8 to diversify. We don't want to go through another oil and  
9 gas crunch and wonder what we're going to do next.

Comment  
#100-2

10 This is a great way to bring economy back to  
11 this area also. I appreciate your being here.

12 MR. CAMERON: Thank you very much, Kim. Thank  
13 your father for the comments.

14 We have a number of elected officials, county  
15 commissioners and city councils, city commissioners that  
16 we're going to go to next.

17 We're going to start with the Lea County  
18 commissioners and start with Harry Teague and then go to  
19 Darrold Stephenson and Gary Schubert.

20 Harry, do you want to come up?

21 CHAIRMAN TEAGUE: Hello everyone. I'm Harry  
22 Teague, the chairman of the Lea County Commission.

23 The first thing I want to do is I want to thank  
24 the NRC for coming to Lea County and to Eunice. Thank you  
25 and thank your staff.

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1 I know it's a lot of effort and a lot of  
2 trouble to get everything that you need transported 2,000  
3 miles and have a meeting, but we definitely thank you for  
4 coming.

5 Going back prior to the time that you accepted  
6 the application from LES, there's been some people that  
7 have made comments about your impartiality, your  
8 qualification, and your integrity.

9 I want you to know that that's not the case of  
10 me or any of the people from Lea County. We have the  
11 utmost respect for your qualifications and your  
12 impartiality and your integrity.

13 I know that several of you have spent your  
14 adult life preparing for the opportunity to work on a  
15 permit like this.

16 The people of Lea County appreciate you. We're  
17 the people that most impacted by the National Enrichment  
18 Facility, not the people in Washington or Sante Fe or  
19 Albuquerque.

20 Every community in Lea County is presented here  
21 tonight, along with Roswell, Carlsbad, Andrews and Kermit,

22 Texas. It's not just Eunice; it's not just Lea County.  
23 It's the whole area that wants this. We want it for the  
24 economic impact that it has for our county and our area.

25 We want to thank you for your thorough analysis

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Comment .1  
#005-3  
(cont.)

2 and detailed review of the environment impact in verifying  
3 to us that this is indeed a truly safe facility.

4 I see that some people are talking again and  
5 trying to scare us that the plant will have dangerous to  
6 the national security and to our personal safety.

7 I think that's scare tactics. It's a false  
8 accusation. LES is bringing jobs and sophisticated  
9 technology and help for our US electrical industry into  
10 this country.

11 And everybody here that's -- this is an energy  
12 county; it's an energy state: \$50 oil, \$8 gas. Our  
13 electric industry needs some help, some relief. Our  
14 citizens will need some shortly.

15 There will be nothing in this facility for  
16 anyone to steal, and there will be high security. They  
17 will be enriching uranium to 5 percent, not to the 95  
18 percent necessary for weapons. They will not be able to  
19 do that even if someone wanted to.

20 We've looked at this, and we've visited their  
21 facility in Europe, and we've done independent research  
22 and thinking. We're confident in LES.

23 Now, the independent research that I did is I  
24 visited with the neighbors of the plant in Almelo. The  
25 grass is green; the trees are green. The people bring  
their families to picnic across the fence from the

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J-37

Comment  
#005-2

Comment  
#005-3

1 facilit'

2 That's the checking that I did. I don't have a  
3 scientific degree to check it the way the NRC is for us.  
4 But I can assure you that it's safe.

5 Another thing I'd like to say, on a personal  
6 note, today's my 35th wedding anniversary. I invited my  
7 wife to come to this meeting for our anniversary. We've  
8 never went to an NRC meeting on our anniversary, and she  
9 refused.

10 (General laughter.)

11 CHAIRMAN TEAGUE: But she and I have been  
12 married in Lea County -- we were married in Lea County.  
13 We've been married and lived here for 35 years. I still  
14 love her after 35 years.

15 I have a son and a daughter, and I love them.  
16 I've even learned to love my son-in-law and daughter-  
17 in-law. I have five beautiful grandchildren, and I love  
18 all of them. I wouldn't ask this plant to come here if I  
19 thought it would endanger them.

20 I also have 110 or -15 employees that live in  
21 every community in Lea County, with the exception of  
22 Tatum. I know them. I know their wives, and I know their  
23 children. I know them by name, not by numbers. I  
24 wouldn't bring this plant here if I thought it would harm  
25 them either.

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1 Thank you for coming tonight.

2 MR. CAMERON: Thank you very much, Chairman  
3 Teague, and I guess happy anniversary.

4 Darrold?

Comment  
#011-2

5 MR. STEPHENSON: Well, I'd like to voice my  
6 support for the construction of LES's proposed uranium  
7 enrichment facility to be built in Eunice, New Mexico.

8 I speak for myself as a citizen of Lea County and as a Lea  
9 County commissioner.

Comment  
#011-3

10 After visiting the model facility in The  
11 Netherlands and talking to the LES management team, I know  
12 the NEF will be safe and it will be good for New Mexico.  
13 Further, it will be good for our country.

14 The draft environmental impact statement was  
15 very positive. Thank you, Tim. I'm glad NEF will have  
16 large negative impact on our local resources.

17 I am also very excited about the boost to our  
18 local economy that the NEF will bring. We certainly need  
19 a more diversified economy and new jobs. The NEF will  
20 achieve both of these.

21 After reviewing the draft EIS, I firmly believe  
22 that the NEF will both safe and environmentally sound for  
23 the citizens of Lea County.

24 I look forward to welcoming LES as a permanent  
25 part of our community and encourage you to approve their

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1 license application quickly.

2 MR. CAMERON: Thank you, Mr. Stephenson.  
3 Gary Schubert?

4 COMMISSIONER SCHUBERT: Members of the  
5 Commission, welcome to Lea County. I'm delighted to have  
6 you here. I'm Gary Schubert, and I'm the County  
7 Commissioner from District 3, which basically comprises of  
8 Hobbs.

9 I've had the privilege of serving on the Lea  
10 County Commission since January 2003. I believe that it  
11 was in March 2003 when this concept of having LES build  
12 this facility came to the County Commission. So basically  
13 I've been involved with this from the beginning.

14 The County Commission has put considerable  
15 efforts and time since that day into this project. We  
16 have explored the possibility of building this facility  
17 very thoroughly. I think we've done our due diligence.

18 I've had the opportunity to participate in  
19 the implementation of this project regarding the  
20 governmental and things, and I want to tell you that LES  
21 has been very reputable, very generous, very much above  
22 board. I have come to know and to trust them.

23 In every way that we have participated, they've  
24 gone above and beyond what I feel like their obligations  
25 were.

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Comment  
#078-1

1 You've heard a lot about the economic impact  
2 and what the facility will mean to us, and I don't want to  
3 be redundant; I want to tell you that they've got me  
4 convinced.

5 I'm here in Lea County. I've lived here 27  
6 years; I'm raising a family here. I'm intending to stay  
7 here and complete raising my family here. And that's as  
8 good a testimony as I know to say towards my trust in them  
9 in implementing this facility. Thank you.

10 MR. CAMERON: Thank you, Commissioner.

11 We going to now go to Mary Fuller. Is Mary  
12 here? The next person is David who has the same last name  
13 as Toni. Do we know who we're talking about. Is David  
14 here? Mary Fuller?

15 MS. FULLER: My name is Mary Fuller, and I've  
16 lived in the City of Eunice for 14 years. I've raised my  
17 family here. I look for a local company, and I'm on the  
18 City Council.

19 I'd like to thank the NRC Committee for their  
20 draft EIS. We've got a copy of it in the mail a couple of  
21 weeks ago. It looks like you spent a lot time working on  
22 it.

23 In April I met with a group of people in Almelo  
24 to visit the enrichment plant over there. Unescorted by  
25 anybody, we walked around the town and talked to the

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1 people that live there, that share a fence line with the  
2 enrichment plant. Everybody in Almelo is just happy to  
3 have them as a neighbor. Their enrichment plant is not  
4 five or six miles out of town; theirs is right in the  
5 middle of Almelo.

Comment  
#020-2

6 There's been no accidents. They supply good-  
7 paying jobs to the community. They're good members of the  
8 community. I think personally that they would be good for  
9 our community.

10 I think a lot of what I would say is just  
11 reiterating what everybody has said, that I look forward  
12 to the day when they start building the plant outside of  
13 Eunice. That's all I can say.

14 MR. CAMERON: Thank you, Mary.

15 We're going to go to Hector Ramirez, and then  
16 Robert Wallach and Ray Betzen. Hector?

17 MR. RAMIREZ: Good evening. Thank you for  
18 coming to Lea County. Thank you for all your time and  
19 effort.

20 I'd like to say thank you to LES to give me an  
21 opportunity to go over there. It was a great honor for  
22 me.

23 I asked a lot of questions. And I remember one  
24 question that I asked one of the farmers over there. I  
25 said, man, what's the average of the person who live in

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1 this community. And she said 92 on the ladies and 85 on  
2 the men.

3 She said, how about America? I said 45 and 37.  
4 Then she said we last a long time; not kidding, 85, maybe  
5 75.

6 I'd like to say I've been in Hobbs for 44  
7 years. This community has been great. This is a great  
8 opportunity. You know, I don't know how to express myself  
9 to tell you people what we got coming to this community.

10 I'm so excited that my son is going to study  
11 something else, and we can open a furniture store, because  
12 we see that he's going to make a difference in the  
13 community for the quality of life for everybody in this  
14 community.

15 My district is one of the poor districts in  
16 Hobbs. We're trying to be part of it that we're real  
17 excited.

18 You know, I'm telling these people, Go up to  
19 the Junior College and be prepared to get a job for  
20 \$60,000 a year. That's going to make a lot of difference  
21 for a lot of people in this community. I wish I was 35  
22 years old, but I'm too late.

Comment  
#079-1

23 But I'd like to say thank you, and I welcome  
24 LES with open arms. We've got some truly honest people  
25 coming to live here. Thank you.

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1 MR. CAMERON: Thank you, Mr. Ramirez.

2 Mr. Wallach.

3 MR. WALLACH: First of all the mayor of Hobbs  
4 couldn't be here tonight. I feel like I need to defend  
5 Hobbs, because there's been some property grabs here about  
6 the city of Jal and a few others.

7 So on behalf of the mayor of Hobbs and the City  
8 of Hobbs, we want to welcome you back to Lea County. We  
9 appreciate your being here.

10 I feel like we're all up here just repeating  
11 ourselves, so I'm going to take just a second. My family  
12 has lived in Eunice and Lea County for over 70 years. My  
13 grandparents both their family back in the mid-'30s.

14 I'm just like everybody else. You know, we  
15 need the jobs. Economically we need the stimulation, we  
16 need the diversification. But we want to be sure that  
17 we're going to have a good partner to do that with, and a  
18 safe partner to do that with.

19 The comfort that I get in making that decision  
20 and giving my support is first of all you guys involved in  
21 that process. I have a lot of confidence in that.

22 Second of all, it's Mary Fuller's testimony on  
23 the trip to Almelo, and everybody else, but hers was so  
24 eloquent. I mean, you hear their stories about the  
25 development that's gone around on around the facility and

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1 what the citizens think of their involvement in the  
2 community. That give me some comfort.

3 The third thing is Jim Ferland and his staff.  
4 You know, they've been very forthright; they've  
5 communicated the way they've needed to, and that's very  
6 important in this process. So we appreciate that.

7 The last thing I want to say is my family has  
8 been here for 70 years, and so I'm very proud that our  
9 community has an opportunity to be a part of something  
10 that's so important to the country. Thank you.

11 MR. CAMERON: Thank you very much.

12 Mr. Betzen. Ray Betzen.

13 MR. BETZEN: I haven't been married 35 years,  
14 but I might be by the time this meeting is over.

15 (General laughter.)

16 MR. BETZEN: Commissioners, the Hobbs City  
17 Commission has passed three separate resolutions  
18 supporting LES locating in Lea County.

19 After seeing that the draft environmental  
20 impact study finds that there will be minimum negative  
21 impact to the environment and a positive socio-economic  
22 impact on our county, we will continue to support LES  
23 locating in Lea County. Thank you very much.

24 MR. CAMERON: Thank you, Ray.

25 Next we're going to ask Mr. Johnny Cope.

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Comment  
#080-3

Comment  
#081-1

Comment  
#080-1

Comment  
#080-2

J411

1 Johnny?

2 MR. COPE: Ladies and gentlemen of the NRC,  
3 thank you for being here tonight.

4 A little history about how LES came to Lea  
5 County. Actually, they did not -- it was a group of  
6 businessmen that first saw the opportunity that we might  
7 try to do economic development, and so the facts are that  
8 we solicited LES to come to see if our community might fit  
9 the profile for a uranium enrichment plant.

10 And we have been so fortunate to interact with  
11 Jim Ferland and Marshal Cohen, about the honesty about  
12 what a facility such as this will do for our state and our  
13 county.

14 I was one of the fortunate people to be able to  
15 go to Almelo. Certainly as leadership of this community  
16 felt, it's very important for us to ask all the safety  
17 concerns that there is along with this plan.

18 I'm very pleased with your EIS report. It's  
19 just exactly what I thought it would be, that's it low to  
20 very moderate impact to our environment. So thank you for  
21 the due diligence that you're doing.

22 The second thing that I'd like to say is I'm  
23 the chairman of Transportation Commission. I think I

24 agree with our statement also that it is a very low to  
25 moderate impact as far as transportation.

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Comment  
#082-1

Comment  
#082-2

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1 I do believe that we will increase in traffic.  
2 The Transportation Department has funding for a new  
3 20-year design road from the Texas state line to Highway  
4 18.

5 The issue the Department is trying to decide is  
6 what is the proper time to redo the road, and do we want  
7 to wait until after construction is over with and then  
8 build a nice, beautiful road that will last 20 years, or  
9 certainly do we need to do it now for the safety of the  
10 people through construction?

11 And so that's a decision that we have yet to  
12 decide. Certainly we would love your input if there's  
13 something that you have strong feelings about.

14 But I do want to say I'm very proud that LES  
15 has decided to go through this permit application. I  
16 appreciate all of your due diligence and hard work and  
17 dedication.

18 I do firmly believe in my heart that this is  
19 something that's good for our nation, and I appreciate all  
20 that you're doing here tonight.

21 MR. CAMERON: Thank you, Johnny.

22 Buster Goff.

23 MR. GOFF: I feel like I was chosen last. My  
24 name is Buster Goff, and I am the chairman of the Lea  
25 County Water Users Association.

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Comment  
#082-3

Comment  
#082-4

1 We are an association that is represented not  
2 only by Lea County but by all of the cities in Lea County.  
3 We are appointed by each of the commissioners or the  
4 councils. We were charged with putting together the  
5 40-year water plan; the Lea County regional plan.

6 When I heard about LES, the first thing I  
7 thought was how much water do they want, because water to  
8 me is more than just a commodity; it's really personal,  
9 because we in Lea County know that we have a aquifer that  
10 really is not rechargeable, so as water users we were very  
11 concerned about the amount of water that this facility of  
12 this magnitude would use.

13 The estimated water usage for the facility is  
14 approximately a 75 acre-feet. How much is that?

15 Seventy-five acre-feet would water about three holes of  
16 the golf course in Eunice.

17 According to the numbers of our regional plan,  
18 Eunice golf course uses 210 acre-feet a year. This  
19 facility is estimating in using 75 acre-feet.  
20 Seventy-five acre-feet is 25 acres of farmland.

21 If you're familiar with how we irrigate or farm  
22 of the country, primarily it's with pivot systems. A  
23 pivot system is 120 acres per system. We have in this  
24 area hundreds of them. That's about 20 percent of one  
25 system, is what 75 acre-feet is.

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1 So I was certainly-surprised that this facility

2 uses so little water. We feel as water users that this  
3 aquifer can easily meet the water requirements for this  
4 facility. Thank you.

5 MR. CAMERON: Thank you, Mr. Goff.

6 Next we're going to go to Ron Aboulsman. I'm  
7 sorry if I'm probably pronouncing your name incorrectly,  
8 Ron. Ron is the Eunice city manager.

9 After Ron we're going to go to Jerry King of  
10 the New Mexico Land Commission.

11 MR. ABOULSMAN: I'm Ron Aboulsman. I'm the  
12 city manager here in Eunice. I haven't been here as long  
13 as everybody else has. I've only been here a little over  
14 a year.

15 But one of the things I noticed when I came  
16 out -- and some of the instruction or the words that were

17 told to me -- is that we needed to diversify the economy  
18 of our community. I think this a great step in that  
19 direction.

20 I'd like to really thank the NRC staff for  
21 their efforts. In a small community like ours we don't  
22 have the staff available or that's necessary to review an  
23 application of this magnitude.

24 I think that with your review, we depend on it  
25 greatly, and we sure thank you for everything that you've

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Comment  
#083-1

Comment  
#084-1

Comment  
#084-2

1 done.

Comment  
#084-3

2 We all felt very confident before the draft  
3 environmental impact statement came out that it would come  
4 out the way it did. We've always felt very confident that  
5 way, and it did. And we're happy that it has.

6 When I read through it was I saw really was the  
7 positive socio-economical impact that was addressed in the  
8 document -- what it's going to do for the local economy,  
9 if we take advantage of it.

10 We're looking at eight years of construction,  
11 397 jobs at any given time on an average basis. After  
12 four years of construction, we're looking at about 800  
13 jobs. It'll grow to that size.

14 What's going to happen in the area -- the  
15 spending for goods and services -- will also generate some  
16 580 jobs. We know that the facility will have 210  
17 permanent jobs. But we don't count what else is going to  
18 happen once this plant locates here.

19 We've already had some contacts -- us as a  
20 small community of our size -- from other industries that  
21 may be coming, something very different from what the  
22 facility will be.

23 But I think because the facility is coming,  
24 other people are beginning to look at this part of New  
25 Mexico. And I think they want to make their little mark

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1 in the world here in southeast New Mexico.

2 Let's not forget construction is \$1.2 billion  
3 in 2002 dollars. That means that even today it's a little  
4 bit more than that.

5 Although we've heard different things, I'm very  
6 confident that we will soon here a solution to the waste,  
7 the decontamination facility disposal or whatever is going  
8 to happen with it. But I'm sure that we'll be hearing  
9 soon of what will happen there.

10 The one other point that I want to make is that  
11 I'm surely happy to have the experts here that make their  
12 determination on fact, not on assumptions of what might  
13 happen, but on facts that are being presented, which is  
14 the way we need to run our business, our communities, our  
15 state and our counties. Thank you again.

16 MR. CAMERON: Thank you, Ron.

17 Mr. Jerry King.

18 MR. KING: Good evening, everybody. My name's  
19 Jerry King. I'm an assistant commissioner at the State  
20 Land Office.

Comment  
#085-1

21 I'm here on behalf of Commissioner Pat Lyons  
22 who apologizes for not being here tonight, but he has  
23 publically supported this project time and time again.

24 I want to tell you a little story. About a  
25 year and a half ago now, Johnny Cope, Carroll Lavelle and

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1 Commissioner Teague walked into the Land Office.

2 They said, Commissioner, Lea County wants to  
3 make another development, and we want to build a uranium  
4 enrichment facility down there. We're in Santa Fe,  
5 remember.

6 He said, What? You want to do what?

7 We want to build a uranium enrichment facility,  
8 and we want to find some property that we can do it on.  
9 What's the state have?

10 The Commissioner says, I'll do whatever I can  
11 to help you, but the first thing I want to know is I want  
12 to know that it will be safe. Then I want to know who's  
13 doing it and get them in here and get them in here now.

14 So then about two or three days later Jim  
15 Ferland walks in, Marshal walks in, and Ron walks in. And  
16 the Commissioner says, guys, tell me what you're going to  
17 do and tell me how you're going to do it and make sure and  
18 convince me that this is going to be safe.

19 So we sat down and spent a couple of days'  
20 worth of meetings going over all this, making sure it was  
21 safe. So we'd gone in, and we'd looked at the land. The  
22 Commissioner says, what's there? What are the impacts  
23 going to be.

24 One thing that, Anna, that you should us  
25 tonight is that what we thought we knew is that the

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1 impacts were going to be small on the environment but they  
2 were going to be great for the community.

3 Commissioner Lyons has a soft spot in his heart  
4 for rural communities; he's a rancher from over by  
5 Tucumcari. We looked at the upside and the downside.  
6 And, Mayor Brown, I got to tell you something:

7 We looked at all the upside and said that's  
8 great, but remember, he's from Tucumcari and Santa Rosa.  
9 Then when we looked at the downside, he said, dang,  
10 Eunice's and you all's football teams are going to be  
11 good.

12 So, anyway, on behalf of Commissioner Lyons,  
13 it's great to be here. We want this to be safe. And,

14 Scott, Tim, Anna, Brian, I think we're in very reliable  
15 hands, not only the citizens of Eunice, but the citizens  
16 of the state of New Mexico, to have you decide what's best  
17 for this facility.

18 And, again, I want to thank you, and on behalf  
19 of Commissioner Lyons, everybody have a good evening.

20 MR. CAMERON: Thank you, Mr. King.

21 JUDGE DOLGENER: My name's Richard Dolgener;  
22 I'm the County Judge in Andrews. I represent 13,002  
23 people in 1500 square miles to the east of the river, and  
24 for the record, I'm going to be sending you all a written  
25 statement.

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Comment  
#085-2

Comment  
#085-3

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1 I just want to thank the other guys -- Jim, I  
2 really appreciate your diligence on your second part of  
3 this. As somebody said, your life has been in this, not  
4 for your government service; I just want to appreciate  
5 that you kept us in your heart all these years.

6 I'm going to be really short. The main thing  
7 is that I love the talking about regionalism among our  
8 Regional Planning Commission.

9 It was over the last six months the planning  
10 people, you all's commissioners and ours, have got  
11 together.

12 My background -- I was the chief deputy in the  
13 sheriff's office, and we had a very good relationship with  
14 the Lea County sheriff's office, and now I'm seeing that  
15 come over to this.

16 And I really appreciate the rapport in the city  
17 and the chamber that now Andrews and Lea County are  
18 talking to each other. This is going to work.

19 We have been in the waste business for maybe  
20 ten years, trying to get a bill passed through our  
21 legislature. The state agencies are now reviewing that  
22 license. And depending on what happens, we can go forward  
23 with our part.

24 You look at -- [inaudible] had a deal one time  
25 in the paper -- I don't know if you all seen it, but it

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1 said [inaudible], and it has Amarillo, Lubbock, Andrews,  
2 [inaudible], Eunice, and Carlsbad.

3 Another person said we live in the third-  
4 largest oil producing region in the United States. When I  
5 was a deputy, I'd hate to go out to an oilfield or get out  
6 of the tank there; you didn't if you were going to get up  
7 or fall in.

8 This is going to be a lot of people; a lot of  
9 guards, a lot of security. I'm not worried at all about  
10 what's going to be inside that fence. I am worried about  
11 the ten guys that came across the Mexican border.

12 But this kind of stuff is not going to be a  
13 problem. I include everybody from the mayor on down; we  
14 need to change the way we're doing.

15 This community as a whole can change, because  
16 we live in the oilfield; we've always been in the  
17 oilfield, and we can change the way we do.

18 They've probably never seen a boom like this.  
19 And if we can ever get them on the highways and stuff,  
20 we'll be all right. There is some risk of wrecks. You've  
21 got a great hospital in Hobbs. You've got a great  
22 hospital in Andrews. We have emergency evac. You have  
23 Lubbock.

24 Within 45 minutes, if you are hurt, you can be  
25 at a major hospital. So we're not out here in the desert

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away from medical science and all that. I mean, we have a university teaching medical facility within a hundred miles of here by helicopter.

Comment  
#086-1

So a lot of these issues I think are taken care of already. The decision is going to be a major eco-socio thing. I do like those executive summary. I'm going to read the deal and try to comment on the big book.

Comment  
#086-2

I just appreciate you all keeping Andrews informed, which you have, and I, myself, informed. I'm in favor of this. Thank you.

MR. CAMERON: Thank you, Judge. Look forward to your comments.

Next we're going to hear from Jerry Harper, who's with the Eunice Fire Department, is Jerry still here, and Erica Valdez from Economic Development Corporation. Is Erica here?

(No response.)

MR. CAMERON: Mr. Ojeda?

MR. OJEDA: Good evening. Welcome to our little town of Eunice. My name is Termilo [phonetic] Ojeda from the radio station KMMEA, and [speaking Spanish].

MR. CAMERON: Thank you. Thank you very much. And that will be on the transcript, and I guess we better provide a translation.

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#### Comments from Carmelo Ojeda

NOTE: These comments were provided in Spanish at a public meeting to discuss the Draft Environmental Impact Statement on the National Enrichment Facility. The meeting was held on October 14, 2004 in Eunice, New Mexico. The following is a translation Mr. Ojeda's oral comments. The meeting transcript is at [www.nrc.gov/materials/fuel-cycle-fac/ml043090069.pdf](http://www.nrc.gov/materials/fuel-cycle-fac/ml043090069.pdf).

Mr. Ojeda: Good evening. Welcome to this small town of Eunice. My name is Carmelo Ojeda, from the radio station KLMA, and I encourage you to support this enterprise, since it will be beneficial for the current economy. Two thousand construction-related jobs for 5-7 years; 210 permanent jobs, ranging from cleaning to physical security. I do not know much about the plant's technology, but I can assure you about the plant's security. I had the opportunity to visit Almelo, and I was impressed by the security in that place. There has not been any major accident. The loyalty of the workers is incredible - from 20 to 24 years working for a company, that is loyalty. The Nuclear Regulatory Commission is concerned about our security (that is, you). And neither me nor some of us who were at the plant in Almelo, none of us is glowing green, since we are not radioactive. I am not an expert on nuclear matters, but I am concerned about my children's security. And I can assure you that security is very good at this plant. Thank you.

Comment  
#059-2



1 Lana Davel?

2 MS. BAVEL: I'd like to thank the NRC for  
3 coming and doing all your hard work and planning for us.  
4 I'd like to also thank LES and [inaudible] for making  
5 Andrews a big part of this.

6 We're very excited. We appreciate the chance  
7 to respond to the NRC, the impact study. I'm very pleased  
8 to know, with regards to the safety issues, that it's a  
9 minimum environmental impact.

10 I believe that as a citizen of a community  
11 that will be impacted by this, we have a responsibility to  
12 understand as much as possible.

13 Again I really appreciate the chance to come  
14 here to better understand what I support and believe will  
15 be an outstanding opportunity for southeastern New Mexico  
16 and West Texas. Thank you very much.

17 MR. CAMERON: Thank you, Lana. Chief Harper?

18 CHIEF HARPER: Hi. I'm Jerry Harper from the  
19 Eunice Fire Department. I'm the fire chief.

20 I want to thank each and everyone of you here  
21 this evening helping out with the license for LES. I just

22 want to say that with the safety issues and the  
23 environmental issues that they're going through to try to  
24 get a license -- I just want to say you're doing a great  
25 job for the environmental in the Eunice area, the Lea

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Comment  
#088-1  
(cont.)

1 County area, the State of New Mexico.

2 Again, I want to say thank you for coming down.

Comment  
#088-2

3 And I'd just like to say if there's any way to kind of  
4 push a little bit, get it a little bit quicker where they  
5 can start the facility, I'd appreciate it.

6 MR. CAMERON: Thank you, Chief Harper.

7 Next were going to go to Mike Bundick and then  
8 Marilyn Dill and Gary Dill. Mr. Bundick?

9 MR. BUNDICK: I'm Mike Bundick. I've been in  
10 Eunice 24 years now. I've raised my kids here; I'm a  
11 member of the Eunice Chamber of Commerce.

12 And I just wanted to say thank you for coming.

13 The Chamber of Commerce supported LES; we really think  
14 that they would be a good member. They're a good person  
15 for Eunice.

16 Also, I'd like to say that my two sons  
17 graduated from Eunice, and they both left. There's

18 nothing for us. I'd like LES to help us maybe retain our  
19 kids and they don't go off to war or join the military  
20 because there wasn't anything in Eunice to keep them home.

21 Thank you.

22 MR. CAMERON: Thank you, Mr. Bundick.

23 Is it Marilyn? Marilyn Dill.

Comment  
#090-1

24 MS. DILL: Thank you very much. I appreciate  
25 seeing your presentation tonight. I learned a lot from

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Comment  
#087-1

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Comment  
#088-1

Comment  
#090-1  
(cont.)

91

your very clear statements.

Comment  
#090-2

I'm representing the Southwest Symphony in Hobbs, New Mexico, and on behalf of the symphony, we are in support of LES coming to Lea County.

Southwest Symphony brings about eight concerts to the area each year. And in addition to the public concerts, we also take music into the schools, and one of those schools will be Eunice.

We've already had a very productive meeting with Marshal, and he has been very supportive of our efforts. Hopefully we can partner with them in the future.

Comment  
#090-3

As Southwest Symphony works to improve the quality of life in the arts in Lea County, we look to LES to improve the quality of life economically. Thank you very much.

MR. CAMERON: Thank you, Marilyn.  
Gary Dill?

MR. DILL: I'm Gary Dill, president of the College of the Southwest.

Comment  
#091-1

I'm here to say that we are pleased with the draft report but not surprised. We're convinced that the science is good, appropriate.

The faculty members of the College of Southwest in the Departments of physics, biology and environmental

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Comment  
#091-2

management have looked the issues over carefully. We believe strongly that LES will be a good and appropriate academic and intellectual partner. They'll be good scientists. They'll be good stewards of our resources. And for that reason we're enthusiastically in support of the petition.

MR. CAMERON: Thank you very much.

Debra Hicks? And then we're going to go to Susan Holler.

MS. HICKS: My name is Debra Hicks. I am a registered professional engineer in the states of Texas, New Mexico, Oklahoma, and Kansas.

I'm also a mother raising children in Lea County. My family homestead was in Lea County in the early 1900s, and I'm fourth generation in the county.

I value Lea County, and I value our natural resources. It's important to me to know, in raising my family here, that we have findings such as the small impact for historical and cultural resources, for air quality, for water usage and for land usage.

Comment  
#025-2

I can place my whole support in the National Enrichment Facility that LES is proposing to build here in Eunice, New Mexico.

Having worked on environmental impact statements through my profession, I'm knowledgeable of the

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1 resources and the detail study that is necessary to  
2 prepare documents of this magnitude. And I appreciate  
3 your endeavors very much.

4 I appreciate that you are looking out for Lea  
5 County. I trust the findings of small impact as it  
6 relates to the environment and also the small to moderate  
7 impact as it relates to transportation and safety.

Comment  
#025-4

8 I realize and I believe that you will take the  
9 safety to the next level, to discuss the issues that we  
10 may have with regard to the construction and operation of  
11 the plant for safety.

Comment  
#025-3

12 I also trust that NRC will monitor the  
13 construction and operation for Lea County to make sure or  
14 to ensure us that it is built to the standards a  
15 specifications necessary for us to have a quality of life.

16 Lea County has a long history of supporting  
17 energy needs for our country. LES will allow us to  
18 continue to contribute in a way that also benefits our  
19 county.

20 I submit my whole support for the construction  
21 and operation of the National Enrichment Facility here in  
22 Lea County. Thank you.

23 MR. CAMERON: Thank you very much.

24 Susan?

25 (No response.)

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1 MR. CAMERON: We're going to go to Justin  
2 McGrath at this point. Justin?

3 MR. McGRATH: Good evening. My name is Justin  
4 McGrath. I'm the executive director of the Carlsbad  
5 Chamber of Commerce.

6 I'm here this evening also with the delegation  
7 with other Carlsbad Chamber members. I'm here tonight in  
8 support of the Enrichment Facility.

9 In a recent board meeting, the Carlsbad Chamber  
10 of Commerce Board of Directors passed a resolution in  
11 support. I'd like to read that at this time.

12 "Whereas Louisiana Energy Services seeks to  
13 build a uranium enrichment plant to provide enriched  
14 uranium for the United States nuclear energy industry;

15 "Whereas the economic benefit to Southeastern  
16 New Mexico will be stability, growth, job creation and  
17 industry diversification;

18 "The facility will product depleted uranium  
19 byproduct in cylinders that will undergo deconversion for  
20 final disposal in a location outside of New Mexico;

21 "Whereas the facility will be virtually the  
22 same as the plants that have been operated safely in  
23 Europe for over 30 years;

24 "Whereas the facility will licensed and  
25 regulated by the Nuclear Regulatory Commission along with

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1 appropriate state agencies;

2 "Whereas the facility will have regulated air  
3 and water emissions at or below state and federal limits  
4 as allowed by the NRC and New Mexico Environmental  
5 Department;

6 "Whereas the National Enrichment Facility, to  
7 be situation in Southeastern New Mexico, has the support  
8 of major U.S. utilities, the DOE, and U.S. Senate Energy  
9 Committee Chairman Pete Domenici, and ranking member  
10 Senator Jeff Bingaman, Congressman Steve Pearce and  
11 numerous local and state elected officials;

12 "Therefore be it resolved that the Carlsbad  
13 Chamber of Commerce supports locating such facility in  
14 Southeast New Mexico in the interest of regional economic  
15 stability."

16 MR. CAMERON: Thank you, Mr. McGrath.

17 Our next speaker/commenter is Kelly Holiday.  
18 Then we're going to go to Suzie Holler.

19 MS. HOLIDAY: I'm Kelly Holiday from the New  
20 Mexico Junior College. I'm a professor of geology.

21 I, too, have had the opportunity to travel to  
22 Almelo last November to take a look at the uranium  
23 enrichment plant. I have to tell you that before I went,  
24 I was totally anti-uranium enrichment plant; didn't  
25 particularly care if it came to Lea County or didn't come

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Comment  
#092-1

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1 to Lea County.

2 But after visiting the plant in Almelo, I've

3 totally changed my mind about that. I feel completely  
4 comfortable with the plant coming to Lea County, and  
5 basically I have the same thoughts and comments as many of  
6 the rest of you have already made.

7 However, one thing I did want to point out that  
8 the plant in Almelo, which has been there for 30 years --  
9 I didn't realize this before I went, but Almelo is just  
10 above sea level, and so their plant's just right on top of  
11 their water table. They've had no problems with anything  
12 infiltrating their water system.

13 With our water table being 800 feet below the  
14 plant with a thick layer of red clay that's going to not  
15 allow any penetration of anything dangerous, it's even  
16 more safe than the plant in Almelo, if that be the case.

17 So with the exception of my concern about the  
18 byproduct -- I am very concerned about that. If this  
19 particular facility here in Lea County operates like the  
20 one in Almelo, they have 400 canisters of byproduct on  
21 their facility, which is pretty minimal.

22 While we were there, they actually took some of  
23 the canisters and transported them to another facility in  
24 France or Russia, where they were actually recycling the  
25 product.

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Comment  
#029-2

Comment  
#029-5

Comment  
#029-3

Comment  
#029-3  
(cont.)

1 And I really do hope that in Lea County we're  
2 able to do that as well, because those canisters don't  
3 need to be lying out on the ground for years to come,  
4 because they could be an eyesore and maybe a danger in  
5 many years to come, if something's not done with them.

6 So I am concerned about that, but other than  
7 that, I completely support the National Enrichment  
8 Facility. Appreciate your work here you've done.

9 MR. CAMERON: Thank you very much.

10 MS. HOLLER: I'm Suzanne Holler, and I'm from  
11 Hobbs and president of the Hobbs Rotary Club and a board  
12 member of the Chamber of Commerce and involved in several

13 other associations in Hobbs, and I do support this  
14 National Enrichment Facility.

15 I've lived here since 1969, raised my family  
16 here. My husband's retired, and we're staying here. I

17 would like to see this diversification come to Lea County.

18 Our children have been our greatest export, and  
19 I would like to see something come here so that there will  
20 be opportunities for them to stay.

21 I would like to give you my support and  
22 appreciate everything you've done. Thank you.

23 MR. CAMERON: Thanks, Suzanne. We're going to  
24 go to Ben Kendrick now. Ben?

25 MR. KENDRICK: I'm Ben Kendrick, executive

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Comment  
#010-2

Comment  
#010-2  
(cont.)

1 director for Economic Development Corporation of Lea  
2 County.

3 On behalf of EDC, welcome and thank you for  
4 your tireless efforts with regard to this important  
5 project.

6 From an economic development perspective, we  
7 see the NEF as an economic development anchor, an anchor  
8 that may incentivize or entice suppliers and vendors to  
9 consider locating within the county; An anchor that, while  
10 during construction, will provide some 400 jobs with  
11 annual payroll of \$170 million; an anchor which upon  
12 startup of the operation will provide over 200 jobs with a  
13 \$10 million annual payroll, as well as over \$3,000,000  
14 being paid out as benefits.

15 Certainly I met Jim Ferland also and his staff.  
16 They are dedicated professionals. In fact I sat down with  
17 Mr. Ferland and got a uranium enrichment 101 course and  
18 learned everything I needed to know about uranium  
19 enrichment.

20 The point of that is this: His enthusiasm was  
21 contagious. He believes in the technology. That  
22 technology has been in use for over 30 years now, and I,  
23 too, believe in it.

24 As a proud American I truly believe that this  
25 facility will help our country by enabling us to have our

Comment  
#054-2

Comment  
#054-3

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Comment  
#054-3  
(cont.)

own domestic source of enriched uranium so that we can drive our own nuclear plants.

Thank you. On behalf of EDC we support the LES NEF. Thank you.

MR. CAMERON: Thank you very much, Ben.

We're going to hear from Jennifer Jordan and then Pat McCasland.

MS. JORDAN: Good evening. Thank you for coming.

Comment  
#053-2

I personally am in support of the National Enrichment Facility in Lea County, and I'm just very pleased with the findings in the EIS.

As a representative of New Mexico Junior College, I'm very excited and appreciative of the partnership that we have with LES currently. This semester we were able to reward over \$2400 in scholarships to ten Lea County students -- math, engineering and science students.

So we're very excited for LES and the National Enrichment Facility in Lea County. Thank you.

MR. CAMERON: Thank you, Jennifer.

MR. McCASLAND: My name is Pat McCasland.

I support the facility, and I really appreciate the NRC being here tonight. I think it represents a very significant part of the safety of this facility. I guess

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it's okay to comment on the report. Right?

I just have a few comments, and truly I'm not going to take a lot of time. But I wanted to -- as I read

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#093-2

the report, there was an issue out here at Wallach Concrete, and there seemed to be, maybe not a contradiction, but it was somewhat confusing to me in regard to the water resources on Wallach Concrete.

It's on page 3-4. Line 40 and 41 says, a man-made pond on the adjacent quarry property to the north that is stocked with fish for private catch-and-release use. That's a shallow pond.

Over here on page 3-34, 12 through 18 it reads, on the Wallach Concrete property a shallow surface depression is located at the base of one of the gravel pits.

Water is perennially present in the pit due to a seep at the base of the sand and gravel unit at the top of the Chinle formation clay, and Wallach Concrete occasionally pumps water out of this depression for use on site. However, the amount of water in the depression is insufficient to fully supply to quarry operations.

While the rate of replenishment is not being quantified, it appears to be relatively slow. This shallow zone of groundwater is not observed throughout Wallach's property; therefore it appears to be

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Comment 1  
#093-2  
(cont.)

representative of a local perch water conditions that is not considered to be a aquifer.

I don't know whether -- in the application I think there was a lot more detail than that. In the report those two comments seem to be conflicting. I think it'd be important to resolve that, not just for the veracity of the document, but also to get the facts straight.

Wallach Concrete does maintain a shallow lake out there that has fish in it; it's a recreational thing. But they use the City of Eunice water. They don't have any water wells out there, because the amount of water there is not producible.

I wanted to clear that up just in case somebody had any questions about that in the future. It's not a big deal, but it just seemed important for me to make that comment.

One of the reasons is in the application there's -- the nearest resident is 2.63 miles away. And that just happens to be where I live, along with my wife and 18 laying hens.

But I hope that that comment, insignificant as it may be -- I wanted to make that comment.

Another thing that may be inconsistent with the application is on page 5-5, 30, 31, 32. It's in regard to

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Comment 1  
#093-3  
(cont.)

waste management, inspection of the cylinders.

It says, inspect cylinders of UF-6 prior to placing in filled cylinder on the UBC storage pad and annually inspect UBCs for damage or surface-coating defects. I think the rate of inspection is more frequent than annual.

That's the only comments that I have about this. I appreciate the work that you all have done on this. It's a good document, very informative document.

Comment 10  
#093-5

For the benefit of everyone here, this document does not address the accident scenarios that I'm concerned about. The application does.

My wife and I and everybody lives east of Eunice, under normal operations this says that we'll probably at maximum receive one millirem exposure per year. That's not very much at all.

I think our annual exposure of everything around us is in the neighborhood -- some say 350. Some say 700 if you count radon. But anyway, fairly insignificant.

The application says the worst-case scenario where one of the cylinders is ruptured that we'll receive 18 millirems. Again, that's not real significant. And if you read this, you see that many, many of the aspects of the operation of that facility are -- the acronym is BMP,

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Comment  
#093-3

1 and it's best management practice. That's all through  
2 this document. I just wanted to mention that.

Comment  
#093-4

3 One final question to the NRC: When will the  
4 safety evaluation be conducted and when will it be  
5 available?

6 MR. JOHNSON: The safety evaluation is being  
7 conducted right now, and our scheduled date for completion  
8 is June 2005.

9 MR. CAMERON: Thank you, Mr. McCasland, for  
10 those specific comments. Thanks again for that  
11 information.

12 We're going to go to Brian Norwood and Will  
13 Palmer, then Twilla Parker. Is Brian here?

14 MR. NORWOOD: Thank you. I'm Brian Norwood  
15 with Jal Chamber of Commerce. I'm a past president and a  
16 current member of the board of directors.

17 Since tonight's meeting is about the draft  
18 environmental impact statement, I will address my comments  
19 about that.

20 In reviewing that document -- and as so many  
21 people have said, I think it's a good document -- what  
22 struck me was that, having grown up in this area -- I've  
23 lived in West Texas and Southeastern New Mexico all of my  
24 life, which means I've lived in the middle of the oilfield  
25 all of my life -- what struck me most was that the impacts

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Comment  
#094-1

1 that you point out, which, as you've said, are low to  
2 moderate, are almost exactly the same impacts that we face  
3 on a daily basis from the oil and gas industry.

4 In my mind that says that, yes, there are some  
5 risks and there are some concerns, but we believe we are  
6 addressing them in this document.

7 I think that, given what we live with every  
8 day, what we will see with the enrichment facility is

Comment  
#094-1  
(cont.)

9 nothing new. I think it will certainly be safe and that  
0 Lea County will still be a place to live.

1 Finally, although it's already been said, I do  
2 want to invite you and everybody else that's left in the  
3 room down to Jal sometime.

4 MR. CAMERON: Thanks, Brian,  
5 Mr. Palmer.

6 MR. PALMER: The problem with speaking so late  
7 at a meeting is that inevitably someone else has already  
8 talked about what you were going to say. That's happened,  
9 so I will be repeating myself.

10 My name is Will Palmer, and I'm just a  
11 concerned Lea County citizen. I want to thank you all  
12 from the Nuclear Regulatory Commission for coming down and  
13 holding this hearing also.

Comment  
#095-1

14 I've long been an advocate for conserving the  
15 quality and quantity of our freshwater reserve here in Lea

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Comment  
#095-1  
(cont.)

County.

It pleases me to see in the environmental impact statement that there was going to be minimal impact on the groundwater here in Lea County. That's something that's deeply important to us here in Lea County.

I'm glad to see that. That coupled with the fact that there is such a enormous positive socio-economic impact, that to me it's a no-brainer. And that's why I support the Louisiana Energy Services coming and building a National Enrichment Facility in Eunice, New Mexico 110 percent.

I'm also in the oil and gas industry. While I appreciate the vast amount of resources that lies beneath surface here in Lea County, I also realize that it's a finite resource.

We need to diversify our economy. Having this National Enrichment Facility in Lea County provide the vehicle, we'll be able to maintain and employ our workforce. And that is extremely important, and that's another thing I completely support for building this facility in Lea County. Thanks for your time.

MR. CAMERON: Thanks for those comments. Is Twilla here?

MS. PRESTON: Hello, I'm Twilla Preston, and I'd like to thank you and everyone who's stayed tonight.

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#095-2

Comment  
#096-1

I'd like to first say that I'm very impressed by the breadth of the subjects covered in the EIS and that was a major task for you to undertake. It was very well presented so that all of us could understand the information.

Comment  
#096-2

Also from the results I see that there are both strong benefit and a few possible concerns. The benefits are both local and national. Some of the national benefits include a stronger domestic source for energy by providing a domestic source of input for domestic power plants.

The local benefit, as many people have said, is the diversification of our economy. But I'd also like to point out the decrease in the brain drain. As I learned when I was in Pennsylvania, during my graduate studies of world sociology and regional economics, as well as development, I learned that it's not only necessary to diversify our economy, as we have we have been doing in Lea County, with our prison and other facilities who have been attracted to our community and provided more jobs outside of the oilfield, but we also need to diversify our economic with good high-tech and high-paying jobs, so that our educated youth are able to stay in Lea County with our families and that we don't end up having to leave in order to use our education.

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1 I think that's one great benefit that LES has  
2 provided us, to allow our youth to stay here. By  
3 diversifying our economy and allowing new industries that  
4 allow our educated youth to stay for a position that  
5 allows them to use their education, not just a job for a  
6 paycheck. Thank you.

7 MR. CAMERON: Thank you, Twilla.

8 Scott Smith.

9 MR. SMITH: Good evening. I am chairman-elect  
10 of the Hobbs Chamber of Commerce.

11 I come before you tonight to ask for your  
12 consideration and a show of support for the National  
13 Enrichment Facility.

14 Many of us have reviewed the information,  
15 discussed the benefits and risks of such a facility being

16 located in our area. We've come to the conclusion that  
17 the benefits most definitely outweigh the limited risks  
18 associated with the safe operation and management of the  
19 facility.

20 For more than 20 years a similar facility has  
21 been successfully operated and maintained in Europe  
22 without any emergencies or ill effects to the general  
23 populations around the facilities.

24 The testimony with this history make a  
25 compelling argument for the NRC to continue the speedy

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Comment  
#097-1

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Comment  
#097-1  
(cont.)

1 review process and awarding the licensing of this  
2 facility.

3 The positive economic impact and the quality-  
4 of-life issues are key elements in the development in this  
5 facility.

6 The Eunice and Hobbs areas in general will  
7 benefit directly from the various developmental and  
8 operational components of this facility. Many examples  
9 we've heard tonight: the additional jobs, the additional  
10 pay, just to name a few.

11 But if we had any concerns regarding the safe,  
12 professional management qualifications of the applicant,  
13 we would have addressed those concerns early in the  
14 planning process.

15 We understand the review and exploration  
16 process that you and the various NRC committees and staff  
17 must do to safeguard the handling of the various  
18 components that make up the nuclear energy family, and we  
19 do salute you in this mission.

20 We also want you to know that the importance of  
21 the facility to our communities and in the United States  
22 in safeguarding and protecting us, and fuel rods for  
23 future use are important to us.

24 The National Enrichment Facility management is  
25 a good neighbor and is ready to work with our community

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#097-2

Comment  
#097-3

1 leaders and businesses to continue that positive  
2 relationship.

3 Your being here tonight shows us and the  
4 community that this is a noble cause and that every  
5 positive consideration will be given to the National  
6 Enrichment Facility and their application process.

7 Again, on behalf of Hobbs Chamber of Commerce,  
8 thank you for the opportunity of presenting our comments  
9 to you on this very important issue.

10 MR. CAMERON: Thank you, Mr. Smith.

11 Alberto Caballero and then Mr. Cliff Burch.

12 MR. CABALLERO: Good evening. I as well  
13 support the NEF and would like to read a statement from  
14 Commissioner Joe Calderon.

15 "This letter is in support of Louisiana Energy  
16 Services to obtain a license from the Nuclear Regulatory  
17 Commission to build and operate a National Enrichment  
18 Facility.

19 "I support LES and the city Commissioner,  
20 former mayor and school board member. I had the  
21 opportunity to visit Urenco facility in Almelo, which is  
22 very similar to the facility of this plant in Lea County.

23 "I felt that the questions and concerns our  
24 group had were answered. The highlight of the tour was  
25 when we went to the town, talked to the average person on

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#027-2

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1 the streets of Almelo.

2 "These people answered our questions and were  
3 all very positive in their answers. As an educator, I  
4 keep myself informed about the project. This is  
5 important, because as an elected official it is my duty to  
6 be informed and to be aware of safety issues for those  
7 that I represent.

8 "The citizens put their trust in me, and I in  
9 turn put my trust in LES. I haven't been let down by LES.  
10 They're always open to answers to questions and hear  
11 concerns.

12 "I appreciate the work the NRC did on the draft  
13 environmental impact statement, and I'm pleased with the  
14 results. The National Enrichment Facility will benefit  
15 Lea County, New Mexico, and America. Sincerely,  
16 Commissioner Joe Calderon."

17 MR. CAMERON: Thank you and thank you the  
18 commissioner.

19 Mr. Burch?

20 MR. BURCH: My name is Cliff Burch, and I'm the  
21 assistant superintendent for the Hobbs municipal schools.  
22 I am here on behalf of Stan Rams, who could not be here  
23 tonight.

24 Knowing how supportive he is of this project,  
25 we felt that it was very important that we still allow

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Comment  
#027-3

1 him -- and he made a statement in this letter that I'd  
2 like to read.

Comment  
#021-2

3 "The Hobbs municipal schools is in strong  
4 support of Louisiana Energy Services' application to  
5 obtain a license from the NRC to establish the National  
6 Enrichment Facility in Eunice, New Mexico.

7 "We have reviewed the draft environmental  
8 impact findings and concur that there is little negative  
9 impact upon our community and our schools. In fact, LES  
10 has shown its intent to be a substantial partner in  
11 education of our children and has stepped forward to be a  
12 partner in education in Lea County.

13 "Together we will provide the necessary  
14 workforce to ensure the success of the placement of the  
15 NEF in Lea County.

16 "The draft environmental impact statement is  
17 very positive for the NEF. We are pleased that the report  
18 found only minimal impact. More importantly the NEF will  
19 have a positive socio-economic impact on this region.

20 "The Hobbs municipal schools fully supports the  
21 NEF and asks that you continue expedient progress in  
22 licensing the facility so that we in Lea County can begin  
23 to make the important plans for our future."

24 Thank you.

25 MR. CAMERON: We go to Mr. Don Peterson and

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1 then Mr. Glen Pipes. Mr. Peterson?

2 MR. PETERSON: On behalf of the Los Alamos  
3 Education Group, I'd like to thank both the NRC and the  
4 Lea County citizens for allowing us to speak.

5 The Los Alamos Education Group consists of  
6 about two dozen old, retired men and some gals of  
7 indeterminate age who all are very interested in nuclear  
8 energy and getting facts out properly. We spend a lot of  
9 time refuting exaggerated and erroneous claims and  
10 badgering people who govern letters to the editor.

11 Our principal interest is in solving the energy

Comment  
#046-2

12 dilemma, which is clearly getting worse. And we certainly  
13 agree with the findings of the NRC related to the draft  
14 EIS for the National Enrichment Facility.

15 It's enormously important to reduce imports of  
16 both nuclear fuel and petroleum and to approach as closely  
17 as we can energy independence, with some pie-in-the-sky  
18 notions that we'll talk about later, but which are  
19 irrelevant to this particular enterprise.

Comment  
#046-3

20 We were especially pleased to see the response  
21 on the NRC regarding the claims for radiation hazard,  
22 which we knew to be small and yet we had been reading were  
23 large.

Comment  
#046-4

24 There was an allusion earlier to proliferation  
25 and terrorism that I think everyone has to realize is not

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Comment  
#046-4  
(cont.)

1 a factor in the case of the NEF proposal, because of the  
2 fact that if their license exceeds 3 to 5 percent, it gets  
3 pulled in a hurry.

4 The material, both product and byproduct, are  
5 nowhere near the kinds of concentrations that would be  
6 required. The material that is left is too heavy to steal  
7 and not radioactive enough to be a dirty bomb.

8 Thank you.

9 MR. CAMERON: Thank you, Mr. Peterson. Mr.  
10 Pipes.

11 MR. PIPES: It's getting late, and I'll be  
12 quick. Now I know how all my parishioners feel when I wax  
13 too eloquent from the pulpit.

14 I congratulate you people on the diligent,  
15 professional, fair review that you made of this situation.

16 My dad used to have a saying about people like you. He  
17 would say, You guys really don't have a dog in this fight.  
18 That means that you can be fair, and we're proud of that.

19 I'm a lifelong resident of the Permian Basin.  
20 I fully appreciate all of the risks related to living in  
21 the Permian Basin. Be glad you guys don't live in the  
22 Permian Basin.

23 Every morning when I wake up I smell H<sub>2</sub>S;  
24 Smells so good. I'm a new resident in Eunice, maybe the  
25 newest person to speak. Been here since July 1.

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1 Before I came to Eunice, I said, I need to do  
2 some research before I come to Eunice. And I found out  
3 about LES. And I thought well, what am I going to do?  
4 I'm going to do some research.

5 I found positive things. I found that the  
6 impact that LES is going to make in our community. I  
7 found hope for a decaying community.

8 As a practicing attorney for the past 32 years,  
9 I did a little research on why people are opposed to this  
10 research, why people are opposed to LES. And I found  
11 Brother Cheney's web page. If you guys haven't found  
12 that, you're missing something.

13 What I found on Brother Cheney's web page was  
14 supposition, assumption, half-truth scare tactics: The  
15 terrorists are coming. There's a communist under every  
16 rock. It's a great conspiracy, and you guys are involved  
17 in the conspiracy.

18 And if all of this is based upon -- is Lynn  
19 White still here? -- newspaper editorials -- now, I'm sure  
20 that all of you put a lot of faith in newspaper  
21 editorials, don't you? Well, I don't.

22 It's what in my former life we used to call  
23 hearsay. Hearsay is not admissible in this state or any  
24 state or at the NRC. Now, I found no facts. Facts.  
25 That's a big word, facts.

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Comment  
#065-2

095

1 If you're worried about the world coming to an  
2 end, if you'll come over to the First Baptist Church  
3 Sunday, I will tell you about God's fire insurance. I  
4 will.

5 At First Baptist Church we're planning on an  
6 influx of people coming to this community to make this  
7 community a better place to live. We're preparing for it  
8 today.

9 That's what we're doing, because we believe  
10 that these people have made the right decision, the only  
11 decision there is to make. There are no facts out there  
12 contrary to that -- anybody can make a web page and put  
13 anything on there. Web pages are not regulated. Congress  
14 doesn't regulate those things.

15 I want to say welcome, LES, to Eunice.

16 Thank you, ladies and gentlemen.

17 MR. CAMERON: Who wants to follow Mr. Pipes?

18 (General laughter.)

19 MR. CAMERON: Mr. White, Lynn White. He  
20 mentioned your name; I bet that's a good introduction.  
21 Lynn White and then Lee White.

22 Mr. White.

23 MR. WHITE: Mr. Chairman, members of the Board,  
24 we appreciate you folks coming tonight, and we appreciate  
25 all the hard work you all have done on the EIS.

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1 My name is Lynn White. I've been a resident of  
2 New Mexico all my life. I've been living in Eunice for  
3 the past 25 years.

4 Like a lot of other people here, I went to  
5 Almelo to visit the Urenco plant there and had the same  
6 experience that a lot of other people did, except for one  
7 thing.

8 I interviewed an old couple there in Almelo  
9 that had been living there ever since they were born. And  
10 this guy's about 75 years old, and he had one thing to  
11 say. And as I listen tonight, that thing just keeps  
12 coming back to me. He said, You Americans get way too  
13 uptight about nuclear energy.

14 Thank you.

15 MR. CAMERON: Thank you, Mr. White.  
16 Lee White.

17 MR. WHITE: My name is Lee White. I am a  
18 teacher and program director with Eunice public schools.  
19 I've lived in Eunice for over seven years, and I've lived  
20 in Lea County for over 20 years.

21 My family and I enjoy Eunice and all it has to  
22 offer us as far as stability, support, and security. As a  
23 member of this community, I am concerned about its long-  
24 term sustainability in providing the economic security  
25 that we crave and depend upon.

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1961

Comment  
#065-3Comment  
#098-1Comment  
#098-2

1 That is why I am here to lend my support for  
2 the construction and operation of the uranium enrichment

Comment  
#099-1

3 plant to be built by Louisiana Energy Services. As a  
4 citizen of Eunice, I am pleased to provide a heartily  
5 affirmative vote in favor of all the proposed actions that  
6 this plant has to offer.

7 Not only will our socio-economic status be  
8 enhanced, but also another viable business will partner  
9 themselves within the community to enrich the lives of  
10 all.

11 The benefits that this plant has to offer far  
12 outweigh the negatives. Please do not allow the plant

13 detractors interfere in the steps that will enable us to  
14 reduce the dependence on foreign goods and services.

15 We in this county and those surrounding us have  
16 experienced first-hand what happens when economic  
17 dependence is placed on foreign goods and services.

18 As a community member I encourage all of you in  
19 attendance to ask yourselves how you can become a part in  
20 bringing economic diversity to our region and community.

21 Join me in celebrating and thanking LES in  
22 considering Lea County and Eunice as a new home.

23 MR. CAMERON: Thank you, Mr. White.

24 We're next going to go to Mr. John Good and  
25 then Janice Spence. Mr. Good?

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1 MR. GOOD: Thank you. I didn't want to get up  
2 here and repeat things that have already been said, so  
3 I've been placed towards the last.

4 I'm John Good. I've been in environmental and  
5 safety business in Lea County since 1975, except for a few  
6 years in the teaching business. I've been in the top end  
7 of it and the bottom end of it.

8 I was invited to go to Almelo last year with  
9 Hector Ramirez and Mary Fuller and Lea County. I jumped  
10 at the opportunity. I have a science and technology  
11 background, so I'm a techno geek; I'm fascinated by the  
12 technology of the industry. I'm also a strong proponent  
13 of the nuclear industry.

14 It's critical that this country get our nuclear  
15 energy program back on course. It's pretty much  
16 stagnating the last 20 years. We've lost a lot of time,  
17 and we're going to have to give it a kick-start again.

Comment  
#061-2

18 The nuclear enrichment facility is a key part,  
19 one of the first steps to getting us back on track and  
20 getting our energy problems squared away. Nuclear energy  
21 is going to be a key component of getting our energy  
22 problems solved.

23 As a techno geek when I went to Almelo, I  
24 really kind of gravitated toward the technical people. I  
25 think probably the most meaningful evening I spent was in

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1 an Irish pub downtown in Almelo with the -- you've been  
2 there, too, haven't you?

3 I spent the evening with the project manager  
4 that was in charge of putting in their unit 5, which was  
5 just about to be completed at that time. Mike's from  
6 Manchester, England. I just liked him. Of course, we had  
7 to go to an Irish pub in The Netherlands. I could just  
8 sit and listen to him talk all night just because of his  
9 accent. But what I found out -- I mean, this guy is  
10 sharp.

11 And having been in the technical business and  
12 science business, you know, I can see people that are  
13 really competent pretty quick. I will tell that the  
14 Urenco people that I met, these people are top-notch.  
15 They know their stuff.

16 The facility over there -- I'm quite familiar  
17 with high-tech facilities. This is a facility, as far as  
18 the quality of construction, the technology that goes into  
19 it, the redundancy systems -- there are no shortcuts taken  
20 in these plants.

21 Now, Mike will be the project manager for this  
22 plant. He will be moving his family from Manchester,  
23 England to come over here to put this plant in, and this  
24 guy knows his stuff.

25 I tried to get him to drink enough Guinness

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1 stout that night to tell the classified part. Part of the  
2 technology is classified information under international  
3 agreement.

4 I tried to get enough Guinness to tell me what  
5 it was, but then he told me he'd have to kill me if he  
6 did, so I stopped. He did tell me enough, that there's  
7 only one simple part of it. The science behind the  
8 centrifuge is pretty simple. It's not rocket science.

9 He said, I can tell you what the secret does,  
10 but I can't tell you the secret. What he said was the  
11 secret is that once we turn these centrifuges on and they  
12 turn -- how many rpms do they turn? Thousands, thousands.

13 They turn them on they run from 15 to 20 years  
14 with no maintenance. They never shut them off. That's  
15 the secret.

16 Anyway, these people run one of the best  
17 facilities, the best run, most safety-conscious, best  
18 designed facilities you'll ever see.

19 Thank you.

20 MR. CAMERON: Thank you.

21 Janice Spence.

22 MS. SPENCE: Hello. I'm Janice Spence. I am  
23 president of Jim Spence Cadillac-GMC-Nissan-Mitsubishi, so  
24 you know how important this is to me. We're talking  
25 business, and business is what's important to me.

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Comment  
#061-3



1 I also am in a lot of organizations in town, to  
2 mention real quick. Jim's team in the last nine months, I  
3 think I've seen then all over Hobbs and all over this  
4 county supporting us.

5 I'm chairman of the a lot of committees. We  
6 have a lot of things going on, and every time I look  
7 around, one of them are there. This means a lot to us and  
8 our community. I support -- our community's supported me

9 for so long, I today support LES to build the National  
10 Enrichment Facility outside of Eunice.

11 I'm excited. I'm thinking about business,  
12 people, and selling them cars. Thank you very much.

13 MR. CAMERON: Thank you.

14 Karen Stevens and Joan Tucker.

15 MS. STEVENS: Thank you. I'll be very brief.

16 As president I speak on behalf of the Jal Chamber of  
17 Commerce. Our board has voted unanimously to support this  
18 project.

19 We feel this will have a very positive impact  
20 on the economy of Lea County. The Jal Chamber of Commerce  
21 is looking forward to working the NRC and LES in any way  
22 we can.

23 We appreciate the effort LES has gone to to  
24 make all safety and environmental requirements. Thank  
25 you.

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Comment  
#071-1

J-64

Comment  
#052-2

1 MR. CAMERON: Thank you very much...

2 Joan Tucker?

3 MS. TUCKER: Mr. Chairman, members of the  
4 Commission, another very warm welcome to Lea County. We  
5 are privileged to have you here, and thankful to have you  
6 back.

7 As someone who cares deeply, among many other  
8 someones in this entire region, about the future of this  
9 region, I was very delighted, not surprised, but delighted  
10 to learn the findings of the draft environmental impact  
11 statement.

12 I just want you to know that we're very pleased  
13 and thankful for the environmental findings, for the  
14 recognition of the economic impact that this will have on  
15 our community. It is significant, and we certainly  
16 recognize that. And we do so appreciate the integrity of  
17 your process, the significant time that goes into this.

18 I want to add that we are deeply excited about  
19 the opportunity that this region of the country might have  
20 to help create energy independence, start to work toward  
21 that. That is critically and vitally important to the  
22 future of this country.

23 I want to say to you something that I have just  
24 witnessed and it's been alluded to, but I don't think  
25 mentioned.

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Comment  
#070-1

Comment  
#070-2

1 LES is a great example of corporate citizenship  
 2 at its best. I know whenever this is in operation, if  
 3 that comes to be, that their corporate citizenship will  
 4 increase, but to this point already they have made  
 5 significant investment in this areawide community in  
 6 supporting the things that this area has.

7 We talked about the brain drain, and perhaps  
 8 part of this, or maybe not -- our son, who is an attorney,  
 9 is moving back to this area.

10 So I think that whenever LES does build the  
 11 National Enrichment Facility, in a sense that it does come  
 12 to pass and we trust that it will -- I think you will see  
 13 more of our young people here and other young people come  
 14 here. You know what that means to an area that is  
 15 failing.

16 But we do thank you so very much for your  
 17 deliberations and thoughtful process. Thank you.

18 MR. CAMERON: Thank you for those remarks.

19 DeDe Wallace and Barbara Durham.

20 MS. WALLACE: Hi. I'm DeDe Wallace. I'm from  
 21 Andrews. I'm the director of business development there,  
 22 and I just wanted to thank you for taking the time to do  
 23 this.

24 One of the different aspects that may be hasn't  
 25 been addressed is really how encompassing the scope of

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1 this project is.

2 Some of the things -- the dynamics that have  
 3 taken place just since I've been involved in this  
 4 collaboration and partnerships that are passing state  
 5 boundaries that not have happened before. A tremendous  
 6 impact for Andrews I believe that has resulted from part  
 7 of this process is we're building a business and  
 8 technology center.

9 We do not have a college in Andrews, but we're  
 10 building a business and technology center, and it's going  
 11 to partner with Odessa College and UTPB.

12 We just recently found out within the last two  
 13 weeks that we received a grant of almost \$1 million that's  
 14 going to partner with the College of the Southwest for a  
 15 state-of-the-art distance-learning center. And it's also  
 16 going to provide the centers top staffing positions.

17 This is a federal grant that I believe is  
 18 really significant for this region, in that it's going to  
 19 open some doors to be able to facilitate and ensure that  
 20 we have the ability to take care of a project of this  
 21 scope.

22 I know that you all are probably familiar with  
 23 all the components of the Waste Control Specialists and  
 24 what's going on in that realm. I believe that this part  
 25 of the country and on our state border -- we have a real

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1 opportunity to be able to meet some critical issues and  
2 some critical needs for our country.

3 But I think that it's also incredibly important  
4 that we do the due diligence and that we make sure that  
5 everything is aligned and well-taken care of.

6 On the things that I've been most impressed  
7 with is in dealing with WCS, I've been out there numerous  
8 times, and every time I've been out there, they've been so  
9 willing to open their doors to make sure that we saw every  
10 single aspect of what was going on out there.

11 And again, hearing what the folks have to say  
12 here about being taking over to Almelo and given the  
13 opportunity to speak freely to everyone -- I appreciate  
14 your openness and the frankness.

15 I believe that it is our obligation as citizens  
16 and as community leaders to make sure that we understand  
17 what these projects are going to involve, and for me to be  
18 able to get this report from you all with as much  
19 information as is in there, I was really excited to have  
20 the chance to learn more and to know more about the  
21 project than I've already done research on my own, and  
22 being able to come to the meetings.

23 I just appreciate that you took the time to  
24 make sure the folks that came here and were interested got  
25 a full copy of this. I just think that's a great asset

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1 that we are involved so much in this process.

2 The other thing that I also wanted to point out  
3 is that I've really been intrigued by in dealing with  
4 WCS is the vast amount and the number of folks who -- not  
5 folks, but entities that monitor that facility.

6 I can't even begin to tell you the list -- it's  
7 two pages long -- of the different departments and the  
8 different regulatory commissions that oversee that. And I  
9 thing that's one of the aspects that we were talking about  
10 in developing this plant.

11 It's not only does it stop once the application  
12 is approved, but the number of regulatory issues that are  
13 going to be covered continue to be monitored.

14 I think it's something that's really important  
15 that you all made sure that we're aware of that has been a  
16 real asset to know when all of that happens.

17 So we thank you, and we're really excited about  
18 the opportunity for regional collaboration on this project  
19 and all the things that are going on this region.

20 MR. CAMERON: Thank you, DeDe.

21 Barbara?

22 (No response.)

23 MR. CAMERON: Mr. Cotton? Joe Cotton?

24 (No response.)

25 MR. CAMERON: I have to thank you all for your

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Comment  
#028-3

Comment  
#028-4

Comment  
#028-2

1-66

1 comments and your patience and your perseverance. Are  
2 there any final questions that we can answer before I turn  
3 this over to Scott to close the meeting?

4 One question?

5 MR. CHENEY: Thank you. I'm Lee Cheney. I  
6 just have one final question for the NRC. As you folks  
7 can see at the NRC, LES has spent a lot of money and has  
8 taken a lot of people over to Almelo, The Netherlands, to  
9 show them how good that plant is over there.

10 I would ask the NRC to get at the truth and put  
11 in the draft environmental impact statement a clear  
12 statement of why the Almelo Urenco plant in The  
13 Netherlands had its operating license revoked twice.

14 Thank you.

15 MR. CAMERON: Okay. That was not exactly a  
16 question, but a request. Anything we need to say about  
17 that? Okay,

18 Scott, do you want to close it out for me?

19 MR. FLANDERS: As we started out, we indicated  
20 that your comments were very important to us in finalizing  
21 in the environmental impact statement.

22 We appreciate everyone's comments, the  
23 attendance, the participation, and we'll take your  
24 comments back along with other great comments that were  
25 received and decide how best to either clarify or modify

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1 the document as we complete our licensing review.

2 With that, again, I'd like to thank everyone.

3 Have a good evening. Thank you. Drive carefully.

4 (Whereupon, at 10:20 p.m., the meeting was  
5 adjourned.)

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Comment  
#031-5

167

Group A

**CERTIFICATE**


This is to certify that the attached proceedings before the United States Nuclear Regulatory Commission in the matter of:

Name of Proceeding: Louisiana Energy Services  
Public Meeting

Docket Number: n/a

Location: Eunice, NM

were held as herein appears, and that this is the original transcript thereof for the file of the United States Nuclear Regulatory Commission taken by me and, thereafter reduced to typewriting by me or under the direction of the court reporting company, and that the transcript is a true and accurate record of the foregoing proceedings.

  
Suddy Peer  
Official Reporter  
Neal R. Gross & Co., Inc.

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December 16, 2004

Chairman Nils Diaz  
US Nuclear Regulatory  
Office of Public Affairs  
Washington, D.C. 20555

Dear Chairman Diaz:

This letter is in support of Louisiana Energy Services (LES) to obtain a license from the Nuclear Regulatory Commission. This facility, to be built outside of Eunice, New Mexico, will greatly impact Eunice and the surrounding region.

Comment  
#A-1

There is much excitement in the preparations to facilitate LES. The Draft Environmental Impact Statement helped calm nerves by showing how little of an impact this facility will have concerning environmental justice and other important issues. We are excited to welcome this plant into Lea County. The NEF will not only positively impact us, it will also aid our nation in becoming independent from foreign countries for our energy needs.

We are hoping that this process will be swift so we can welcome LES into our community and help our nation where it is needed.

Comment  
#A-2

Group B

December 16, 2004

Chairman Nils Diaz  
US Nuclear Regulatory  
Office of Public Affairs  
Washington, D.C. 20555

Dear Chairman Diaz:

I am writing to show my support for the National Enrichment Facility. I appreciate the opportunity we in Lea County have to welcome a new energy industry into this region.

Comment  
#B-1

After reviewing the Draft Environmental Impact Statement, I am especially glad that the EIS found that the entire NEF process from construction, operation and decommissioning will have only a small impact on ecological resources. I am also glad that land use and air quality will not be adversely affected. That the NEF will bring a positive socioeconomic impact, particularly with respect to jobs and revenue added to the local economy, is cause to celebrate!

According to the Draft EIS, "The NRC staff recommends that, unless safety issues mandate otherwise, the proposed license be issued to LES." I completely agree. The LES has shown itself to be a good corporate citizen by contributing to local organizations that benefit the people of Lea County as well as always keeping us informed and educated about the process. The Draft EIS just confirms that the NEF really is a safe and environmentally sound project.

I urge the NRC to grant LES their license so that we in Lea County can continue planning our future with the NEF in it.

69-1

Group C

October 14, 2004

Chairman Nils Diaz  
US Nuclear Regulatory  
Office of Public Affairs  
Washington, D.C. 208555

Dear Chairman Diaz:

This letter is to show my support for the National Enrichment Facility (NEF) that is to be built near Eunice, New Mexico. It is a facility deeply needed in Lea County.

Comment  
#C-1

The Draft Environmental Impact Statement (EIS) was very positive and uplifting. It shows how this facility will have a small impact and also how it will aid growth in surrounding areas. Louisiana Energy Services (LES) is a wonderful part of our community. Their contributions are widely appreciated and have not gone unnoticed by the citizens.

I am impressed to know how open this process has been. LES has been more than forthcoming with any details related to the building, operation and safety of this facility. Minds are put at ease to know how closely the Nuclear Regulatory Commission examines all aspects of this project. And the EIS is very positive for the NEF.

I look forward to having NEF in Lea County and encourage you to swiftly approve their license application.

Comment  
#C-2

Group D

December 16, 2004

Chairman Nils Diaz  
US Nuclear Regulatory  
Office of Public Affairs  
Washington, D.C. 20555

Dear Chairman Diaz:

I am writing to express my continued support of the National Enrichment Facility (NEF)

*Comment  
#D-1*

The Draft Environmental Impact Statement (EIS) was very positive for the NEF. I am especially glad that the EIS found that the entire NEF process from construction, operation and decommissioning will have only a small impact on ecological resources. I am also glad that land use and air quality will not be adversely affected.

The NEF is a great opportunity for Lea County and the United States. The Draft EIS concluded that the NEF would help to provide energy independence for America as an additional, reliable, and economical domestic source of enrichment services. According to the EIS, "This facility would contribute to the attainment of national energy security policy objectives by providing an additional source of low-enriched uranium."

This information combined with the fact that the NEF has been found to be safe and environmentally sound should lead to only one conclusion. The NEF should be built and the site outside of Eunice, New Mexico is the perfect place to build it.

We in Lea County are eagerly anticipating the National Enrichment Facility and I encourage the NRC to grant them their license quickly.

*Comment  
#D-2*

J-70

Group E

December 16, 2004

Chairman Nils Diaz  
US Nuclear Regulatory  
Office of Public Affairs  
Washington, D.C. 20555

Dear Chairman Diaz:

I am writing to offer my continued support of the National Enrichment Facility (NEF) project that is to be built outside of Eunice, New Mexico.

*Comment  
#E-1*

Eunice has embraced the NEF for the simple reason that we know and understand the benefits of this new industry. Many people will be offered new jobs and the payroll will come back to help the economy of our town.

The Draft Environmental Impact Statement (EIS) only helped to support our excitement at having the NEF here. Louisiana Energy Services has promised that the NEF will be a safe and environmentally sound facility and the Draft EIS backs them up on their promises completely!

I look forward to welcoming the NEF as a permanent part of our community and encourage you to approve their license application quickly.

*Comment  
#E-2*

Group F

Group G

December 16, 2004

Chairman Nils Diaz  
US Nuclear Regulatory  
Office of Public Affairs  
Washington, D.C. 20555

Dear Chairman Diaz:

I am writing to express my continued support of the planned National Enrichment Facility (NEF). Lea County needs to diversify our economy and the NEF is a welcome opportunity to do that.

*Comment #F-1*

I am pleased that the recently issued Draft Environmental Impact Statement agreed with what Louisiana Energy Services has been telling the citizens of Lea County. This project really is safe and environmentally sound.

It was nice to see how much preparation goes into building a site and how carefully the Nuclear Regulatory Commission reviews all aspects of the project. That the NEF will have a small impact on such things as historical and cultural resources and land use and air quality makes it easy to extend our continued support.

I look forward to welcoming the NEF as a permanent part of our community and encourage you to approve their license application quickly.

*Comment #F-2*

J-71

December 16, 2004

Chairman Nils Diaz  
US Nuclear Regulatory  
Office of Public Affairs  
Washington, D.C. 20555

Dear Chairman Diaz:

This letter is written in support of Louisiana Energy Services license application to build and operate the National Enrichment Facility (NEF) outside of Eunice, New Mexico.

*Comment #G-1*

Having lived in southeastern New Mexico all my life, I can appreciate the opportunity we in Lea County have to welcome a new energy industry into our community. The NEF will give Lea County welcome relief from our overdependence on the oil and gas industries. Our community will benefit both from the new jobs and from the money the NEF will spend locally.

The Draft Environmental Impact Statement said exactly what I thought it would; that the NEF is both safe and environmentally sound.

I encourage the NRC to grant LES their license to run the National Enrichment Facility. We in Lea County are ready to welcome our new neighbor!



December 16, 2004

Group H

Chairman Nils Diaz  
US Nuclear Regulatory  
Office of Public Affairs  
Washington, D.C. 20555

Dear Chairman Diaz:

I am writing to express my continued support of the planned National Enrichment Facility (NEF).

*Comment  
#11-1*

I have recently had the opportunity to review the Draft Environmental Impact Statement (EIS) and am pleased that the report agreed with what Louisiana Energy Services has been telling the citizens of Lea County. This project really is safe and environmentally sound.

I also read in the Draft EIS that the NEF will help to provide energy independence for America. As an American, I am concerned about our dependence upon foreign countries for our energy needs and as a citizen of Lea County, I am glad we have been chosen to help this cause.

I look forward to welcoming the NEF as a permanent part of our community and encourage you to approve their license application quickly.

*Comment  
#11-2*

Thank you for such a thorough and informative Draft EIS. I look forward to reviewing the final one.

J-72

Group I

December 17, 2004

Chairman Nils Diaz  
US Nuclear Regulatory  
Office of Public Affairs  
Washington, D.C. 20555

Dear Chairman Diaz:

This letter is in support of Louisiana Energy Services (LES) to obtain a license from the NRC to establish the National Enrichment Facility (NEF) near Eunice, NM.

*Comment  
#1-1*

It was nice to see how much preparation goes into building a site and how carefully the NRC reviews all aspects of impact. That the NEF will have a small impact on such things as historical and cultural resources and land use and air quality makes it easy to extend our continued support.

The Draft EIS was very positive for the NEF. I am glad that the report found that the NEF will have only minimal environmental impact on this region. That the Draft EIS found that the NEF will have a positive socioeconomic impact on Lea County encourages our continued support.

LES has shown itself to be a good corporate citizen by contributing to local organizations that benefit the people of Lea County as well as always keeping us informed and educated about the process. The Draft EIS just confirms that the NEF really is a safe and environmentally sound project.

I fully support the NEF and hope that their licensing process continues to go smoothly so that we in Lea County can begin making plans for a future that includes the NEF.

*Comment  
#1-2*

December 16, 2004

Group J

Chairman Nils Diaz  
US Nuclear Regulatory  
Office of Public Affairs  
Washington, D.C. 20555

Dear Chairman Diaz:

This letter is in support of Louisiana Energy Services (LES) to obtain a license from the Nuclear Regulatory Commission to establish the National Enrichment Facility in Eunice, NM. *Comment #J-1*

The Draft Environmental Impact Statement (EIS) was very positive for the NEF. I am especially glad that the EIS found the NEF will have only a small impact on radiological exposures with levels significantly below regulatory limits.

LES has shown itself to be a good corporate citizen by contributing to local organizations that benefit the people of Lea County as well as always keeping us informed and educated about the process. The Draft EIS just confirms that the NEF really is a safe and environmentally sound project.

I fully support the NEF and hope that their licensing process continues to go smoothly so that we in Lea County can begin making plans for a future that includes the NEF. *Comment #J-2*

October 14, 2004

Group K

Chairman Nils Diaz  
US Nuclear Regulatory  
Office of Public Affairs  
Washington, D.C. 20555

Dear Chairman Diaz:

I am writing to express my continued support of the planned National Enrichment Facility (NEF). This project and the many benefits it will bring to Lea County are very exciting. *Comment #K-1*

The Draft Environmental Impact Statement (EIS) was very positive for the NEF. I am glad that the NEF will have no large negative impact on our local resources. I am also very excited about the boost to our local economy that the NEF will bring. We certainly need a more diversified economy and new jobs. The NEF will help achieve both of these.

I look forward to welcoming NEF as a permanent part of our community and encourage you to approve their license application quickly. *Comment #K-2*

After reviewing the Draft EIS, I firmly believe that the NEF will be both safe and environmentally sound to the citizens of Lea County.

Group L

January 6, 2005

Anna Bradford

Anna Bradford:

Chief, Rules and Directives Branch  
U.S. Nuclear Regulatory Commission  
Mail Stop T6-D59  
Washington, D.C. 20555-0001

Re: Comments on the Draft Environmental Impact Statement for the Proposed National Enrichment Facility in Lea County, New Mexico (NUREG-1790); Docket No. 70-3103

To Whom It May Concern:

The NRC has determined in its Draft EIS that the environmental impacts from building and operating a uranium enrichment facility on the site would be "small" to "moderate," and has recommended that the proposed license be issued to LES (Draft EIS, § 2.4).

However, it is my view that the Draft EIS fails to consider important factors that may contribute to substantial environmental impacts not adequately represented in this review.

Generally, the Draft EIS does not fully meet the requirement of the National Environmental Policy Act (NEPA) that each federal agency must consider in an environmental impact statement "the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity" (42 U.S.C. § 4332(c)(iv)). The cumulative hazards and dangers of the nuclear fuel cycle, nuclear power generation, and nuclear waste management weigh heavily and deserve a thorough accounting in the EIS, which is lacking in this draft version.

Specifically, the Draft EIS is insufficient in the following areas:

**SITE SELECTION:**

The description of LES's site selection process is misleading in that it only mentions certain objective criteria of respective sites and neglects the political situation that led to the selection of the site in New Mexico. It has been reported that Sen. Pete Domenici of New Mexico "wooed" the company to his home state when it was having trouble meeting

zoning requirements established at its chosen site in Tennessee. Officials at the federal, state, and local level in New Mexico were, unlike in Tennessee, generally favorable to the project, yet nothing of this is mentioned in the Draft EIS; rather, the process used to select the site is described as a "multi-attribute-utility-analysis methodology" (page 2-35, line 5).

Comment #L-2 (cont.)

Seven candidate sites were eliminated because of the risk of an earthquake (Draft EIS, Table 2-7); yet the Lea County site lies in a seismically-active area near, possibly over, a geologic fault. The site in Demopolis, Alabama is said to have been eliminated because a "historic preservation assessment" may have been required (page 2-38, line 16), but seven archaeological sites have been identified at the Lea County site. The "costly relocation" of high-voltage transmission lines is cited as a reason for lowering Bellefonte's rating, but at the Lea County site is a high-pressure carbon-dioxide (CO2) gas line that would have to be relocated before the site is developed (page 2-9). Considering this, why is the Bellefonte site considered to be inferior to the Lea County site?

Comment #L-3

Comment #L-4

**NEED FOR THE FACILITY:**

The Draft EIS states that "nuclear-generating capacity within the United States is expected to increase, causing an increase in demand for low-enriched uranium" (page 2-23, lines 46-47). Given the facts that (1) no new nuclear power reactor has been ordered in a quarter of a century; (2) no company has received a license to build a new reactor; (3) no company has expounded an explicit plan to build a new nuclear reactor; and (4) Wall Street does not seem to have an interest in funding a new generation of nuclear reactors, even with government support, how does the NRC justify the claim that nuclear-generating capacity is expected to increase in the United States?

Comment #L-5

**SOCIO-ECONOMIC IMPACT:**

The NRC judges the socio-economic impact of the proposed NEF to be "moderate," citing benefits to Lea County and the surrounding region in the form of jobs and taxes (Draft EIS, Table 2-8, page 2-52; see also § 4.2.9.7). However, per the terms of the agreement between LES and Lea County on the \$1.8 billion in industrial revenue bonds the county offered to finance the project, LES would not have to pay any property taxes for the duration of the operational life of the NEF—roughly 30 years—and it may be exempt from other taxes as well. According to the Economic Development Corporation of Lea County, this kind of property tax exemption could be worth \$3 million over 30 years for a \$10 million project. Considering that construction of the NEF is expected to cost \$1.2 billion (Draft EIS, Table 2-8, page 2-52), what does the NRC expect the total property tax exemption for the NEF to be? Moreover, the percentage of persons in the region employed in the "Professional, Scientific, Management, Administration, and Waste Management" fields—presumably applicable to jobs that would be created at the NEF—is less than half the averages for New Mexico and Texas (Draft EIS, Table 3-15, line 27).

Comment #L-6

Comment #L-7

**"ENVIRONMENTAL JUSTICE":**

The NRC staff judges that the impact of the NEF in the area of "environmental justice" will be "small." Yet the data are skewed by comparing the minority and low-income population percentages of the area to state averages, rather than to national averages. In fact, Hispanics make up 42.1 percent of the population of New Mexico—the highest

Comment #L-8

J-74

percentage of any state—and 39.6 percent of the population of Lea County, but only 12.5 percent of the U.S. population at-large.

Comment  
#L-8 (cont.)

**WATER RESOURCES:**

In the Draft EIS, the NRC observes that the water requirements of the NEF are well within the capacity of the Eunice and Hobbs municipal water systems, but this assessment totally neglects the severe long-term water shortage problem of Lea County, as documented in the Lea County Regional Water Plan. According to water plan, groundwater in the county is being withdrawn at a greater rate than it is being recharged. The report projects a doubling of water usage by 2040 and warns that "there is physically not enough water in the Basin to maintain an annual diversion of this magnitude."

Comment  
#L-9

**WATER QUALITY:**

The site of the proposed NEF lies in the vicinity of several geologic faults, and earthquakes frequently occur around the designated NEF site, including one with a magnitude of 5.0 in 1992. Despite this, the NRC has not conducted an investigation of the possible effects of earthquakes on groundwater flow, nor has it considered the possibility of contaminant infiltration into groundwater due to such seismic activity. Furthermore, the Draft EIS appears to indicate an assumption by the NRC that the liners employed to impound the contents of the NEF's wastewater basins will retain their integrity for the duration of the facility's operation, since there is no estimate of the likelihood of liner corruption and subsequent leakage of contaminated liquid effluents from the plant. How long does the NRC assume that the liners will contain the waste, and on what basis is this assumption made?

Comment  
#L-10

**CLASSIFICATION OF DEPLETED URANIUM:**

On page 2-27, the NRC states that "[f]or the purpose of this Draft EIS, the NRC considers the DUF6 generated by the proposed NEF to be a Class A low-level radioactive waste as defined in 10 CFR § 61.55(a)(6)." Why is it assumed in the Draft EIS that DUF6 is low-level waste when (1) LES itself has not yet determined whether the DUF6 it produces will be considered a waste or a resource, and (2) the NRC has not finally determined the proper waste classification of depleted uranium?

Comment  
#L-11

**DISPOSAL OF DEPLETED URANIUM:**

The Draft EIS lists as a second plausible disposition strategy a scenario in which LES would pay the U.S. Department of Energy (DOE) for conversion and disposal of its waste under Section 3113 of the 1998 United States Enrichment Privatization Act which states that the DOE "shall accept for disposal low-level radioactive waste, including depleted uranium if it were ultimately determined to be low-level waste..." (Draft EIS, page 2-31; the law is codified as 42 U.S.C. § 2297h-11). But the NRC has yet to make a final determination on the waste classification of depleted uranium; this being the case, transfer to the DOE cannot be considered a plausible option for disposal of DUF6.

Comment  
#L-12

**ATMOSPHERIC EMISSIONS:**

The Draft EIS notes that the NEF would annually discharge 440 cubic meters of helium, 190 cubic meters of argon, 53 cubic meters of nitrogen, 610 liters of methylene chloride, 40 liters of ethanol, 0.8 metric tons of volatile organic compounds, 0.5 metric tons of carbon monoxide, and 5.0 metric tons of nitrogen dioxide (page 2-23, lines 4-13). What mitigation

Comment  
#L-13

measures are in place to limit these emissions, and what negative environmental and public health impacts would their dispersal into the atmosphere contribute to?

Comment  
#L-13 (cont.)

**ACCIDENTS:**

The Draft EIS describes the most significant accident scenario at the proposed NEF to be an accidental release of uranium hexafluoride (UF6). NRC staff judges that the risk of such exposures would increase if the winds were from the south at the time of the accident, sending the plume of UF6 towards Hobbs and Lovington, New Mexico (Draft EIS, page 4-25, lines 21-30). The local wind patterns documented in Section 3.5.2.4 and represented in Figures 3-8 and 3-10 show that southerly winds prevail in the area; thus, the likelihood of this worst-case scenario, which is contingent upon winds from the south, is increased.

Comment  
#L-14

**CULTURAL RESOURCES:**

There are seven archaeological sites within the proposed project area, each of which has been determined to be eligible for listing in the National Register of Historic Places. Considering this, how does NRC deem the NEF's impact on cultural resources as "small"?

Comment  
#L-15

**CONCLUSION:**

In the areas described above, the NRC's Draft EIS for the National Enrichment Facility (NEF) falls short of a complete evaluation of the environmental impacts of the proposed facility as required by the National Environmental Policy Act. Until the above questions and criticisms are adequately addressed and resolved, the NRC staff's recommendation that the license for the NEF be approved is premature.

Comment  
#L-16

Please enter these comments into the official record on this proceeding.

Group M

January 7, 2005

By email to: nrcrop@nrc.gov

Chief, Rules and Directives Branch  
U.S. Nuclear Regulatory Commission  
Mail Stop T6-D59  
Washington, D.C. 20555-0001

Re: Environmental Impact Statement for the Proposed National Enrichment Facility in Lea County, New Mexico: Draft Report for Comment, NUREG-1790, Docket Number 70-3103

Dear Chief,

The undersigned organizations submit the following general and specific comments regarding the Environmental Impact Statement for the Proposed National Enrichment Facility in Lea County, New Mexico: Draft Report for Comment, NUREG-1790, published September 2004, Docket Number 70-3103.

The Draft Environmental Impact Statement (DEIS) indicates that impacts from the National Enrichment Facility (NEF) will be small to moderate. Nevertheless, we know from experience at similar uranium enrichment facilities nationwide that this process can be extremely damaging, not only to surrounding communities but also to worker and public health and safety. Many of these effects cannot be estimated in the context of a DEIS. Therefore, we recommend that the Nuclear Regulatory Commission (NRC) pursue the "No Action Alternative" presented in the document.

Furthermore, it is our belief that there was a clear conflict of interest in the preparation of the DEIS and that the document should be rejected. Section 1506.5(c) of the National Environmental Policy Act (NEPA) specifies

"...a consulting firm preparing an EIS must execute a disclosure statement [and] does not define financial or other interest in the outcome of the project.<sup>3</sup> The Council interprets this term broadly to cover any known benefits other than general enhancement of professional reputation. This includes any financial benefit such as a promise of future construction or design work on the project, as well as indirect benefits the consultant is aware of (e.g., if the project would aid proposals sponsored by the firm's other clients). For example, completion of a highway project may encourage construction of a shopping center or industrial park from which the consultant stands to benefit. If a consulting firm is aware that it has such an interest in the decision on the proposal, it should be disqualified from preparing the EIS, to preserve the objectivity and integrity of the NEPA process.

<sup>3</sup>When a consulting firm has been involved in developing initial data and plans for the project, but does not have any financial or other interest in the outcome of the decision, it need not be disqualified from preparing the EIS. However, a disclosure statement in the draft EIS should clearly state

Comment #M-1

Comment #M-2

the scope and extent of the firm's prior involvement to expose any potential conflicts of interest that may exist.<sup>4</sup> (<http://ceq.eh.doe.gov/nepa/regs/40/11-19.htm>).

We believe that there was a conflict of interest in the preparation of this document as it was prepared by a private firm called Advanced Technologies and Laboratories International (ATLI). ATLI lists among its clients Westinghouse and Oak Ridge National Laboratories, at which British Nuclear Fuels Limited and Westinghouse are contractors, and others.

Westinghouse and British Nuclear Fuels Limited are members of the Louisiana Energy Services (LES) consortium, which has proposed the uranium enrichment facility for Lea County, NM. As such, ATLI would benefit from the licensure of the facility through its various associations with the organizations proposing the facility. Therefore, ATLI should not have been contracted by NRC to prepare the DEIS without a disclosure statement as required under NEPA. As no disclosure statement was released, we recommend that the DEIS be rejected and rewritten by a new organization, absent of conflict of interest issues.

Comment #M-2 (cont.)

Moreover, Paul Abramson, one of the associate chief administrative judges on the Atomic Safety and Licensing Board (ASLB) of the NRC, which will ultimately decide whether to license the uranium enrichment facility, is a former partner of the Winston and Strawn law firm of Washington, D.C. Winston and Strawn is now the legal representative for the LES consortium. We believe that, due to his prior associations with Winston and Strawn, Mr. Abramson should be disqualified from deciding whether to issue an operating license to LES.

Comment #M-3

As a result, we find the DEIS to be inadequate, incomplete and lacking disclosure. Therefore, we make the following specific comments on the DEIS with the caveat that we are not aware of specific examples of conflicting interests within the document, and many of our concerns may be a result of conflicting interests by ATLI.

We submit the following comments specific to the content of the DEIS and request that these issues be thoroughly addressed in the final EIS:

1.) The statement of Purpose and Need for the facility, found in the Executive Summary of the DEIS, states that "only about 15 and 14 percent of the enrichment services that were purchased by U.S. nuclear reactors in 2002 and 2003, respectively, were provided by enrichment plants located in the [U.S.]" (pg. xix).

Later, the DEIS states, "[United States Enrichment Corporation, which operates uranium enrichment facilities in Portsmouth, Ohio and Paducah, Kentucky] provides approximately 56 percent of the U.S. enrichment market needs." (pg. 1-4). This is an obvious discrepancy. We request that NRC not only clarify the amount of domestically produced enriched uranium currently used, but also indicate the specific foreign sources of the enriched uranium on which the U.S. currently relies.

Comment #M-4

2.) The DEIS states, "The NRC staff reviewed the site selection process and determined that none of the candidate sites were obviously superior to the LES preferred site in Lea County, New Mexico, therefore no other site was selected for further analysis." (pg. xx)

Comment #M-5

This statement is patently false, as it is well known that two sites were investigated prior to the selection of Lea County, New Mexico. The NRC ASLB charged LES with environmental racism during the license application process for a similar facility in Louisiana. LES later withdrew its license application. Further, LES withdrew its interest in proposing a similar facility for Hartsville, Tennessee after public officials in the area refused to allow it to locate there. (<http://www.nirs.org>). In the interest of full disclosure and providing a clear picture of the history of LES and NEF, we request that the NRC include this information in the EIS.

Comment  
#M-5 (cont.)

3.) Please indicate in the sidebar entitled, "Determination of the Significance of Potential Environmental Impacts" on pg. xx, the number of Latent Cancer Fatalities (LCFs) that are considered "small," "moderate," or "large." On pg. xxiii, the DEIS indicates that there will be two LCFs over the lifetime of the NEF as a result of vehicle emissions during shipment of materials to and from the NEF. Although NRC considers this a "small" impact, others may disagree. Please explain how this determination is made, providing methodology used.

Comment  
#M-6

4.) Please correct the spelling of "predominantly" on page xxii.

Comment  
#M-7

5.) Assuming peak production at the NEF during the entire projected 30-year lifetime of the facility, a generous estimate, the NEF would produce 3,270,000 separative work units (SWUs) of enriched uranium per year. (pg. 2-6). This represents an average of approximately 24% of the total enriched uranium required for the U.S. as estimated by the Energy Information Agency. (pg. 1-4). This number will be far smaller considering that NEF will reach peak operating capacity for only 14 years, from 2013 to 2027. This means that, according to pg. 1-4, more than 20% of U.S. enriched uranium needs will continue to be fulfilled by foreign sources for at least 16 years during the lifetime of the facility.

Comment  
#M-8

Given this information, please explain how NEF is anticipated to increase U.S. independence from foreign enriched uranium sources. Please provide a table showing the total estimated amount of enriched uranium that will be required for U.S. energy production by year as compared to the amount that will be produced by NEF.

The DEIS states that nuclear generating capacity is going to increase by 2020, which would further dilute the effect that the NEF will have on creating U.S. energy independence. (pg. 4-73). What is the total yearly percentage of U.S. enriched uranium supply that the NEF is expected to produce?

Comment  
#M-9

6.) Please define the phrases used on pg. 1-5, "short-term uses of the environment" and "long-term productivity." If 30 years, the operating lifetime of the facility, is considered "long-term," then should many of the environmental effects of the NEF, particularly the constant emissions of uranium to the air and water, also be considered "long-term" and the impacts thereof considered as such? Please identify points in the document in which these are being considered.

Comment  
#M-10

7.) During the EIS scoping process, at a public meeting conducted in Eunice, New Mexico on March 4, 2004, commentator Pat McCasland asked whether NRC would provide a full-time inspector for the facility. Tim Johnson, of

Comment  
#M-11

NRC, responded that there would be inspectors during construction and periodically during operations. (Official Transcript of Proceedings, Nuclear Regulatory Commission, Louisiana Energy Services National Enrichment Facility Public Meeting on the EIS, Docket Number 71-3103, pg. 125, lines 8-13).

Comment  
#M-11 (cont.)

The DEIS fails to outline NRC's proposed inspection schedules and procedures, saying only, "The NRC is responsible for regulating the activities performed within the proposed NEF through its licensing review process and subsequent inspection program." (1-19). NRC's inspection program must be outlined in either the final EIS or the Safety Evaluation Report (SER). If it is outlined in the SER, we request that the public be allowed to review and comment on the SER in order to make certain that NRC is adequately ensuring the health and safety of community members through proper and timely inspections.

8.) The DEIS indicates that the NEF will include a Visitor Center near the boundary of the facility. (pg. 2-4). Do dose estimates in the DEIS include estimated exposure to workers at the Visitor Center and community members that use the Visitor Center? If so, please specify more clearly which exposure estimates are specifically related to the Visitor Center. If not, please include dose estimates for workers at or community members using the Visitor Center and clearly indicate that those estimates relate to the Visitor Center.

Comment  
#M-12

9.) The DEIS indicates that the NEF will be constructed on 611,000 cubic meters of fill. (pg. 2-8). Structures built on fill can occasionally experience settling and structural movement that may compromise the integrity of the facility.

We understand that with regard to the earthwork required to construct the facility, some portion of the facility would be built on fill (embankment) and some on cut (excavation) areas. This is not uncommon and can be accomplished with good results as long as the material is adequate for the intended purposes (generally clays are bad and silty sands, sand and gravelly materials are good).

Comment  
#M-13

It is also important that earthwork operations are monitored closely to ensure that the embankments are placed and compacted properly. We understand that these large construction projects where many contractors are working simultaneously and usually quickly because of deadlines, oversight is not what it should be and problems due to settlement from improper compaction appear following construction.

We request that NRC include its plans for inspection during construction, including a requirement for inspecting the earthwork operations required to construct the NEF, in order to ensure the structural stability of the facility. Furthermore, we request that any contractor for this project will perform the greatest oversight possible.

10.) The DEIS states that approximately 25 miles of pipeline would be constructed in order to provide the NEF with potable water. (pg. 2-14). The environmental impacts of the construction of this pipeline should be included in the final EIS.

Comment  
#M-14

11.) LES argued at the March 4, 2004 EIS scoping meeting in Eunice, New

Comment  
#M15

Mexico that impacts on the Eunice and Hobbs municipal water systems would be minimal given that the facility would use an average 72 acre-feet of water per year. This argument, while technically correct, is disingenuous.

The DEIS states, the average and peak potable water requirements for operation of the proposed NEF would be approximately 63,423 gallons per day (72 acre-feet) average and 539,000 gallons per day at peak operation. (pg. 2-14). Therefore, during 14 years of peak operation, from 2013 to 2027, NEF will be using nearly 604 acre-feet of water per year.

Although the DEIS estimates that the impacts of the NEF on the Eunice and Hobbs water supplies will be small, the DEIS does not clarify if this determination is made according to the 72 acre-feet per year average estimate, or 604 acre-feet per year peak estimate. The final EIS must include a detailed, yearly water usage plan for the NEF, incorporating the impacts of the NEF according to its actual usage and future water demand and availability.

Comment  
#M-15 (cont.)

12.) The DEIS indicates that the NEF will require 30 megawatts of electricity to be supplied through two new synchronized 115-kilovolt overhead transmission lines. These lines would have to be constructed, and would require that two new independent substations be constructed by Xcel Energy, which supplies the area with energy. Additional power-support structures would be installed along the highway near the NEF. (pg. 2-14). Please include any environmental impacts expected as a result of this construction.

Comment  
#M-16

13.) The DEIS states, "Waste treatment systems, including treatment ponds or lagoons designed to meet requirements of the Clean Water Act (other than cooling ponds as defined in 40 CFR § 423.11 (m) which also meet the criteria of this definition), are not surface waters of the State, unless they were originally created in surface waters of the State or resulted in the impoundment of surface waters of the State. (NMWQCC, 2002)." (pg. 2-21).

Comment  
#M-17

Does this mean that the State of New Mexico does not have authority over permitting and/or regulating the waste treatment systems, treatment ponds or lagoons associated with the NEF? If not, who will have such authority?

14.) The DEIS mentions several times the possibility of locating a private depleted uranium hexafluoride (DUF6) conversion facility near the NEF. (pg. 2-30). We believe that this option is far too speculative to be considered an option for conversion. Further, such a requirement would not fulfill the requirements of the State of New Mexico, as the waste from the NEF would remain in New Mexico, albeit moved offsite, which would be contrary to assurances to Governor Bill Richardson by LES. This proposal is not a sufficient conversion option and should not be considered further.

Comment  
#M-18

15.) In its discussion of waste conversion and disposal options (pp. 2-27 - 2-33), the DEIS mentions Envirocare in Utah and U.S. Ecology in Richland, Washington as two potential sites to which to ship the triuranium octaoxide (U3O8) produced as a result of conversion of DUF6 at the potential conversion facility at ConvergDyne in Metropolis, Illinois.

Comment  
#M-19

The DEIS does not indicate that negotiations between LES and any of these facilities are underway. Without the consent and participation of these facilities, there is no viable solution to the waste problem that NEF

presents. The State of New Mexico, and the citizens it represents, has asked multiple times that an NRC operating license not be granted to LES unless a viable waste solution is presented.

LES must provide NRC a documented waste disposal solution otherwise all waste disposal plans included in the DEIS are speculative and do not meet NRC requirements. A thorough, complete and feasible waste disposal plan must be included in the final EIS, including all negotiations between LES and the facilities that will be converting and disposing of the large quantities of waste.

Comment  
#M-19 (cont.)

16.) In its discussion of waste disposal options, the DEIS says repeatedly that, "the NEF would not be able to ship depleted uranium directly to<sup>2</sup> Barnwell, SC, Nevada Test Site or Waste Control Specialists (WCS). (pg. 2-32, emphasis added). Are there instances in which such waste could be shipped indirectly to Barnwell, Nevada Test Site, or WCS?

Comment  
#M-20

For example, if the Department of Energy (DOE) were to take ownership of this waste, could it be shipped to the Nevada Test Site? Is NRC obliquely referring to the Congressional initiative proposed by Senator Pete Domenici that would require the DOE to take ownership of the depleted uranium waste generated by the NEF? If this is the case, we request that NRC be more explicit in its discussion of these waste disposition options and thoroughly outline this proposal by Senator Domenici and analyze its environmental impacts.

17.) The DEIS states that sites under consideration by LES were disqualified if they were in proximity to operating nuclear power plants because they would require additional security measures. (pg. 2-35). How did this rationale not disqualify the Lea County, New Mexico site given that it is approximately 60 miles away from the Waste Isolation Pilot Plant (WIPP), which is an operating nuclear waste repository for plutonium contaminated waste that may require additional security measures as well?

Comment  
#M-21

18.) The Bellefonte, Alabama site was removed from consideration for location of the NEF because it would have necessitated relocating high-voltage transmission lines that cross the proposed site. (pg. 2-38). Similarly, the Lea County, New Mexico site would necessitate relocation of a high-pressure carbon dioxide pipeline that crosses the site. Why does this fact not remove the Lea County, New Mexico site from consideration? The final DEIS should outline the methods by which this relocation will be funded and the potential environmental impacts from this relocation.

Comment  
#M-22

19.) The DEIS states that the Carlsbad, New Mexico site was disqualified because soil on the site is contaminated with oils, solvents and industrial waste products as a result of potash mining and oil-field welding services in the area. (pg. 2-38).

Comment  
#M-23

The DEIS does not make mention of the effects of the oil and gas industry, which is also prominent in Lea County, New Mexico, on the soil characteristics at the proposed NEF site in Section 3: Affected Environment. Please include a soils chemistry analysis including potential oil and gas contamination for the NEF site in Lea County, New Mexico.

20.) The DEIS states that the Carlsbad, New Mexico site was disqualified because LES would have to pay for Xcel Energy to install new transmission

Comment  
#M-24

lines and a new substation to service the NEF. (pg. 2-39). The same is true of the Lea County, New Mexico site, (see #12 above). We believe that this should disqualify the Lea County, New Mexico site as well.

Comment #M-24 (cont.)

21.) The DEIS states, "Consequently, the NRC staff has assumed that all of the DUF6 to be generated by the proposed NEF would be converted to U308 and disposed of in a licensed disposal facility." (pg. 2-44). Given that the DEIS never once details a viable disposal option, but rather a myriad of incomplete and speculative options proposed by LES but not verified, why does NRC assume this? Given the limited information in the DEIS, there is no foundation for such an assumption. Please provide more substantial rationale for this assumption.

Comment #M-25

22.) Because storm events and their effects are not limited to their immediate vicinity, we request that NRC expand the meteorological investigation to a 50-mile radius surrounding the proposed NEF site in Section 3.5.2.5: Severe Weather Conditions. (pg. 3-19). The proposed site could be adversely affected by flash flooding and high winds generated by tornadoes that occur in the vicinity of the NEF, although not on the site specifically.

Comment #M-26

23.) In NRC's analysis of tornado frequency and effects on pg. 3-19, we request that NRC include data collected from Andrews County, Texas as Andrews County is very close to the NEF site and high winds generated by a tornado in Andrews County may effect the NEF site.

Comment #M-27

24.) There have been 88 tornadoes in Lea County, New Mexico since 1954. Those tornadoes have caused more than \$26,000,000 in damage. (<http://www4.ncdc.noaa.gov/cgi-bin/wwwcgl.dll?wwEvent-Storms-nm-lea-tornado>). Given this information, NRC must justify the statement, "All the reported tornadoes were associated with very light damage." (pg. 3-19).

Comment #M-28

25.) The "Description of Alternative Sites" on pg. 2-38 of the DEIS indicates that the Carlsbad, New Mexico site was disqualified because of prior environmental contamination on the site as a result of potash mining and the oil and gas industry. Was this determination made based only on soil contamination or also ground and surface water contamination?

Comment #M-29

Table 3-11, "Chemical Analysis of Proposed NEF Site Ground Water," (pg. 3-42) indicates that there are eight ground water contaminants in the ground water on the proposed NEF site that exceed a regulatory standard up to five times, including total dissolved solids, iron, manganese, gross alpha and uranium-234. Why does this contamination not preclude the Lea County, New Mexico site from consideration for the NEF?

Comment #M-30

26.) A letter in Appendix B from Lisa Kirkpatrick, Chief of the Conservation Services Division of the Department of Game and Fish of the State of New Mexico, states in regard to the threatened sand dune lizard, "If there is in fact suitable habitat, the Department requests information as to the qualifications of the individual(s) conducting the survey. Sand dune lizards are extremely difficult to identify and there are only a very few people qualified to conduct a presence/absence survey. October is rather late in the year for a survey; the lizards are likely to be dormant at that time." (pg. B-45)

Comment #M-31

The DEIS does not directly address Ms. Kirkpatrick's concerns in its discussion of ecological resources on pg. 3-48. Who conducted the survey for the sand dune lizard and what were their qualifications? Was an additional survey performed when the lizard was more likely to be active? What was the result of that survey?

Comment #M-31 (cont.)

27.) Ms. Kirkpatrick also expressed concerns about the impacts of the NEF on the lesser prairie chicken, a federal Species of Concern, saying, "According to our prairie chicken biologist, the area around the project has not been adequately surveyed for lek sites ... Lesser prairie chickens will use an area within two miles of the lek for nesting and rearing. Birds have been reported from the Eunice area. Since there is a large acreage of contiguous habitat, and a lek within four miles, it is reasonable to assume these birds may be impacted by development." (pg. B-46).

Comment #M-32

Again, the DEIS does not directly address Ms. Kirkpatrick's concerns in its discussion of ecological resources on pg. 3-47. The NRC should integrate Ms. Kirkpatrick's assessment more thoroughly in its discussion of the lesser prairie chicken.

28.) Figure 3-29, "Population Density Surrounding the Proposed NEF Site" (pg. 3-51) seems to indicate that there is a population density of 110,000 to 120,000 in a small area in the North-Northwest sector around the proposed NEF site. Certainly this is not correct, as that sector would exceed the reported population density of all of Lea County. Please correct this figure.

Comment #M-33

29.) The U.S. Census of 2000 states that of the populations of the cities of Hobbs, Eunice and Jal, on average 65.4% have completed high school and only 10.4% have attained a Bachelor's degree or higher. This is far lower than the statewide averages of 78.9% and 23.5% respectively. (<http://quickfacts.census.gov/qld/states/35000.html>). The DEIS mentions this fact, stating, "The population surrounding the proposed NEF site generally has a lower level of educational attainment than the State averages." (pg. 3-53).

Comment #M-34

However, this information is not mentioned when considering the socioeconomic impacts of the NEF in Section 4.2.8 on pg. 4-19. What level of educational achievement will be required to fill the positions created by the NEF? Please include this information divided into each of the job types the NEF is expected to create, construction, management, professional, skilled and administrative. How many of these jobs will not be able to be filled in the vicinity of the NEF and will have to be imported from surrounding communities? What effects will that have on the overall socioeconomic impact of the NEF?

30.) In the analysis of Environmental Justice impacts of the proposed NEF, the DEIS states, "It should be noted that for this analysis, the State was used as the area of geographic comparison." (pg. 3-62). We request that the final EIS evaluate environmental justice issues in geographic comparison with national rates given that the NEF is a project that was considered for multiple sites nationwide, not only in the State of New Mexico.

Comment #M-35

Residents of the State of New Mexico must be assured that the site was not chosen for its abnormally high minority and low-income populations, which in the area of influence, represent 48.3% and 20% of the population



respectively. Compared with national averages of 30.9% and 12.4% respectively, it is clear that Lea County is home to a disproportionately large number of minority and low-income community members and thus will be impacted disproportionately by the construction and operation of the NEF. Therefore, NRC must justify its claim on pg. 4-26 that environmental justice impacts would be small.

Comment  
#M-35 (cont.)

31.) The DEIS states in Section 4.2.2, "Historical and Cultural Resources Impacts," that a Memorandum of Agreement will be developed between LES, the New Mexico State Historic Preservation Office, the New Mexico State Land Office, the Advisory Council on Historic Preservation, NRC and Lea County to address the seven sites on the proposed NEF site that are considered eligible for listing on the National Register of Historic Places. The Memorandum will record the terms and conditions agreed upon between the consulting parties to resolve adverse effects to historic properties at the proposed NEF site. (pg. 4-4). We request that this Memorandum be included in the final EIS.

Comment  
#M-36

32.) In Section 4.2.4, "Air Quality Impacts," the DEIS states, "Because the diesel generators have the potential to emit more than 91 metric tons (100 tons) per year of a regulated air pollutant, LES proposes to run these diesel generators only a limited number of hours per year for the above emission rates to avoid being classified as a Clean Air Act Title V source." (pg. 4-9). What is the basis for this statement? How will this be verified? What disciplinary measures will be taken should LES exceed its 91 metric ton standard and who will be responsible for implementing disciplinary action?

Comment  
#M-37

We recommend that as a mitigation measure, LES be required to obtain a Clean Air Act Title V permit regardless of its assurances that these generators will not exceed the 91 metric ton standard.

Comment  
#M-38

33.) In Section 4.2.5.1, "Site Preparation and Construction," the DEIS states, "Although not presently foreseen, if final design studies indicate the necessity to extend footings through the sand into the Chinle Formation, then more soils would be disturbed and the clay layer could be penetrated." (pg. 4-10). Such action may compromise the integrity of the Chinle Formation, which was shown through visual inspection to be continuous, solid and tight with few fracture planes. (pg. 3-35).

Comment  
#M-39

NRC claims that, "Using the largest measured Chinle Formation permeability, vertical ground water velocity through the clay is conservatively estimated as 0.04 meters per year (0.13 feet per year); the resulting travel time from the surface of the clay to its base (the top of the Santa Rosa Formation) would be greater than 8,000 years." (pg. 3-36). Would penetrating the Chinle Formation, and possibly creating fractures in the formation, change this estimate? How would travel times be increased if permeability of the Chinle Formation were increased as a result of penetration?

Comment  
#M-40

34.) The DEIS indicates that wastewater will be disposed of through evaporation in the Treated Effluent Evaporative Basin, the UBC Storage Pad Stormwater Retention Basin and the Site Stormwater Detention Basin. The DEIS states, "Net evaporation/transpiration is estimated at 65 inches per year." (pg. 3-32). The DEIS also estimates monthly evaporation of 6.7 inches per month. (pg. 4-13). This figure is incorrect as, assuming that NRC estimated the inches per month figure by dividing 65 inches per year by

Comment  
#M-41

12 months, evaporation would, in fact, be 5.4 inches per year, not 6.7 inches per year.

Furthermore, due to the monsoon rain season, there are several months during the summer when evaporation could be much lower than this net estimation. This is of particular concern when considering the UBC Storage Pad Stormwater Retention Basin. The DEIS states that this basin will receive 5.1 million gallons of effluent annually, but will be dry for 11 to 12 months per year due to precipitation and evaporation. (pg. 4-13). The basin will receive not only stormwater runoff but also cooling tower blowdown water.

Please state the amount of wastewater in this basin that is expected to be cooling tower blowdown water? Please include monthly averages for the amount of cooling tower blowdown water expected to be stored in the UBC Storage Pad Stormwater Retention Basin as compared to the monthly amount of anticipated evaporation, taking into consideration low evaporation rates during wetter months. Please include this information as presented in the water balance prepared by LES for the NEF.

Comment  
#M-41 (cont.)

35.) NRC should require a shielding structure around each evaporative pond and basin to ensure that dry solids remaining in those ponds and basins on the NEF site are not vulnerable to being scattered by the high and strong winds that are prevalent in the area.

Comment  
#M-42

36.) In Section 4.2.8.2, Operations: Employment and Economic Activity, the DEIS states, "Ten percent of the skilled positions are expected to be in management, 20 percent in professional occupations, 60 percent in various skilled positions, and 10 percent in administrative positions." (pg. 4-21). According to these percentages, the average 210 permanent operating employees would consist of 21 managers, 42 professional employees, 126 skilled employees and 21 administrators. The DEIS states that this is approximately 1% of the workforce in Lea, Andrews and Gaines Counties, and thus the NEF would have a moderate impact on the socioeconomics of the area.

Comment  
#M-43

However, as much as 60% of the workforce is expected to come from outside of the area of influence, according to the DEIS, which states, "The majority of these higher paying skilled jobs would be expected to be filled outside of the immediate area surrounding the proposed site, but within the [75-mile] region of influence...." (pg. 4-19). A 75-mile radius around the site would include Eddy and Chavez Counties in New Mexico and Cochran, Culberson, Davison, Ector, Hockley, Loving, Lynne, Martin, Midland, Reeves, Terry, Yoakum and Winkler Counties in Texas. Therefore, given that these counties may provide the majority of the workforce, they must be included in the analysis of socioeconomic impact. This may effect the 1% figure mentioned above and thus the impact estimated by NRC may be much smaller.

36.) In Section 4.2.8.3, Employment and Economic Activity Mitigation Measures, the DEIS states, "Educational programs coordinated by LES with local colleges would help develop a pool of qualified local workers." (pg. 4-22). This measure is an effort to draw more highly skilled technical workers from the area. Please include any communication between local colleges and LES in developing these educational programs. Also, please document the capacity for these local colleges to train the workforce in nuclear materials handling and uranium enrichment processes. Are these local colleges prepared to handle such curriculum? If not, when will they be and

Comment  
#M-44

how will those preparations be funded?

37.) Pg. 4-24 of the DEIS states that the NEF will use up to 687 million gallons of water from the Ogallala aquifer over its lifetime, while pg. 4-15 states that the NEF will use 695 million gallons of water from the Ogallala aquifer over its lifetime. Please explain this discrepancy. How much water from the Ogallala aquifer will the NEF use over its lifetime?

38.) The DEIS states, "The DUF6 would be placed in Type 48Y cylinders for either temporary storage onsite or shipment offsite. If the DUF6 were shipped offsite, 157 rail shipments with four cylinders per railcar would be used to transport the cylinders to Paducah, Kentucky; Portsmouth, Ohio; or Metropolis, Illinois, where it would be converted into U3O8. After conversion, the U3O8 would be shipped from either Paducah or Portsmouth to Envirocare in Clive, Utah, or the Nevada Test Site for disposal or it would be shipped to Envirocare from Metropolis in gondola railcars with four bulk bags per car. The hydrofluoric acid generated during the process of converting the DUF6 to U3O8 could be reused in the process of generating UF6 or neutralized to CaF2 for potential disposal at the same site as the U3O8. If the DUF6 were converted to the more chemically stable form of U3O8 at an adjacent conversion facility to the proposed NEF, the conversion products of U3O8 and CaF2 would be shipped to a disposal site in 137 and 116 gondola railcars respectively." (pg. 4-37)

Not only is this paragraph so poorly written as to be nearly unintelligible, but it also illustrates clearly that the NEF proposed by LES is ill-planned, ill-conceived, ill-timed and ill-prepared. It is clear from this paragraph that LES has no plans whatsoever for disposal of the waste to be generated by the NEF. Although it has outlined its options, not a single option has been identified as a realistic solution to the thousands of tons of waste to be generated by the facility.

The problems that we note include the fact that there is no private conversion facility for the waste and that no private conversion facility is planned. There is no disposal facility for the converted waste and the only disposal facility contacted by LES or NRC in the preparation of this DEIS is Envirocare of Utah. Their response to this proposal is not documented in the DEIS.

Also, the DEIS unfairly considers DOE disposal a viable solution, although the energy bill that includes the provision that would pass ownership of LES waste to DOE has been stalled in Congress for more than one year. Furthermore, the provision is widely contentious, not only among the public but also among members of Congress.

Given the fact that LES has clearly not defined its solution to the waste problem, we believe that it is extremely premature for the NRC to issue any preliminary recommendations about the NEF, as it does on pg. 2-44, saying, "The NRC staff recommends that, unless safety issues mandate otherwise, the proposed license be issued to LES." NRC has clearly made this determination without reviewing a clear and detailed plan for one of the most critical environmental and safety concerns regarding the NEF, waste disposition. NRC should be more thorough and careful in its determinations when considering the waste problem than it is in the DEIS.

NRC is showing blatant disregard for the people of the State of New Mexico,

Comment  
#M-44 (cont.)

Comment  
#M-45

Comment  
#M-46

Comment  
#M-47

which has made it clear from the initial proposal by LES that support for the project is contingent upon a viable waste solution. NRC ignores completely the fact that the DEIS in no way presents a viable waste solution. Therefore, we respectfully disagree with NRC and believe that no operating license should be issued to LES until such time that the waste problem is solved and disposition plans be detailed clearly, including the location of a conversion facility and a location for permanent disposal outside of the State of New Mexico.

We believe that the NEF should not and cannot progress until there are assurances from owners and/or operators of a conversion facility and disposition facility, including contracts, construction plans, environmental impact statements, etc.

As the waste disposition proposal by LES is clearly inadequate and may do nothing to remove the waste from the NEF site, we request that NRC outline the potential environmental impacts of indefinite storage of UBC tails on the proposed NEF site. This should include an analysis of corrosion of storage containers and its effects on soil, groundwater and air quality at the NEF site and within a 50-mile radius. Further, the analysis should include cumulative health effects on community members within a 50-mile radius of the site as a result of indefinite storage of this waste.

39.) Table 4-12, "Estimated Occupational Dose Rates for Various Locations or Buildings Within the Proposed NEF," indicates that empty used UF6 shipping cylinders would release less radioactivity than full UF6 shipping containers (10 millirem per hour and 5 millirem per hour respectively). (pg. 4-46). This is counterintuitive. Please explain in the final EIS why this is the case.

40.) We oppose NRC's considering a conversion facility adjacent to the NEF as a viable waste conversion strategy and believe that it should not be considered in the context of the DEIS.

However, if it continues to be considered, its environmental effects must be considered cumulatively with those of the NEF. The DEIS states, "Therefore, the NRC staff considers the impacts for these resources from the construction and operation of an adjacent conversion facility to be bounded by the impacts considered in this [DEIS] for the proposed NEF." (pg. 4-55). While the environmental effects of a conversion facility may not exceed those of the NEF, they would also not occur independently of the environmental effects of the NEF and must be considered cumulatively.

41.) The DEIS states that the evaporative ponds and retention basins around the site will create pools of perched water in the ground beneath the site. (pg. 4-13). The water is not expected to migrate and LES estimates, optimistically, that most of it will be absorbed in the root systems of vegetation in the area. We believe that there must be a method for monitoring the perched water that will be created by these ponds. NRC must include this information in Section 6, Environmental Measurements and Monitoring Programs.

42.) Who will be collecting and analyzing the environmental samples from the NEF site? Will this be an independent contractor to the NRC or LES itself? If it is expected to be LES, we are concerned about the independence and credibility of the results. Will there be quality control

Comment  
#M-47 (cont.)

Comment  
#M-48

Comment  
#M-49

Comment  
#M-50

Comment  
#M-51

Comment  
#M-52

and assurance measures implemented by NRC, or will the contractors responsible for quality control and assurance (listed on pg. 6-14) be enlisted by LES?

Comment #M-52 (cont.)

43.) The DEIS states, "Each year, the proposed NEF would submit a summary report of the Environmental Sampling Program to NRC." (pg. 6-14). How will this information be made available to the State of New Mexico and the public? How will the State of New Mexico and the public participate in environmental oversight of the facility?

Comment #M-53

44.) The DEIS indicates that ground water monitoring wells will monitor at the 220 foot zone. (pg. 6-13). However, the DEIS also states, "...[T]he first occurrence of a well-defined aquifer capable of producing significant volumes of water is the Santa Rosa Formation." (pg. 3-36). Will there be any monitoring of the ground water in the Santa Rosa Formation, which is located at approximately 1,115 feet below the ground surface?

Comment #M-54

45.) The DEIS states, "The limits [on chemical discharges] would be specified in the U.S. Environmental Protection Agency (EPA) Region 6 National Pollutant Discharge Elimination System (NPDES) General Discharge Permits as well as the New Mexico Environment Department/Water Quality Bureau Ground-Water Discharge Permit/Plan. Therefore this [DEIS] does not specify administrative action levels for physiochemical constituents." (pg. 6-15).

Comment #M-55

LES must consult with EPA Region 6 and the New Mexico Environment Department prior to the production of the final EIS to determine the administrative action levels for physiochemical constituents according to each agency and report those levels for NRC to consider when determining whether to license this facility. Without this information, impacts of the NEF on surface and ground water resources is incomplete, and therefore NRC cannot adequately determine whether to license the facility.

46.) The DEIS states regarding effluent monitoring, which includes air and water, "Corrective actions would be instituted when an administrative action level is exceeded for any of the measured parameters...." (pg. 6-19). What agency will oversee these corrective actions and what will those corrective actions be? Is there a mechanism in place for an operating license to be suspended or revoked? Please clarify what safeguards are in place should environmental emissions of radioactive and hazardous constituents exceed federal and/or state regulatory standards.

Comment #M-56

47.) Would environmental monitoring at the NEF site continue beyond decontamination and decommissioning activities? Who would be responsible for long-term stewardship of the site?

Comment #M-57

48.) In Section 7, Cost-Benefit Analysis (pg. 7-5), the DEIS states that DUF6 disposition will cost approximately \$5.50 per 2.2 pounds or \$731 million in 2002 dollars. In order to gauge accurately the benefit of the NEF, NRC must also include the amount of enriched uranium estimated to be produced by the facility and the amount of profit LES anticipates that it will earn through its sale per pound.

Comment #M-58

49.) The DEIS states that LES has proposed to allocate \$5.50 per kilogram for disposition of depleted uranium waste. (pg. 7-4) Is this figure presented in 2002 dollars, as dollar figures are represented in the rest of

Comment #M-59

the DEIS? The DEIS states that the NRC will evaluate the adequacy of this figure in the SER. We request that disposition costs be considered with due consideration to inflation in the SER.

Comment #M-59 (cont.)

50.) The DEIS indicates that ConverDyne and U.S. Ecology were not consulted in the production of the DEIS. (pg. 8-3) If their facilities are considered options for conversion and disposal, should they not be consulted in the production of this document? They must be consulted in the production of the final EIS and their response to LES's proposals must be included.

Comment #M-60

51.) The DEIS overlooks a critical comment received during its scoping period, which recommends that LES and NRC consult the Western Interstate Energy Board, which is responsible for communication and cooperation among its membership with specific regard to the development and management of nuclear energy products. (Scoping Summary Report, pg. 11) Why was this Board not consulted? We reiterate the request that the Board be consulted and their analysis of the proposal be included in the final EIS.

Comment #M-61

53.) The DEIS notes that the SER will outline safety evaluation and procedural requirements or license conditions to ensure the protection of the health and safety of workers and the general public. The SER will also address the adequacy of funding provided by LES in compliance with NRC's financial assurance regulations. We request that the SER also thoroughly address the emergency preparedness of first responders in the Lea and Eddy Counties in New Mexico and Andrews County in Texas. This analysis must also address the adequacy of the Lea County Regional Medical Center, which according to the DEIS has a capacity for only 250 patients (pg. 3-56), which may be far fewer than those who would be impacted in case of emergency at the NEF.

Comment #M-62

Also, the SER must address the adequacy of the fire and police departments of Lea and Eddy Counties in New Mexico and Andrews County in Texas to address potential radiological emergencies at the NEF. Who will provide funding for the proper equipment and training for these departments? What are the capacities of additional response services, including hospitals, in surrounding communities?

Comment #M-63

Through personal communication with Tim Johnson, of NRC, we have learned that the SER will not be released for public comment as per NRC's internal protocol. What is NRC's rationale for this protocol? Is there a regulatory requirement for producing the SER? If so, which regulatory agency authorizes the SER? If not, is it simply an NRC initiated document? Will the information contained in the SER be sensitive or classified, thus necessitating that there be no public comment period? We request that the SER be released for a thorough public review and comment period.

Comment #M-64

53.) In a letter to NRC, Cheryl Eckhardt, of the United States Department of the Interior, noted that several Urban Park and Recreation Recovery Programs in the Eunice and Hobbs area may be adversely effected by the NEF. (pg. B-42). Has LES addressed Ms. Eckhardt's concerns? How have these potential effects been mitigated?

Comment #M-65

54.) Table C-2, "Population Within 80 Kilometers (50 Miles) of the Proposed NEF," (pg. C-5) seems to be inaccurate in the same way as noted in comment #28 above. Please correct this error.

Comment #M-66

55.) In Table C-3, \*Ingestion Parameters Used in GENII to Calculate Collective Radiological Dose to the Public,\* (pg. C-6), please clarify the heading of the fourth column, \*Holdup Time,\* in laypersons' terms.

Comment  
#M-67

56.) Section C.4.1.1, \*Selection of Representative Accident Scenarios,\* include only an analysis of the effects of an earthquake on the NEF. Given that there have been 120 tornadoes in Lea and Andrews Counties since 1954, as noted above, we request that NRC also evaluate for effects related to tornadoes within the vicinity of the NEF.

Comment  
#M-68

57.) Section C.4.2.1, \*Inadvertent Nuclear Criticality,\* outlines the potential consequences of an inadvertent nuclear criticality incident at the NEF, postulated to be the accident scenario with the most severe consequences. (pg. C-22). What are the chances of this type of an accident? Has this type of accident occurred before in similar facilities?

Comment  
#M-69

58.) The DEIS claims that in the event of an inadvertent nuclear criticality, the west sector of Eunice would be most effected because it is closest to the facility and \*short-lived radionuclides\* would not have completely decayed before reaching the west sector. (pg. C-23)

Comment  
#M-70

What type of radionuclides will be released in the event of Inadvertent nuclear criticality? What are their rates of decay? If it is uranium or its decay products, it is disingenuous for NRC to claim that these isotopes are \*short-lived\* given that uranium 234, 235 and 238 have half-lives of 4.46 billion, 704 million and 245,000 years respectively. This would mean that these particles would be dispersed long before they ceased to be dangerous. If decay products are released in such an incident, half-lives could range from 75,400 years for thorium-230 to 163 microseconds for polonium-214. (<http://www.leer.org/factsheet/uranium.html>). Please revise your estimate regarding \*short-lived\* radionuclides.

59.) The DEIS states, \*To reduce the magnitude of fires resulting from the presence of transient combustible material, LES would rely on administrative controls. The purpose of these controls is to prevent large fires that could result in the release of large inventories of UF6.\* (pg. C-26). This statement is quite vague. NRC must outline the nature of these administrative controls.

Comment  
#M-71

60.) The DEIS states, \*Acute effects evaluated were assumed to estimate a threshold nonlinear relationship, or quadratic approximation, with exposures; that is, some low level of exposure can be tolerated without inducing a health effect.\* (pg. D-26).

Comment  
#M-72

Although the theory of a nonlinear relationship between exposure and health effects has been validated by some studies, it has yet to be proven accurate for human subjects. According to the Committee Examining Radiation Risks of Internal Emitters (CERRIE), the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) reported in 2000 that some animal data show linear dose-response relationships for cancer induction by alpha-emitting radionuclides over the dose ranges studied. (Report of the Committee Examining Radiation Risks of Internal Emitters, October 2004, <http://www.cerrie.org>).

Given this genuine disagreement amongst experts, we request that NRC not

assume that the threshold theory is applicable when considering radiation exposures to members of the public during transportation of materials to and from the NEF.

Comment  
#M-72 (cont.)

We reiterate our request that NRC pursue the No Action Alternative in the case of the NEF.

Thank you for your consideration of our comments. We request that NRC enter these comments into the official record of the proceeding. Should you have any questions or comments, please contact Amy Williams, of Concerned Citizens for Nuclear Safety.

Sincerely,

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Group N

Nuclear Regulatory Commission  
Chief, Rules and Directives Branch  
Division of Administrative Services  
US Nuclear Regulatory Commission  
Washington, DC 20555-0001

NUREG-1790/Docket # 70-3103

Public Comment: Draft Environmental Impact Statement for the Uranium Enrichment Facility Proposed by Louisiana Energy Services for Lea County, NM

To Whom It May Concern:

This is a public comment relating to the Environmental Impact Statement for Louisiana Energy Services' proposed uranium enrichment facility in Lea County, New Mexico.

A site in Bellefonte, Alabama was found unacceptable for the NEF because it would have meant re-locating high-voltage transmission lines to cross the proposed site. The proposed site in Lea County, New Mexico is no different - this site would also necessitate relocation of high pressure carbon dioxide pipeline crossing the proposed site. How come the Bellefonte site was rejected for the NEF but the Lea County site is acceptable? Please address this in the final EIS for Louisiana Energy Services.

Comment  
#N-1

Thank you,

*Louise Kearney*  
*Delphina Ortiz*  
*Fred M. Miller*  
*Charlotte Shirley-Divine*  
*Glenn Stanton*  
*Fay D. Martin*  
*Glenn Williams*  
*Emma Ann*  
*J. Paul*  
*Amica Duland*

1-85

Group O

Nuclear Regulatory Commission  
Chief, Rules and Directives Branch  
Division of Administrative Services  
US Nuclear Regulatory Commission  
Washington, DC 20555-0001

NUREG-1790/Docket #70-3103

Public Comment: Draft Environmental Impact Statement for the Uranium Enrichment Facility Proposed by Louisiana Energy Services for Lea County, NM

To Whom It May Concern:

I am concerned that the draft EIS statement maintains the possibility of putting a depleted uranium hexafluoride conversion facility near the site. This option is not feasible due to current state laws, which require that the waste be moved out of the state rather than just off-site. This option should not be considered. I request that the final EIS delete any references to the possibility of storing the waste near the NEF.

Comment  
#O-1

Sincerely,

*Louise Kearney*  
*Delphina Ortiz*  
*Fred M. Miller*  
*Charlotte Shirley-Divine*  
*Glenn Stanton*  
*Fay D. Martin*  
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*Amica Duland*

Group P

Nuclear Regulatory Commission  
Chief, Rules and Directives Branch  
Division of Administrative Services  
US Nuclear Regulatory Commission  
Washington, DC 20555-0001

NUREG-1790/Docket #70-3103

Public Comment: Draft Environmental Impact Statement for the Uranium Enrichment Facility Proposed by Louisiana Energy Services for Lea County, NM

To Whom It May Concern:

The EIS states that Envirocare (Utah) and U.S. Ecology (Washington State) are two potential sites to ship the byproduct of the uranium enrichment process. The EIS does not mention any negotiations between LES and Envirocare or U.S. Ecology are underway or being pursued. This is troubling because without the consent and cooperation of at least one of the two facilities, LES has no viable waste disposal option. The citizens of Lea County and the State of New Mexico have continually asked that the NRC license be withheld until viable waste solution options are presented. I request that the final EIS look further into this issue.

Comment  
#P-1

Thank you.

Sincerely,

*Angie H. Williams*  
*Terri Anne Pearson*  
*Delphine Ortiz*  
*Les McLeary*  
*Sharon Brant*  
*Jay V. Martin*  
*Alfred Williams*  
*Lama Owens*  
*Jessie Mae*  
*Amelia Ireland*

1-86

Group Q

Nuclear Regulatory Commission  
Chief, Rules and Directives Branch  
Division of Administrative Services  
US Nuclear Regulatory Commission  
Washington, DC 20555-0001

NUREG-1790/Docket 70-3103

Public Comment: Draft Environmental Impact Statement for the Uranium Enrichment Facility Proposed by Louisiana Energy Services for Lea County, NM

To Whom It May Concern:

These are my public comments regarding the draft environmental impact statement for Louisiana Energy Services (LES).

The DEIS does not state the maximum amount of time that Uranium Byproducts Cylinders (UBC) would be stored on site. I request that the EIS address this question.

Comment  
#Q-1

Also, the DEIS is not specific about its water source (p. 2-13). It states that the source is from the municipality selling it, but that does not get to the environmental issue at stake. Is it underground water? Have there been studies conducted that assure that sources are not irreparably depleted? Please address this in the final EIS.

Comment  
#Q-2

Thanks,

*Charlotte Shily-Dunn*  
*Sharon Brant*  
*Jay Martin*  
*Alfred Williams*  
*Emma Owens*  
*Jessie Mae*  
*Amelia Ireland*

Group R

Group S

NRC  
Chief, Rules and Directives Branch  
Division of Administrative Services  
US Nuclear Regulatory Commission  
Washington DC 20555-0001

Nuclear Regulatory Commission  
Chief, Rules and Directives Branch  
Division of Administrative Services  
US Nuclear Regulatory Commission  
Washington, DC 20555-0001

NUREG-1790/Docket#70-3103

NUREG-1790/Docket 70-3103

Public Comment: Draft Environmental Impact Statement for the Uranium Enrichment  
Facility Proposed by Louisiana Energy Services for Lea County, NM

To Whom It May Concern:

To Whom It May Concern:

The NRC should deny the license application for Louisiana Energy Services, Urenco on the basis of the following:

There is no viable alternative for the depleted uranium waste tails that will be generated by the operations of this plant. The possible alternatives listed in the Draft EIS are not plausible since an effective alternative, the deconversion plant have not even been built for the older depleted uranium waste at other sites in the US. There will be opposition to such plant if plans are drawn up to build in NM or TX.

Comment  
#R-1

I am writing to submit my public comments for the Louisiana Energy Services DEIS. In its Purpose and Need, the draft environmental impact statement indicates that the NEF is to supply domestic demand. In the fourth paragraph, however, it states: "forecasts of installed...suggest a continuing demand...in the US and abroad". The NRC should make it clear whether the NEF will be solely for domestic use or if any portion of the project would be used outside of the US.

Comment  
#S-1

Sincerely,

Thank you for your consideration.

*1-87*  
*Sam L. Alvin*  
*Louise Pearson*  
*Fred M. Oates*  
*Delphine O'Leary*  
*Charlotte Shirley Driver*  
*Sharon Drastin*  
*Ray D. Martin*  
*Glenn Williams*  
*Emma O'Leary*  
*Jessica Paul*  
*Debra D'Amico*

Sincerely,

*Sharon Drastin*  
*Ray D. Martin*  
*Glenn Williams*  
*Emma O'Leary*  
*Debra D'Amico*  
*Janita Ireland*



Group T

Nuclear Regulatory Commission  
Chief, Rules and Directives Branch  
Division of Administrative Services  
US Nuclear Regulatory Commission  
Washington, DC 20555-0001

NUREG-1790/Docket #70-3103

Public Comment: Draft Environmental Impact Statement for the Uranium Enrichment Facility Proposed by Louisiana Energy Services for Lea County, NM

To Whom It May Concern:

These are my public comments for the DEIS for Louisiana Energy Services' proposed uranium enrichment facility in Lea County, New Mexico. I am concerned with effluent monitoring of air and water. The draft EIS says that corrective actions will be instituted when an action level is exceeded, but it does not include the regulatory agency that will be in charge of the monitoring. Currently there are no mechanisms in place to revoke an operating license pursuant to unacceptable levels. The final EIS should address specific safety measures to protect citizens from dangerous materials exceeding federal or state standards and also identify the responsible organization for long-term stewardship of the proposed NEF site.

Comment #T-1

Comment #T-2

Thank you,

*Sup. H. Alving*  
*Laraine Pearson*  
*Delphine Arty*  
*Fred McElroy*  
*Charlotte Shelby-Dinner*  
*Sharon Martin*  
*Jay W. Martin*  
*Altitah Williams*  
*Emma A. Auer*  
*Jessica Sanders*  
*Amira Dulamad*

1-88

Group U

Nuclear Regulatory Commission  
Chief, Rules and Directives Branch  
Division of Administrative Services  
US Nuclear Regulatory Commission  
Washington, DC 20555-0001

NUREG-1790/Docket #70-3103

Public Comment: Draft Environmental Impact Statement for the Uranium Enrichment Facility Proposed by Louisiana Energy Services for Lea County, NM

To Whom It May Concern:

I am particularly concerned with sections 4.2.8.2 and 4.2.8.3 in the EIS that relate to Employment and Economic Activity. The draft Environmental Impact Statement concludes that the NEF would have a moderate impact on the socioeconomics in Lea, Andrews, and Gaines Counties. At the same time, 60% of the workforce for the proposed facility is expected to come from outside this area of influence. This fact will greatly influence the figure stated by the EIS.

Comment #U-1

According to the EIS, educational programs with local colleges would help to develop a pool of qualified workers. Are there any partnerships or discussions between local colleges and LES? Even if there were, would our local colleges have the capacity to train students in such sensitive nuclear materials handling?

Comment #U-2

I ask that the final EIS go into further detail regarding both the employment generated by the proposed facility and workforce training.

Thank you.

Sincerely,

*Sup. H. Alving*  
*Laraine Pearson*  
*Delphine Arty*  
*Fred McElroy*  
*Charlotte Shelby-Dinner*  
*Sharon Martin*  
*Jay W. Martin*  
*Altitah Williams*  
*Emma A. Auer*  
*Amira Dulamad*

Group V

Nuclear Regulatory Commission  
Chief, Rules and Directives Branch  
Division of Administrative Services  
US Nuclear Regulatory Commission  
Washington, DC 20555-0001

NUREG-1790/Docket #70-3103

Public Comment: Draft Environmental Impact Statement for the Uranium Enrichment Facility Proposed by Louisiana Energy Services for Lea County, NM

To Whom It May Concern:

The DEIS states that the proposed NEF would submit an annual report of the Environmental Sampling Program to the Nuclear Regulatory Commission. I would like a guarantee that this information will be made public to the citizens of Lea County and the State of New Mexico. The public must be allowed to participate in the environmental oversight of the proposed NEF facility, and I request that the final EIS address these concerns.

Comment  
#V-1

Sincerely,

168-1

*Louise Pearson*  
*Delphine Arty*  
*Fred McCreary*  
*Charlotte Shirley-Dunn*  
*Sharon Swartz*  
*Jay D. Meehan*  
*John William*  
*Lenna Alvar*  
*J. Hill*  
*Anita Ireland*

Group W

Nuclear Regulatory Commission  
Chief, Rules and Directives Branch  
Division of Administrative Services  
US Nuclear Regulatory Commission  
Washington, DC 20555-0001

NUREG-1790/Docket #3103

Public Comment: Draft Environmental Impact Statement for the Uranium Enrichment Facility Proposed by Louisiana Energy Services for Lea County, NM

To Whom It May Concern:

During the EIS scoping period, it was recommended that LES and the NRC consult the Western Interstate Energy Board regarding this proposed project. To my knowledge, the Board, valuable in the communication and cooperation of nuclear energy products, was never consulted. Why? The proposed LES facility certainly falls within the scope of the Western Interstate Energy Board and therefore should consult the Board. Please address this issue in the final EIS.

Comment  
#W-1

Thank you,

*Steph L. Williams*  
*Louise Pearson*  
*Delphine Arty*  
*Fred McCreary*  
*Sharon Swartz*  
*Jay D. Meehan*  
*John William*  
*Lenna Alvar*  
*J. Hill*  
*Anita Ireland*

Group X

Nuclear Regulatory Commission  
Chief, Rules and Directives Branch  
Division of Administrative Services  
US Nuclear Regulatory Commission  
Washington, DC 20555-0001

NUREG-1790/Docket 70-3103

Public Comment: Draft Environmental Impact Statement for the Uranium Enrichment Facility Proposed by Louisiana Energy Services for Lea County, NM

To Whom It May Concern:

I am writing to ask that the final Louisiana Energy Services EIS statement address the Claiborne Enrichment Facility. The Claiborne facility is referenced throughout the EIS, but the document does not address Homer, LA as a potential site. I ask that the final document include more detailed information on the Claiborne Enrichment Facility and also address reasons why it was rejected. Thank you for your consideration.

Comment  
#X-1

Thank you,

106-1

*Sam H. Anderson*  
*Louise Pearey*  
*Nelphine Ortiz*  
*Fred Melby*  
*Charlotte Shelby-Diann*  
*Sharon Swartz*  
*Jay Swartz*  
*Alfred Williams*  
*Emma Aune*  
*J. Paul*  
*Anita Lubank*

Group Y

Nuclear Regulatory Commission  
Chief, Rules and Directives Branch  
Division of Administrative Services  
US Nuclear Regulatory Commission  
Washington, DC 20555-0001

NUREG-1790/Docket # 70-3103

Public Comment: Draft Environmental Impact Statement for the Uranium Enrichment Facility Proposed by Louisiana Energy Services for Lea County, NM

To Whom It May Concern:

I have concerns with the environmental justice impacts of the proposed uranium enrichment facility in Lea County, New Mexico. I request that the environmental justice impacts be looked into more thoroughly in that the EIS evaluate environmental justice issue in geographic comparison with other states rather than just New Mexico. This is necessary since multiple sites around the country were considered for the NEF and the people of Lea County would like some reassurance that the site in Lea County was not chosen because it has a high-minority and low-income populacc. In comparison with the population nationally, Lea County is home to a disproportionate number of low-income persons and minorities. Therefore, the citizens of Lea County will be impacted disproportionately by the NEF. These concerns coupled with LES' history of environmental justice issues makes it important that this issue be looked at more carefully in the final EIS.

Comment  
#Y-1

Thank you,

*Sam H. Anderson*  
*Louise Pearey*  
*Nelphine Ortiz*  
*Fred Melby*  
*Charlotte Shelby-Diann*  
*Sharon Swartz*  
*Jay Swartz*  
*Alfred Williams*  
*Emma Aune*  
*J. Paul*  
*Anita Lubank*

Group Z

Group AA

Nuclear Regulatory Commission  
Chief, Rules and Directives Branch  
Division of Administrative Services  
US Nuclear Regulatory Commission  
Washington, DC 20555-0001

Nuclear Regulatory Commission  
Chief, Rules and Directives Branch  
Division of Administrative Services  
US Nuclear Regulatory Commission  
Washington, DC 20555-0001

NUREG-1790/Docket 70-3103

NUREG-1790/Docket 70-3103

Public Comment: Draft Environmental Impact Statement for the Uranium Enrichment Facility Proposed by Louisiana Energy Services for Lea County, NM

Public Comment: Draft Environmental Impact Statement for the Uranium Enrichment Facility Proposed by Louisiana Energy Services for Lea County, NM

To Whom It May Concern:

I am submitting my public comment for the Louisiana Energy Services DEIS. I ask that the final EIS address the following:

I am writing to request that the DEIS for Louisiana Energy Services address the following issue: In pages 1-3, the DEIS states that "of the 11.5 million SWUs that were purchased by US nuclear reactors in 2002, only about...15% were provided by plants located in the US...and 14% for 2003". Then the DEIS states that the USEC provides about 56% of the US enrichment market needs. This does not match up, and I request that the EIS address this.

Comment #Z-1

The DEIS says that construction would be done in phases and that cascades would be brought on-line in stages. This is clearly a security vulnerability. How will LES assure that construction workers have sufficient security clearances when working adjacent to operational facilities?

Comment #AA-1

Thank you,

Sincerely,

16  
Sharon Martin  
Jay D Martin  
Glitch Williams  
Emma Auer  
J. Gul  
Anita Suland

Sharon Martin  
Jay D Martin  
Glitch Williams  
Emma Auer  
J. Gul  
Anita Suland

Commenter 001

October 14, 2004

Chairman Nils Diaz  
US Nuclear Regulatory  
Office of Public Affairs  
Washington, D.C. 20555


Dear Chairman Diaz:

I am writing to express my continued support of Louisiana Energy Services (LES) for the National Enrichment Facility (NEF) project. *Comment #001-4*

The Draft EIS was very positive for the NEF and I am glad that the report found that the NEF will have minimal environmental impact on this region. I also understand that the NEF will help the United States lessen its reliance on foreign imports. Anything that supports our energy independence and is as safe and environmentally sound as the NEF has my support.

According to the Draft "The NRC staff recommends that, unless safety issues mandate otherwise, the proposed license be issued to LES." (Page 2-44). I couldn't agree more! I hope the NRC continues to do a thorough job of reviewing the NEF license and I encourage them to grant it quickly. *Comment #001-19*

Sincerely,

  
cc: Governor Bill Richardson  
Secretary Ron Curry  
New Mexico Attorney General Patricia Madrid

J-92

Commenter 002

*City of Andrews*

111 LOGSDON • ANDREWS, TEXAS 79714-6589  
(915) 523-4820



November 4, 2004

Chairman Nils Diaz  
US Nuclear Regulatory  
Office of Public Affairs  
Washington, D.C. 20855

Honorable Chairman Diaz:

This letter is to confirm the support of the City of Andrews for the National Enrichment Facility (NEF). We believe the facility will provide needed support to the nuclear power industry in the United States. There is strong support in the region for a facility based upon good geology, sound science and proper oversight. *Comment #002-1*

The draft Environmental Impact Statement (EIS) was both comprehensive and compelling. The EIS demonstrates the relatively small impact of this facility, yet its importance to the economic growth of Southeast New Mexico and West Texas. As a community in the "affected area" by NEF, this review is important to Andrews.

We appreciate the informative and inclusive process of the Nuclear Regulatory Commission. Similarly, LES has been very forthcoming in addressing concerns or questions raised regarding the NEF and its operations. We believe that the EIS confirms that the NEF can operate in a safe, prudent manner.

We encourage the expedient, but thorough review of the NEF license application. *Comment #002-2*

Sincerely,

  
Glen E. Hackler  
City Manager

  
Robert Zap  
Mayor

/sac

cc: Governor Bill Richardson  
Secretary Ron Curry  
New Mexico Attorney General Patricia Madrid



Hobbs — More Than Meets the Eye

Commenter 006

Chairman Nils Diaz  
United States Nuclear Regulatory  
Office of Public Affairs  
Washington, DC 20555

Dear Chairman Diaz:

Once again we write to you and your offices concerning our support for the National Enrichment Facility to be built outside of Eunice, New Mexico. This is not only an important economic development investment in New Mexico but also a high priority for national security. We support the NRC's time and investigated necessities for proper control and handling of nuclear by-products of the industry, we also see the sense of urgency to protect and keep safe these by-products. The NEF facilities offer that protection and safe disposal of the by-product from our nuclear power plants throughout the country.

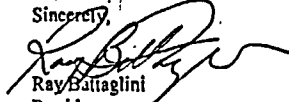
Comment  
#006-1

The draft Environmental Impact Statement addressed many issues affecting the safe operations and handling by NEF, this report was very positive and reflects no large negative impact on the local resources. This report also made it clear that the NRC was taking the necessary steps to insure a safe environment both for the operator and the communities surrounding the plant.

We are excited about the National Enrichment Facilities being built and safely operated in Lea County, New Mexico. As a related community just north of this proposed NEF facility, we are monitoring your and NRC progress with great interest.

We were pleased with comments of the draft of the Environmental Impact Statement and look forward to the final report.

Sincerely,

  
Ray Battaglini  
President

cc: Governor Bill Richardson  
Secretary Ron Curry  
New Mexico Attorney General Patricia Madrid



Chamber of  
Commerce

400 N. Marland ◊ Hobbs ◊ NM ◊ 88240 FAX : (505) 397-1689  
Phone: (505) 397-3202 ◊ (800) 658-6291 URL : www.hobbschamber.org

Commenter 007



## Eunice Public Schools

TONI NOLAN TRUJILLO  
SUPERINTENDENT  
(505) 394-2524

P. O. BOX 129  
EUNICE, NM 88231  
FAX (505) 394-3006

October 14, 2004

Chairman Nils Diaz  
US Nuclear Regulatory  
Office of Public Affairs  
Washington, D.C. 20555

Dear Chairman Diaz:

I want to express my thanks and appreciation to the staff members from the Nuclear Regulatory Agency. Throughout this process you have kept the citizens of Lea County informed about the permit process and have provided numerous opportunities for public comment.

Comment  
#007-1

A copy of the draft Environmental Impact Statement was provided by the NRC. Because of the document's organization, format and language usage, I was able to understand most of the report. The definitions regarding the degree of impact were very helpful and written using a minimum of jargon.

Comment  
#007-5

I continue to support the National Enrichment Facility. And I continue to support the federal and state regulatory approval processes. In this case, private industry and governmental entities have worked together to ensure a safe and prosperous future for Lea County.

Comment  
#007-6

Tonight, I have one request. The next time you come to Eunice, I would like to invite the staff members of the Nuclear Regulatory Commission to meet with our students and explain the permit approval process. We have many students now engaged in an applied physics course and in an internet class, entitled "An Introduction to Nuclear Energy."

Comment  
#007-7

Again, thank you for the diligence and professional behavior.

Sincerely,

  
Toni Nolan Trujillo  
Superintendent

**HOME**  
*Pro Mortgage*

Commenter 009

Commenter 010

Email: alberto@homeproam.com

October 11, 2004

Chairman Nils Diaz,  
US Nuclear Regulatory  
Office of Public Affairs  
Washington, DC 20555

Dear Chairman Diaz:

I am writing this letter to express my support for Louisiana Energy Services (LES) and its efforts to build and operate the National Enrichment Facility (NEF) in Lea County, New Mexico. Comment #009-1

J-94

I have reviewed the Draft Environmental Impact Statement (EIS) and was pleased to see that the NEF will have only minimal impact on the environment, land, air quality and water usage. Lea County is a strong contributor to our country's energy needs and it is my belief that the NEF will enhance this and lessen our dependence on foreign imports. The NEF appears to be safe and has my full support.

LES is to be commended for keeping the community informed and educated about the process. They have quickly proven to be a good corporate citizen of Lea County by helping and contributing to our local organizations.

As a member of several organizations (Hobbs Municipal School board, Hispano Chamber of Commerce board, Habitat for Humanity of Hobbs), a business owner and more importantly, as a citizen of Lea County, I look forward to welcoming NEF and the positive economical impact it will have on Lea County.

Sincerely,

  
Alberto Caballero

November 1, 2004

Chairman Nils Diaz  
US Nuclear Regulatory  
Office of Public Affairs  
Washington, D.C. 20555

Dear Chairman Diaz:

As the President of the Hobbs Rotary Club, Past-President of the Hobbs Chamber of Commerce, a present and past member of several other boards in Hobbs and a resident of Hobbs since 1969, I am writing to express my continued support of the planned National Enrichment Facility (NEF). Comment #010-1

I have recently had the opportunity to review the Draft Environmental Impact Statement (EIS) and am pleased that the NEF will have small impact on things such as land and air quality. I also look forward to the benefit to our local economy that NEF will bring. Having lived in Hobbs through the ups and downs of the oilfield, it is important to me to see Lea County diversify our economy. As a mother and grandmother of children who have moved away, it pleases me to see an industry that would impact our workforce and allow our children to stay in Lea County. Our children have been our greatest export and I would personally like to see them have opportunities to stay.

I also read in the Draft EIS that the NEF will help to provide energy independence for America. As an American, I am concerned about our dependence upon foreign countries for our energy needs and as a citizen of Lea County, I am glad we have been chosen to help this cause.

I look forward to welcoming NEF as a permanent part of our community and encourage you to approve their license application quickly. Comment #010-3

Thank you for such a thorough and informative Draft EIS. I look forward to reviewing the final one.

Sincerely,  
  
Suzanne Holler

cc: Governor Bill Richardson  
Secretary Ron Curry  
New Mexico Attorney General Patricia Madrid

Commenter 016

Commenter 021

October 12, 2004

Chairman Nils Diaz  
US Nuclear Regulatory  
Office of the Public Affairs  
Washington, D.C. 20555

Dear Chairman Diaz:

I am writing this letter in support of National Enrichment Facility (NEF). This facility is needed in Lea County, especially to aid in the diversification of the economy.

Comment #016-1

This facility will provide the citizens of our county with much needed jobs. These jobs will create a flow of money back into our community's businesses. There would be benefits much higher than just the employees of the facility, our small businesses would grow and prosper with the implementation of NEF.

Outside of all of these positions, the Draft Environmental Impact Statement (EIS) pointed out several other points of interest, like how there will be little negative impacts on the area.

With these points being made in the EIS it only encourages the hopes of our communities. Please be prompt in approving the NEF license application as we know this facility will be safe and beneficial to all involved.

Comment #016-2

Sincerely,

Cc: Governor Bill Richardson  
Secretary Ron Curry  
New Mexico Attorney General Patricia Madrid

1-95

**HOBBS MUNICIPAL SCHOOLS**  
Office of the Superintendent

Stan Rounds, Superintendent  
P.O. Box 1030  
1515 E. Sanger  
Hobbs, New Mexico 88241-1030

Telephone (505) 433-0100  
Fax (505) 433-0140  
E-mail: [srounds@hobbsschools.net](mailto:srounds@hobbsschools.net)

October 14, 2004

Chairman Nils Diaz  
US Nuclear Regulatory Commission  
Office of Public Affairs  
Washington, DC 20555

Dear Chairman Diaz:

The Hobbs Municipal Schools is in strong support of Louisiana Energy Services application to obtain a license from the NRC to establish the National Enrichment Facility (NEF) in Eunice, New Mexico. We have reviewed the draft environmental impact findings and concur that there is little negative impact upon our community and our schools.

In fact, LES has shown its intent to be a substantial partner in education of our children and has stepped forward to be a partner in education in Lea County. Together, we will provide the necessary workforce to ensure the success of the placement of the NEF in Lea County.

The Draft Environmental Impact Statement is very positive for the NEF. We are pleased that the report found only minimal impact. More importantly, the NEF will have a positive socioeconomic impact on this region.

The Hobbs Municipal Schools fully supports the NEF and asks that you continue expedient progress in licensing the facility so that we, in Lea County, can begin to make the important plans for our future.

Comment #021-1

Sincerely,

Stan Rounds  
Superintendent

Cc: Governor Bill Richardson  
Secretary Ron Curry  
New Mexico Attorney General Patricia Madrid





New Mexico State Senate

State Capitol  
Santa Fe

Commenter 022

COMMITTEES:

MEMBER.  
Finance

Commenter 024

SENATOR CARROLL H. LEAVELL  
R-Eddy & Lea-41

P.O. Drawer D  
Jal, NM 88252

Business: (505) 393-2550  
Home: (505) 395-3154  
Fax: (505) 393-6539  
E-Mail: leavell4@leaco.net

October 11, 2004

Chairman Nils Diaz  
U. S. Nuclear Regulatory  
Office of Public Affairs  
Washington, DC 20555

Dear Chairman Diaz,

I am writing again in support of Louisiana Energy Services' (LES) efforts to obtain a license from the Nuclear Regulatory Commission for the proposed National Enrichment Facility (NEF) outside Eunice, New Mexico.

Comment  
#022-1

Lea County is very excited about the NEF. The oil and gas industry has supported Lea County and the State of New Mexico for over 75 years. My constituents know the pitfalls of the economic swings in oil and gas. It is time to diversify!

The Draft Environmental Impact Statement (EIS) was very positive for the NEF. I am glad the report found what I already knew - the NEF will have a minimal environmental impact of this region and a positive socioeconomic impact, particularly with respect to jobs and revenue added to the local economy.

The LES has shown itself to be a good corporate citizen by contributing to local organizations that benefit the people of Southeast New Mexico as well as always keeping us informed and educated about the process. The Draft EIS just confirms the NEF is really a safe and environmentally sound project.

I support the NEF and hope their licensing process continues to go smoothly so we in Lea County can begin making plans for a future that includes the NEF.

Comment  
#022-4

Sincerely,

Carroll H. Leavell

October 12, 2004

Chairman Nils Diaz  
U.S. Nuclear Regulatory  
Office of Public Affairs  
Washington, D.C. 20555

Dear Chairman Diaz:

I am writing this letter in support of the proposed National Enrichment Facility in Eunice, New Mexico.

As a life-long resident of New Mexico, I understand what it is like to have to rely on the oil and gas industry for a source of revenue. My husband and I were able to raise a family here, and I continue to watch my family grow as two of my five children chose to stay here in Eunice as they raise their families. But the oilfield industry is presently unpredictable, so as our citizens grow they are forced to move where more job opportunities are available.

I was given the opportunity to visit the Ureco Nederland B.V. facility in Almelo. The site was impressive and was no different from the surrounding countryside. I visited with local citizens about the plant and did not encounter a single person who had negative comments about the Ureco plant or its operation.

After reviewing the Draft Environmental Impact Statement, it only reassured me of what I knew to be true. It stated there would be no significant impact on our land, water or air. It also affirmed there would be an increase in employment which I know would lead to new-housing construction, but more importantly an increase in school enrollment in our area. We are proud that our educational institutions are some of the best in our state and the new students would enable us to continue to challenge the children of this area.

With family still in Eunice, I have no problem supporting the Louisiana Energy Services' application to operate the National Enrichment Facility in our hometown. With the offer to diversify our economy, I will support this effort. The anticipated growth in our community is welcomed along with all of the positive effects associated with it. The National Enrichment Facility will be beneficial to our schools, our city, our country, and to all of our Land of Enchantment.

Comment  
#024-1

Thank you kindly for your time and consideration of this proposed facility.

Sincerely,

Alicia N. Montanez  
P.O. Box 1394  
Eunice, New Mexico 88231

Cc: Governor Bill Richardson  
Secretary Ron curry  
New Mexico Attorney General Patricia Madrid

1-96



**PETTIGREW and ASSOCIATES**

1110 N. GRIMES  
HOBBS, NEW MEXICO 88240  
(505) 393-9827

DE WH Commenter 025

14 October 2004

Chairman Nils Diaz  
US Nuclear Regulatory  
Office of the Public Affairs  
Washington, DC 20555

Dear Chairman Diaz:

This letter is in support of LES to obtain a license from the NRC to establish a uranium enrichment facility in Eunice, New Mexico.

Comment #025-1

As a consulting engineer born and raised in Lea County, I place great value on our natural resources. With findings such as small impact on historical and cultural resources, land use, air quality and water usage, I can place my full support for the proposed National Enrichment Facility (NEF) outside of Eunice, New Mexico.

The NEF is a great opportunity for Lea County and for the United States. The Draft EIS concluded that the NEF would have a positive socioeconomic impact on our local economy. The establishment of this facility is important to the future of Lea County.

Comment #025-1 (cont.)

The Draft EIS concluded that the NEF would help to provide energy independence for America as an additional, reliable, and economical domestic source of enrichment services which will have a direct impact on attaining national energy security policy objectives. In today's global environment, this is vital to all of us.

Lea County has had a long history of supporting the energy needs of our country and the NEF will allow us to continue to contribute in a way that also benefits our local economy.

After reviewing the Draft EIS, I firmly believe that the NEF will be environmentally sound to the citizens of Lea County.

Sincerely,

Debra P. Hicks, PE  
President  
Pettigrew & Associates, P.A.



**NEW MEXICO JUNIOR COLLEGE**

Commenter 026

Office of the President

October 14, 2004

Chairman Nils J. Diaz, Ph.D.  
U.S. Nuclear Regulatory Commission  
Office of Public Affairs (OPA)  
Washington, D.C. 20555

Dear Chairman Diaz:

I am writing this letter in continued support of Louisiana Energy Services' (LES) application to build and operate a National Uranium Enrichment Facility in Lea County, New Mexico. I commend the NRC for the detailed draft Environmental Impact Statement (EIS). The draft EIS confirmed that the NEF is safe and important to the economic development of Lea County and the State of New Mexico.

Comment #026-1

Comment #026-1

I have found the employees of LES to be extremely dedicated to the development of the project, full of integrity, and willing to openly discuss the issues. I also confirm that New Mexico Junior College has embraced the NEF as an outstanding opportunity to train technicians for many of the potential jobs that will be available. We have been working on the training for over a year, and we are working with the Lea County Public Schools to bring the training initiative to fruition.

Additionally, I think Lea County is positioned to provide the needed infrastructure to support the NEF, and I strongly feel the Lea County municipalities have embraced the idea and are prepared to do the due diligence in regard to the project. The NEF provides less dependency on foreign oil and improves our position for national defense. The facility is safe, and I encourage the NRC to grant Louisiana Energy Services the license to run the National Enrichment Facility.

Sincerely,

Steve McCleery, Ed.D.  
President

Cc: Governor Bill Richardson  
Secretary Ron Curry  
Patricia Madrid, New Mexico Attorney General

1-97

Commenter 027

Commenter 028

October 12, 2004

Chairman Nils diax  
IS Nuclear Regulatory  
Office of the Public Affairs  
Washington D.C. 20555

Dear Chairman Diaz:

This letter is in support of Louisiana Energy Services (LES) to obtain a license from the Nuclear Regulatory Commission (NRC) to build and operate the National Enrichment Facility (NEF) near Eunice, New Mexico. I support LES as a City Commissioner (former Mayor) and school board member.

Comment #027-1

I had the opportunity to visit the Urenco-owned facility in Almelo, which is very similar to the facility that is planned for Lea County. I felt that the questions and concerns our group had were answered. The high-light of the tour was when we went down town to talk to the average person on the streets of Almelo. These people answered our questions and were all very positive with their answers.

As an educator, I keep myself informed about the project. This is important because as an elected official, it is my duty to be informed and to be aware of safety issues of those I represent. The citizens put their trust in me, and I, in turn, put my trust in LES. I haven't been let down by LES and they are always open to answer questions and hear concerns.

I appreciate the work the NRC did on the Draft Environmental Impact Statement and I'm pleased with the results. The National Enrichment Facility will benefit Lea County, New Mexico and America.

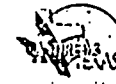
Comment #027-4

Sincerely,

Joe Calderon  
P.O. Box 5628  
Hobbs, New Mexico 88241

Cc: Governor Bill Richardson  
Secretary Ron Curry  
New Mexico Attorney General Patricia Madrid

1-98



# Andrews Industrial Foundation, Inc.

DeeDee Wallace  
Director of Business Development  
dwallace@andrewsind.org

November 5, 2004

Chairman Nils Diaz  
U.S. Nuclear Regulatory  
Office of Public Affairs  
Washington, D.C. 20555

Re: Letter of Support for National Enrichment Facility in Lea County, N.M.

Dear Chairman Diaz:

Please accept this letter as confirmation of full support for Louisiana Energy Services' (LES) National Enrichment Facility (NEF) in Eunice, New Mexico. Many of us from Andrews have studied this process and participated in the NRC forums in order to better educate ourselves with the scope of this project. Our conclusion was uniform with the Environmental Impact Statement conducted by your office - that the NEF will have small environment impact and significant economic impact.

Comment #028-1

In Andrews, Texas, we believe there exists a necessity for regional collaboration in order to meet the needs of activity underway on our Texas-New Mexico border. We anticipate regional partnerships to enable us to effectively address any concerns or considerations for these projects. This theme of alliances is exemplified in the development of our new Andrews Business and Technology Center. We have established administrative and curriculum programs in partnership with Odessa College, The University of Texas - Permian Basin, and most recently, College of The Southwest in Hobbs, NM. A recent grant through College of the Southwest will fund a state of the art Distance Learning Center and administrative costs as well for the Center. In part, this grant was approved because of the regional partnerships involved.

The NEF project solidifies the demand for firm regional efforts in an array of areas and ensures that our labors are justifiable. The Andrews Industrial Foundation, Inc. strongly supports Louisiana Energy Services' (LES) National Enrichment Facility (NEF) in Eunice, New Mexico.

Sincerely,

DeeDee Wallace

/dsw

ANDREWS, TX  
Move Ahead

111 Logsdon • Andrews, Texas 79714 • 432/523-4820

Commenter 029

NEW MEXICO JUNIOR COLLEGE

October 14, 2004  
Arts and Sciences

Chairman Nils Diaz  
US Nuclear Regulatory  
Office of Public Affairs  
Washington, D.C. 20555

Dear Chairman Diaz:

As the Interim Dean of Arts & Sciences and Geology Professor at New Mexico Junior College and as one of the lucky ones that actually got to go to Amelo last November, I am writing this statement in support of the National Enrichment Facility (NEF) that is being proposed for Lea County, New Mexico.

Comment #029-1

It is my understanding that this facility being proposed here in Eunice will be modeled after the facility in Amelo, Netherlands. If indeed this is the case, then I am quite comfortable with this plan.

Comment #029-4

Environmentally speaking, if it is built and operated like the one in Amelo, then the people of Lea County and especially, Eunice will be completely safe and sound. There will be very little, if any, impact on the air, ground, and water.

- The facility in Amelo was built right next to a beautiful public campground. There seemed to be no disruption to the local farming or livestock in the area surrounding the facility.
- Amelo is just barely above sea level and so their facility sits right on top of their water supply. According to the workers in the facility and the local people in the area, they have had no problems. The plant itself had canals running through the well kept grounds with grass, trees, and even ducks.
- In Amelo, the process of enriching uranium happens in an enclosed system. The air that is expelled goes through a purification process before reaching the outside atmosphere.

My only concern is the by-product that will be generated. Once again, if this facility is operated like the one in Amelo, the amount of by-product actually stored at the facility will be minimal. There were 400 canisters on their premises. In Amelo, they regularly sent their by-product (depleted uranium) to either France for the removal of the fluorine and the remainder to be

Comment #029-6

disposed of or to Russia to be recycled through yet another enrichment process.

Comment #029-6 (cont.)

I'm in favor of making sure that these canisters of depleted uranium get recycled and used again or disposed of properly so that they don't become an environmental hazard years from now and are not an eye-sore in our backyard!

Other than that, I think having the National Enrichment Facility here in SE New Mexico will be just as much of an asset to this area and the nation as WIPP has been. Need I remind you that there was much controversy over WIPP being here before it was operational, as well.

With a finite supply of natural resources, we need alternative methods of providing electricity for the United States that can be created right here in the U.S. instead of becoming dependent on other countries.

Sincerely,

Kelly Holladay  
Interim Dean of Arts & Sciences and Professor of Geology  
New Mexico Junior College  
Hobbs, New Mexico  
kholladay@nmjc.edu

J-99



Commenter 031

From: "Lee Cheney" <lee\_cheney@leaco.net>  
To: <nrcprep@nrc.gov>  
Date: Tue, Nov 16, 2004 8:53 AM  
Subject: LES & Flash Flooding

Lea County is subject to frequent flash flooding. What design requirements, precautions, and procedures will the NRC impose upon LES to guarantee that the radioactive water storage ponds at LES will not overflow?

Comment #031-2

Lee Cheney  
420 W. Humble  
Hobbs, NM 88240-7116

Commenter 031

## QUESTION FOR GOV. RICHARDSON

If the NRC refuses to allow the State of New Mexico to participate in the LES hearing on the important subjects of national security, terrorism, LES financial qualifications, and waste disposal, will Gov. Richardson withdraw his support for LES and refuse to issue all state permits?

Comment #031-3

Monterey Journal  
7/04 - P. 1

State May Be Stuck With Nuke Waste  
By John Heck  
Journal Staff Writer

When an international consortium said last year it wanted to build a nuclear fuel factory in southeastern New Mexico, Gov. Bill Richardson drew a line in the sand.

Richardson said he would only support the factory with an ironclad guarantee that New Mexico would not get stuck with the plant's waste.

But thanks to what the Nuclear Regulatory Commission characterizes as botched legal filings by staff attorneys in the New Mexico Attorney General's office and Richardson's Environment Department, the state may be left with no say in the matter.

Louisiana Energy Services wants to build a uranium enrichment plant on land outside Eunice, along the New Mexico/Texas border. The plant would process uranium for use as nuclear power plant fuel.

The NRC is in the midst of a two-year evaluation of the plant's safety and environmental impacts, necessary before LES can be granted a license.

In a pair of rulings in July and August, NRC regulators said attorneys for the state did not demonstrate that their concerns about the waste issue met legal requirements for consideration in the licensing process.

The only exception was the Attorney General's contention that the company's license application may understate waste disposal costs.

Meanwhile activists opposed to the project, represented by veteran Santa Fe nuclear waste attorney Lindsay Lovejoy, won the right to have their questions about the waste issue heard.

The \$1.2 billion plant would employ hundreds in the Hobbs/Eunice area and has generally won support from local and state political leaders. But Richardson's support has not been unqualified because of questions about the plant's waste.

Over its life, the plant would generate an estimated 15,700 steel cylinders, each 4 feet in diameter and 8 feet long. Each cylinder would hold more than 12 tons of toxic uranium hexafluoride.

Getting rid of the waste is problematic. It requires treatment to remove the corrosive and toxic fluorine, then it must be sent to a dump legally permitted to take radioactive waste. In its license application, LES mentions several possible ways of getting rid of the waste but acknowledges that it has no plan in hand.

That led both the Environment Department and Attorney General Patricia Madrid to raise the issue in the licensing process. They claimed LES had not yet demonstrated a "plausible strategy" for dealing with its waste.

"Storage of such highly dangerous waste over a 30-year period may pose a threat to the protection of health and property," the Environment Department said in its legal brief filed with the NRC.

But by not being specific enough in their critique of the LES's waste plans, the Environment Department and Attorney General's office failed to meet the NRC's strict requirements for participation, the NRC ruled.

Both the Environment Department and Madrid's office blamed their problems on a lack of familiarity with NRC's unusual procedures. Madrid's attorneys also claimed a "budget crisis" prevented them from hiring experts to help with the filing.

Chris Coppin, one of the attorneys for Madrid's office in the case, disputed the NRC's conclusion that the filing was inadequate. "We don't agree that we didn't comply with their requirements," Coppin said in an interview.

Both have appealed, asking to have their claims in the case reinstated.

State officials assumed that they would be granted a seat at the table, Environment Secretary Ron Curry said in an interview.

"I felt that because we were acting on behalf of the state and on behalf of the governor that our being admitted was, if not automatic, close to it," Curry said. Madrid's office made a similar assumption, according to a brief filed with the NRC.

Richardson complained about the NRC's decision to exclude most of the state's concerns, saying in a letter to the NRC that the decision deprives the state of a say in the issue.

"Such a decision, particularly on procedural grounds, is regrettable," he wrote.

See other slide to learn about TOXIC WASTE from uranium-enrichment plants → → →

## LEA COUNTIANS: CONSIDER WHAT HAPPENED IN KENTUCKY BEFORE DECIDING ON LES PLANT HERE

### HERE'S WHAT HAPPENED WHEN LES-TYPE WASTE WAS STORED IN KY

**1. CANCER, REPRODUCTIVE/IMMUNOLOGICAL DISORDERS, DAMAGE TO GROWTH GLANDS AND LIVER - DIOXIN.** One of the most deadly carcinogens, dioxin has leaked from the plant in Paducah. The dioxin had contaminated enough soil at four plant sites by 1990 that the state required the soil to be excavated and put in drums. The dirt contained as much as 4.5 times the dioxin that the state allowed.

**2. DEATH, CANCER - PLUTONIUM/NEPTUNIUM.** Often referred to as the world's deadliest poison, plutonium was detected in soil (8 miles and 9.3 miles from the plant), apples, trees, vegetable gardens, and crops grown nearby. The 11.6 ounces of plutonium known to have passed through the Paducah plant was enough to kill more than 4.1 million people - more than all the men, women, and children in Kentucky - if they each had inhaled just one speck.

**3. DEAD FISH, CANCER - LEAD.** Fish studied for at least 12 years show toxic fish. Streams near the plant contain 50 to 100 times as much lead as they did before the plant.

**4. DEAD ANIMALS, CANCER - POLYCHLORINATED BIPHENYLS (PCBS)** Cause cancer and other diseases have been found at significant levels in fish, hawks, mice, rats, mink, raccoons, and a bobcat.

**5. CANCER - TRI-CHLOROETHYLENE and TECHNETIUM.** Tri-chloroethylene, a suspected carcinogen, and Technetium, a radioactive chemical, have been spreading northward from the plant and at least one is believed to have reached the river. Traces of contaminants have penetrated as far as 14 stories below ground.

**6. CANCER - CONTAMINATED GASES.** Contaminated gases have been released for decades, though the Department of Energy does not know the magnitude of these releases.

**7. OTHER TOXINS INCLUDE CESIUM, BERYLLIUM, CADMIUM, URANIUM, COPPER, NICKEL, SILVER, ZINC, VANADIUM, STRONTIUM, TECHNETIUM, PLUTONIUM**

**PROTECT YOURSELF, YOUR FAMILY, AND YOUR COMMUNITY! DEMAND THAT LES ADDRESS THE WASTE-DISPOSAL ISSUE BEFORE BUILDING ITS TOXIC PLANT!**

INFORMATION BELOW TAKEN FROM:

*Toxins Altering Life in Fragile Ecosystem: Official Reassurances Breed Skepticism*  
James Carroll and James Malone, The Courier-Journal (Louisville, KY)

To learn more, go to:

[http://www.courier-journal.com/cjextrn/uranium/legacyd2\\_eny.html](http://www.courier-journal.com/cjextrn/uranium/legacyd2_eny.html) OR visit the Citizens Nuclear Information Center at [www.cnics.us](http://www.cnics.us)

Commenter 031

From: "Lee Cheney" <lee\_cheney@leaco.net>  
 To: <nrcprep@nrc.gov>  
 Date: Mon, Jan 3, 2005 9:16 PM  
 Subject: Question for NRC to answer at LES hearings

After a recent study, the EPA announced it could take up to 35 years and \$280 billion to cleanup the nation's hazardous waste sites. The EPA currently estimates 77,000 such sites, with up to 9,267 more discovered each year. At that rate, more than 355,000 hazardous waste sites could require cleanup by 2039.

How many sites does the NRC estimate that there will be on the cleanup list ahead of Les when LES closes down operations after thirty years and how long does the NRC estimate that it will take after LES closes down operations before the LES waste stored at Eunice will be cleaned up and at what cost to the taxpayers?

Lee Cheney

Hobbs, NM 88240

Comment  
 #031-7

Commenter 031

From: "Lee Cheney" <lee\_cheney@leaco.net>  
 To: <nrcprep@nrc.gov>  
 Date: Wed, Jan 5, 2005 5:55 PM  
 Subject: Question for LES hearings about LES clean up costs

Please give the questions below full evaluation and analysis at the LES hearings:

Evidently, according the reply below that the NRC sent to Phillip, there is no risk to the taxpayers for LES cleanup. The only problem is, as I understand it, the LES cleanup bonds are only about 1/10th (and if inflation keeps going maybe only 1/100th) of what the cost will be if the cost of other taxpayer funded clean up costs are used as a guide. Who is going to GUARANTEE that the LES bonds will be SUFFICIENT to cover the cleanup costs 30 years from now and that there will be zero cost to the taxpayers 30 years from now????

Comment  
 #031-8

----- Original Message -----  
 From: PHILLIP BARR

To:  
 Sent: Wednesday, January 05, 2005 1:33 PM  
 Subject: Re: Question for Timothy Johnson of the NRC about the Louisiana Energy services plant in lea county

This is the answer I received from the NRC. If all this government involvement has allowed 77,000 toxic sites in this country, and more added to the list each year, whats to keep LES from becoming another site that has to be cleaned up at government expense?

Notice no answer from Mr. Johnson on the projected number of toxic cleanup sites that might be on a list about the time that LES goes off line.

If this LES plant was such a good deal, why was it run out of two states?

Government was involved in an uranium enrichment plant in Paducah Kentucky, and our own Governor Richardson apologized to the workers there for what that plant did to them.

Try to get anyone with the Nrc to guarantee this industry wont make people sick.

Are you listening Governor? Ron Curry?

Phillip Barr  
 Lea County

----- Original Message -----

From: Timothy Johnson  
 To: pharb2@msn.com  
 Sent: Wednesday, January 05, 2005 11:19 AM  
 Subject: Re: Question for Timothy Johnson of the NRC about the Louisiana Energy services plant

I assume the list of sites requiring cleanup you mention is the list the U.S. Environmental Protection Agency keeps of potential Superfund sites. It is our objective to ensure that NRC's sites never get on the Superfund list and require taxpayers to fund the decommissioning of licensed sites. We do this through our decommissioning financial assurance requirements (see 10 CFR 40.36 and 70.25). In the event that the licensee is unable to carry out decommissioning through bankruptcy or other reason, the financial assurance provisions provide the funding for decommissioning and NRC would ensure that the proper site remediation takes place. For uranium enrichment facilities, applicants must provide a decommissioning funding plan consisting of a site-specific cost estimate for decommissioning and a financial instrument, such as a surety bond, letter of credit, etc. The regulations provide additional information on the types of instruments that may be used and the requirements for these instruments. LES has chosen to use a surety bond for its financial mechanism.



>>> "PHILLIP BARR" <pharb2@msn.com> 01/04/05 09:39AM >>>  
 I understand there are 77,000 toxic waste sites in this country that need to be cleaned up with more added to the list each year.  
 Mr. Johnson, what is the estimated number of cleanup sites that would be on a cleanup list and ahead of LES at the end of the thirty year lifespan of the LES plant?  
 I request the nrc find this data and submit it to the state congress.

Phillip Barr  
 lea county.

J-104

Commenter 031

From: "Lee Cheney" <lee\_cheney@leaco.net>  
 To: <nrcprep@nrc.gov>  
 Date: Thu, Jan 6, 2005 7:07 PM  
 Subject: Fw: Question for LES hearings about LES clean up costs

> Dear Mr. Johnson:  
 > Thank you for your reply below to my original question. I would also like  
 to  
 > have the LES DEIS explain in detail by whom, and how the LES cleanup costs  
 > would be paid if the insurance company (or companies) that are providing  
 the  
 > LES cleanup bonds go bankrupt (as many insurance companies have and  
 continue  
 > to do) or for any other reason are unable to pay for the LES cleanup  
 costs.

Comment  
 #031-9

> Lee Cheney  
 >  
 > ----- Original Message -----  
 > From: "Timothy Johnson" <TCJ@nrc.gov>  
 > To: <lee\_cheney@leaco.net>  
 > Sent: Thursday, January 06, 2005 12:24 PM  
 > Subject: Re: Question for LES hearings about LES clean up costs  
 >  
 >  
 > As is stated in 10 CFR 40.36(d) and 70.25(e), decommissioning cost  
 estimates  
 > must be adjusted at intervals not to exceed 3 years. The periodic  
 > adjustments would account for inflation, changes in the costs of goods and  
 > services (e.g., waste disposal), changes in facility conditions or  
 > operations, and changes in expected decommissioning procedures.  
 >  
 > The following is a link to the guidance document we use in reviewing  
 > decommissioning funding plans:  
 >  
 >  
 > <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1757/v3/sr1757v3.pdf>  
 >  
 > The periodic updates to the decommissioning funding plan will ensure that  
 > there is sufficient funds to decommission the facility throughout its  
 > lifetime.  
 >>> "Lee Cheney" <lee\_cheney@leaco.net> 01/05/05 05:57PM >>>  
 > Please give the questions below full evaluation and analysis at the LES  
 > hearings:  
 >  
 > Evidently, according to the reply below that the NRC sent to Phillip, there  
 is  
 > no risk to the taxpayers for LES cleanup. The only problem is, as I  
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 > other taxpayer funded clean up costs are used as a guide. Who is going to  
 > GUARANTEE that the LES bonds will be SUFFICIENT to cover the cleanup costs  
 > 30 years from now and that there will be zero cost to the taxpayers 30  
 years  
 > from now????  
 > Lee

> ----- Original Message -----

> From: PHILLIP BARR

> To:

> Sent: Wednesday, January 05, 2005 1:33 PM

> Subject: Re: Question for Timothy Johnson of the NRC about the Louisiana

> Energy services plant in lea county

>

>

> This is the answer I received from the NRC. If all this government

> involvement has allowed 77,000 toxic sites in this country, and more added

> to the list each year, whats to keep LES from becoming another site that

> has to be cleaned up at government expense?

> Notice no answer from Mr. Johnson on the projected number of toxic cleanup

> sites that might be on a list about the time that LES goes off line.

> If this LES plant was such a good deal, why was it run out of two

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> Government was involved in an uranium enrichment plant in Paducah

> kentucky, and our own Governor Richardson apologized to the workers there

> for what that plant did to them.

> Try to get anyone with the Nrc to guarantee this industry wont make

> people sick.

> Are you listening Governor? Ron Curry?

>

> Phillip Barr

> Lea County

>

>

> ----- Original Message -----

> From: Timothy Johnson

> To: pharb2@msn.com

> Sent: Wednesday, January 05, 2005 11:19 AM

> Subject: Re: Question for Timothy Johnson of the NRC about the Louisiana

> Energy services plant

>

>

> I assume the list of sites requiring cleanup you mention is the list the

> U.S. Environmental Protection Agency keeps of potential Superfund sites.

It

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> list and require taxpayers to fund the decommissioning of licensed sites. We

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out

> decommissioning through bankruptcy or other reason, the financial

assurance

> provisions provide the funding for decommissioning and NRC would ensure

that

> the proper site remediation takes place. For uranium enrichment

facilities,

> applicants must provide a decommissioning funding plan consisting of a

> site-specific cost estimate for decommissioning and a financial

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> such as a surety bond, letter of credit, etc. The regulations provide

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the

> requirements for these instruments. LES has chosen to use a surety bond

for

> its financial mechanism.

>

>>> "PHILLIP BARR" <pharb2@msn.com> 01/04/05 09:39AM >>>

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> to be cleaned up with more added to the list each year.

> Mr. Johnson, what is the estimated number of cleanup sites that would be

on

> a cleanup list and ahead of LES at the end of the thirty year lifespan of

> the LES plant?

> I request the nrc find this data and submit it to the state congress.

>

>

> Phillip Barr

> lea county.

>

>

>

>

>

>

>

Commenter 031

Commenter 032

From: "Lee Cheney" <lee\_cheney@leaco.net>  
 To: <nrcprep@nrc.gov>  
 Date: Fri, Oct 15, 2004 1:49 AM  
 Subject: Request for NRC to investigate CNIC web site

Attention Chip Cameron:

Per my discussion with you following the NRC meeting at Eunice tonight, I hereby submit the following request to the NRC:

Comment

In view of the attack on and the accusations made about the Citizens Nuclear Information Center (CNIC) web site at the NRC draft EIS meeting at Eunice tonight I hereby request that the NRC include in the NRC EIS a clear statement that the NRC has investigated the CNIC and that there is nothing on the CNIC web site that is not the truth and that if the NRC finds anything on the CNIC web site that is not the truth that the NRC so advise me so that anything that is not the truth on the CNIC web site may be removed from the CNIC web site.  
 sincerely,  
 Lee Cheney

#031-10

-----  
 United States  
 Interest Free Home Mortgage Corporation  
 www.USIFHMC.com

J-106

Through out the whole document there are statements made regarding the construction, operation and decommissioning of said plant National Enrichment Facility. Although the report does summarize the effects of the different phases of the plant and according to the NRC the impacts of the operations and construction and decommissioning would have a small impact on the environment, I find that all one has to do is easily look up the

subject and find the summary following. In many of the different situations involving information, many references are made to the properties of the UF6 uranium hexafluoride and the feed gas as well as the depleted uranium waste byproduct. In all occurrences involving accidental release of the UF6 I find dangerous situations arise. A ruptured

Comment #032-1

container can cause death and excessive radioactive materials are release to the air and surrounding environment. What would happen if at some point all 15727 containers ruptured due to a possible terrorist attack. This is an item not covered under the EIS.

Comment #032-2

This is a state and national security issue. Who will address this and give a reply as to the consequence of such a thing happening? Does this fall under Safety and Security which is identified as being outside the scope of the EIS and NRC?

Comment #032-3

What about the disposition of the waste? The viable options are discussed; unfortunately, nothing is solid or contingent upon completion of this plant. Where is the proof that the waste will be gone? I have heard all politicians say that the governor wants the waste gone but final disposition has only been in outlines as possible options available. No contract means no guarantee.

The State of NM Environmental Dept and Atty General's office is being left out of the legal process and this concerning to me. The 2 state government entities filed contentions that should be addressed during the NRC hearing starting 2005, but it appears as though nothing is happening yet. The Gov of NM has requested the admittance of the 2 offices but it looks like the governor has no real say in this matter. This is very serious and we in this community will be lacking support if they are not admitted as important Interested Parties to this process. Who will assure us that the waste is removed as soon as possible? Who will stand up for Eunice? Our city government should be asking these same questions, why aren't they? Who will protect us with the necessary laws in place should something like environmental contamination or death occur?

Comment #032-4

The water issue is still of concern as well, we know that communities in NM are adopting water conservation policies required to be in place by next year. We know our 40-year water plan indicated a possible shortage of water within 40 years and yet we will allow this plant to use all the water they need and want and then at some point a possible deconversion plant may be built and that plant will use our water as well. When will our needs be considered for the 40 yr plan? My community still has much work to do, according to the water study engineers recommended that new water wells be drilled and water conservation be addressed. Water is an important and crucial part of our future here in Eunice and I am very concerned that this is not being taken seriously enough. Other issues that concern me are in the scoping summary reports are identified as being outside the scope of this environmental impact statement drafted by the NRC but I do intend to submit written comments in addition to these.

Commenter 032

Commenter 032

I personally do not support this project. I do not believe that this facility should be constructed in Eunice. Our community already has more than it's share of a hi-risk and polluting industry with the Oil and Gas Industry. We are exposed daily to hydrogen sulfide gas and other oil related pollutants. We have more than our fair share of cancer and in this DEIS there are constant references to Latent Cancer Fatalities. Excessive exposure to radioactive emissions and waste cannot be good for anyone. Why must the community of Eunice be the one to suffer the ill effects which are bound to occur and the surrounding areas will profit by our misery? I live here and I intend to be here a long time if God is willing. I ask you as Christian brothers and sisters, would you want this done to you? I would not want this for anyone regardless of the monetary profit potential. It is an unhealthy environment that you supporters of this project are wanting to subject the community of Eunice to and I will vigorously oppose the planning of this plant. I am a member of Public Citizen and Nuclear Information Resource Services and am very glad that most of our contentions were admitted by the NRC. We will have our day in court and at the end of the day, who knows what might happen.

Comment #032-5

I request that the Nuclear Regulatory Commission deny the license application for Urenco, Louisiana Energy Services, National Enrichment Facility.

*Rose Gaidum*  
 10-14-04  
 615514  
 Eunice NM  
 88231

J-107

Nuclear Regulatory Commission  
 Chief, Rules and Directives Branch  
 Division of Administrative Services  
 US Nuclear Regulatory Commission  
 Washington, DC 20555-0001

NUREG-1790/Docket 70-3103

Public Comment: Draft Environmental Impact Statement for the Uranium Enrichment Facility Proposed by Louisiana Energy Services for Lea County, NM

In Louisiana Energy Service's DEIS the gaseous effluent vent systems emissions of the operational plant are unclear. I request that the final EIS clearly state the allowable emission of each of these various discharges (per EPA, ACGIH, etc.) The numbers don't mean anything without an understanding of what can be discharged by law.

Comment #032-14

Thank you,

*Anita Ireland*  
*Rose Gaidum*

Commenter 032

NRC  
Chief, Rules and Directives Branch  
Division of Administrative Services  
US Nuclear Regulatory Commission  
Washington DC 20555-0001

NUREG-1790/Docket#70-3103

To Whom It May Concern,

The following are issues that have not yet been resolved.

1. Water- The 40-year water plan states that this area will have a water shortage within the next 40 years-why will we let LES take our water before it hits our water tanks? This rich company needs to drill their own water wells and go and deplete their own water supply not ours. (pg 4-66, 19-22, pg3-40, 53-60, pg 3-37, 33-43)

Comment  
#032-15

2. Waste- The waste sitting at Paducah and Oak Ridge is an ugly reminder that we humans will tolerate even this mess for 50 years or even longer. NM Governor Richardson claims he will not support facility if the waste is left here, so will he accept the idea that it's alright to move it 100 yards over to Waste Control Specialists and that will satisfy his requirements? No, I expect our Governor to do the right thing and take care of NM and the residents of Eunice, small as we are, we need him to take care of us. The waste should not travel anywhere on rail or truck, the waste should never be allowed to be created. This plant does not need to be created.

Comment  
#032-16

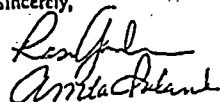
3. Air Quality- we breathe polluted air already with 3 gas processing plants in around the town of Eunice, hydrogen sulfide gas is prevalent just stepping outside of our home. Why must we be subjected to radiation and radioactive emissions and all the other negative pollutants as stated in the EIS? Is this just to justify 150-200 temporary jobs? The plant operating time will only be a few years (14) the rest of the time will be initial construction and 9 years will be spent in the decommissioning phase, the so-called full time employees with special qualifications will be employed less than 15 years. That is not even time enough to satisfy a bank note on a new home. (pg 4-44, 31-42, pg 4-43, 27-30, pg 4-72 1-9, pgC-9 17-29)

Comment  
#032-17

I request that the NRC deny the license application for Urenco, Louisiana Energy Services.

Comment  
#032-18

Sincerely,



801-108

Commenter 032

NRC  
Chief, Rules and Directives Branch  
Division of Administrative Services  
US Nuclear Regulatory Commission  
Washington DC 20555-0001

NUREG-1790/Docket 70-3103

The following are my comments on the proposed Louisiana Energy Services, Urenco uranium enrichment plant.

I question the validity of the statement pg xix line 43 that the facility would contribute to the attainment of national energy security policy objectives. What good are these objectives if national and state security are compromised? With the world as we know it today there are many issues that are raised when one refers to national security. This draft indicates that nonproliferation, public scoping, and safety and security are not considered in the environmental impact. How can that be when all of these are a factor in this unstable world? If this technology were stolen again as it was before with AQ Khan then it would impact our environment by possibly making our city, state and country vulnerable due to espionage. If there is an attack of any type on the facility, would that not constitute a national security due to the potential disbursement of radioactive fall-out caused by an explosive?

Comment  
#032-19

Per the no action alternative pg xx enrichment services would continue to be met by our friends and allies with existing domestic and foreign uranium enrichment suppliers-still a viable alternative to this plant. Still a saner alternative is to divert all research and development to a better and safer source of electricity development such as wind turbines and solar energy.

Comment  
#032-20

On pg xxiii, reference to public and occupation health and safety line 40-47 I find totally unacceptable since at this point in time there is no radiation or accidents involving radioactive materials so the most severe accident caused by rupturing an overfilled/overheated cylinders. It is a fact that the risks of regular low dose radiation can be a carcinogen at some point in time.

Comment  
#032-21

Reference pg 1-3 line 19-39 the 2002 letter to NRC from DOE indicates that the DOE made several recommendations and the last refers to Urenco as a partner, I question whether the US had knowledge of the espionage and status of the stolen secrets and plans that have been discovered about AQ Khan when this letter was written and whether this information is valid today? He has been acknowledged as the Father of The Pakistani Bomb after stealing the centrifuge technology secrets and used them to develop the technology in his homeland. Is this the kind of company the US wants to deal with for the next generation?

Comment  
#032-22

Reference pg 1-10 line 44-48, since the NM Governor has decided to withhold the Ground Water Discharge Permit it is evident that there may be other factors that are not agreeable with our Governor as has recently been divulged to the public regarding the disposition of the waste.

Comment  
#032-23

Reference pg 1-16, it is stated that there were no cooperating agencies involved with the scoping process, but since this process was started there has been information

Comment  
#032-24

forthcoming about this LES company contributing to NM Governor Richardson's' pet program, Move On.Org. This is what I would consider a possible conflict of interest in the license application since it may prove compromising to the Governor's Office.

Comment  
#032-24  
(cont.)

Reference page 2-2 table 2-1 reflects that construction will be 3 years then some operations will begin and construction will continue for 3 more years so actual full operations will only be 14 years, then decommissioning starts. It would appear that there will be a very moderate amount of time spent in the actual full operations of the plant so then the US would have to look for alternative to the plant again. This does not seem like a very cost effective operation, or a safe operation considering there are alternative energy sources that could be tapped during this 30-year span of time, which could be safer to the human species and our external environment.

Comment  
#032-25

On page 2-12 the table reflects projected earning for the temporary construction workers but I find nothing in the draft concerning pay and description of the plant workers, I have asked for this information before, why will this information not be divulged? It certainly falls under the socioeconomic issues at stake.

Comment  
#032-26

Page 2-21 line 3 states the sludge from the water pit will be removed at the end of the 30-year plant life once during decommissioning phase. Since this area does get rain deluge on a periodic basis this sludge must be removed on a regular basis, not just once in a lifetime.

Comment  
#032-27

Page 2-25 line 42-43 should be thrown out of the draft; it assumes there is a licensed low-level radioactive waste disposal facility, there is none.

Comment  
#032-28

Page 2-27 line 43-47 should be thrown out of the draft, it assumes there is/will be a licensed low-level radioactive waste disposal facility, there is none, this is not a viable assumption to make.

Comment  
#032-29

Page 2-29 refers to disposition of hydrogen fluoride gas to acid and calcium fluoride and how there will be more than the DUF6 to dispose of; there will be additional toxic wastes that will need to be disposed of as well. The no action alternative would mean there would be no wastes at all to be disposed of, therefore the disposition of these wastes and lack of a viable plan to rid the waste should not be assumed to be satisfied. There is no contract, no contingency in place with said ConvecDyn, no construction of a conversion facility that can even be considered as a viable plan to dispose of the waste. This should be thrown out of the draft.

Comment  
#032-30

Page 2-31 indicated disposal options that do not meet the criteria as viable options for the waste disposal. Line 19 proposes using an abandoned mine but certainly nothing has come about with this option since no one wants the waste generated by LES. This should be thrown out of the draft as an option. The other options detailed on 2-31 and 2-32 also prove to be uncertain since none of the facilities listed can accept this type of waste. All of these facilities should be disregarded as a viable waste disposal facility since none are licensed to accept the wastes. A no action alternative would be to continue as the US is currently doing and seek alternate methods of generating electricity, which I support.

Comment  
#032-31

Page 2-39 refers to the US reliance of foreign sources of enrichment services and how an alternative would not meet the US national energy policies but still the US is willing to sponsor a foreign owned company and trust them with providing this service? Line 44 indicated is in DOE 300a, obviously before the facts known about LES espionage history and AQ Khan. Does the government still feel the same about a foreign based/owned company having the this technology and just because it will be on US soil it

Comment  
#032-32

will trust this company to carry on as if there past never happened? It seems to me that if the US can judge what countries like Iran and Korea can do about their uranium enrichment then these same countries would be within their rights to condemn the US for their involvement with this foreign owned company.

Comment  
#032-32  
(cont.)

Page 2-44 line 11-15 states that the NRC staff assumes all DUF6 will be converted to U308 and will be disposed of in a licensed facility but I challenge the NRC to reevaluate this assumption since at present time there is no facility in existence in the US to convert DUF6 to U308 and there is no facility to put this waste in. This should totally negate the entire alternative for the waste disposal. The optimum situations and circumstances do not exist. This is not the time to dream of the ideal situations it is the time to develop and seek alternatives to nuclear energy. There are better and safer alternatives to nuclear power and the US should be the catalyst in the refinement of already known alternatives to nuclear power.

Comment  
#032-33

Page 3-40 line 53-60 are a review of what we already know about the Ogallala Aquifer and the future regional demand for water that would deplete Lea County's current water supply. There are projected shortages and specific recommendations that have been made by the State Engineer's Office and these items should be identified and acted upon before Lea County takes it upon itself to support the operation of this plant by authorizing our valuable water commodity to be sold to the highest bidder.

Comment  
#032-34

Page 3-56 line 15 refers to Prime Care Health Clinic; this clinic was abandoned by its parent hospital and is not open. There is no clinic open for business in Eunice as of this date.

Comment  
#032-35

Page 3-56 line 18 states that the public safety with this vicinity includes fire support provided by Eunice Fire and Rescue Service but since I am a resident of the Eunice Community I challenge that this Service can meet the necessary requirements of a useful and productive Fire and Rescue Service. There have situations just recently where our Fire and Rescue service could not respond to emergency either due to lack of personnel and in one situation on an emergency ambulance run, the patient/victim had to walk to the ambulance because the personnel responding could not perform their duties because they did not know how to operate the gurney for patient transport. This community may tolerate this type of ignorance and incompetence in this situation but will they in an emergency situation involving terrorist activity or major fire or injury situation? I don't desire to find out if they are capable, we have a very small and inexperienced volunteer fire department and frankly I do not think they are capable of handling any real, large and dangerous emergency. I do not desire to discredit my neighbors but we are not a sophisticated community and we are neither knowledgeable nor experienced in big time disasters.

Comment  
#032-36

Page 3-63 Line 6-8 refers to an extra effort made to meet with reps of the African-American and Hispanic groups, who and where was this effort actually made. Certainly was not in Eunice, I am Hispanic, my husband is African-American and certainly we live in the south/west side of Eunice and I have interviewed several people in this area and we were not contacted by LES nor the NRC. Did these groups of people actually participate and contact those directly affected by the plant, or are they from Hobbs, 20 miles away? This needs to be addressed in detail.

Comment  
#032-37

Page 4-8 lines 19-24 refer to operations and air quality, the pollutants that are released to the air during this plant operation period. This is unacceptable; our air quality is poor on

Comment  
#032-38

J-110

some days anyway due to hydrogen sulfide in the area due to the oil industry now we must endure additional caustic/toxic emissions. Zero emissions in the only acceptable alternative.

Comment #032-38 (cont.)

Page 4-13 lines 42-49 refers to the Ogallala Aquifer as a nonrenewable water source and future demand for water in the region would exceed the recharge rate, the present local water supplies could be affected. Knowing that our water supply is in jeopardy now and in the future it is appalling to me to see and hear the water officials in Lea County endorse this facility without regard to the future. Water conservation for the local population is one thing but to allow a polluting plant to use the water we need is inexcusable. LES should drill their own water wells and get their own water source other than ours. Why is the state of NM undergoing water conservation policy changes if they are willing to just negotiate our water rights away?

Comment #032-39

Page 4-36 Lines 5-17 refer to the largest impacts on the general public which include the magnitude of higher than the direct radiation and inhalation of the radioactive material in a postulated accident, I would like this detailed so that all the public would know of the symptoms and effects of any such postulated accident.

Comment #032-40

Page 4-39 lines 1-24 refers to potential chemical accidents to the public in an accident by rail or truck, I would like more information regarding the gravity of such an accident occurring. Gov Mackie, Colorado is very much against the transportation of such material as the waste across his state since there have been several rail accidents that have occurred in Colorado over the last year. I too have many questions and I believe all the Governors and state officials of all the states involved in the "alternative" methods of waste disposal should be made aware that this company is assuming that the waste product and/or enriched uranium can travel any place that they wish to ship it to.

Comment #032-41

Page 4-40 lines 23-37 reviews the summary of transportation accident impacts, I would like more information on how latent cancer fatalities are calculated, I am a lay person and I require these references to be described in details that an average lay person understands.

Comment #032-42

Page 4-44 lines 31-42 refers to the public exposure to the radioactive material released to the atmosphere and the expected exposure pathways of material deposited on the ground which could in affects not just people but livestock, and food sources such as leafy vegetables, carrots, potatoes and beef from nearby grazing livestock that may be eaten. This is totally unacceptable to me. I grow my own vegetables and beef and the idea that my food, which I grow, to avoid unnecessary pesticides and chemicals, will now be tainted by dangerous radioactive nuclides is abhorrent and totally unnecessary. Why should I accept less than zero emissions from this facility? Why can't the hepa-filtered air not just be recirculated back into the plant? Anyone working for this organization knows what this facility and its operations are so let it just be part of their on the job hazard to breathe their own pollutants.

Comment #032-43

Page 4-46 lines 4-30 refer to the high consequence events and intermediate consequence events, I am concerned about all these items, please detail all the dangers and actions that would be required to take place on each specific event listed. Also detail what emergency notification would be given to the public and how quickly can this information go out. Who would prepare and give out this necessary information? Would it be radio, tv, or the city government?

Comment #032-44

(4)

Page 4-48 lines 36-42 refers to accident consequences, in any hypothetical situation there are procedures in place to prevent these from occurring, but how does the NRC judge that a few DUF6 cylinders if on fire or leaking pose small to moderate impacts if just a few people get hurt or die? It would seem to me that the families of those few injured or dead people might think it's more than a small or moderate impact to their lives. Would there be monetary compensation to these families in this type of scenario?

Comment #032-45

Page 4-53 and 4-54 outline the routes for the waste and possible adjacent private conversion facilities they are somewhat unspecific and certainly questionable since there is no conversion facility in this country as of this date. The details are nothing more than a wish list since there is no contingency contract with any of these dream companies outlined. These items should not be considered since they do not exist.

Comment #032-46

Page 4-72 lines 1-34 refers to the unavoidable exposure of the public and workers to radiation and chemicals. This is totally unacceptable to this community because although the surrounding communities are willing to put our health and lives on the line for their monetary gain, we choose not to be guinea pigs. Zero emissions and zero contaminated water are the only acceptable alternatives.

Comment #032-47

I request the Nuclear Regulatory Commission deny the license for Louisiana Energy Services due to the many holes in the waste disposition alternatives and the growing public opposition to this plant project.

Comment #032-48

Sincerely yours,

Rose Gardocki  
Rose Gardocki  
Box 514  
Eunice NM 88231

(5)

1-9-05  
 NU Reg. 1790 / Pocket 70-3103

Anna Bradford -

Ms Bradford,  
 I'm forwarding copy originals of  
 documents faxed on Dec. 17, 2004.  
 Also find copy of editorial from  
 Eunice News dated Dec. 16, 2004.  
 How sad for those of us in Eunice  
 who must put up with not just big  
 business and those that will support  
 it, but this unreasoning enclanchment plenty  
 just from the narrow minded and  
 ignorant that write up articles and call  
 their side (the only side) right. Not just  
 right but this person thinks he can  
 see the Governor how to do things.  
 Indeed how sad for Eunice, we call  
 this stuff "news".

Comment  
 #032-050

Rose Graham

Cy: Bill Richardson, Governor NM

DECEMBER 16, 2004

Eunice News



**MURPH SEZ**

Not in my backyard! This is what Governor Bill Richardson has been saying lately concerning the waste and by-product that will be generated by the National Enrichment Facility proposed to be built near Eunice.

At least he's consistent with his statement. He's said it from the very beginning and he's still saying it.

The funny part about this entire scenario is that the NEF plant is not in the waste storage business to begin with. They never have been and they never will be. It's just not in their bag. They enrich rods for nuclear electric plants.

What's even more funny about this whole thing is the Governor is telling us it's okay to create this waste and by-product, but by golly, let's get it out of New Mexico as soon as it is generated.

This is the biggest problem we have in the whole country. There just aren't enough disposal plants to store this stuff properly in the first place.

If the Governor really has all of his faculties going for him, he would be looking to make Southeast New Mexico the Nuclear Corridor of the whole country. It's a natural.

We have the WIPP Site, we have Waste Control Specialists, and we will soon have the NEF plant.

We also have the advantage of Los Alamos Labs and the Sandia Corporation. These people have years of experience and have spent billions of dollars supporting their research.

The geological make-up of Southeast New Mexico and West Texas is probably the best and most unique division in the United States.

I'm sure our Governor knows this already and instead of giving out state all this rhetoric about what to do with the storage of waste and by-product, he needs to be thinking of ways that will benefit the state and the nation.

Other countries are doing it and with the knowledge and experience we have just in New Mexico, we should be the forerunners in nuclear energy and the storage of what we generate.

Don't forget, it was New Mexico that developed and exploded the first bomb. So why shouldn't New Mexico know more than any other state on what to do with the waste in a safe way?

It sounds to me like political propaganda coming from the Gov and he is trying to straddle the fence. One leg for the business opportunities and one leg for the environmentalists.

Not in my backyard is just a ruse. The governor needs to get off the fence before he mangles himself. He needs to put New Mexico in the situation where we benefit not only our state, but the entire country.

We have the opportunity and the resources. So, let's take the bull by the horns and do it the right way.

J-111



Commenter 033

From: "PHILLIP BARR" <pharb2@msn.com>  
 To: <nrcprep@nrc.gov>  
 Date: Fri, Jan 7, 2005 8:23 PM  
 Subject: Louisiana Energy Services in Lea County

I believe the Les plant should not be licensed because the emissions expose over 30,000 people to the following substances. These substances are known to be harmful to humans. I believe the NRC is ignoring this fact and licensing the plant will put a lot of people at risk.

radioactivity:

- uranium-234
- uranium-235
- uranium-236
- uranium-238
- gross alpha
- thorium (decay product of uranium)
- actinium (decay product of uranium)
- radium (decay product of uranium)
- depleted hexavalent uranium
- triuranium octaoxide (U3O8)
- uranyl fluoride (UO2F2)

toxics:

- volatile organic compounds
- carbon monoxide
- nitrogen dioxide
- particulates

Comment #033-1

J-112

Phillip Barr  
 Lea County

you legal types keep a copy of this for future reference

CC: "Timothy Johnson" <TCJ@nrc.gov>, <cellis@branchlawfirm.com>, "Kathy Helms" <khelms@frontier.net>, <Sally\_Worthington@nmenv.state.nm.us>, "Wenonah Hauter" <whauter@citizen.org>, "Ned" <Ned.Farquhar@state.nm.us>

Commenter 033

From: "PHILLIP BARR" <pharb2@msn.com>  
 To: <nrcprep@nrc.gov>, "nmlady2000" <nmlady2000@hotmail.com>, <sandra\_ely@nmenv.state.nm.us>, "Karen Keith" <keithd2@cox.net>, "mfgav" <mfgav@hotmail.com>  
 Date: Wed, Nov 10, 2004 2:54 PM

I believe the emissions from the proposed Les enrichment plant will be deposited into the loose topsoil we have in this area.

Seasonal winds from the south, some can be in excess of 50mph, will eventually blow the contaminated soil north over Hobbs.

This poses health risks for everyone between that plant and Hobbs.

Every man, woman, and child.

That is over 30,000 people.

I believe that if that plant goes into operation, the state of New Mexico and the federal government should be financially responsible for all new cancer cases in contaminate field: Hobbs and Eunice and surrounding areas.

Comment #033-2

As a 25 employee of the City of Hobbs, I hauled quite a few loads of trash to the landfill that is located on the same road as the LES site.

On many occasions, I noticed strong winds blowing to the west.

Radioactive pollutants will be deposited heavily on Eunice.

One or more of the evaporative ponds that will hold radioactive water pose a health risk also.

I believe using pit liners under a body of radioactive water is a substandard idea for safety reasons.

If the water table becomes contaminated, again the state and federal government should assume all costs.

Comment #033-3

Les is an underfunded shell company. Its parent company Urenco has a reputation for dishonesty. If there are any problems, Les will simply go bankrupt.

Comment #033-4

Our City and County leaders have failed to provide full disclosure on the effects of the LES plant to the people here.. LES officials have failed to provide full disclosure to the people here.

Comment #033-5

===== source EIS for the National Enrichment Facility in Lea County New Mexico

CC: "Ned" <Ned.Farquhar@state.nm.us>, <info@fritzlawfirm.com>, <bcrooke@ellaw.com>, <jrobertson@ellaw.com>, <klawetter@easthamlaw.com>, <info@baronbudd.com>

Commenter 033

Another sensitivity test was conducted to investigate possible effects of strong southerly but not extreme winds (again between 8 meters per second [26.2 feet per second] and 14 meters per second [45.9 feet per second]) on pollutant concentrations, when pollutants may possibly reach Hobbs. March 10, 1991, was selected for this simulation and 24-hour average concentrations were estimated. The wind speed was approximately 10 meters per second (32.8 feet per second) from 9 a.m. until 10 p.m., mostly from the south, and stability was neutral. Figure E-9 shows the results from this simulation. Average 24-hour concentrations are shown as a shaded image overlaid on a schematic map of the study area. The figure shows a narrow plume extending to the north from the source.

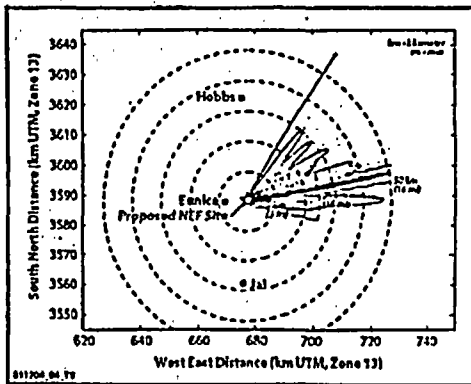


Figure E-8 Average 24-Hour Concentrations of Pollutants in Extreme Winds from the West-Southwest

These sensitivity tests indicate that pollutants may possibly reach Hobbs during strong wind episodes. However, atmospheric conditions when winds can be characterized as "gale" or "storm" are rare, and levels of concentrations are expected to be significantly lower at distances greater than 25 kilometers (15.5 miles). Spatial gradients in modeled pollutant concentrations were also estimated. A sensitivity test was conducted for the same day (March 10, 1991), with winds from the south, so the plume extends to the north from the proposed NEF source. The results from this simulation are shown in Figure E-10. The figure shows the decrease in concentrations at the plume centerline due to dispersion processes as a function of distance from the source. As can be seen from the figure, the concentration decreases by a factor of 1,000 when the possible plume from the proposed NEF reaches Hobbs.

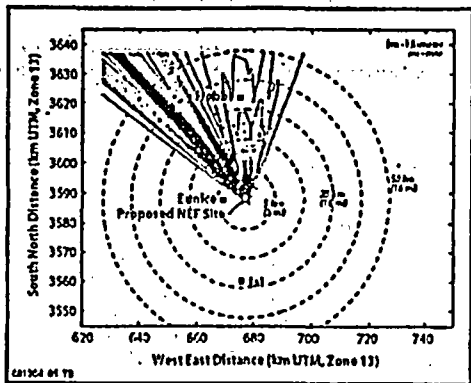


Figure E-9 Average 24-Hour Concentrations of Pollutants in Strong Southerly Winds

From: "PHILLIP BARR" <pharb2@msn.com>  
 To: <nrcprep@nrc.gov>, "Ned" <Ned.Farquhar@state.nm.us>, <sandra\_ely@nmenv.state.nm.us>, <st.nancy@mail.house.gov>, <Sally\_Worthington@nmenv.state.nm.us>  
 Date: Mon, Nov 15, 2004 10:28 AM  
 Subject: statement on ---Licensing of the proposed LES uranium enrichment plant in Lea County-

I believe the Les plant emissions will get into the loose topsoil we have in this area. Successive seasonal high winds that blow from the south that we have in this area will carry the loose radioactive soil over Hobbs. Winds also blow to the west in this area. Eunice will get contaminated soils also. Pathway for emissions from the Les plant to humans will be the sandstorms. I believe the licensing of this uranium enrichment plant poses a long term health risk to over 30,000 people.

Comment #033-6

Phillip Barr  
 Lea County, New Mexico

You legal guys should save this one for future reference

CC: <info@fritzlawfirm.com>, <bcrooke@elllaw.com>, <robertson@elllaw.com>, <klawetter@easthamlaw.com>, <info@baronbudd.com>, "Wenonah Hauter" <whauter@citizen.org>

J-113

Commenter 033

From: "PHILLIP BARR" <pharb2@msn.com>  
 To: <nrcprep@nrc.gov>  
 Date: Sun, Dec 26, 2004 6:33 PM  
 Subject: Comment against licensing of LES uranium enrichment plant in Lea County, NM.

Valley Fever ( coccidiomycosis) is an incurable disease caused by the inhalation of C. immitis, a fungus which permanently becomes a parasite in its host. The organism that causes it is commonly found in the soil of the southwestern United States, Mexico, and parts of Central and South America. *Comment #033-7*

The Center for Disease Control states that C. immitis could be used as a weapon of biowarfare or bioterror via aerosol delivery.

Valley fever can activate or reactivate at any time in ones life with dire consequences and may never show up on a blood test.

The radioactive emissions from the LES plant would tend to sterilize the soil and if any new C. immitis is later blown into a sterilized area there would be no natural competition for space and the fungus would find an environment it could thrive in. Seasonal high winds in this area can hit over 50mph+ and they usually blow in a northerly direction. North of the Les site is over 30,000 people within 25 miles.

Valley fever is incurable and allowing the Les plant to operate with these emissions poses an unacceptable risk of making this existing natural hazard worse, causing major health problems to the public.

*Comment #033-7 (cont.)*

source of map=<http://www.valleyfeversurvivor.com/history.html>  
<http://www.valleyfeversurvivor.com/history.html>

Phillip Barr  
 Lea County

CC: "Kathy Helms" <khelms@ironliernet.net>, "Ned" <Ned.Farquhar@state.nm.us>, "Wenonah Hauter" <whauter@citizen.org>, <lindsay@lindsaylovejoy.com>



Commenter 034

From: "Fisher, Karen" <KFisher@ago.state.nm.us>  
 To: "nrcprep@nrc.gov" <nrcprep@nrc.gov>  
 Date: Mon, Oct 18, 2004 3:27 PM  
 Subject: Docket No. 70-3103

Dear Sir/Madam:

Is the Draft Environmental Impact Study, which was issued on 09/17/2004 in the referenced case, available in Spanish?

*Comment # 034-1*

Karon L. Fisher, MBA  
 Assistant Attorney General  
 Water, Environment & Utilities Division  
 New Mexico Attorney General's Office  
 Mailing Address: P.O. Drawer 1508, Santa Fe, NM 87504  
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J-114

Commenter 034

From: "Fisher, Karen" <KFisher@ago.state.nm.us>  
 To: <nrcprep@nrc.gov>  
 Date: Sat, Dec 18, 2004 4:10 PM  
 Subject: NUREG-1790

Dear Sir or Madam:

Attached please find the comments of the New Mexico Attorney General's Office to the Draft Environmental Impact Statement for the Proposed National Enrichment Facility (NUREG-1790).

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STUART M. BLUESTONE  
 Chief Deputy Attorney General

December 18, 2004

Chief, Rules Review and Directives Branch  
 U.S. Nuclear Regulatory Commission  
 Washington, DC 20555-0001

RE: Report No. NUREG-1790, Draft

Dear Sir or Madam:

The Staff of the New Mexico Attorney General's Office ("AGO") is submitting these comments to the Draft Environmental Impact Statement for the Proposed National Enrichment Facility in Lea County, New Mexico ("EIS") to the U.S. Nuclear Regulatory Agency ("NRC"). In the first section, we will discuss our general, overall comments. In the second section, we will provide specific, line-by-line comments.

GENERAL COMMENTS

Overall, the EIS is well written and organized. However, we have several general concerns about the EIS, as follows:

1. Selection of Alternatives

We are very troubled that the EIS considers only the preferred alternative and the no-action alternative. On page 2-39 of the EIS, the decision is explained: "None of the candidate sites were *obviously superior* to the [Louisiana Energy Services ("LES")] preferred site in Lea County, New Mexico; therefore no other site was selected for further analysis." (emphasis added)

Comment #034-2

This is not the appropriate legal standard for evaluating the inclusion of alternatives under the National Environmental Policy Act ("NEPA"), 42 U.S.C. § 4321 *et seq.* Rather, the NEPA and its implementing regulations make it clear that appropriate and reasonable alternatives must be fully evaluated.

NEPA provides: "[A]ll agencies of the Federal Government shall-- ... (E) study, develop, and describe *appropriate alternatives* to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources; ... ." Section 102(2) of NEPA, 42 U.S.C. § 4332(2) (emphasis added).

The NEPA implementing regulations for the NRC state: "[D]raft environmental impact statements should also include consideration of the economic, technical, and other benefits and costs of the proposed action and alternatives . . ." 10 C.F.R. § 51.71(d). This Section goes on to clarify that the alternatives to be considered are "reasonable alternatives." See 10 C.F.R. § 51.71(e).

The Council on Environmental Quality ("CEQ"), the federal agency with NEPA oversight authority, has also promulgated NEPA implementing regulations, which are binding on other federal agencies conducting NEPA analyses. 40 C.F.R. § 1507.1. CEQ regulations explain that the purpose of evaluating "reasonable alternatives" is to fully "inform decisionmakers and the public." 40 C.F.R. § 1502.1; see 40 C.F.R. § 1502.14. This laudatory policy is undermined by conclusory statements, such as the one contained in the EIS that alternative sites were not analyzed because they were not obviously superior to the preferred alternative.

The Tenth Circuit recently considered the selection and analysis of alternatives under NEPA in a case involving an environmental assessment. *Davis v. Mineta*, 302 F.3d 1104 (10th Cir. 2002). The court criticized the federal agency (the Department of Transportation) for failing to analyze a reasonable alternative when there was nothing "in the record to establish that [the alternative] is such a 'remote, speculative, impractical or ineffective' alternative that it did not need to be studied as a viable alternative." *Id.* at 1122. The court concluded: "There are no cost studies, cost/benefit analyses or other barriers advanced that would warrant a conclusion that [the unconsidered] alternatives are unreasonable, standing alone or in conjunction with other alternatives."

Comment #034-2 (cont.)

In this case, the NRC is preparing an environmental impact statement rather than an environmental assessment. Thus, greater detail of discussion is required, because as the Tenth Circuit has made clear an environmental impact statement must be conducted with more rigor than an environmental assessment. See *Utah Shared Access Alliance v. United States Forest Service*, 288 F.3d 1205, 1213 (10th Cir. 2002). However, in light of the legal requirements outlined above and the paucity of discussion of alternative sites in the EIS, the AGO is concerned that the EIS may fail to comply with NEPA in this respect. The AGO urges the NRC to revisit the issue of selection and analysis of alternative sites.

## 2. Impacts to Water Resources

The AGO is very concerned about protecting New Mexico's water resources and is concerned that the EIS provides insufficient information to evaluate fully whether the National Enrichment Facility ("NEF") would be sufficiently protective. For example, with respect to off-site migration of contaminants through groundwater, there is no discussion of the potential transmission pathways to deeper groundwater. The EIS should include identification and analysis of these potential pathways, such as domestic wells, abandoned wells, geologic faulting and areas of exposure of aquifer-supporting geologic formations. It is particularly important that the EIS examine potential contaminant pathways to the Ogallala Aquifer, because as noted in the EIS the Ogallala Aquifer is of critical regional significance. See Section § 3.8.2.1 at 3-37.

Comment #034-3

Comment #034-4

In several places, the EIS notes that wastewater from the NEF could be transported through groundwater to a location 3.2 kilometers (2 miles) from the site. See Section 4.2.6.2, page 4-13, lines 38-46; Section 4.2.6.2, page 4-14, lines 19-22. The EIS also notes the possibility of off-site transport of stormwater. Section 6.2.2, page 6-18, lines 26-27. However, the EIS fails to discuss the resulting impacts to human health and the environment. For example, is this migration likely to cause an exceedance of New Mexico water quality standards? If so, how will exceedances be addressed? Even if the groundwater and surface water contamination levels comply with water quality standards, will there be injury to New Mexico's trust resources, such as nearby uncontaminated groundwater and surface water and biota? In addition, what is the potential impact to private property rights, such as vested water rights? LES is not permitted to cause injury to these trust resources or private property rights.

Further, it would appear that the stormwater from the NEF that will contain the highest concentration of radionuclides is being discharged to a single-lined retention basin. See IES Section 4.2.6.2, page 4-11, line 49 to 4-12, line 5. The EIS acknowledges, "Exposure to uranium may occur from . . . releases of radioactive liquids to surface water." As discussed, we are concerned about off-site migration of wastewater and stormwater, and a discharge of radioactive stormwater to a single-lined basin has the potential to increase that risk to an unacceptable level. The EIS should quantify these risks and contain further discussion and analysis of the threats to groundwater and surface water so the decision maker and the public can make an informed decision regarding the acceptability of these risks.

Comment #034-5

## 3. Impacts of Long-Term Storage of DUF<sub>6</sub>

It is undisputed that there currently is no conversion facility that could accept DUF<sub>6</sub> generated at the NEF. The EIS acknowledges that DUF<sub>6</sub> would be stored at the NEF for up to 30 years while disposal options are developed. See Section 4.2.14.3, page 4-52, lines 39-41. However, the EIS fails to analyze the impacts to human health and the environment if the efforts to develop these disposal options are unsuccessful. The AGO is very concerned about the seriousness of this omission.

Comment #034-6

Under NEPA, a potential effect must be analyzed if it is reasonably foreseeable. 40 C.F.R. § 1508.8. "As in other legal contexts, an environmental effect is 'reasonably foreseeable' if it is 'sufficiently likely to occur that a person of ordinary prudence would take it into account in reaching a decision.'" *Mid States Coalition for Progress v. Surface Transportation Board*, 345 F.3d 520, 549 (8th Cir. 2003) (quoting *Sierra Club v. Marsh*, 976 F.2d 763, 767 (1st Cir. 1992)). In other words, the effect need not be certain to occur.

In this case, the inability of LES to identify adequate conversion and disposal options, when none currently exist, is a classic example of an effect that is not certain, but is of sufficient likelihood that analysis is required under NEPA. Without a full discussion of the impacts of long-term storage on human health and the environment, the EIS fails to provide the necessary information to insure that future generations are not unduly burdened by the NEF's generation of large volumes of radioactive waste. See *Nuclear Energy Institute, Inc. v. Environmental*

Protection Agency, 373 F.3d 1251, 1284-85 (D.C. Cir. 2004). The AGO is very concerned that, by failing to consider this issue, the EIS may not comply with NEPA.

#### SPECIFIC COMMENTS

This section addresses specific comments following the organization of the EIS. It should be assumed that comments mentioned for particular chapters also apply to parallel discussions, if any, in the executive summary.

Section 1.6, pages 1-18 to 1-19 — The State of New Mexico owns the fee interest in the land upon which the NEF will be sited, so it would be appropriate to list the State as an organization involved in the proposed action. *Comment #034-7*

Section 2.1.9, page 2-27, lines 38-41 — Throughout the EIS, it is assumed that the DUF<sub>6</sub> generated at the NEF would be categorized as a Class A low-level radioactive waste. See, e.g., Section 4.2.14.2, page 4-52, lines 14-15; Section 4.2.14.4, page 4-58, line 37. However, the NRC has not yet ruled on this issue. Therefore, the EIS should identify and analyze alternative storage, conversion and disposal options if the DUF<sub>6</sub> is not categorized as a Class A low-level radioactive waste. *Comment #034-8*

Table 2-8, page 2-52 — Under the No-Action Alternative column, the following sentence does not make sense: "Long-term uncertainty in future supplies of low-enriched uranium could be affected without replacement enrichment capacity for the existing U.S. enrichment facility or from the potential ending of the 'Megaton to Megawatts' program in 2013." *Comment #034-9*

Table 2-8, page 2-55 — Under the Proposed Action column, it appears that text is cut off at the bottom and missing. *Comment #034-10*

Table 2-8, page 2-56 — In the third sentence under the Proposed Action column, for clarification, we suggest you insert *of radiation exposure* in between (5 millirem) and per year. *Comment #034-11*

Table 2-8, page 2-56 — Under the Proposed Action column, it appears that text is cut off at the bottom and missing. *Comment #034-12*

Table 2-8, page 2-57 — Under the Proposed Action column, the final sentence in the first paragraph is inaccurate. The sentence states: "There would be enough existing national capacity to accept the low-level radioactive waste that could be generated at the proposed NEF." Throughout the EIS, it is acknowledged that there is no facility currently operating that could convert the DUF<sub>6</sub> generated at the NEF for disposal. If this reference is not intended to include DUF<sub>6</sub>, it should so state, and then address the national capacity for converting and disposing of DUF<sub>6</sub>. *Comment #034-13*

Section 3.12, page 3-65, line 28 — This sentence indicates that Eunice, New Mexico is east of the proposed facility, but in fact Eunice is west of the site. *Comment #034-14*

#### Comment #034-15

Section 4.2.4.1, page 4-7, lines 31-33 — We disagree with this statement. As noted by the New Mexico Environment Department in its comments dated November 8, 2004, PM<sub>10</sub> is a concern in this area of New Mexico. The EIS should address this issue in more detail.

Table 4-1, page 4-8, lines 11-12 — As noted in the preceding comment, PM<sub>10</sub> is a matter of concern. These model results indicate that the NEF will generate a 24-hour maximum of 144 µg/m<sup>3</sup> of PM<sub>10</sub>. This amount is very close to the primary regulatory limit of 150 µg/m<sup>3</sup>, and in light of the fact that an exceedance for PM<sub>10</sub> has been recorded for Hobbs, New Mexico, the conclusion that the potential impact to air quality is small is unsupported. The EIS should address whether the NEF's emissions of PM<sub>10</sub>, when added to other sources in the vicinity, will cause an overall exceedance, particularly since a quarry is nearby and could be expected to emit significant amounts of particulates, see Figure 3-3, page 3-3. In addition, the EIS should contain a more detailed explanation of how an exceedance for PM<sub>10</sub> would be prevented. The general references throughout the EIS to dust suppression are inadequate to inform the decision maker and the public fully on this issue. *Comment #034-16*

Section 4.2.4.2, pages 4-8 to 4-9 — The references to the total amount of hazardous air pollutants emitted are inconsistent. Line 32 on page 4-8 and line 6 on page 4-9 erroneously indicate a limit of 91 metric tons (100 tons) per year, but line 24 on page 4-8 correctly references a limit of 9.1 metric tons (10 tons) per year. *Comment #034-17*

Section 4.2.5.1, page 4-10, lines 12-14 — The EIS should explain how penetration of the clay layer would affect off-site transmission of contaminants through groundwater. *Comment #034-18*

Section 4.2.5.1, page 4-10, lines 21-22 — It is inaccurate to state that "site preparations and construction result in only short-term effects to the geology and soils," because the effect of the NEF footprint on geology and soils will be long term. See Section 4.7, page 4-72, lines 24-25. *Comment #034-19*

Section 4.2.5.2, page 4-10, lines 28-29 — The statement that "the rate of wind and water erosion of the exposed surface soils surrounding the proposed NEF site would likely be small" is conclusory. The EIS should explain why this is so, and how this conclusion was reached. *Comment #034-20*

Section 4.2.6.1, page 4-11, lines 25-27 — Based on discussion elsewhere in the EIS, it appears that a large portion of the water used during construction will be used for dust suppression. Therefore, the design estimates for the Claiborne Enrichment Facility are applicable only to the extent that the climatic and soils conditions are similar or adjustments based on differences have been made. The EIS needs to explain the underlying rationale for assuming that the two facilities are comparable in this regard. *Comment #034-21*

Section 4.2.6.2, page 4-12, lines 40-43 — This discussion assumes that water buildup in the evaporative basin would be gradual. The EIS should discuss how overflows would be prevented. *Comment #034-22*

<sup>1</sup> It should be noted that this table erroneously identifies this standard as secondary. The standard is primary. See Table 3-6 at 3-21.

*Comment #034-22 (cont.)*

in instances of rapid buildup, such as a valve failure or burst pipe, or a discussion of how a rapid water buildup would be prevented under such circumstances.

Section 4.2.6.2, page 4-13, lines 38-46 — The fact that “[t]here are no ground-water users within 3.2 kilometers (2 miles) downgradient of the proposed NEF site, and there are no downgradient users of ground water from the sandy soil above the Chinle Formation” is not relevant to the question at hand, whether seepage from the Site Stormwater Detention Basin has the potential to contaminate groundwater. As far as we are aware, there is no legal constraint, other than State Engineer permitting, that would prevent the construction of a shallow groundwater well next to the NEF property line. Therefore, the analysis should focus on the magnitude of impacts from this perspective.

*Comment #034-23*

In addition, the EIS concludes, “the Site Stormwater Detention Basin seepage would have a SMALL impact on water resources of the area.” However, this conclusion is contradicted by the immediately preceding statement that there is a potential for migration of seepage from the stormwater detention basin to a location 3.2 kilometers (2 miles) from the site. The potential for seepage needs to be examined and analyzed in much greater detail before an appropriate conclusion regarding the impact can be made.

*Comment #034-24*

Section 4.2.6.2, page 4-14, lines 19-22 — Similarly, the conclusion that “[t]he septic systems would also be expected to have a SMALL impact on water resources” is directly contradicted by the preceding sentence acknowledging the potential for off-site migration to a location 3.2 kilometers (2 miles) from the site. As above, the potential for seepage needs to be examined and analyzed in much greater detail before an appropriate conclusion regarding the impact can be made.

*Comment #034-25*

Section 4.2.7.1, page 4-17, lines 33-34 — This analysis fails to discuss the impacts on ecological resources from the use of pesticides, which Table 4-15 on page 4-51 indicates would occur.

*Comment #034-26*

Section 4.2.7.2, page 4-18, line 24 — The EIS should explain why the level of safety required for the protection of humans is adequate for other animals and plants, since different species use natural resources and react to environmental toxins in very different ways.

*Comment #034-27*

Section 4.2.7.3, page 4-18, lines 44-45 — The EIS should explain why netting would not be installed over the UBC Storage Pad Stormwater Retention Basin. As noted above, even if the concentration levels are within regulatory limits, LES is not permitted to cause damage to natural resources, such as waterfowl.

*Comment #034-28*

Section 4.2.9.1, page 4-24, lines 4-6 — Impacts from increased traffic are summarized by the statement, “this period of inconvenience would be short.” However, traffic impacts would last from the inception of construction through the last phase of decontamination, which would span 30 or more years. It is inaccurate to state that this is a “short” period of inconvenience.

*#034-29*

Section 4.2.9.5, page 4-24, lines 44-47 — The observation that the nearest residence is 4.3 kilometers (2.6 miles) from the NEF, which is made throughout the EIS, diverts attention from

*Comment #034-30*

*Comment #034-30 (cont.)*

the fact that residences could be established much closer to the NEF. The EIS should focus on analyzing the potential human health and environmental impacts to the general public with respect to the maximally exposed individual. The frequent references to the currently existing nearest residence could create confusion regarding the appropriate benchmark.

Section 4.2.9.5, page 4-25, lines 8-19 — The EIS should include discussion of relevant infant mortality rates, if available. This would be particularly helpful if the statistics can be broken out by race and ethnicity.

*Comment #034-31*

Table 4-3, page 4-26 — The category of potential impacts to socioeconomic and community resources for recreation is identified in the table but not discussed in the text. The text should include a discussion of this impact.

*Comment #034-32*

Section 4.2.10.1, page 4-27, lines 22-23 — The EIS indicates in a very generalized way that “[c]onstruction activities would be expected to occur during normal daytime working hours.” It would be much more informative to the decision makers and the public if the term *normal daytime working hours* is defined. What hours of the day and what days of the week are included? How are holidays handled? Are there any exceptions to the general rule of limiting construction activities to these times, particularly since the EIS states that “short-term noise impacts may be limited to workday mornings and afternoons?” (emphasis added)

*Comment #034-33*

Section 4.2.10.1, page 4-29, lines 8-10 and 20 — Despite finding that the “projected noise level ranges are within the U.S. Department of Housing and Urban Development (HUD) unacceptable sound pressure level guidelines,” the EIS concludes that the impact on noise levels from site preparation and construction is small, noting that the duration is short term. However, the unacceptable noise levels would continue for several years, and the EIS fails to describe the impact on the maximally exposed individual. For example, if hearing loss were likely to occur for this individual, it would appear erroneous to conclude that the impact is small. This issue merits further discussion and analysis.

*Comment #034-34*

Section 4.2.10.3, page 4-29, line 46 — In accordance with the preceding comments, it would be informative to the reader to expand upon the statement that “construction could occur during nights and weekends, if necessary.”

*Comment #034-35*

Section 4.2.11.1, page 4-30, lines 47-49 — We do not agree that a 188% increase in vehicular traffic on New Mexico Highway 234 results in a small to moderate impact. We believe this impact should be characterized as moderate to large. In light of this substantial increase in traffic, the EIS should further analyze this impact. For example, the EIS should quantify the expected additional expense to the State of New Mexico for increased road maintenance. The EIS should also discuss how this impact would be mitigated. For example, would LES contribute resources to the State to assist in maintenance and improvement of Highway 234 in the affected area?

*Comment #034-36*

Section 4.2.11.1, page 4-31, lines 11-12 — The EIS should explain how the assumption was reached that a truck would have an average round-trip distance of 64 kilometers (40 miles).

*Comment #034-37*

Section 4.2.11.1, page 4-31, lines 19-21 — It is unclear how the fact that the construction access roads will be converted to permanent access roads leads to a conclusion that the impacts from the construction access roads are small. Conversion of these roads will not cause a decrease in the amount of vehicular traffic on Highway 234. And the fact that the roads essentially will be constructed twice does not decrease other human health and environmental impacts. The EIS needs to contain further analysis and explanation of this issue.

Comment #034-38

Section 4.2.11.2, page 4-31, lines 45-46 — As above, the EIS should explain how the assumption was reached that a supply truck would have an average round-trip distance of 64.4 kilometers (40 miles).

Comment #034-39

Section 4.2.11.2, page 4-32, lines 41-42 — The EIS should explain why an assumption of stable meteorological conditions is appropriate for the NEF.

Comment #034-40

Section 4.2.11.2, page 4-37, lines 78-84 — This paragraph is virtually unintelligible.

#034-41

Section 4.2.11.2, page 4-40, lines 17-19 — The EIS fails to explain how the probability of occurrence of a transportation accident factors into the conclusion that the impacts could be small to moderate. It is almost inconceivable that impacts on up to 28,000 persons could be small to moderate unless the risk of such occurrences is infinitesimally small. Without an explanation of how probabilities influenced the conclusion, it is impossible for the decision maker or the public to make an informed decision regarding the acceptability of a risk with such a large potential impact.

Comment #034-42

Section 4.2.11.3, page 4-40, lines 24-25 and 28-29 — As above, we do not agree that an approximately 100% increase in vehicular traffic on New Mexico Highway 234 results in a small to moderate impact. We believe this impact should be characterized as moderate to large. In light of this substantial increase in traffic, the EIS should further analyze this impact. For example, the EIS should quantify the expected additional expense to the State of New Mexico for increased road maintenance. The EIS should also discuss how this impact would be mitigated. For example, would LES contribute resources to the State to assist in maintenance and improvement of Highway 234 in the affected area?

Comment #034-43

Section 4.2.11.3, page 4-40, lines 31-37 — It is misleading to discuss only cancer fatalities in connection with summarizing the potential impacts to human health for transportation accidents. There are other significant, concerning impacts identified in the preceding discussion, which should also be mentioned in the summary.

Comment #034-44

Section 4.2.11.4, page 4-41, line 2 — The EIS should state whether LES is being required to install dedicated turning lanes. As written, it sounds more like a mere suggestion. Also, as noted above, construction of dedicated turning lanes may be inadequate to mitigate the impacts of increased traffic on Highway 234.

Comment #034-45

Section 4.2.12.2, page 4-45, lines 4-11 and 37-39 — The UBC Storage Pad Stormwater Retention Basin is expected to be dry for 11 to 12 months of the year, *see* Section 4.2.6.2, page 4-13, lines 10-12, but there is no discussion of impacts to human health and the environment from resuspension of contaminated soil from this basin. Because the USB Storage Pad Stormwater Retention Basin would not be covered with netting, it could be expected that the resuspension factor for soils would be higher than for the Treated Effluent Evaporative Basin. There is no indication in Chapter 6 that either of these basins would be monitored for impacts to air quality. The EIS should address these issues. The EIS also should contain a discussion of the effect of this drying on the integrity of the liner.

Comment #034-46

Section 4.2.13.1, page 4-48, lines 22-23 and Section 4.2.13.2, page 4-48, lines 36-42 — The statements regarding the severity of the accident consequences are inconsistent. Section 4.2.13.1 identifies the selected accident sequences as high to intermediate in severity, yet Section 4.2.13.2 concludes that these accident scenarios pose acceptably low risks and small to moderate impacts. It is possible that this discrepancy is due to factoring in the probability of the selected accident sequences, but that cannot be determined from the EIS. The decision maker and the public cannot make an informed decision regarding the acceptability of these risks without a full discussion of probabilities of occurrence and how these probabilities factor into a conclusion regarding the magnitude of impacts.

Comment #034-47

Section 4.2.14, page 4-50, line 43 — The word *govern* should be replaced with the word *governed*.

Comment #034-48

Section 4.2.14.2, page 4-52, lines 9-10 — This statement regarding the generation of wastes needs clarification: Does this mean that the NEF would generate 86,950 kilograms (191,690 pounds) annually of purely radiological (nonmixed) waste?

Comment #034-49

Section 4.3.4, page 4-61, lines 41-47 — The discussion of solvents is inadequate. It does not identify what solvents would be emitted and whether these solvents are classified as hazardous air pollutants. If they are so classified, the EIS should analyze whether the NEF would have the potential to emit more than 10 tons per year of any single pollutant or more than 25 tons per year of any combination of pollutants. The analysis should be from the perspective of the NEF's potential to emit these pollutants, not the estimated actual emissions of such pollutants. *See, e.g.,* 42 U.S.C. § 7511a(b)(1)(A)(ii)(I). It would appear that the EIS erroneously relies on an estimate of actual emissions. The discussion of solvents needs to be expanded and clarified to address these issues.

Comment #034-50

Section 4.3.8, page 4-63, lines 34-35 — It would appear untenable to conclude that closure of the NEF would have a small to moderate socioeconomic impact if the NEF became the major employer in the Eunice, New Mexico area. It is more likely that the impact would be moderate to large under these circumstances.

Comment #034-51

Section 4.3.9, page 4-63, lines 39-42 — The statement regarding the NEF's environmental justice impacts during decommissioning is conclusory. The EIS should explain how this conclusion was reached.

Comment #034-52



Section 4.3.10, page 4-63, line 49 to page 4-64, line 1 — The statement regarding noise impacts lasting "for a few months" is confusing. The EIS indicates elsewhere that the decommissioning process will take 9 years. This apparent contradiction should be explained. *Comment #034-53*

Section 4.4, page 4-65, lines 22-23 — The EIS should explain why there would not be cumulative impacts to these resource areas. Intuitively, it would appear that most if not all of these resources would experience cumulative impacts. *Comment #034-54*

Section 4.4.3, page 4-66, lines 24-27 — The EIS should explain why it was appropriate to analyze only the Waste Control Specialists site for cumulative impacts to water resources, or it should include analyses of impacts from other nearby sites. *Comment #034-55*

Section 4.4.4, page 4-66, lines 35-48 — As noted above, the EIS should discuss the cumulative impacts to air quality with respect to PM<sub>10</sub> resulting from the operation of NEF in addition to the nearby quarry and other surrounding land activities. *Comment #034-16 (cont.)*

Section 4.4.6, page 4-67, line 43 — The word *or* should be replaced with the word *of*. *#034-56*

Section 4.4.6, page 4-67, lines 42-44 — The EIS should discuss cumulative impacts with respect to environmental justice resources during the operation and decommissioning phases of the NEF. *#034-57*

Section 4.4.7, page 4-68, lines 8-9 — As noted above, the AGO disagrees that the impacts to transportation resources would be small to moderate. Therefore, we also disagree for the same reasons that the cumulative impacts to transportation resources would be small to moderate. *Comment #034-43 (cont.)*

Section 4.7, page 4-72, lines 17-18 and 24-25 — It is unclear whether the commitment of 81 hectares (200 acres) of natural land is inclusive of the footprint for the NEF, which as noted in this section, would constitute a long-term commitment of terrestrial resources. The EIS should identify the amount of land that will be subject to such long-term commitment. *Comment #034-58*

Table 5-1, page 5-2 — With respect to proposed mitigation measures for impacts to ecological resources, the EIS makes conflicting statements that trenches will not be left open overnight and that animal will be removed from trenches left open overnight. This apparent inconsistency should be resolved. *Comment #034-59*

Table 5-1, page 5-5 — With respect to proposed mitigation measures for impacts to public and occupational health resources, the word *to* should be inserted in the first line of the fourth paragraph in between the words *radiation* and *workers*. *Comment #034-60*

Table 5-1, page 5-5 — With respect to the activity description for waste management, it is inaccurate to state that air emissions are addressed under "water resources." *Comment #034-61*

Chapter 6, page 6-3, lines 21-23 — The EIS leaves too much unfettered discretion in LES to determine the details of the monitoring program, including in some instances whether any *Comment #034-62*

monitoring will occur. The EIS should identify minimum requirements, so the decision maker and the public will know what monitoring definitely will occur, in addition to describing the spectrum of additional monitoring options. Throughout Chapter 6, monitoring projects are described, and then it is noted that LES may make changes to the projects after issuance of the NRC license. For example, with respect to bird monitoring, the EIS states, "Following this [three-year] period, program changes could be initiated based on operational experience." Section 6.3.2.2, page 6-22, lines 3-4. Without any explanation of the scope of permissible changes, we do not see why LES could not simply abandon bird monitoring altogether. *Comment #034-62 (cont.)*

The AGO understands and appreciates the value and efficacy of using adaptive management practices. These practices, when properly implemented, can benefit all stakeholders and lead to win-win outcomes. However, the EIS has no discussion of how these practices would be implemented. For example, if LES wants to change an aspect of its monitoring program, can it do so unilaterally? Would it seek NRC staff concurrence without an opportunity for public notice and input? Or would there be a full permit modification process, with all the attendant due process protections? Without this level of detail, the decision maker and the public are left with no real understanding of the NEF monitoring program and cannot evaluate its effectiveness and sufficiency.

Section 6.1.1.1, page 6-5, lines 29-31 — The EIS assumes that the NEF would have twice the amount of gaseous radioactive effluent as the proposed Claiborne enrichment facility, because the NEF would be twice the size of the proposed Claiborne facility. This assumption, standing alone, is not conservative. The EIS should provide justification for considering this assumption to be conservative. *Comment #034-63*

Section 6.2.1, page 6-16, line 12 — The word *exhaust* is misspelled. *Comment #034-64*

Section 6.2.1, page 6-16, lines 21-22 — It would appear unnecessarily risky not to conduct chemical sampling of the septic systems merely because it is assumed no plant-process-related effluents would be introduced into the septic systems. This assumption is particularly confusing in light of the subsequent statement in the EIS, "Physiochemical monitoring would be conducted via sampling of stormwater, soil, sediments, vegetation, and ground water to confirm that trace, incidental chemical discharges would be below regulatory limits." Section 6.2.1, page 6-17, lines 1-2 (emphasis added). The only way to verify that incidental plant-process-related effluents have not been introduced inadvertently into the septic systems is to conduct chemical sampling of the systems. For this reason, the AGO believes there should be a requirement of periodic chemical sampling of the septic systems. *Comment #034-65*

Section 6.2.6, page 6-20, line 2 — The word *participates* should be replaced with the word *participate*. *Comment #034-66*

Section 6.3.2.3, page 6-22, lines 6-12 — There is very little detail regarding monitoring of mammals as compared to reptiles and amphibians. The EIS should explain why this is so. For example, are reptiles and amphibians better indicators of overall ecological health than mammals, and if so why? *Comment #034-67*

Chief, Rules Review and Directives Branch  
December 18, 2004  
Page 12

Commenter 035

**Comment #034-68**

Section 6.3.2.4, page 6-22, lines 24-25 — The EIS notes that, for monitoring of reptiles and amphibians, there will be at least two other replicated sample sites beyond the primary location of the proposed NEF site. The EIS should explain why similar replicated sites are not being used for monitoring other types of ecological resources, such as vegetation, birds and mammals.

Section 6.3.6, page 6-23, lines 28-29 — The EIS should describe the timeframe for completion of tribal consultation. In addition, it is unclear what will be provided when completed. Is it anticipated that a report will be generated as a result of the consultations? If so, the AGO hereby requests that it receive a copy.

**Comment #034-69**

Thank you for the opportunity to submit these comments. We look forward to continuing to work with the NRC and its staff to ensure that New Mexican's health and the State's environment are fully protected. Please feel free to call me if you have any questions.

Sincerely,



Karen L. Fisher, Assistant Attorney General  
Water, Environment & Utilities Division  
Direct phone (505) 827-6695  
Facsimile (505) 827-4440  
Email kfisher@ago.state.nm.us

J-121

From: "William Mackle" <wmackle@westgov.org>  
To: <EXE@nrc.gov>  
Date: Thu, Oct 21, 2004 3:25 PM  
Subject: EIS for proposed National Enrichment Facility (NUREG-1790)

Earl:

This EIS was not distributed to all Western States (only three). We just got word of it and feel that it is appropriate to reply. Since comments will only be received until November 8, 2004, WGA and some of the other Western states would like to get a sixty day extension to this cutoff date to give us time to review and comment. How do we do this? (I don't know how to get in touch with the Division of Waste Management and Environmental Protection.)

**Comment #035-1**

Thanks for your help. This is the reason I called this morning. I will be out of the office tomorrow.

Bill

William B. Mackle  
Program Manager  
Western Governors' Association  
1515 Cleveland Place, Suite 200, Denver CO 80202  
Phone: 303-623-9378, Ext. 112 -- Fax: 303-534-7309  
Web: <http://www.westgov.org> <<http://www.westgov.org/>>

CC: <tammy.oltmer@state.co.us>

Commenter 036

From: "CNIC" <CNIC@leaco.net>  
 To: <nrcprep@nrc.gov>  
 Date: Thu, Oct 28, 2004 4:45 PM  
 Subject: NEF DEIS re: Claiborne

Nuclear Regulatory Commission  
 Chief, Rules and Directives Branch  
 Division of Administrative Services  
 US Nuclear Regulatory Commission  
 Washington, DC 20555-0001

NUREG-1790/Docket 70-3103  
 Public Comment: Draft Environmental Impact Statement for the Uranium  
 Enrichment Facility Proposed by Louisiana Energy Services for Lea County, NM

To Whom It May Concern:

I am writing to ask that you address the Claiborne Enrichment Facility proposed for Homer, Louisiana in the Louisiana Energy Services (LES) EIS. Although the Claiborne facility is referenced throughout the EIS, the document does not address Homer, LA as a potential site or mention why it was rejected as such. I ask that you include the Claiborne Enrichment Facility in Homer, LA in the final Environmental Impact Statement.

Comment  
 #036-1

Thank you,

Citizens Nuclear Information Center  
 P.O. Box 312  
 Hobbs, New Mexico 89240-0312  
 Web Site: <http://www.CNIC.ws>  
 Email: CNIC@leaco.net

J-122

Commenter 036

From: "Lee Cheney" <lee\_cheney@leaco.net>  
 To: <nrcprep@nrc.gov>  
 Date: Thu, Oct 28, 2004 4:48 PM  
 Subject: NEF DEIS re: Bellefonte

Nuclear Regulatory Commission  
 Chief, Rules and Directives Branch  
 Division of Administrative Services  
 US Nuclear Regulatory Commission  
 Washington, DC 20555-0001

NUREG-1790/Docket # 70-3103  
 Public Comment: Draft Environmental Impact Statement for the Uranium  
 Enrichment Facility Proposed by Louisiana Energy Services for Lea  
 County, NM

To Whom It May Concern:

I am writing to submit a public comment regarding NUREG 1790 – the draft EIS statement for the Louisiana Energy Services proposed uranium enrichment facility in Lea County, NM.

The Bellefonte, Alabama site was found inappropriate for the NEF due to the fact that it would have necessitated re-locating high-voltage transmission lines to cross the proposed site. I see no difference in Lea County, New Mexico – this site would also necessitate the relocation of high pressure carbon dioxide pipeline that crosses the site. Why did this not disqualify the Lea County site as it did the Bellefonte site? I request that the EIS address this question in the final draft.

Comment  
 #036-2

Thank you,

Citizens Nuclear Information Center  
 P.O. Box 312  
 Hobbs, NM 88240-0312  
 Web Site <http://www.CNIC.ws>  
 Email: CNIC@leaco.net

Commenter 036

From: "Lee Cheney" <lee\_cheney@leaco.net>  
 To: <nrcprep@nrc.gov>  
 Date: Thu, Oct 28, 2004 4:51 PM  
 Subject: NEF DEIS re: environmental justice

Nuclear Regulatory Commission  
 Chief, Rules and Directives Branch  
 Division of Administrative Services  
 US Nuclear Regulatory Commission  
 Washington, DC 20555-0001

NUREG-1790/Docket # 70-3103  
 Public Comment: Draft Environmental Impact Statement for the Uranium  
 Enrichment Facility Proposed by Louisiana Energy Services for Lea County, NM

To Whom It May Concern:

I am writing to submit a public comment regarding NREG-1790. Since the NEF was considered for multiple sites nationwide, I request that the environmental justice impacts be looked in to more thoroughly in that the EIS evaluate environmental justice issue in geographic comparison with national rates rather than just the State of New Mexico. I would like to be sure that the Lea County site was not chosen for its high-minority and low-income populace. Compared with the national population, Lea County is home to a disproportionate number of low-income persons and minorities and will thus be impacted disproportionately by the NEF. Since LES has a history of environmental justice issues, I request that further discussion of the facility's environmental justice impacts be included in the final EIS statement.

Comment  
 #036-3

Thank you,

Citizens Nuclear Information Center  
 P.O. Box 312  
 Hobbs, NM 88240-0312  
 Web Site: <http://www.CNIC.ws>  
 Email: [CNIC@leaco.net](mailto:CNIC@leaco.net)

J-123

Commenter 036

From: "Lee Cheney" <lee\_cheney@leaco.net>  
 To: <nrcprep@nrc.gov>  
 Date: Thu, Oct 28, 2004 4:55 PM  
 Subject: NEF DEIS re: employment

Nuclear Regulatory Commission  
 Chief, Rules and Directives Branch  
 Division of Administrative Services  
 US Nuclear Regulatory Commission  
 Washington, DC 20555-0001

NUREG-1790/Docket #70-3103  
 Public Comment: Draft Environmental Impact Statement for the Uranium  
 Enrichment Facility Proposed by Louisiana Energy Services for Lea County, NM

To Whom It May Concern:

I am submitting my public comments for review regarding NUREG-1790. I am concerned with sections 4.2.B.2 and 4.2.B.3 relating to Employment and Economic Activity. The EIS states that the NEF would have a moderate impact on the socioeconomics in Lea, Andrews, and Gaines Counties. However, 60% of the workforce is expected to come from outside this area of influence, which will, therefore, influence the 1% figure stated by the EIS.

Comment  
 #036-04

The EIS also states that educational programs with local colleges would develop a pool of qualified workers, but I am not aware of any partnership or talks between LES and the local colleges. I also doubt that our local colleges have the ability to train people in sensitive nuclear materials handling and uranium enrichment processes.

Comment  
 #036-05

I request that the final EIS go into further detail regarding the employment generated by the NEF and workforce training.

Thank you for your consideration.

Sincerely,

Citizens Nuclear Information Center  
 P.O. Box 312  
 Hobbs, NM 88240-0312  
 Web Site: <http://www.CNIC.ws>  
 Email: [CNIC@leaco.net](mailto:CNIC@leaco.net)

Commenter 036

From: "Lee Cheney" <lee\_cheney@leaco.net>  
 To: <nrcprep@nrc.gov>  
 Date: Thu, Oct 28, 2004 4:58 PM  
 Subject: NEF DEIS re: waste disposal

Nuclear Regulatory Commission  
 Chief, Rules and Directives Branch  
 Division of Administrative Services  
 US Nuclear Regulatory Commission  
 Washington, DC 20555-0001

NUREG-1790/Docket #70-3103  
 Public Comment: Draft Environmental Impact Statement for the Uranium  
 Enrichment Facility Proposed by Louisiana Energy Services for Lea County, NM

To Whom It May Concern:

I am writing to submit my public comments for consideration regarding  
 NUREG-1790. I am particularly concerned with the fact that the draft EIS  
 statement mentions the possibility of locating a depleted uranium  
 hexafluoride conversion facility near the NEF. The option is  
 unfeasible. The State of New Mexico requires that the waste be moved out of  
 the state and not just off-site. This is not a feasible conversion option  
 and should not be considered. I request that the EIS cease to mention  
 moving the waste off-site as a viable  
 possibility.

Comment  
 #036-6

Thank you.

Citizens Nuclear Information Center  
 P.O. Box 312  
 Hobbs, NM 88240-0312  
 Web Site: <http://www.CNIC.ws>  
 Email: [CNIC@leaco.net](mailto:CNIC@leaco.net)

> Sincerely,  
 >

J-124

Commenter 036

From: "Lee Cheney" <lee\_cheney@leaco.net>  
 To: <nrcprep@nrc.gov>  
 Date: Thu, Oct 28, 2004 5:01 PM  
 Subject: NEF DEIS re: Envirocare/US Ecology

Nuclear Regulatory Commission  
 Chief, Rules and Directives Branch  
 Division of Administrative Services  
 US Nuclear Regulatory Commission  
 Washington, DC 20555-0001

NUREG-1790/Docket #70-3103  
 Public Comment: Draft Environmental Impact Statement for the Uranium  
 Enrichment Facility Proposed by Louisiana Energy Services for Lea County, NM

To Whom It May Concern:

I am submitting my comments for consideration regarding the EIS for the  
 proposed NEF facility to be built in Lea County, New Mexico. The EIS states  
 that Envirocare in the state of Utah and U.S. Ecology in the state of  
 Washington are two potential sites to ship the triuranium  
 octoxide, a byproduct of the uranium enrichment process. The EIS does not  
 indicate that negotiations between LES and Envirocare or U.S. Ecology are  
 underway or being sought. Clearly, without the consent  
 and cooperation of one of the two facilities, no viable waste disposal  
 option currently exists. The State of New Mexico and the citizens of  
 Lea County have repeatedly requested that the NRC license not be granted  
 until viable waste solution options are presented. I ask that the final EIS  
 statement look into the question of waste disposal further to ensure there  
 are viable options.

Comment  
 #036-7

Thank you.

Sincerely,

Citizens Nuclear Information Center  
 P.O. Box 312  
 Hobbs, NM 88240-0312  
 Web Site: <http://www.CNIC.ws>  
 Email: [CNIC@leaco.net](mailto:CNIC@leaco.net)

Commenter 036

From: "Lee Cheney" <lee\_cheney@leaco.net>  
 To: <nrcprep@nrc.gov>  
 Date: Thu, Oct 28, 2004 5:05 PM  
 Subject: NEF DEIS re: Western Interstate Energy Board

Nuclear Regulatory Commission  
 Chief, Rules and Directives Branch  
 Division of Administrative Services  
 US Nuclear Regulatory Commission  
 Washington, DC 20555-0001

NUREG-1790/Docket #3103  
 Public Comment: Draft Environmental Impact Statement for the Uranium  
 Enrichment Facility Proposed by Louisiana Energy Services for Lea County, NM

To Whom It May Concern:

I am submitting my comments for review regarding the NEF proposed for Lea County, New Mexico (NUREG-1790). I ask that that Louisiana Energy Services and the Nuclear Regulatory Commission consult the Western Interstate Energy Board as recommended in the EIS scoping period. Why was the Board not consulted? The Western Interstate Energy Board is valuable in that it is integral in the communication and cooperation among its membership regarding the development/management of nuclear energy products. The proposed LES facility certainly falls within its scope and therefore should consult the Board. Please include this in the final EIS for the proposed Louisiana Energy Services NEF.

Comment  
 #036-8

Thank you for your consideration.

Sincerely,

Citizens Nuclear Information Center  
 P.O. Box 312  
 Hobbs, NM 88240-0312  
 Web Site: <http://www.CNIC.ws>  
 Email: CNIC@leaco.net

Commenter 036

From: "CNIC" <CNIC@leaco.net>  
 To: <nrcprep@nrc.gov>  
 Date: Thu, Oct 28, 2004 5:08 PM  
 Subject: NEF DEIS re: safeguards

Nuclear Regulatory Commission  
 Chief, Rules and Directives Branch  
 Division of Administrative Services  
 US Nuclear Regulatory Commission  
 Washington, DC 20555-0001

NUREG-1790/Docket #70-3103  
 Public Comment: Draft Environmental Impact Statement for the Uranium  
 Enrichment Facility Proposed by Louisiana Energy Services for Lea County, NM

To Whom It May Concern:

These are my public comments for submission to the Nuclear Regulatory Commission regarding its Draft Environmental Impact Statement for the proposed Louisiana Energy Services NEF.

I am concerned with effluent monitoring, including both air and water. The DEIS states that corrective actions will be instituted when an action level is exceeded for any of the parameters but it does not include the regulatory agency that will be in charge of the monitoring. It seems that currently there is no mechanism in place for an operating license to be revoked pursuant to unacceptable levels. Are there safeguards in place? I request that the final EIS addresses safety measures to protect the citizens of Lea County from hazardous materials exceeding federal or state standards. Additionally, I request that the final EIS identify the responsible party for long-term stewardship of the proposed NEF site.

Comment  
 #036-9

Comment  
 #036-10

Thank you for your time.

Sincerely,

Citizens Nuclear Information Center  
 P.O. Box 312  
 Hobbs, NM 88240-0312  
 Web Site: <http://www.CNIC.ws>  
 Email: CNIC@leaco.net

Commenter 036

From: "CNIC" <CNIC@leaco.net>  
 To: <nrcprep@nrc.gov>  
 Date: Thu, Oct 28, 2004 5:11 PM  
 Subject: NEF DEIS re: summary report

Nuclear Regulatory Commission  
 Chief, Rules and Directives Branch  
 Division of Administrative Services  
 US Nuclear Regulatory Commission  
 Washington, DC 20555-0001

NUREG-1790/Docket #70-3103

Public Comment: Draft Environmental Impact Statement for the Uranium  
 Enrichment Facility Proposed by Louisiana Energy Services for Lea County, NM

To Whom It May Concern:

The draft environmental impact statement for the proposed NEF facility in Lea County, New Mexico states that the proposed NEF would submit an annual report of the Environmental Sampling Program to the Nuclear Regulatory Commission. Would this information be made public to the citizens of Lea County and the State of New Mexico? How? It is essential that the public be allowed to participate in the environmental oversight of the proposed NEF facility. I request that the final EIS statement address these questions.

Comment  
 #036-11

Thanks,

Citizens Nuclear Information Center  
 P.O. Box 312  
 Hobbs, NM 88240-0312  
 Web Site: <http://www.CNIC.ws>  
 Email: [CNIC@leaco.net](mailto:CNIC@leaco.net)

J-126

Commenter 036

From: "Lee Cheney" <lee\_cheney@leaco.net>  
 To: <nrcprep@nrc.gov>  
 Date: Fri, Nov 5, 2004 2:25 PM  
 Subject: LES DEIS - Plutonium Detection Equipment

Nuclear Regulatory Commission  
 Chief, Rules and Directives Branch  
 Division of Administrative Services  
 US Nuclear Regulatory Commission  
 Washington, DC 20555-0001

NUREG-1790/Docket #70-3103

Public Comment: Draft Environmental Impact Statement for the Uranium Enrichment Facility Proposed by  
 Louisiana Energy Services for Lea County, NM

To Whom It May Concern:

The draft environmental impact statement for the proposed NEF facility in Lea County, New Mexico fails to require LES to install plutonium detection equipment. Because of the possibility that LES could receive UF6 that is contaminated with plutonium similar to the way the Paducah, KY facility received plutonium contaminated UF6, we hereby request that the NRC require LES to install adequate plutonium detection equipment before the NRC grants LES an operating permit.

Comment #036-12

Thank you.

Citizens Nuclear Information Center  
 P.O. Box 312  
 Hobbs, NM 88240-0312  
 Web Site: <http://www.CNIC.ws>  
 Email: [CNIC@leaco.net](mailto:CNIC@leaco.net)

Commenter 037

From: "Michael Mariotte" <nirsnet@nirs.org>  
 To: <nrcprep@nrc.gov>  
 Date: Thu, Oct 28, 2004 5:24 PM  
 Subject: NIRS/Public Citizen request for extension of comment period on NUREG-1790

Also attached as .doc file

Nuclear Information and Resource Service  
 Public Citizen's Critical Mass Energy and Environment Program

October 28, 2004

Anna Bradford  
 TWFN 7J-8  
 U.S. Nuclear Regulatory Commission  
 Washington, DC 20555-0001  
 nrcprep@nrc.gov

Dear Ms. Bradford

Nuclear Information and Resource Service (NIRS) and Public Citizen's Critical Mass Energy and Environment Program respectfully request <<DEIScommentextension102804.doc>> an extension of the public comment period on the Draft Environmental Impact Statement (DEIS) for the proposed Louisiana Energy Service uranium enrichment facility (NUREG-1790), which currently is set to expire on November 6, 2004.

As you know, the NRC has closed its ADAMS document system to the public for an indefinite period. Thus, it is virtually impossible for anyone who has not already obtained a copy of NUREG-1790 to comment on this document. Moreover, supporting documents that may be relevant to NUREG-1790 are not available either. Ending the public comment period during a time when the relevant documents are not available to the public would make a mockery of the entire concept of public participation.

Thus, we request that the NRC extend the public comment period on NUREG-1790 until 30 days following publication of a notice in the Federal Register that NUREG-1790 and all other documents related to the Louisiana Energy Services license application (Docket No. 70-3103-ML) are again available for public access.

Comment  
 #037-1

Sincerely,

Michael Mariotte  
 Executive Director  
 NIRS  
 202-328-0002  
 nirsnet@nirs.org

Wenonah Hauter  
 Executive Director  
 CMEEP  
 202-546-4996  
 whauter@citizen.org

## Nuclear Information and Resource Service Public Citizen's Critical Mass Energy and Environment Program

October 28, 2004

Anna Bradford  
 TWFN 7J-8  
 U.S. Nuclear Regulatory Commission  
 Washington, DC 20555-0001  
 nrcprep@nrc.gov

Dear Ms. Bradford

Nuclear Information and Resource Service (NIRS) and Public Citizen's Critical Mass Energy and Environment Program respectfully request an extension of the public comment period on the Draft Environmental Impact Statement (DEIS) for the proposed Louisiana Energy Service uranium enrichment facility (NUREG-1790), which currently is set to expire on November 6, 2004.

As you know, the NRC has closed its ADAMS document system to the public for an indefinite period. Thus, it is virtually impossible for anyone who has not already obtained a copy of NUREG-1790 to comment on this document. Moreover, supporting documents that may be relevant to NUREG-1790 are not available either. Ending the public comment period during a time when the relevant documents are not available to the public would make a mockery of the entire concept of public participation.

Thus, we request that the NRC extend the public comment period on NUREG-1790 until 30 days following publication of a notice in the Federal Register that NUREG-1790 and all other documents related to the Louisiana Energy Services license application (Docket No. 70-3103-ML) are again available for public access.

Sincerely,

Michael Mariotte  
 Executive Director  
 NIRS  
 202-328-0002  
 nirsnet@nirs.org

Wenonah Hauter  
 Executive Director  
 CMEEP  
 202-546-4996  
 whauter@citizen.org

J-127



Commenter 037

**From:** "Joseph Maherek" <jmaherek@citizen.org>  
**To:** <nrcprep@nrc.gov>  
**Date:** Tue, Dec 7, 2004 1:06 PM  
**Subject:** Request to Extend Deadline for DEIS Comments

Dear Ms. Bradford:

Attached you will find a letter (in PDF format) from the Nuclear Information and Resource Service and Public Citizen requesting an extension of the public comment period on the Draft Environmental Impact Statement for the proposed National Enrichment Facility (NUREG-1790).

Due to the inaccessibility of essential documents pertaining to and including the NEF application and the DEIS -- which are necessary to drafting meaningful public comments -- we feel that it is inappropriate for the NRC to maintain the current deadline of December 18.

Regards,  
 Joe Maherek

Joseph P. Maherek

Policy Analyst  
 Critical Mass Energy and Environment Program  
 PUBLIC CITIZEN  
 215 Pennsylvania Ave SE  
 Washington, DC 20003  
 Phone: 202-454-5109  
 Fax: 202-547-7392  
 E-mail: jmaherek@citizen.org

## NUCLEAR INFORMATION AND RESOURCE SERVICE • PUBLIC CITIZEN

December 7, 2004

Anna Bradford  
 Two White Flint North, 71-8  
 U.S. Nuclear Regulatory Commission  
 Washington, DC 20555-0001  
[nrciren@nrc.gov](mailto:nrciren@nrc.gov)

**Re: Renewed Request to Extend Public Comment Period on the Draft Environmental Impact Statement for the proposed National Enrichment Facility (NUREG-1790)**

Dear Ms. Bradford:

The Nuclear Information and Resource Service (NIRS) and Public Citizen respectfully reiterate our request for an extension of the public comment period on the Draft Environmental Impact Statement (DEIS) for the proposed National Enrichment Facility (NEF) (NUREG-1790), which currently is set to expire on December 18, 2004 (69 FR 64983).

As you know, the NRC has closed its Agencywide Documents Access and Management System (ADAMS) to the public for an indefinite period for a security review. Thus, it is virtually impossible for anyone who has not already obtained a copy of NUREG-1790 to comment on this document. Moreover, supporting documents that may be relevant to NUREG-1790 are not available either. Ending the public comment period during a time when the relevant documents are not available to the public would make a mockery of the entire concept of public participation.

In addition, online access to the license application for the NEF and the similar American Centrifuge Plant has been blocked. According to Matthew Blevins of the NRC, this is due to the NRC's ongoing security review, although access to these documents had been maintained between October 25, when access to ADAMS was initially restricted, and November 30. The NRC cannot hold to the deadline of December 18 when the documents most essential to drafting comments are not conveniently available to the general public.

Thus, we reiterate our request that the NRC extend the public comment period on NUREG-1790 until 30 days following publication of a notice in the *Federal Register* that NUREG-1790 and all other documents related to and including the LES application (Docket No. 70-3103-ML) are again available for public access.

Sincerely,

Michael Mariotte  
 Executive Director  
 Nuclear Information and Resource Service  
 202-328-0002  
[nirsnel@nirs.org](mailto:nirsnel@nirs.org)

Wenonah Hauter  
 Director  
 Public Citizen's Critical Mass Energy and  
 Environment Program  
 202-546-4996  
[whauter@citizen.org](mailto:whauter@citizen.org)

Comment  
 #037-2

J-128

Commenter 038

From: <JAWard@state.nm.us>  
 To: <nrcprep@nrc.gov>  
 Date: Mon, Nov 1, 2004 4:19 PM  
 Subject: NUREG-1790

Attached are comments from the NM Dept of Game and Fish regarding the EIS for the proposed National Enrichment Facility in Lea County, New Mexico. A hard copy of the response, with attachments, is in route.  
 <<9598 NUREG -1790.doc>>

Janell Ward  
 CSD, Assistant Chief  
 PO Box 25112  
 Santa Fe, NM 87504  
 Phone: (505) 476-8114  
 Fax: (505) 476-8128

GOVERNOR  
 Bill Richardson



DIRECTOR AND SECRETARY  
 TO THE COMMISSION  
 Bruce C. Thompson

November 1, 2004

STATE OF NEW MEXICO  
 DEPARTMENT OF GAME & FISH

One Wildlife Way  
 PO Box 25112  
 Santa Fe, NM 87504

Visit our website at [www.wildlife.state.nm.us](http://www.wildlife.state.nm.us)  
 For basic information or to order free publications. 1 800 862 9310

STATE GAME COMMISSION  
 Guy Jordan, Chairman  
 Albuquerque, NM

Alfredo Montoya, Vice-Chairman  
 Alcalde, NM

David Henderson  
 Santa Fe, NM

Jennifer Archley Montoya  
 Las Cruces, NM

Peter Pino  
 Za Pueblo, NM

Dr. Tom Arvas  
 Albuquerque, NM

Leo Sims  
 Hobbs, NM

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

Re: NUREG-1790 (Draft)  
 NMGF Project No. 9598

Dear Nuclear Regulatory Commission:

The New Mexico Department of Game and Fish (NMGF) has reviewed the above referenced report, titled Environmental Impact Statement for the Proposed National Enrichment Facility in Lea County, New Mexico (DEIS). The function of the proposed facility is gas centrifuge enrichment of uranium hexafluoride, for the purpose of manufacturing nuclear fuel for commercial reactors. Project location is approximately 5 miles east of Eunice and 20 miles south of Hobbs, NM. Facility construction would take place on 200 acres of the total 543-acre site.

The project proponents have committed to a number of mitigation practices in order to minimize adverse ecological impact. NMGF commends Louisiana Energy Services (LES) for their intention to revegetate with native, low-water-use, plant species, follow best management practices for *wildlife protection in trenching operations, fence and net stormwater and effluent ponds, and* Comment conduct an extensive monitoring program. Regarding the trenching practices, we would like to *#038-1* emphasize that the same precautions should be followed when constructing the 25 miles of new water supply pipe, as well as the 1.5 miles of relocated carbon dioxide line. We enclose a copy of our guidelines for power lines that minimize harm to perching birds, and recommend the guidelines *be followed in construction of the 8 miles new overhead power supply line. An additional* recommended mitigation would be down-shielding of security lights, to minimize interference with *avian navigation.* Comment #038-2

During the scoping process, NMGF expressed concern about the sufficiency of LES's survey efforts for two species of concern, the sand dune lizard (*Sceloporus arenicolus*) and lesser prairie chicken (*Tympanuchus pallidicinctus*). We are now satisfied that surveys have been adequate to document absence of both species from the site, and support the conclusion of no significant adverse impact. However our biologists recommend the following technical corrections to the species accounts in the DEIS: Comment #038-10

1-129

Page 3-47 line 43: "nearest known breeding area" should be changed to read "nearest known lek site". Breeding area infers display grounds, nesting, and brood-rearing habitat. Approximately 25,000 acres of contiguous, suitable habitat is needed to support viable lesser prairie-chicken populations. Habitat used for nesting and brooding-rearing are usually within 2 mi of booming grounds. The combined home range of all birds at a lek is ~19 mi<sup>2</sup> (>12,000 ac). However, the average home range of an individual bird is ~4 mi<sup>2</sup>. Based on these estimates, disturbance from the proposed facility may impact habitat components necessary to fulfill lesser prairie-chicken life history needs including nesting habitat, brood-rearing and summer habitat, and autumn and winter habitat.

Comment #038-3

Line 49: The assertion that water distribution can be a limiting factor for the lesser prairie-chicken in SE NM is false. Lesser prairie-chickens will use free water from stock ponds when available, however, they typically obtain the necessary moisture through food since the original distribution of lesser prairie-chicken were not limited to rangelands having free water.

Comment #038-4

Page 3-48, line 11, change the word "or" to "and"; page 3-48, line 14, change the word "insects" to "invertebrates".

Comment: #038-5

Comment #038-6

The fenced and lighted 200 acres of constructed facilities will constitute total loss of habitat for medium to large size mammals and some birds. We are assuming that the perimeter fence around the entire 543-acre site will be chain-link security fence designed to keep out human intruders. This fence may eliminate connectivity with critical habitat components for animals trapped inside. While the assertion in the DEIS is correct that mobile wildlife will move to adjacent areas of similar habitat when displaced, the ultimate effect of habitat loss is reduced carrying capacity and wildlife population levels. This is especially important when considering the cumulative effects of industrial development in the project area. Species such as the kit fox (*Vulpes velox*), which have low population density (large home range requirements), are relatively more susceptible to population-level effects of cumulative habitat loss, not less susceptible as implied on page 3-49 of the DEIS.

Comment #038-7

In addition to netting the stormwater and effluent ponds to protect birds and bats from potential contact with oily or toxic substances, the DEIS makes numerous references to "animal-friendly fencing". Since large mammals will presumably not be present within the developed portion of the plant, fencing should focus on limiting access of reptiles, amphibians, and small mammals. The fence material should have limited permeability, such as silt fence or fine gauge welded or woven wire mesh, and the bottom edge should be turned outward 90 degrees and buried below the ground surface to discourage burrowing under. Neither the netting nor fencing should be constructed of nylon monofilament, which has been documented to entangle birds and reptiles, causing injury or death.

Comment #038-8

Finally, we urge the NRC to carefully consider the need for this project, given the possible alternatives of domestic energy-efficient enriched uranium production at the proposed USEC gas centrifuge plant, and extension of the MOX and down-blending programs. There is a certain amount of risk inherent in introducing to the environment, processing and transporting, large quantities of radioactive and chemically toxic material.

Comment #038-9

Thank you for the opportunity to comment on this project. If there are any questions, please contact Rachel Jankowitz at (505) 476-8159 or [rjankowitz@state.nm.us](mailto:rjankowitz@state.nm.us).

Sincerely,

Lisa Kirkpatrick, Chief  
Conservation Services Division

LK/rjj

cc: Susan MacMullin, Ecological Services Field Supervisor, USFWS  
Roy Hayes, SE Area Operations Chief, NMGF  
Rachel Jankowitz, Habitat Specialist, NMGF

NEW MEXICO DEPARTMENT OF GAME AND FISH

Power line Project Guidelines  
September 2003

- J-131
- 1) **TRANSMISSION LINE STRUCTURAL DESIGN** All eagles, hawks, owls and vultures are protected under New Mexico state law (New Mexico Statutes Annotated, 1978, 17-2-14, as amended). Bald and golden eagles are also protected under federal law. Transmission lines should be designed to prevent or minimize risk of electrocution of raptors. A variety of alternatives were set forth in Olendorff et al. 1981 in *Suggested Practice for Raptor Protection on Power Lines: The State of the Art in 1981* (Raptor Research Report No.4, Raptor Research Foundation, Inc., St. Paul, Minnesota, 111 pages). This report was updated by the Avian Power Line Interaction Committee in 1996 as *Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 1996* (Edison Electric Institute/Raptor Research Foundation, Washington, D.C.). A Copy of this report may be requested by calling the Raptor Research Foundation at (612) 437-4359.
  - 2) **LOCATION** Existing roads, trails, and rights-of-way should be followed where possible. Roads and rights-of-way should avoid critical wildlife habitat, saddles, ridge tops, riparian, meadows, edges of meadows, and big game migration routes. Construction using helicopters should be considered in remote critical wildlife areas where construction of new roads would otherwise be necessary.
  - 3) **CLEARING** Rights-of-way clearing should be selective, leaving shrubs and brush undisturbed where possible. Clearing should be avoided in riparian areas and on steep slopes. Brush and limbs should be piled at intervals to enhance wildlife habitat.
  - 4) **STRUCTURES** Bridges and culverts should be designed so that fish passage is not impeded. Water hydrology and stream courses should remain unchanged. Special techniques and structures should be employed as necessary to minimize erosion and sedimentation to riparian areas (e.g., catch basins, raised culverts for roads runoff, water bars).
  - 5) **CLOSURES** Roads and rights-of-way that provide access to critical wildlife areas should be designed for easy and effective closure. Gates should be installed at the onset of construction and closed immediately after completion of the project. Temporary roads should be obliterated and revegetated immediately after construction.
  - 6) **SCHEDULING** Winter construction is preferred on critical big game summer range. Summer construction is preferred on big game winter range. No construction should be conducted in winter range from December 15-April 15. No construction should occur in elk calving areas from May 1-June 30. No

construction should occur in deer fawning areas from June 1-August 31 (northern New Mexico) or July 1-September 31 (southern New Mexico). No construction should occur in turkey nesting areas from April 15-June 30. Construction in big game migration areas should be restricted during migration.

- 7) **SPECIAL CONSIDERATION FEATURES** (Areas such as seeps, springs, wet meadows, marshes, wallows, salt licks and water development areas). Protect these features from damage during construction. No roads within 200 feet of feature. Remove debris from wildlife trails. Protect rock talus areas from disturbance by heavy equipment.
- 8) **RIPARIAN AREAS AND FISHERIES** Develop site-specific measures where appropriate. Maintain at least 100-foot buffer along streams. Debris left in streams and drainages may be detrimental or beneficial and should be assessed on a site-specific basis. Prevent siltation to streams. Fine sediment (less than 0.85 mm diameter) should remain at < 20% of spawning gravel in trout streams. In streams: maintain  $\geq 80\%$  natural shade over water; maintain  $\geq 80\%$  natural bank protection; composition of sand, silt, and clay should remain within 20% of natural levels.
- 9) **FENCES** Provide jumps or top rails on fences, or lay-down fences, within areas of high wildlife use (e.g., travel corridors). Bottom wire should be barbless and at least 16" above ground in antelope or deer habitat. Maximum fence height should be 42". Minimum spacing between top two wires should be 10". Do not use woven wire fencing.
- 10) **REVEGETATION AND RESTORATION** A reclamation plan is recommended for all short-term or long-term temporary surface disturbances. Stockpile topsoil at the time of original construction. When the disturbed area is no longer needed, re-contour the site to blend visually with surroundings, and return the drainage pattern as close as feasible to pre-existing conditions. For best results, topsoil should be spread to a minimum depth of 20 inches. Where no topsoil is available, or topsoil has been stored over one or more winters, amend with organic matter and fertilizer. Create furrows perpendicular to slope, if on a hillside. Seed with an appropriate certified weed-free mix of native grasses, forbs and shrubs beneficial to wildlife. In some cases seeding or transplant of woody species may be desirable. Incremental revegetation is preferred in areas where work is conducted during spring and summer. Sections of right-of-way should be rehabilitated as construction is completed. Follow up by monitoring to assure no development of erosion problems and successful establishment of vegetation. Revegetated areas, which have not become established by the end of the growing season, should be treated to prevent erosion and site degradation (e.g., mulching, contouring, water bars).

### SPECIES-SPECIFIC RECOMMENDATIONS

- 1) **THREATENED AND ENDANGERED SPECIES** Determine which state and/or federally listed species could occur in the project area. Sources of information include:

New Mexico Department of Game and Fish  
PO Box 25112  
Santa Fe, New Mexico 87504  
(505) 476-8101 [State-listed wildlife]

New Mexico Department of Energy, Minerals and Natural Resources  
Forestry Division  
1220 St. Francis Dr.  
Santa Fe, New Mexico 87505  
(505) 476-3200 [State-listed plants]

U.S. Fish and Wildlife Service  
New Mexico Ecological Services State Office  
2105 Osuna, NE  
Albuquerque, New Mexico 87113  
(505) 346-2525 [Federally-listed plants and animals]

Contact the above agencies for assistance in determining presence or absence of threatened and endangered species and critical habitats. Work with these agencies to develop protective strategies.

- 2) **DEER AND ELK** Protect browse and forage plants.
- 3) **TURKEY** Identify and protect roost tree groups (winter roost trees are most critical). Roost tree groups can be described as:
- Large open topped trees ( $\geq 13''$  dbh,  $> 40'$  tall, especially ponderosa pine)
  - Canopy cover  $> 55\%$ ;
  - Basal area  $> 100$  ft<sup>2</sup>/ac.
  - Accessible from clearing directly up slope, not isolated from stand.
  - Provide nesting habitat in ponderosa pine or mixed conifer where practical by creating slash piles (10' diameter x 3' high) or leaving unlopped treetops. Nesting habitat should be within  $\frac{1}{2}$  mile of dependable water.
- 4) **RAPTORS** Protect known nest tree groups. Protect perch and roost trees adjacent to cliffs, major ridges and openings.
- 5) **BEAR** Protect mast (oak & juniper) and forage plants. Leave large diameter dead or down trees for insect forage.

- 6) **TREE SQUIRRELS** Protect stands with high squirrel activity (e.g., nest trees, large middens). Protect trees with existing cavities.

- 7) **NON-GAME BIRDS** When abandoning or realigning old electric lines, leave 10% to 30% of the abandoned poles standing for perching and cavity nesting birds, especially in areas lacking natural snags. Numbers and location of poles to be left standing should be coordinated with the U.S Fish and Wildlife Service and New Mexico Department of Game and Fish. The taller the poles the better, but under existing lines, leaving four to ten feet of the old pole standing will provide useful habitat. If poles are still sound, artificial nesting cavities can be created. Heavily creosoted, potentially toxic poles should be cut at ground level and removed.



United States Department of the Interior

Bureau of Land Management  
 Carlsbad Field Office  
 620 E. Greene Street  
 Carlsbad, NM 88220  
 www.nm.blm.gov

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

Dear Sir:

The Bureau of Land Management (BLM), Carlsbad Field Office appreciates the opportunity to provide the following comment regarding the Draft Report for Comment on the Environmental Impact Statement for the Proposed National Enrichment Facility in Lea County, New Mexico.

BLM Staff have concerns regarding the discussion of the seismic potential (section 3). A study by Hills in 1996 differs in its conclusions regarding tectonic earthquake potential in the area of the proposed National Enrichment Facility. BLM staff suggest that analysis of the potential for earthquakes be discussed in the environmental analysis (section 4) and opportunities for mitigation of potential earthquake activity be addressed.

Comment #039-1

Again, thank you for the opportunity to comment and if you have questions or desire clarification regarding this information please contact Peg Sorensen of our office at (505) 234-5983. Please allow the BLM to continue being involved in this process.

Sincerely,

*Joe Lara*  
 Joe Lara  
 Field Manager

Commenter 039

Commenter 040

From: <Stephen\_Spencer@ios.doi.gov>  
 To: <nrcprep@nrc.gov>  
 Date: Fri, Nov 5, 2004 2:55 PM  
 Subject: U.S. Department of the Interior Comments, Draft EIS for the Proposed National Enrichment Facility in Lea County, NM [Virus checked]

Please find attached the U.S. Department of the Interior comments on the proposed project. Please confirm receipt of this comment letter by replying to this e-mail. Please feel free to contact me if there is a need for further information.

(See attached file: ER04685 UraniumEnrichment.pdf)

Stephen R. Spencer, Ph.D.  
 Regional Environmental Officer  
 U.S. Department of the Interior  
 Office of Environmental Policy and Compliance  
 Mailing Address:  
 P.O. Box 26567 (MC-9)  
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 E-mail: Stephen\_Spencer@ios.doi.gov

1-133



United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
P.O. Box 26567 (MC-9)
Albuquerque, New Mexico 87125-6567



November 5, 2004

9043.1
ER 04/685

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

Dear Sir/Madam:

The U.S. Department of the Interior has reviewed the Draft Environmental Impact Statement (DEIS) for the Proposed National Enrichment Facility (NEF) to Produce Enriched Uranium, Lea County, New Mexico (Document No. NUREG-1790). In this regard, we offer the following comments.

The primary function of the NEF is to enrich natural uranium hexafluoride by separating a feed stream containing the naturally occurring proportions of uranium isotopes into a product stream enriched in 235U and a tails stream depleted in the 235U isotope. The enrichment process is a mechanical separation of isotopes using a fast rotating cylinder (centrifuge) based on a difference in centrifugal forces due to molecular weight of the uranium isotopes. To perform this process, the NEF would incorporate a number of structures on a 543-acre site, including buildings, cooling towers, storage areas, fences, and a road network. The NEF also will include one liquid effluent treatment basin and two stormwater treatment basins.

The DEIS identifies that there are no surface water features on the existing site. However, the proposed action would create three artificial water features and the management of these water bodies should be further addressed to reduce potential effects to human health and the environment. The NEF will discharge 7.6 million gallons of wastewater into two of these basins per year (DEIS, page 4-11). Approximately 0.6 million gallons will be disposed into the lined and netted Liquid Effluent Treatment Basin. Approximately 5.1 million gallons of wastewater, mainly cooling tower blow down, will be disposed into the lined Uranium Byproduct Cylinder (UBC) Storage Pad stormwater basin. An additional 46 million gallons of stormwater will be discharged to both stormwater basins, with 163 million gallons of site runoff (DEIS, page 4-12) expected to percolate downward and form a perched layer below the NEF. The UBC stormwater basin would be expected to contain trace amounts of oil and grease, any chemicals associated with the cooling tower process (e.g., salts, corrosion inhibitors, metals, disinfectants, de-scaling compounds), and any pollutants that are either wet- or dry-deposited from the atmosphere.

J-134

We are concerned that ponded wastewater may attract wildlife and pose a risk to their health and the environment. Even if waters are temporary, constructed wetlands, ponds, and lagoons can nonetheless attract amphibians, insects, crustaceans, algae, and migratory birds. The UBC stormwater basin has the potential to contain wastewater with salts and brine, trace elements, nutrients, heavy metals, organic chemicals, petroleum, solvents, pesticides, or pathogenic microorganisms that may pose a health risk to migratory birds and other wildlife. Migratory birds often do not distinguish between these wastewater lagoons and natural water bodies and can be attracted to these open lagoons to drink, rest, and perhaps feed on any algae and invertebrates found there. Migratory birds are protected under the Migratory Bird Treaty Act and it is unlawful to create conditions that kill migratory birds.

Comment

#040-1

Depending on the duration and season of filling, these basins may also become thermally stratified. Under the right conditions (e.g., with excess biochemical or chemical oxygen demand) these ponds can become stagnant. Stagnant water can foster conditions where mosquitoes thrive and breed, providing the potential for exposure to West Nile Virus and other arboviruses that may be lethal to migratory birds, as well as people. Potential mitigating actions to reduce these conditions, can include, but are not limited to:

Comment

#040-2

- 1. Stormwater and wastewater management (e.g., treatment, recycling or reuse);
2. Stormwater basin design that discourages wildlife visitation (i.e., more rectangular and narrow shapes rather than oval, playa-like shapes);
3. Wildlife exclusion technologies (e.g., netting, amphibian and reptile barriers);
4. Mosquito management programs (e.g., integrated pest management, predators); and
5. Engineering solutions to keep water moving (e.g., weirs or aerating fountains).

The NEF also includes two 115-kilowatt overhead transmission lines and 8 miles of power support structures and lines along Highway 234. Birds of prey such as eagles, hawks, and owls frequently use power lines and support structures for perching and nesting. These raptors can be electrocuted while using power lines, thus contributing to the cumulative mortality factors affecting these biologically important and environmentally sensitive birds. Standard techniques have been developed to prevent raptor electrocutions at electric distribution lines. This latest guidance is included in the publication, "Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 1996," by the Avian Power Line Interaction Committee. The document may be requested from Edison Electric Institute, P. O. Box 266, Waldorf, Maryland, 20604-0266, Telephone 800-334-5453; from the Raptor Research Foundation at 12805 St. Croix Trail, Hastings, Minnesota 55033, Telephone 612-437-4359; or by e-mail to jmfitzpatrick@aol.com. New or modified electric distribution lines should be designed and constructed to prevent the electrocution of raptors by using the above-referenced guidance. Proper design should include adequate separation of energized hardware or insulation of wires where sufficient separation cannot be attained. Closely spaced transformer jumper wires, bushing covers, protective cutouts, or surge arresters can be made safe for raptors by the use of special insulating material. The use of grounded steel cross arm braces should be avoided. These measures should be implemented on each line and pole associated with your new or converted lines, as necessary.

Comment

#040-3

Specific Comments:

The proposed project area is close in proximity to a number of National Park Service units including Carlsbad Caverns National Park in New Mexico and Guadalupe Mountains National Park in Texas, both of which are Class I air quality areas, as well as White Sands National Monument in New Mexico, which is a Class II area. Given the proximity to these parks, we encourage you to consider the following specific comments.

**Page 2-11 - We commend the Nuclear Regulatory Commission (NRC) for including the impacts that construction emissions will have on air quality. We would like to point out that construction emissions will be more than dust as mentioned on Page 2-11. Emissions will vary depending on the type of construction equipment that is utilized, the controls that are instituted on the equipment and the fuel types used, as well as the length of time that construction activities occur. We would like to see these impacts accounted for in the EIS.** *Comment #040-4*

**Page 4-66 - Examining cumulative impacts is an important facet to determine how the impacts from the facility, when combined with other operations in the same area, will contribute to the overall air quality of the region. The NRC has made an effort to examine cumulative emissions; however, it seems as if the NRC solely examined the combined impact of the various operations involved in its own facility. For a complete cumulative impact analysis, these emissions would need to be looked at in conjunction with emissions that are being emitted from other nearby facilities.** *Comment #040-5*

**Page 5-4, 5.1 Mitigation Measure Proposed by LES (Louisiana Energy Services), Table 5-1 Summary of Potential Mitigation Measures Proposed by LES for Construction and Table 5-2 Summary of Potential Measure Proposed by LES for Operations, Ecological Resources - Both tables identify mitigation measures to enhance habitats "defined as rare or unique or that support threatened or endangered species." Although use of native plants is proposed for disturbed land restoration, no mention is made of potential incidental encroachment of non-native vegetation. We suggest that weed monitoring and control be considered in keeping with native habitat enhancement.** *Comment #040-6*

J-135

In summary, we suggest the final EIS and/or mitigation plan should address:

1. the potential water quality conditions in the wastewater treatment basins;
2. provisions for a mosquito management program;
3. reduction of any nuisance conditions posed to migratory birds and other wildlife;
4. prevention of the electrocution of raptors;
5. incorporation of weed monitoring;
6. emissions during construction activities; and
7. emissions in the cumulative impact analysis.

Thank you for the opportunity to review and comment on this Draft EIS.

Sincerely,



Stephen R. Spencer, Ph.D.  
Regional Environmental Officer



Commenter 041

From: "Barnes, Melanie" <MELANIE.BARNES@tu.edu>  
 To: <nrcprep@nrc.gov>  
 Date: Mon, Nov 8, 2004 7:13 AM  
 Subject: comments on Docket No. 70-3103

Dear Ms. Anna Bradford,

Thank you for the copy of the Environmental Impact Statement (EIS) for the Proposed National Enrichment Facility in Lea County, New Mexico. I was disappointed that it took so long to arrive. I received it on the 4th of November, the day before leaving for the annual meeting of the Geological Society of America in Denver, Colorado. I truly hope that I am correct in understanding that my comments will be addressed as long as they are sent by e-mail by the 6th of November 2004. It is now 9:30pm Mountain Time on the 6th of November 2004 and the first chance I have had to send this e-mail after

participating in a public policy meeting all day. Also I was disappointed in the public hearing and the lack of opportunity to address the group in person. The meeting was too long for us to remain and speak after driving two and half hours each way to attend. There was no effort on the persons holding the meeting to allow far travelled individuals to speak first. In past public hearings I have seen the process of allowing those who lived the furthest to speak near the beginning. It was unfortunate that our trip was unsuccessful.

Comment #041-5

The EIS for Docket No. 70-3103 was fairly informative and comprehensive document, however there are several issues which I would like to see addressed in greater detail.

Comment #041-1

The first issue is a request to demonstrate scientifically that the hydrogeologic integrity of the area will not be compromised by the construction of retention and detention ponds and septic systems. I feel that this is very important and should be model to include the surrounding area because of the activities on the neighboring properties. There is a quarry, hazardous waste burial site, proposed low level radioactive waste burial site, municipal landfill and oil and gas operations. All of these activities penetrate the ground and disrupt the existing geologic formations. Since the existence of the hazardous waste burial site is predicated on the unique geology and semi-desert conditions it seems that it is imperative to demonstrate that the additional water and penetrations will not effect the existing activities. There is some mention of the Waste Control Specialists Hazardous Waste Burial site but there does not seem to be any consideration of the proximity of these activities and how they might interact with a perched water table which is expected to form at the proposed National Enrichment Facility.

The next issue also arises because of the surrounding land uses. The proposed monitoring program is good but not frequent enough considering that there will be continued disruption of the geologic units by the neighbors and that there is an application by WCS for locating a low level radioactive waste burial site at the existing hazardous waste burial site. I would think that a schedule of monthly or more frequent depending on the weather conditions would be more protective of the environment and human health. An example of conditions which would suggest more frequent monitoring might occur during high winds when there is a potential for blowing dust out of the dry retention pond that was expected to have a small accumulation of uranium and associated chemicals. In addition, during high precipitation events when there is the potential of overflow from the detention pond an hourly sampling would produce data that could be used to quantify the existing concentrations of potential pollutants and thus provide data for

Comment

#041-2

modelling environmental effects if an over flow occurs. In addition there was no mention of public access to these data. Where and how frequently will the data be posted? A yearly summary as mentioned is not adequate for an informed public.

Comment #041-3

Thank you for your attention to these issues.

Sincerely,

Dr. Melanie Barnes  
 2815 23rd St  
 Lubbock TX 79410

806 928 1098 (cell)

Another issue needing a bit more discussion is the training of a local workforce. There was mention of working with local colleges, however there was no mention of working with the local high schools and possibly providing monies for extra science teachers in order to insure high school graduates who could continue in the fields needed for employment at the National Enrichment Facility.

Comment #041-4

CC: <mbarnes27@cox.net>

J-136

Commenter 042

From: "Tannis Fox" <tannis\_fox@nmenv.state.nm.us>  
To: <nrcprep@nrc.gov>  
Date: Mon, Nov 8, 2004 4:13 PM  
Subject: LES Docket No. 70-3103/New Mexico Environment Department Comments on Draft EIS

Attached for filing are the comments of the New Mexico Environment Department on the draft Environmental Impact Statement for the Proposed National Enrichment Facility in Lea County, New Mexico prepared by NRC Staff.

Confidentiality Notice: This e-mail, including all attachments, is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited unless specifically provided for under the New Mexico Inspection of Public Records Act or by express permission of the New Mexico Environment Department. If you are not the intended recipient, please contact the sender and destroy all copies of this message.

CC: "David Riepka" <drepka@winston.com>, "Karen Fisher" <kfisher@ago.state.nm.us>, "Lisa Clark" <lbc@nrc.gov>, "Steve Farris" <sfarris@ago.state.nm.us>, "Chris Coppin" <ccoppin@ago.state.nm.us>, "Glenn Smith" <gsmith@ago.state.nm.us>, "Lindsay Lovejoy" <lindsay@lindsaylovejoy.com>, "Angela Coggins" <abc1@nrc.gov>, "James Curtiss" <jcurtiss@winston.com>, "David Pato" <dpato@ago.state.nm.us>, "Jon Goldstein" <jon\_goldstein@nmenv.state.nm.us>

J-137



BILL RICHARDSON  
GOVERNOR

State of New Mexico  
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RON CURRY  
SECRETARY

Direct line 505-827-1603  
Email tannis\_fox@nmenv.state.nm.us

November 8, 2004

By electronic mail (nrcprep@nrc.gov) and mail

Chief, Rules Review and Directives Branch  
Division of Administrative Services  
United States Nuclear Regulatory Commission  
Mailstop: T6-D59  
Washington, DC 20555-001

Re: NMED Comments on Draft EIS for LES - Docket Number 70-3103

Dear Chief of the Rules Review and Directives Branch:

The New Mexico Environment Department (NMED) hereby submits its comments on the draft Environmental Impact Statement (EIS) for the Proposed National Enrichment Facility in Lea County, New Mexico prepared by Nuclear Regulatory Commission (NRC) Staff. NMED submits comments on the sections in the draft EIS concerning impacts on waste management, ground water, surface water, and air quality and concerning radiological impacts.

Waste Management

Louisiana Energy Services, LP (LES) proposes to store the depleted uranium that will be generated by its proposed facility for up to the thirty-year life of the facility. LES has put forth various strategies for final disposition of the depleted uranium, but final disposition of uranium byproduct cylinders still remains uncertain. Storage of the depleted uranium for up to thirty years, or longer, and the uncertainty of a disposition pathway represent an unacceptable risk to the citizens of New Mexico and to our environment.

Comment #042-1

Ground Water and Related Issues

1. As proposed in the draft EIS, the leachate from the septic system may result in contaminant transport in the alluvium up to two miles off site, where the waters may pose a threat of contamination to an ephemeral drainage or to aquifers as recharge. If this scenario or any other ground water contamination occurred, abatement would be required under the New

Comment #042-2

Comment #042-2 (cont.)

Mexico Water Quality Act and water quality regulations.

NMED is currently reviewing LES's application for a discharge permit under the New Mexico Water Quality Act and water quality regulations. If LES's application is not protective of ground water, the operation and design of the septic system may require modification prior to NMED approval of the discharge permit to prevent ground water contamination and discharge to an ephemeral drainage.

2. Page xxi, lines 44-49 and page xxii lines 1-5. Infiltration is expected from septic and storm water detention basin. This section states that water will perch on the Chinle layer and that there would be limited transport because of upward flux to the root zone. Later, however, the draft EIS defines the limited transport as potentially off-site contamination for approximately 2 miles. These sections are inconsistent between themselves. See comments 17, 18, and 19. Comment #042-3

3. Table 1-2, page 1-12. As a clarification, the New Mexico Water Quality Act applies to permitting prior to construction, during operation, closure, post-closure and abatement, if necessary. Also, all monitor wells would require a permit from the New Mexico Office of the State Engineer. Comment #042-4

4. Page 2-2, lines 26-31. As a clarification, there is ground water at approximately 220 feet and 600 feet and ground water has the potential for localized occurrences in the alluvium at approximately 30 to 50 feet (as indicated on page 3-35 lines 41-74). Because these waters have total dissolved solids less than 10,000 milligrams per liter, all of the ground water is subject to protection under New Mexico Water Quality Control Commission Regulations, 20.6.2 NMAC. Comment #042-5

5. Page 2-14, lines 19-25 and Figure 2-10. LES should provide a comprehensive water balance to illustrate projected water supply, demand and losses. It would be easiest to evaluate a single figure each for the construction phase and the operational phase. Comment #042-6

6. Page 3-26, lines 33-36 and page 3-29, Table 3-8. The "Cretaceous Age" Antlers Formation is an error when compared to the Table 3-8 because the Antlers Formation is Tertiary Age. If the following is the correct interpretation, the sentence should be rewritten to explain the evidence of a reverse fault in Triassic Beds. There was no fault displacement through the younger Antlers Formation. Currently, the sentence is unclear because a clause modifies Triassic beds and not the fault. Comment #042-7

7. Page 3-26, Figure 3-16. The geologic cross section provided in Figure 3-16 is based on another report, the July 2004 LES environmental report. The EIS should address how many drilling locations were used to draw the cross section; whether there is a plan map that shows the control points for the cross section; whether the dune sands recharge areas are located to the north and south of the proposed site; and how close will the cut and fill construction (maximum 13 feet deep) be to the Ogallala Formation. Comment #042-8

8. Page 3-27, lines 15-19. The EIS should provide an explanation of the petroleum resources and exploration holes on the proposed LES site. Improperly sealed or abandoned drill Comment #042-9

Comment #042-009 (cont.)

holes would provide conduits for contamination. The EIS should address whether there are any existing or former well locations for petroleum within the proposed site boundary.

9. Page 3-27, lines 41-47. The EIS should address whether the dunes and alluvial deposits are part of a recharge area for shallow or deep aquifers southward from the site. Comment #042-10

10. Page 3-32, lines 19-22. Net evaporation is cited as 65 inches per year. The EIS should address whether design measures considered the concentration of salts and other contaminants in basins and ponds. Comment #042-11

11. Pages 3-34 and 3-35. The State of New Mexico regulates ground water with total dissolved solids concentrations less than 10,000 milligrams per liter. The shallow ground water occurrences or perched zones on adjacent properties are considered ground water if there are usable quantities of water even though the aquifer may be of limited horizontal or vertical extent. Also, some shallow ground water zones may recharge other aquifers or discharge to ephemeral drainages. Comment #042-12

12. Page 3-35. The statement, "Field investigation and computer modeling were used to show that no precipitation recharge occurs (i.e., rainfall seeping deeply into the ground) in thick, desert vadose zones with desert vegetation", may conflict with subsequent paragraphs. For example, the draft EIS identifies thick vadose areas with deep percolation, in particular episodic recharge events in ephemeral drainages without vegetation (e.g., Monument Draw), on sand dunes or seasonally when less evaporation or transpiration occurs during the winter. NMED agrees that evaporation and transpiration have the potential to affect water in the vadose zone to a depth of a few to even tens of feet, however there are site specific conditions and seasonal variations that create exceptions to the effects of evaporation and transpiration. Comment #042-13

13. Page 3-37. The draft EIS states that there are no wells within one-mile of the site, but then states that the nearest municipal supply wells are 20 miles to the north of the site. The EIS should address, however, how close the nearest domestic and livestock wells are to the site. In this regard, NRC Staff should consult with the Office of the State Engineer to determine the nearby wells because that office has records of such wells. Comment #042-14

14. Page 3-42, Table 3-11. According to the draft EIS, the total dissolved solids (TDS) concentration of 2,500 milligrams per liter (mg/L) is less than the combined concentrations for chloride and sulfate of 3,800 mg/L. However, the TDS concentration cannot be less than the sum of the concentrations reported for the individual parameters. Field pH and laboratory results for sodium, potassium, magnesium, calcium, alkalinity (bicarbonate and carbonate) should be included in future analysis. Comment #042-15

15. Pages 3-42 and 3-43, Table 3-11. The existing regulatory standard for uranium in New Mexico ground water is 0.030 mg/L, not 0.005 mg/L. The existing regulatory standard for copper in New Mexico ground water is 1.0 mg/L, not NS (no standard). Comment #042-16

16. Page 4-12, lines 35-43. To avoid any confusion with the term "geosynthetic" liner, Comment #042-18

NMED recommends use of "synthetic liner." A High Density Polyethylene (HDPE) or similar synthetic liner will be required. Some geosynthetic liners have bentonite or other clays without an adequate HDPE thickness. Clay was mentioned as the topmost layer above the synthetic liner. The Treated Effluent Evaporative Basin (TEEB) is expected to be dry 1 to 8 months during the year. Drying will cause the clay layer to crack and reducing its effectiveness as a barrier to flow. The clay may offer resistance to ultraviolet (UV) ray damage to a synthetic liner, while some synthetic liners are UV resistant. As the process water dries and when salts dissolve again, the water contaminants in the TEEB will become more concentrated. The EIS should consider impacts from the concentration of salts and other contaminants in basins and ponds. *Comment #042-18 (cont.)*

17. Page 4-13. The Site Stormwater Detention Basin is predicted to infiltrate and form a perched aquifer in the alluvium above the Chinle Formation. The resultant episodic recharge events may cause some ground water to migrate 2 miles down gradient and discharge at Custer Mountain or southeast of Monument Draw. LES must monitor the alluvial material for both ground water quality and the water levels to determine if the water is present or may move off site. A system of alluvial dry wells will be necessary to serve as an early detection system in case the preventive measures fail to eliminate or detect all leaks. *Comment #042-19*

18. Page 4-14. The septic system may form a perched aquifer along with the stormwater that could have off-site impacts. The septic system should be consistent with NMED Ground Water Quality Bureau Guidelines for Design Criteria, Operation and Maintenance. Given the potential impacts cited, it may be necessary to consider an alternate design to reduce the potential formation of a perched ground water and contaminant transport off site. *Comment #042-20*

19. Page 4-14, lines 13-22. Having no ground water users within 2 miles down gradient today does not ensure that there will be no users in the future. Whether there are current users or not, the ground water on- and off-site is protected under the New Mexico Water Quality Act and water quality regulations. Therefore, any on- or off-site ground water contamination would have to be abated under New Mexico water quality regulations. The off-site water movement may recharge other aquifers or discharge to surface water of the United States, which includes ephemeral drainages. *Comment #042-21*

20. Page 4-15, lines 42-43. The term "nonrenewable water source" may not be appropriate for an aquifer that has the potential to receive recharge or recover from reduced demand. Due to local and regional demands for water, the Ogallala aquifer has been mined faster than the recharge rate. *Comment #042-22*

21. Page 4-60, lines 16-24. During the decommission plan development and implementation, LES must involve NMED to ensure that closure activities meet state regulations in addition to the NRC requirements. *Comment #042-23*

22. Page 6-8, lines 40-47. LES reports that effluent concentrations for the TEEB will be 0.225 mg/L for uranium. Its uranium concentration will rise by evaporation. The EIS should evaluate the concentration by evaporation. *Comment #042-24*

23. Page 6-13, lines 6-10. LES will likely be required by NMED to add three alluvial wells, which will be completed in the alluvium at the top of the Chinle to monitor any leakage or changes in water quality from the ponds or septic system. The alluvial wells should be monitored quarterly for water levels and would be sampled when water is present. *Comment #042-25*

24. Page 6-16, lines 17-22. The NMED Ground Water Quality Bureau (GWQB) discharge permit will likely require annual sampling of the septic system for TKN, nitrate, total dissolved solids and chloride. *Comment #042-26*

25. Page 6-17, line 11. Ground water sampling and analyses for the GWQB discharge permit will also include major ions (e.g., Cl, SO<sub>4</sub>, F, Na, Ca, Mg, K) and field parameters of electrical conductance, temperature and pH. *Comment #042-27*

26. Page 6-19, lines 20-37. From the meteorological station, the precipitation measurements may provide some additional means to verify the adequacy of stormwater pond designs and management in a timely fashion. For example, rainfall events above 0.25 inch would trigger a visual inspection for the proper functioning of the site stormwater systems and evaporation pond. *Comment #042-28*

#### Surface Water

1. The United States Environmental Protection Agency (USEPA) requires National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP) coverage for storm water discharges from construction projects (common plans of development) that will result in the disturbance or re-disturbance of one or more acres, including expansions, of total land area.

Because the project, as described in the draft EIS, exceeds one acre (including staging areas), it will require appropriate NPDES permit coverage prior to beginning construction. Small construction projects (one to five acres) may be able to qualify for a waiver in lieu of permit coverage. See Appendix D in CGP.

Among other things, the Construction General Permit requires that a Storm Water Pollution Prevention Plan (SWPPP) be prepared for the site and that appropriate Best Management Practices (BMPs) be installed and maintained both during and after construction to prevent, to the extent practicable, pollutants -- primarily sediment, oil, grease and construction materials from construction sites-- in storm water runoff from entering waters of the United States. The permit also requires that permanent stabilization measures, e.g., revegetation and paving, and permanent storm water management measures, e.g., storm water detention or retention structures as described in the draft EIS and velocity dissipation devices, be implemented post construction to minimize, in the long term, pollutants in storm water runoff from entering these waters. In addition, permittees must ensure that there is no increase in sediment yield and flow velocity from the construction site, both during and after construction, compared to pre-construction, undisturbed conditions. See Subpart 9.C.1 in CGP.

EPA requires that all "operators" obtain NPDES permit coverage for construction projects. See Appendix A in CGP. Generally, this means that at least two parties will require permit coverage: the owner/developer of the construction project who has operational control over project

*Comment #042-29*

specifications (LES in this case) and the general contractor who has day-to-day operational control of those activities at the site, which are necessary to ensure compliance with the storm water pollution prevention plan and other permit conditions. It is possible that other "operators" will require appropriate NPDES permit coverage for the project.

*Comment #042-29 (cont.)*

The CGP was re-issued effective July 1, 2003. See Federal Register, Vol. 68, No. 126, July 1, 2003, p. 39087. The CGP, Notice of Intent (NOI), Fact Sheet, and Federal Register notice can be downloaded at <http://epa.ctgusa.com/npdes/stormwater/lepp.cfm>.

2. Once all associated construction activities are terminated and final stabilization is achieved, the facility may require coverage under the NPDES multi-sector general permit (MSGP). Proposed industrial activities at the completed facility may fall under Sector F, Chemical and Allied Products, as described in the MSGP. See Federal Register, Vol. 65, No. 210, October 30, 2000. In addition, regulatory requirements for each sector are additive if a facility engages in more than one industrial activity as identified in the MSGP.

*Comment #042-30*

The EIS states that LES is in the process of deciding whether to submit a "No Exposure Certification for Exclusion from NPDES Storm Water Permitting." While EPA makes this exclusion available to most industries that may otherwise require permit coverage under the MSGP, such an exclusion is rarely granted for facilities of the size proposed in the EIS.

*Comment #042-31*

#### Air Quality

1. This project is proposed to be located in Lea County, which is currently considered to be in attainment of all state and national ambient air quality standards. The draft EIS, p. 3-20, states incorrectly that there have been no instances where particulate matter has exceeded National Ambient Air Quality Standard (NAAQS), as monitored by NMED. This is not correct. An exceedance of the NAAQS for particulate matter 10 microns or less in diameter (PM<sub>10</sub>) has been recorded in Hobbs, New Mexico. NMED is currently developing a Natural Events Action Plan (NEAP) for Lea County. The NEAP will require Best Available Control Measures (BACM) to minimize blowing dust from anthropogenic sources. The EIS, therefore, should address how BACM will be employed at the facility.

*Comment #042-32*

2. In addition to the NAAQS, New Mexico has state ambient air quality standards that are outlined in Title 20, Chapter 2, Part 3 of the New Mexico Administrative Code (20.2.3 NMAC). The EIS should address these standards and whether these standards will be met. Table 3-6 should be expanded to include the state standards for hydrogen sulfide (H<sub>2</sub>S), total reduced sulfur (TRS), and total suspended particulate (TSP).

*Comment #042-34*

3. The EIS does not address requirements of 20.2.72 NMAC, Construction Permits, regarding minor source permitting and the state toxic air pollutants program. State regulated air toxics should be identified and, as applicable, emissions quantified.

*Comment #042-35*

4. Any requirements under 20.2.73 NMAC, Notice of Intent and Emission Inventory Requirements, should also be addressed.

*Comment #042-36*

#### Radiological Exposure

1. Regarding Section C.4.2 of Appendix C: The probabilities of occurrence should be calculated and indicated for each of the accident scenarios discussed in Section C.4.2 of Appendix C. Doing so would better communicate to the reader the likelihood of such occurrences, allowing the reader to determine whether said occurrences and associated consequences are acceptable.

*Comment #042-37*

2. Regarding Subsection 4.2.13 of Section 4 "Environmental Impacts" and Subsection C.4.3 of Appendix C "Dose Methodology and Impacts": No remediation measures are itemized, discussed, and assessed that would mitigate long-term exposures resulting from the hydraulic rupture of a UF<sub>6</sub> cylinder postulated in Subsection 4.2.13 of Section 4 "Environmental Impacts" or Subsection C.4.3 of Appendix C "Dose Methodology and Impacts." Neither are such remediation measures itemized, discussed, or assessed in the LES license application. However, the possible rupture of a UF<sub>6</sub> cylinder discussed in Subsection C.4.2.2 of the draft EIS estimates 7 latent cancer fatalities (LCF). Given the severity of consequences resulting from such a cylinder rupture, planning is necessary for timely remediation to minimize public radiation dose and adverse biotic effects. Recommended actions, anticipated costs, and funding sources should be itemized and discussed in the EIS. Finally, the environmental impacts from such a remediation project should also be discussed and assessed.

*Comment #042-38*

#### Miscellaneous

1. Page xxii, lines 5-6. Delete 'the' and 'territory' from "...Hobbs water supply system would constitute a small portion of the aquifer reserves from the New Mexico territory." The sentence would read, "...small portion of the aquifer reserves from New Mexico."

*Comment #042-39*

2. Page 1-10, lines 37-48. The first reference, "New Mexico Environment Department/Water Quality Bureau," should be to "New Mexico Environment Department/Drinking Water Bureau" and the second reference to "New Mexico Environment Department/Ground Water Quality Bureau."

*Comment #042-40*

3. Page 3-17, lines 17-25. The EIS should address what measures will be in place to prevent windborne transport of concentrated salts and other contaminants from the evaporation and storm water retention basins.

*Comment #042-41*

4. Page 3-27, lines 3-11. Earthquakes in the vicinity of the site are cited as being isolated, small clusters of low- to moderate-sized events. The EIS should address what magnitude seismic events are considered low- to moderate-sized events.

*Comment #042-42*

5. Page 4-53, lines 1-27. LES cites a cylinder management program to limit exterior corrosion at Paducah, Kentucky; Portsmouth, Ohio; and Oak Ridge, Tennessee sites. The EIS should address whether the cylinder management program considers climatic differences (e.g., evaporation that may concentrate corrosive salts, heat that may increase reaction rates) at Eunice, New Mexico.

*Comment #042-43*



Commenter 043

6. Page 5-5, lines 5-7 and lines 29-31, and page 5-6 lines 3-4. The recommended frequency of annual inspections appears appropriate for the detailed inspections. The EIS should address the frequency of visual inspections. Under the current description, only the annual inspection would trigger additional inspections. The EIS should address whether there would be inspections following large diameter hail, lightning or other severe weather events at the facility. *Comment #042-44*

7. Page 8-1, lines 26-47 and page 8-2, lines 1-8. According to the list of agencies and persons consulted, NMED and Office of the State Engineer were not contacted. These state agencies would be appropriate to contact in the development of an EIS, which evaluates impacts to the water quality and quantity. *Comment #042-45*

8. Page C-25, lines 13-21. LES should mention a specific magnitude of earthquake used for the design basis. *Comment #042-46*

Thank you for considering the comments of the New Mexico Environment Department.

Please feel free to contact me if you have any questions regarding our comments.

Sincerely,

Tannis L. Fox  
Deputy General Counsel

cc: Governor Bill Richardson  
Ron Curry, Secretary, NMED

November 5, 2004

Chief, Rules Review and Directives Branch  
U.S. Nuclear Regulatory Commission  
Mail Stop T6-D59  
Washington, D.C. 20555-0001  
email: [prcrep@nrc.gov](mailto:prcrep@nrc.gov)

VIA FAX, ELECTRONIC AND POSTAL MAIL

Re: Report Number NUREG-1790

Dear Rules and Directives Branch,

These comments are submitted on behalf of Forest Guardians and its members. Forest Guardians seeks to preserve and restore native wildlands and wildlife in the American Southwest through fundamental reform of public policy and practices.

We have reviewed the environmental impact statement (EIS) for the proposed National Enrichment Facility in Lea County, New Mexico, and we remain concerned about impacts of this facility to imperiled species. We integrate by reference our scoping comments, dated March 18, 2004, in their entirety. *Comment #043-7*

Eunice is located in Lea County, which is an important biodiversity hotspot in the state. The EIS indicates the presence of shinnery oak on the facility site. Sand shinnery communities should be rigorously safeguarded given that they are finite and host a highly specialized suite of wildlife. The sand shinnery community consists of oak forests which extend across five to seven million acres in New Mexico, Texas, Oklahoma, Arizona, and Utah and constitute the country's largest stand of oak. Sand shinnery communities are dominated by shrubs and a mixture of grasses, the composition of which varies by region. *Comment #043-1*

Unfortunately, a bevy of threats face this ecosystem, including herbicide treatment, oil and gas development, livestock grazing, and habitat destruction such as that associated with the proposed facility. Altogether, over 1.2 million acres of sand shinnery have been lost to cropland conversion and the application of herbicides for rangeland conversion. As the sand shinnery is destroyed or degraded, the repercussions impact wildlife most closely associated with this unique landscape. *Comment #043-1 (cont.)*

J-141

In addition to the lesser prairie chicken and sand dune lizard, a bounty of other wildlife

Forest Guardians has advocated for the protection of native animals, plants, and their

From: "Nicole Rosmarino" <nrosmarino@fguardians.org>  
 To: <LES\_EIS@nrc.gov>  
 Date: 3/18/04 4:58PM  
 Subject: Forest Guardians Comments in re Docket Number 70-3103

Please find copied below and attached in pdf format our comments in re Docket Number 70-3103.

Nicole J. Rosmarino, Ph.D.  
 Endangered Species Director

Forest Guardians  
 312 Montezuma Ave. Suite A  
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505-988-9126 x156

nrosmarino@fguardians.org

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March 18, 2004

Rules and Directives Branch  
 U.S. Nuclear Regulatory Commission  
 Mail Stop T6-D59  
 Washington, D.C. 20555-0001  
 LES\_EIS@nrc.gov

FAX (301) 415-5398, ATTN: Melanie Wong

VIA FAX, ELECTRONIC AND POSTAL MAIL

Re: Docket Number 70-3103

Dear Rules and Directives Branch,

In response to Federal Register of February 4, 2004 (Volume 69, Number 23) regarding a gas centrifuge uranium enrichment facility proposed to be built near Eunice, New Mexico by Louisiana Energy Services (LES), I request that the Nuclear Regulatory Commission (NRC) carefully consider the impacts to imperiled species when conducting environmental analysis (in the form of an Environmental Impact Statement (EIS)) for this project.



March 18, 2004

Rules and Directives Branch  
 U.S. Nuclear Regulatory Commission  
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 Washington, D.C. 20555-0001  
 LES\_EIS@nrc.gov  
 FAX (301) 415-5398, ATTN: Melanie Wong  
 VIA FAX, ELECTRONIC AND POSTAL MAIL

Re: Docket Number 70-3103

Dear Rules and Directives Branch,

In response to Federal Register of February 4, 2004 (Volume 69, Number 23) regarding a gas centrifuge uranium enrichment facility proposed to be built near Eunice, New Mexico by Louisiana Energy Services (LES), I request that the Nuclear Regulatory Commission (NRC) carefully consider the impacts to imperiled species when conducting environmental analysis (in the form of an Environmental Impact Statement (EIS)) for this project.

Eunice is located in Lea County, which is an important biodiversity hotspot in the state. We are concerned that the construction and operation of this plant would cause harms to imperiled wildlife, including, but not limited to, the lesser prairie chicken (*Tympanuchus pallidicinctus*), sand dune lizard (*Sceloporus arenicolus*), black-tailed prairie dog (*Cynomys ludovicianus*), black-footed ferret (*Mustela nigripes*), and northern aplomado falcon (*Falco femoralis septentrionalis*). The NRC should request a full list of species of concern, threatened, endangered, sensitive species from the U.S. Fish and Wildlife Service.

First, Lea County contains shin-oak (*Quercus havardii*), which is vital habitat for many wildlife species, including the lesser prairie chicken and sand dune lizard. Both of these species are currently formal candidates for Endangered Species Act listing. Once abundant throughout their range in eastern New Mexico, the lesser prairie-chicken has been extirpated from 56% of its former range in the state and persists only as sparse and scattered populations in another 28% of that range. The core of the remaining populations occupies only 16% of its former range (Bailey and Williams 2000). The sand dune lizard

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is verging on extinction (USFWS 2001) and all anthropogenic threats to its survival must be promptly removed (including and especially habitat loss and degradation).

Second, north of Eunice exists one of the densest concentrations of black-tailed prairie dogs in the state. Lea County is one of only five counties within the historic range of the black-tailed prairie dog in New Mexico that contain over 5,000 acres of prairie dog colonies (Johnson et al. 2003). This prairie dog species is a formal candidate for ESA listing (65 Federal Register 5476-5488 (February 4, 2000)). One of the primary causes of continued prairie dog decline is habitat loss and degradation (Ibid). In addition, prairie dogs provide vital habitat for the black-footed ferret, mountain plover, swift fox, ferruginous hawk, and burrowing owl (Miller et al. 1994; 1996). The black-tailed prairie dog is considered a keystone species, which creates habitat and serves as a prey base for a wide variety of associated wildlife (Kotliar et al. 1999; Miller et al. 2000).

The most imperiled member of the prairie dog ecosystem is the black-footed ferret. The ferret is listed as Endangered under the ESA (50 C.F.R. § 17.11). A 1984 NM Department of Game and Fish report on the ferret in NM provided among its recommendations the following:

- Assume the ferret is still a member of the state's fauna and that it could occur anywhere that prairie dogs occur.
- Conserve prairie dog towns statewide, with special emphasis on public lands—where these animals should be accorded a portion of the available forage and other resources in a genuine multiple use framework. (Hubbard and Schmitt 1984: 111).

Third, the northern aplomado falcon is listed as Endangered under the ESA (50 C.F.R. § 17.11). This critically imperiled subspecies likely disappeared from the U.S. in the 1950s due to habitat destruction (51 Fed. Reg. 6686-90 (February 25, 1986)). There is potential falcon habitat in southern Lea County and there have been sightings of falcons in the county since the 1950s (See Forest Guardians et al. 2002).

In addition to our concerns about impacts of this project on imperiled species, we are also alarmed at potential impacts to water quality and quantity, air quality (e.g. spread of radioactive dust), and harms to human health should this plant be built and put into operation. This issues should be thoroughly assessed in analyses for this project.

Forest Guardians has advocated for the protection of native animals, plants, and their habitat for nearly 15 years in the state of New Mexico. We have over 1,500 members, most of whom reside in the state. We thank you for your thorough review of our concerns.

Sincerely,  
  
 Nicole J. Rosmarino, Ph.D.  
 Endangered Species Director

#### References Cited

Bailey, J.A. and S. Williams III. 2000. "Status of the Lesser Prairie-Chicken in New Mexico, 1999." The Prairie Naturalist 32(3): 157-168; and Bailey, J.A. 2002. "Status of the Lesser Prairie-Chicken in southeast New Mexico and southeast Chaves county, 2001." Unpublished report, Santa Fe, NM. 5 pp.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6  
1445 ROSS AVENUE, SUITE 1200  
DALLAS, TX 75202-2733

November 05, 2004

Commenter 044

Anna Bradford  
Chief, Rules Review and Directives Branch  
United States Nuclear Regulatory Commission  
Mail Stop T6-D59  
Washington, D.C. 20555-0001

Dear Ms. Bradford:

In accordance with our responsibilities under Section 309 of the Clean Air Act; the National Environmental Policy Act (NEPA), and the Council on Environmental Quality Regulations (CEQ) for Implementing NEPA, the U.S. Environmental Protection Agency (EPA) Region 6 office in Dallas, Texas, has completed its review of the Draft Environmental Impact Statement (DEIS) for the proposed National Enrichment Facility in Lea County, New Mexico. The proposed facility would produce enriched uranium-235 up to 5 weight percent by the gas centrifuge process with a production of 3 million separate work units per year.

The DEIS evaluates the potential environmental impacts of the proposed action, reasonable alternatives and no action. The DEIS describes the environmental effects and describes the environmental monitoring program and mitigation measures. The proposed action would contribute to the attainment of the national security energy policy directives. Overall impacts both cumulative and direct have been evaluated as having a small impact on the environment. Most impacts are avoided and/or significantly reduced through site selection and mitigation.

EPA classified your DEIS and proposed action as "LO," i.e., EPA has "Lack of Objections". Our classification will be published in the Federal Register according to our responsibility under Section 309 of the Clean Air Act, to inform the public of our views on proposed Federal actions.

Comment #044-1

We appreciate the opportunity to review the supplemental information. We request that you send our office one (1) copy of the FEIS at the same time that it is sent to the Office of Federal Activities (2251A), EPA, 1200 Pennsylvania Avenue, N.W., Washington, D.C. 20044.

Sincerely yours,

Michael P. Jepsky, P.E.  
Regional EIS Coordinator

Internet Address (URL) - <http://www.epa.gov/eair1/>

Recycled/Recyclable - Printed with Vegetable Oil Based Inks on Recycled Paper (Minimum 30% Post-consumer)

Commenter 045

Public Comment Form  
Draft Environmental Impact Statement  
for the Proposed National Enrichment Facility in Lea County, New Mexico  
NUREG-1790

Name: ELSA GRAVES

Address: LOS ALAMOS EDUCATION GROUP  
P.O. Box 386  
LOS ALAMOS, NM 87544

Comment:

The NEF license should be issued. The plant would have minimal environmental impact and substantial positive socioeconomic impact on its region, and would benefit the whole state. Energy independence for America is a further consideration that would be enhanced by operation of this plant, not only from the domestic fuel feed it produces but also for its significant help in diversifying and cleaning up our energy supply.

Comment #045-1

The plant's value is easily demonstrated. Calculations show that the 5% U-235 content in a single 7-foot long, 30-inch diameter, NEF product cylinder containing 2 1/2 tons of uranium hexafluoride has the same potential energy release when fissioned as the burning of over one million barrels of oil or the burning of 250,000-300,000 tons of good to medium grade coal. In full production, the NEF would supply up to 250 of these product cylinders annually, equivalent in energy to 250 million barrels of oil costing 12 billion dollars at current prices.

Failure to construct this plant might have national socioeconomic impacts down the road. Our current 104 nuclear plants and their indispensable electricity generation would be more vulnerable to arbitrary and unassailable fuel cost increases, because 85% of our enriched fuel supply now comes from foreign sources beyond US control. Supply shortages might also result from growing international competition (as nuclear power plant numbers increase abroad), or from foreign political actions - e.g., if cooling international relations led to the reduction or cessation of the supply of highly enriched uranium (HEU) from Russia to the US for "blend down" under present "megatons to megawatts" agreements. These are risks we need not and should not accept. The NEF could supply as much as 25% of our domestic needs.

To submit your comment, please give this form to an NRC representative at tonight's meeting, or mail to: Chief, Rules and Directives Branch, Division of Administrative Services, Mail Stop T-6D59, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001

Your comments should be mailed in time to reach the NRC by November 6, 2004

J-145

The NEF would have negligible local environmental impacts from the temporary storage of UBCs (uranium byproduct containers), regardless of their number or duration. They contain relatively little radioactivity, because their uranium was stripped of its accumulated chain decay products when its ore was purified at the mill, and these will not fully regenerate for tens of thousands of years. For similar reasons, the low level plant wastes can be disposed of readily at existing sites. More importantly, the UF6 in the UBCs is solid to temperatures much higher than any ambient temperatures at the site and the containers can neither support nor propagate a fire.

This plant should have zero nuclear proliferation risks. The plant lacks the capability to produce uranium product remotely approaching the enrichments needed for nuclear weapons and could not do so without extensive enlargement and immediately detectable modifications. But the fuel grade enriched uranium needed to supply US power plants must be and will be produced by a plant either in the US or abroad. That demand is fixed. Building or not building the NEF will not change it, but having the enrichment plant under US observation and regulation is best for our economy and our security.

Much more nuclear power is needed for the US, not only to diversify our energy supply and reduce our dependence on foreign sources, but also to assure extraordinarily small impacts on the environment and displace vastly more polluting sources.

To illustrate, nuclear energy produces absolutely no global warming gases or sulfur dioxide (acid rain), and has an exceedingly small waste stream. The fuel pellets removed from a reactor contain the entire radioactivity from their energy-producing fission events, and do not exceed the volume of the material initially used to form them. Though one would not do so, the roughly 2 1/2 tons of "spent fuel" pellets derived from an original 7-foot long, 30-inch diameter, NEF enriched-product cylinder could be physically fitted back into that space. In an almost unimaginable contrast, getting the same amount of energy from burning coal would produce roughly one million tons of CO2 (and some SO2), along with 30,000 tons of ash and slag!

As the US and the world move tentatively but increasingly to the use of hydrogen as a very low pollution fuel for automobiles and trucks, it must be remembered that hydrogen is only a carrier of energy, not a free source found in nature. We must make it to use it. Because of imperfect process efficiency, more energy is always required for its production than it can deliver in end use.

The electricity to make it - e.g., by electrolysis of water - must come either from fossil fuel (coal, oil, or gas) or from nuclear generating stations.

Using fossil fuels as energy sources to make hydrogen merely moves the sites of pollution (from vehicles to power plants) and changes its type to some degree, but does not particularly lower greenhouse gas emissions nor the potential for global warming. The pollution reducing advantages of using nuclear power for hydrogen production (as just shown) are very clear.

The so-called "alternative" energy sources also cannot meet this need. Hydrogen plants are big, complex, and very capital-intensive. If they tried to deal with the changing power availability of the wind or the diurnal variation in

the sunlight, let alone the wild short-term fluctuations in solar supply from intermittent bright patches on cloud-swept days or its total loss on cloudy days, they could not function properly. The steady 24 hours per day, 7 days per week, baseload electricity and long interval between refuelings in nuclear power plants again makes them nearly ideal for this application and by far the best long-term hope for economic or pollution-free hydrogen production.

Thus, quite apart from its low environmental impact and its obvious and acknowledged economic benefits to regional employment and to the state tax base, in the national picture, the NEF offers a non-trivial and relatively important step toward a cleaner, stabler, and more independent US energy supply.

Commenter 046

Public Comment Form  
Draft Environmental Impact Statement  
for the Proposed National Enrichment Facility in Lea County, New Mexico  
NUREG-1790

Name: DONALD F. PETERSEN

Address: LOS ALAMOS EDUCATION GROUP  
PO Box 386  
LOS ALAMOS, NM 87544

Comment:

The Los Alamos Education Group wishes to thank the NRC and the citizens of Lea County for the opportunity to comment on the proposal to build the National Enrichment Facility.

The Los Alamos Education Group is a small non-profit organization consisting mostly of retired Los Alamos staff members who have spent their careers pursuing various aspects of nuclear research and who maintain an active interest in the development and expansion of nuclear energy. Several of our members have had previous contacts with the NRC related to reactor safety. These contacts include the Advisory Committee on Reactor Safeguards and the President's Science Advisor's Office of Energy R&D Policy. Our principal activity is providing verifiable facts and arguments to refute exaggerated and misstated claims in opposition to nuclear energy

development. We have no economic interest in the National Enrichment Facility but regard it as a crucial step in acquiring energy independence for the nation as well as an asset to the State of New Mexico. Clearly, the dependence on foreign energy sources is increasing and the condition is not likely to improve because of competing energy demands by emerging economies such as China and India.

Comment #046-1

We agree with the findings of the NRC on the draft Environmental Impact Statement for the National Enrichment Facility and can speak authoritatively on several features of the draft EIS and the

deteriorating energy supply situation. It is enormously important that alternatives to escalating imports of both nuclear fuel and petroleum be found as quickly as possible. Expanding energy requirements will outstrip supply or the economics will become prohibitive in the near future and nuclear technology is the only established approach that has the potential to supply the vast amounts of energy required to avert severe perturbation of the economy. There isn't much time to start fixing the problem.

Comment #046-5

Because of the extremely slow decay rate of U-238, the radiation hazard associated with the NEF is small under any circumstance but because of the remote site is virtually nonexistent. The measurable potential exposures are well below protection limits and the claim of "deadly radioactive waste" is a gross exaggeration.

Comment #046-6

Finally, the suggestion at this meeting that NEF could somehow contribute to proliferation or terrorism fails to recognize that the NEF license limits enrichment to 3 to 5 percent depending on customer requirements. To exceed that degree of enrichment jeopardizes the license and would result in shutdown of the NEF as soon as the violation was detected under extant monitoring conditions. Highly enriched uranium, useful in a nuclear weapon, would require a more complex plant design. Theft of the byproduct, depleted UF6, is impractical because the material is too heavy to steal and not nearly radioactive enough to be used in a dirty bomb.

Comment #046-7

J-147

To submit your comment, please give this form to an NRC representative at tonight's meeting, or mail to: Chief, Rules and Directives Branch, Division of Administrative Services, Mailstop T-6D59, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001

Your comments should be mailed in time to reach the NRC by November 6, 2004

Commenter 047

Public Comment Form  
Draft Environmental Impact Statement  
for the Proposed National Enrichment Facility in Lea County, New Mexico  
NUREG-1790

Name: W.B. STRATTON

Address: LOS ALAMOS EDUCATION GROUP  
P.O. Box 386  
COS ALAMOS, NM 87544

Comment:

Steady long term employment, steady salaries would stimulate the in the whole area

Comment #047-1

This plant is a billion and a half dollars construction effort and will produce well paid employment for decades and generations. We believe that the plant license or permit requested is 30 years, but in reality it should be operation much longer. Nuclear power stations are now being licensed for 60 years. We, New Mexico, can tax it and also the considerable economic development that will occur in SE New Mexico. The plant is therefore important for New Mexico

Comment #047-7

During operation, about \$105 million in wages and benefits and \$9.6 million in purchasing local goods and services would be spent annually. Construction and operation of the facility would have additional indirect economic impacts by creating additional indirect economic impacts by creating additional employment and economic activity.

The NRC also found that the NEF will provide more than 200 permanent jobs and more than 400 multi-year construction jobs in Southeast New Mexico. The local economy will be correspondingly benefited commerce.

Environmental Impact in Hobbs-Eunice Area

The stored by-product is depleted uranium hexafluoride. Uranium hexafluoride has been used since WW-2, 1944, in the diffusion plant enrichment process. To our knowledge there has been no hazard from the on-site storage of this material. The risk of harm to people or the environment is truly vanishingly small. We doubt that any radiation could be detected through the steel containers.

Comment #047-2

We agree with the NRC's assessment that the plant will have a "small" to "moderate" impact on the local environment. These words mean that only normal, expected impact, as from a corn flakes manufacturing plant, will be created,

Comment #047-3

The UF6 will be stored in steel cylinders in an orderly array. The very, very weak radioactive emissions of depleted uranium will be unable to penetrate the thickness of the steel containers. Thus the storage will be, essentially, not radioactive at all.

Comment #047-4

Economic Benefit to the United States

Nuclear plants produce about 20% of the electricity for the nation. Their licences are being extended to 60 years. We can expect many more such plants to be built.

This plant will produce slightly enriched uranium for the 103 or so nuclear plants in the US. Currently, about 85% of the fuel for these plants is imported, mostly from Europe. This plant, alone, will provide 25% of the fuel for US plants, thus contributing to less dependence on foreign imports. Thus, this plant is important for the nation.

The proposed NEF would provide an additional, reliable, and economical domestic source of enrichment services.

Comment #047-5

The by-product of the plant, depleted uranium, is a material that will be important in future years when the easily available uranium ore is used. The depleted uranium will be used in what are called "fast neutron reactors", and therefore can and should be referred to as a "resource material". These will be required for electricity production in 50-75 years. Of incidental interest, some designs of these future plants are even safer than the current design of light water reactors.

Comment #047-8

Environmental Benefit to the United States

The burning of coal, oil, and natural gas has reached the stage where the matter of climate change or global warming is taken more and more seriously. The environmental effect of this combustion is not known accurately, but the prospects are not good. The only source of major contributions to our electric demand is nuclear energy, which emits no carbon dioxide, sulfur dioxide, mercury, uranium or fine soot particles. The plant at Eunice will provide a reliable domestic source of fuel for existing power stations and for future power stations, which we hope

J-148

To submit your comment, please give this form to an NRC representative at tonight's meeting, or mail to: Chief, Rules and Directives Branch, Division of Administrative Services, Mailstop T-6D59, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001

Your comments should be mailed in time to reach the NRC by November 6, 2004

and expect to be built.

The combustion of gasoline (from oil) is a major contributor to carbon dioxide and unburned hydrocarbons in the atmosphere. This is a tough nut to crack, but a first step would be encourage the use of hybrid automobiles [battery and internal combustion engines]. Propulsion of automobiles would then be, in part, from electric power. This would be a slow process, but as with the replacement of coal fired power stations this is the best time to start. A carbon tax could accelerate the process.

We can refer to scholarly articles in publications such as Physics Today, Scientific American, and the National Geographic. We can probably find more.

The electric energy demand in the United States continues to climb as electricity replaces other energy sources and the population rises. This plant will provide encouragement for continued expansion of the nuclear industry. Every new nuclear plant will eliminate the need for coal or oil fired plants that would spew CO2, dust, metals and other pollution into the atmosphere. Thus the plant will contribute to the environment of the United States and is important for the whole country. This plant and nuclear power stations are "green" in the finest meaning of the environmental movement.

*Comment #047-6*

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

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

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. Fertand (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

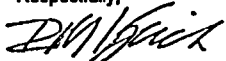
By letter dated December 12, 2003 (Reference 1), E. J. Fertand of Louisiana Energy Services (LES), L. P., submitted to the NRC applications for the licenses necessary to authorize construction and operation of a gas centrifuge uranium enrichment facility. In accordance with NRC regulations for implementing 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."

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

ENCLOSURE

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

J-150

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

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.

Comment #048-1

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..."

Comment #048-2

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.

Comment #048-3

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 (DUF<sub>6</sub>), but because of storage and use of other chemicals.

Comment #048-4

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.

Comment #048-5

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."

Comment #048-6

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

Comment #048-7

LES Comments Regarding Draft Report  
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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<sub>6</sub> 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<sub>6</sub> per cylinder. The value of 66 cylinders of DUF<sub>6</sub> 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)."

Comment #048-8

8. Page 2-17, line 2 - The title of Table 2-5 is currently "Maximum and Anticipated Yearly Production of DUF<sub>6</sub> 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).

Comment #048-9

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.

Comment #048-10

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.

Comment #048-11

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.

Comment #048-12

12. Page 2-21, line 17 - A discussion of the material to be used to exclude waterflow 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 waterflow as recommended by the New Mexico Environment Department.

Comment #048-13

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).

Comment #048-14



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." *Comment #048-15*

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. *Comment #048-16*

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. *Comment #048-17*

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. *Comment #048-18*

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. *Comment #048-19*

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. *Comment #048-20*

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..." *Comment #048-21*

LES Comments Regarding Draft Report  
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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." *Comment #048-22*

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. *Comment #048-23*

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. *Comment #048-24*

24. Page 3-3, line 35 - The phrase "U.S. Nuclear Regulatory (NRC)" should be revised to "U.S. Nuclear Regulatory Commission (NRC)." *Comment #048-25*

25. Page 3-8, line 39 - In New Mexico, "U.S. Highway 176" is referred to as "New Mexico State Highway 234." *Comment #048-26*

26. Page 3-11, line 44 - The word "condensations" should be "condensation." *Comment #048-27*

27. Page 3-17, line 30 - "Figure 3-11" should be "Figure 3-12." *Comment #048-28*

28. Page 3-17, line 33 - "Figure 3-12" should be "Figure 3-11." *Comment #048-29*

29. Page 3-22, Figure 3-13 - The intent of the figure legend "Number of Pollutants" should be clarified. *Comment #048-30*

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. *Comment #048-31*

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. *Comment #048-32*

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. *Comment #048-33*

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. *Comment #048-34*

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 *Comment #048-35*

LES Comments Regarding Draft Report  
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Proposed National Enrichment Facility In Lea County, New Mexico

Comment

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. #048-35 (cont.)

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. Comment #048-36

36. Page 3-68, line 28 - The units "microRad/hour" should be "µR/hr." Comment #048-37

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. Comment #048-38

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. Comment #048-39

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. Comment #048-40

39. Page 4-7, lines 6 and 7 - The reference to "National Weather Station" should be "National Weather Service Station." Comment #048-41

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. Comment #048-42

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.

Comment #048-43

LES Comments Regarding Draft Report  
NUREG-1790, Environmental Impact Statement for the  
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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 evaporating 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. Comment #048-44

43. Page 4-13, line 33 - "252 meters (0.16 mile) per years" should be "252 meters (0.16 mile) per year." Comment #048-45

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. Comment #048-46

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 evaporate 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. Comment #048-47

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. Comment #048-48

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. Comment #048-49

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

Comment #048-50

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 4, 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. *Comment #048-51*

50. Page 4-25, line 26 - The word "results" in this line should be revised to "result" *Comment #048-52*

51. Page 4-44, line 32 - The phrase "gaseous effluent vent system" should be "gaseous effluent vent systems." *Comment #048-53*

52. Page 4-50, line 43 - The word "govern" should be "governed." *Comment #048-54*

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." *Comment #048-55*

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." *Comment #048-56*

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." *Comment #048-57*

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. *Comment #048-58*

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. *Comment #048-59*

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." *Comment #048-60*

59. Page 4-63, lines 21 and 22 - The reference "(LES, 2004a)" should be revised to "(LES, 2004)." *Comment #048-61*

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LES Comments Regarding Draft Report  
 NUREG-1790, Environmental Impact Statement for the  
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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 [30 millirem] per year)." *Comment #048-62*

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." *Comment #048-63*

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 ..." *Comment #048-64*

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." *Comment #048-65*

64. Page 4-72, line 32 - The word "action" in this line should be revised to "actions." *Comment #048-66*

65. Page 4-72, line 49 - The phrase "provide remaining 44 percent" should be revised to "provide the remaining 44 percent." *Comment #048-67*

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." *Comment #048-68*

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." *Comment #048-69*

68. Page 4-74, line 49 - Delete the extraneous comma near the end of the line *Comment #048-70*

69. Page 4-75, line 32 - The phrase "Under no-action alternative" should be revised to "Under the no-action alternative." *Comment #048-71*

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." *Comment #048-72*

71. Page 4-75, line 41 - The phrase "No radiological exposure" should be revised to "No radiological exposures." *Comment #048-73*

72. Page 4-75, lines 43 and 44 - The word "occupation" should be revised to "occupational" in both lines. *Comment #048-74*

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" *Comment #048-75*

LES Comments Regarding Draft Report  
NUREG-1790, Environmental Impact Statement for the  
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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 measure 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. *Comment #048-76*

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." *Comment #048-77*

76. Page 6-1, Figure 6-1 - The reference in the title "(LES, 2003)" should be revised to "(LES 2004b)." *Comment #048-78*

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, Physicochemical Monitoring, and should be deleted from DEIS Figure 6-2. *Comment #048-79*

Additionally, the reference in the title "(LES, 2003)" should be revised to "(LES 2004a)." *Comment #048-80*

78. Page 6-2, Figure 6-2 - Note 6 is not used in the figure and should be deleted. *Comment #048-81*

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, Physicochemical Monitoring, and should be deleted. *Comment #048-82*

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 physicochemical 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 physicochemical monitoring sample parameters and should be placed into Section 6.2, Physicochemical 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. *Comment #048-83*

LES Comments Regarding Draft Report  
NUREG-1790, Environmental Impact Statement for the  
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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." *Comment #048-84*

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 radioactively 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. *Comment #048-85*

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. *Comment #048-86*

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." *Comment #048-87*

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. *Comment #048-88*

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. *Comment #048-89*

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,

*Comment #048-90*

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 UF<sub>6</sub> shipments as described in NEF#04-036 dated September 14, 2004. Comment  
#048-90  
(cont.)

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." Comment #048-91

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." Comment #048-92

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." Comment #048-93

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." Comment #048-94

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." Comment #048-95

93. Page E-3, line 7 - The reference to "National Weather Station" should be "National Weather Service Station." Comment #048-96

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." Comment #048-97

95. Page E-6, Figure E-10 - The Y-axis of this figure is incorrectly labeled. The labeling goes from "10<sup>0</sup>" to "1" to "10<sup>1</sup>." The labeling should be revised to "10<sup>0</sup>" to "10<sup>1</sup>" to "10<sup>2</sup>." Comment #048-98

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. Comment #048-99

November 3, 2004

Chairman Nils Diaz  
US Nuclear Regulatory  
Office of Public Affairs  
Washington, D.C. 20555

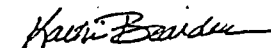
Dear Chairman Diaz:

This letter is in support of Louisiana Energy Services (LES) to obtain a license from the Nuclear Regulatory Commission. This facility, to be built outside of Eunice, New Mexico, will greatly impact Eunice and the surrounding region. Comment #051-1

There is much excitement in the preparations to facilitate LES. The Draft Environmental Impact Statement helped calm nerves by showing how little of an impact this facility will have concerning environmental justice and other important issues. We are excited to welcome this plant into Lea County. The NEF will not only positively impact us it will also aid our nation in becoming independent from foreign countries for our energy needs.

We are hoping that this process will be swift so we can welcome LES into our community and help our nation where it is needed. Comment #051-2

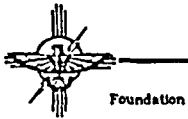
Sincerely,



Kathi Bearden  
Publisher

Cc: Governor Bill Richardson  
Secretary Ron Curry  
New Mexico Attorney General Patricia Madrid





November 4, 2004

Chairman Nils Diaz  
U.S. Nuclear Regulatory Commission  
Office of Public Affairs  
Washington, D.C. 20555

Dear Chairman Diaz:

It is with extreme excitement and great anticipation that I express my continued support for the National Enrichment Facility (NEF) to be built in Lea County, New Mexico.

*Comment #053-1*

I was pleased by the findings of the NRC when I recently reviewed the Draft Environmental Impact Statement (EIS), thus confirming the things Louisiana Energy Services has been telling the citizens of Lea County all along. I have complete confidence in the safety and soundness of this facility.

In addition, I am equally excited for the socioeconomic benefits the National Enrichment Facility will have on southeastern New Mexico and West Texas. At New Mexico Junior College, we are already planning ahead to have workforce training needs for NEF in place. Louisiana Energy Services is also taking beginning steps to prepare the workforce in Lea County; they provided over \$2,400 in scholarships for ten Lea County students this fall. We will be accepting additional applications for spring scholarships soon.

*Comment #053-1 (cont.)*

I greatly appreciate your time and dedication spent on the review of this project. As a supporter of the National Enrichment Facility in Lea County, I encourage you to approve their license application quickly so NEF can become a permanent part of our community.

Sincerely,  
  
Jennifer L. Jordan  
Executive Director

cc: Governor Bill Richardson  
Secretary Ron Curry  
New Mexico Attorney General Patricia Madrid

November 2, 2004

Chairman Nils Diaz  
US Nuclear Regulatory  
Office of Public Affairs  
Washington, D.C. 20555

Dear Chairman Diaz:

I am writing to express my continued support of the planned National Enrichment Facility (NEF) and to communicate the excitement being generated as we look forward to the benefit to our local economy that NEF will bring.

*Comment #054-1*

From an Economic Development perspective, we view the NEF as an economic anchor within Lea County from which potential business opportunities from within their supply-chain can be derived. Given its proposed proximity to local municipalities, I envision an enormously positive economic impact over the next ten to fifteen years both in terms of revenue distribution and increased population.

P.O. Box 1376

Regarding energy independence for America, I as a patriot am concerned about our dependence upon foreign countries for our energy needs and I wholeheartedly endorse this project which will ultimately provide a domestic source of enriched uranium to help drive our National Energy interests.

Hobbs, NM 88241

(505) 397-2039

I look forward to assisting NEF with a seamless transition into Lea County and welcoming this proven corporate citizen as a permanent part of our community and encourage you to approve their license application as soon as practicable.

1-800-443-2236

Thank you for such a thorough and informative Draft EIS. I look forward to reviewing the final one.

FAX: (505) 392-2300

Sincerely,  
  
Ben A. Kendrick  
Executive Director  
Economic Development  
Corporation of Lea County

E-mail:  
edclea@leaconet.com

cc: Governor Bill Richardson  
Secretary Ron Curry  
New Mexico Attorney General Patricia Madrid



J-157



State of New Mexico  
House of Representatives  
Santa Fe

Commenter 058

DONALD E. BRATTON  
El Paso County  
District 42

2012 North McKinley  
El Paso, NM 88540

Business Phone: (505) 933-2937  
Home Phone: (505) 937-4073  
E-Mail: donald.bratton@state.nm.us

COMMITTEES  
Agriculture & Finance  
Transportation  
Mining & Engineering (A)

November 4, 2004

Chairman Nils Diaz  
US Nuclear Regulatory  
Office of Public Affairs  
Washington, D.C. 20555

Dear Chairman Diaz:

I am writing to show my support for the National Enrichment Facility. This project will add jobs in southeast New Mexico and West Texas and help to diversify our economies. Having spent my entire working career in the energy industry, I appreciate the opportunity we have to welcome a new energy industry into the area.

Comment  
#058-1

The Draft Environmental Impact Statement found that the entire NEF process from construction, operation, and decommissioning will have only a small impact on ecological resources. It also shows that land use and air quality will not be adversely affected. While a thorough and complete review by your agency is expected, any prolonged delay is costly to the local economy and the nation.

Comment  
#058-2

According to the Draft EIS, "The NRC staff recommends that, unless safety issues mandate otherwise, the proposed license be issued to LES." I agree. LES has shown itself to be a good corporate citizen. Not only does LES contribute to local organizations that benefit the people of Lea County, they have gone to great lengths to keep us informed about their intent and to help educate everyone about the process. I believe that the draft EIS supports the fact that the NEF is a safe and environmentally sound project.

I urge the NRC to grant LES their license.

Sincerely,

*Donald E. Bratton*  
Donald E. Bratton

cc: Governor Bill Richardson  
NMED Secretary Kos Curry  
New Mexico Attorney General Patricia Madrid

CARLSBAD



CHAMBER OF COMMERCE  
CONVENTION & VISITATION  
Commenter 060

WHEREAS, Louisiana Energy Services, L.P. (National Enrichment Facility) seeks to build a uranium enrichment plant to provide enrichment uranium for the United States nuclear energy industry;

WHEREAS, the economic benefit to Southeastern New Mexico will be stability, growth, job creation, and industry diversification;

WHEREAS, the facility will produce a depleted uranium byproduct in cylinders (Uranium Byproduct Cylinder-UBC's) that will undergo deconversion with final disposal in a location outside of New Mexico;

WHEREAS, the facility will be virtually the same as uranium enrichment plants that have operated safely in Europe for more than 30 years;

WHEREAS, the facility will be licensed and regulated by the Nuclear Regulatory Commission, along with appropriate state agencies;

WHEREAS, the facility will have regulated air and water emissions at or below state and federal limits as allowed by the NRC and New Mexico Environment Department;

WHEREAS, the National Enrichment Facility, to be situated in Southeastern New Mexico, has the support of major US utilities, the DOE, and US Senate Energy Committee Chairman Pete Domenici, and ranking member, Senator Jeff Bingaman, Congressman Steve Pearce and numerous local and state elected officials;

NOW THEREFORE, BE IT RESOLVED, the Carlsbad Chamber of Commerce supports locating such facility in Southeast New Mexico in the interest of regional economic stability.

Comment  
#060-001

1-158



# New Mexico State Senate

State Capitol  
Santa Fe

SENATOR GAY G. KERNAN  
R. Curry, Lea & Roosevelt-42

928 Mesa Verde  
Hobbs, NM 88240

Home: (505) 397-2536

Cell: (505) 370-1335

Fax: (505) 392-1431

E-mail: gkern@valonet.com

November 2, 2004

Chairman Nils Diaz  
US Nuclear Regulatory  
Office of Public Affairs  
Washington, DC 20555

Dear Chairman Diaz:

I am writing to offer my continued support of the National Enrichment Facility (NEF) project that is to be built outside of Eunice, New Mexico.

Comment # 062-1

I have carefully reviewed the Draft Environmental Impact Statement (EIS). It was nice to see that the study was done so thoroughly and I was not surprised to learn the NEF will only have a positive impact on our economy and will have minimal impact environmentally on the region.

I am also proud that Lea County has the opportunity to help the United States reach its national energy security policy objectives which President Bush has wisely made a priority. To decrease our need on foreign oil and energy would greatly help the United States and I fully support any effort that is as safe and environmentally sound as the NEF to accomplish that goal.

Our community and our state will benefit from the NEF. We in Lea County have contributed to the energy needs of this country for over 75 years. With the NEF we can continue to contribute for another 30.

I encourage the Nuclear Regulatory Commission to grant Louisiana Energy Services their license to run the NEF. We in Lea County are ready to plan our future with the NEF in it.

Comment #062-6

Sincerely,

*Gay G. Kernan*  
Gay G. Kernan

Cc: Governor Bill Richardson  
Secretary Ron Curry  
New Mexico Attorney General Patricia Madrid

Commenter 062

MEMBER:  
• Education  
• Indian & Cultural Affairs

INTERIM:

MEMBER:  
• Legislative Education Study  
Committee  
• Corrections Oversight & Justice  
Committee  
• Radioactive & Hazardous Materials  
• Water & Natural Resources  
Committee

Commenter 063

Chairman Nils Diaz  
US Nuclear Regulatory  
Office of Public Affairs  
Washington, D.C. 20555

Olav Amundsen  
Director of Radiological Control and Waste Handling  
New Mexico Junior College  
5317 Lovington Hwy, Hobbs NM 88260  
Phone: 505 392 5335 ext 265  
oamundsen@nmjc.edu

Dear Chairman Diaz:

This letter is in support of Louisiana Energy Services (LES) to obtain a license from the Nuclear Regulatory Commission to establish the National Enrichment Facility in Eunice, NM.

Comment #063-1

After studying the Environmental Statement concerning the impact on people and the environment in Lea County, I endorse the placement and operation of the National Enrichment Facility in our County. I believe in the positive impact of harnessing the tremendous energy potential of the atom. I know it was the dream of our pioneering scientists like Leo Szilard, Lisa Meitner and Niels Bohr, just to mention a few - to unlock and harness the power of the atom. By enriching uranium, we can operate nuclear facilities in a more controlled and stable manner. As of now, I see this as the best way of protecting the environment around our nuclear power plants. I believe that the NEF will have a small impact on radiological exposures to the public, and after studying their plant proposal I believe they will operate with levels significantly below regulatory limits.

LES has shown itself to be a good corporate citizen by contributing to a scholarship fund for our students at the local Community College. It is our hope that LES will continue to contribute to our County by giving young people an opportunity for respected and well paying careers through supporting vocational training at the Community Colleges, supporting this government goal as outlined by President Bush in his nomination speech at the Republican Nomination Congress this fall.

Sincerely,

Olav Amundsen

*Olav Amundsen*

Date:

11/4/04

cc: Governor Bill Richardson  
Secretary Ron Curry  
New Mexico Attorney General Patricia Madrid

1-159





THE CITY OF  
**HOBBS, NEW MEXICO**

Commenter 079

Commenter 102

8302

300 North Turner

Hobbs, New Mexico 88240-

(505) 397-9232

(505)397-9227

FAX

October 14, 2004

Chairman Nils Diaz  
US Nuclear Regulatory  
Office of Public Affairs  
Washington, D.C. 20555

Dear Chairman Diaz:

I am writing to voice my support for the construction of LES' proposed uranium enrichment facility to be built near Eunice, New Mexico. I speak for myself as a citizen of Lea County and as a Hobbs City Commissioner.

When I first heard about this facility I had many questions. Will it be safe? What affect will it have on the environment?

After visiting the model facility in the Netherlands and talking to the LES management team I know the NEF will be safe and it will be good for New Mexico. Further, it will be good for our country.

The Draft Environmental Impact Statement (EIS) was very positive for the NEF. I am glad that the NEF will have no large negative impact on our local resources. I am also very excited about the boost to our local economy that the NEF will bring. We certainly need a more diversified economy and new jobs. The NEF will help achieve both of these.

Comment #079-2

I look forward to welcoming NEF as a permanent part of our community and encourage you to approve their license application quickly.

After reviewing the Draft EIS, I firmly believe that the NEF will be both safe and environmentally sound to the citizens of Lea County.

Comment #079-3

Sincerely,

cc: Governor Bill Richardson  
Secretary Ron Curry  
New Mexico Attorney General Patricia Madrid

NRC

Chief, Rules and Directives Branch  
Division of Administrative Services  
US Nuclear Regulatory Commission  
Washington DC 20555-0001

NUREG-1790/Docket #70-3103

To Whom It May Concern:

Since the announcement of the proposed uranium enrichment plant by Urenco/LES to our town, I have followed the news and the information trail however scant it is and have drawn my own conclusions regarding the proposed safety of such a facility.

I totally oppose the building of said facility. I live 2.6 miles from the sight in question on NM Rd 234 and I have over the last few months determined that my home and family would without a doubt be in perilous danger if there is a radioactive accident or any release of the emissions from the daily operations of the plant. My family and I take care of small children in my home. As a caregiver, I am responsible for the health and welfare of the babies and under no circumstances would I allow them to be endangered by

Comment #102-1

anyone or any outside influences. If this plant is built, there will be toxic emissions and radioactive materials on the plant site for 30 years or longer, as well as toxic and contaminated water pits on the site subject to overflow or flooding due to rains. This type of environment is not acceptable for raising children. What unknown and dangerous impacts will this have on their little bodies? We know from experience and lessons learned that many illness and medical conditions are caused by external factors in our environment and I choose to acknowledge that we know toxic chemicals, polluted radioactive emissions and contaminated water as well as the DUF6 waste on that site cannot and will never be a healthy alternative for anyone.

Comment #102-2

There are already many trucks in and out of the area carrying the wastes to the WCS plant and the local landfill, if radioactive materials like the uranium cake and possible waste to be sent to other sites around the country are added to this traffic it will impact my life significantly. It is apparent now that more and more people are becoming aware of the real dangers that this city government and Lea County government and state officials are willing to subject little Eunice NM to in favor of monetary rewards. It is shameful that they are willing to degrade their integrity in order to see their name associated with Louisiana Energy Services. Just as this company was rejected in Louisiana and Tennessee I believe this company will be rejected in New Mexico!

Comment #102-3

I request that you deny the application for license for Urenco, Louisiana Energy Services.

Sincerely,



**WESTERN  
GOVERNORS'  
ASSOCIATION**

Bill Owens  
Governor of Colorado  
Chairman

Janet Napolitano  
Governor of Arizona  
Vice Chair

191-f

Pam O. Inmann  
Executive Director

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Commenter 103

December 16, 2004

Division of Waste Management and Environmental Protection  
Office of Nuclear Material Safety and Safeguards  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Re: NUREG-1790, DEIS for Proposed  
National Enrichment Facility, Lea County,  
New Mexico

Dear Sirs:

Enclosed, please find the Western Governors' Association  
comments on the Draft Environmental Impact Statement for the  
Proposed National Enrichment Facility, to be located in Lea County,  
New Mexico.

Should you have questions, please contact Mr. Bill Mackie of  
my staff.

Sincerely,

Pam O. Inmann  
Executive Director

enclosure:

F:\NUC\WST2\Correspondence\CY 2004\12 15 04 NEF DEIS Comments.doc

**Western Governors' Association  
Comments on the Draft Environmental Impact Statement (DEIS)  
for the Proposed National Enrichment Facility  
in Lea County, New Mexico (NUREG 1790)  
Prepared by the Staff of the US Nuclear Regulatory Commission  
September 2004**

**General Comment:**

On November 30, the Western Governors' Association (WGA) and the States of Colorado and Wyoming met with officials from the National Enrichment Facility (NEF) to discuss the proposed National Enrichment Facility in Lea County, NM. In addition to discussions on their draft Environmental Impact Statement, NEF agreed to stakeholder involvement in the development of a comprehensive Transportation System.

**Comments:**

**Item 1:**

"The proposed NEF would be licensed in accordance with the provisions of the Atomic Energy Act. Specifically, an NRC license under Title 10, "Energy," U.S. Code of Federal Regulations (10 CFR) Parts 30, 40, and 70 would be required to authorize LES to possess and use special nuclear material, source material, and byproducts material at the proposed NEF site." DEIS page iii

**Comment 1 (a)**

The final Environmental Impact Statement (EIS) should specify what organization will own the special nuclear material, source material and byproduct material, therefore specifying the responsible party for each of these materials.

Comment  
#103-1

**Comment 1 (b)**

The final EIS should specify what organization will own the NEF, therefore specifying the responsible party.

Comment  
#103-2

**Item 2:**

"Nuclear power plants are currently supplying approximately 20 percent of the Nation's electricity requirements, but only about 15 and 14 percent of the enrichment services that were purchased by U.S. nuclear reactors in 2002 and 2003, respectively, were provided by enrichment plants located in the United States." DEIS page xix

Comment 2 (a)

The question is not the fraction of enrichment services provided by USEC in 2002 and 2003, but rather what fraction of fuel will be met in the future based upon the use of MOX, the disposition of the 60,000+ kilograms of weapons Pu, any additional enriched U from Russia, increased burnup of fuel at the power reactors, relative costs of domestic and foreign provided SWOs, cost of uranium, etc. Accordingly, the final EIS should evaluate plausible scenarios relating to these important economic variables.

Comment #103-3

Comment 2 (b)

"... but only about 15 and 14 percent of the enrichment services that were purchased by U.S. nuclear reactors in 2002 and 2003, respectively, were provided by enrichment plants located in the United States." Was this because of cost considerations, because of enrichment services shortfall, or because the electric utilities desired a diversity of supply? Generally, utilities purchase fuel at the lowest cost, not necessarily based upon country or origin (as in uranium ore from Canada or Australia rather than uranium ore from the United States). The final EIS should clarify the reason for the specified percentages.

Comment #103-4

Comment 2 (c)

The final EIS should specify what fraction of U to UF<sub>6</sub> conversions services were provided by domestic (US) facilities as opposed to foreign facilities. The final EIS should specify what fraction of oil consumed in the US is refined in facilities located in the United States. These two ratios would be more relevant comparisons than ones already provided.

Comment #103-5

Item 3:

"Use of a U.S. Department of Energy (DOE) conversion facility in Paducah, Kentucky, or near Portsmouth, Ohio, for disposition of depleted uranium hexafluoride (DFU<sub>6</sub>) could extend the operating life of the conversion facility, and therefore, the socioeconomic impacts associated with the operation." DEIS page xxii

Comment 3 (a)

As a result of DOE and predecessor organization operations there exists a huge backlog of DUF<sub>6</sub>. The final EIS should provide support to the implied assertion that the DOE conversion will be available for use for the DUF<sub>6</sub> waste produced by the NEF.

Comment #103-6

Comment 3 (b)

What is the estimated cost for disposal, assuming the NEF DUF<sub>6</sub> is converted? The final EIS should provide a basis (letter from suppliers of services, quotations, contracts, agreements in principle, etc.) of the disposal cost. What organization will own the DUF<sub>6</sub> that is planned to be stored at the NEF? What organization will own the cylinders that will contain the DUF<sub>6</sub> stored at the NEF? The final EIS

Comment #103-7

should address these questions and therefore specify the responsible parties for the DUF<sub>6</sub> and the cylinders.

Comment #103-7 (cont.)

Item 4:

"Construction of a new privately owned conversion facility, whether adjacent to the proposed NEF or potentially near Metropolis, Illinois, would have comparable impacts to the DOE conversion facilities." DEIS page xxiv

Comment 4

The final EIS should provide support to the implied assertion that DUF<sub>6</sub> waste would be processed at a facility adjacent to the NEF or one near Metropolis, Illinois. It should specify plans for these facilities and it should explain why there would be comparable impacts to the DOE conversion facilities. The paragraph below starts with the statement that: "No private company has yet agreed to construct or operate a DUF<sub>6</sub> to U<sub>3</sub>O<sub>8</sub> conversion facility anywhere in the United States."

Comment #103-8

"No private company has yet agreed to construct or operate a DUF<sub>6</sub> to U<sub>3</sub>O<sub>8</sub> conversion facility anywhere in the United States. LES suggested the construction of a DUF<sub>6</sub> to U<sub>3</sub>O<sub>8</sub> conversion facility near Metropolis, Illinois. The existing ConverDyn plant at Metropolis, Illinois, converts natural uranium dioxide (UO<sub>2</sub>) (yellow cake) from mining and milling operations into UF<sub>4</sub> and UF<sub>6</sub> for feed to enrichment facilities such as the proposed NEF (ConverDyn, 2004). Construction of a private DUF<sub>6</sub> to U<sub>3</sub>O<sub>8</sub> conversion near the ConverDyn plant in Metropolis, Illinois would allow the hydrogen fluoride produced during the DUF<sub>6</sub> to U<sub>3</sub>O<sub>8</sub> conversion process to be reused to generate more UF<sub>6</sub> feed material while the U<sub>3</sub>O<sub>8</sub> would be shipped for final dispositioning." DEIS page 2-29

Item 5:

"Costs associated with construction activities would be approximately \$1.2 billion (2002 dollars) excluding escalation, contingencies, and interest." DEIS page xxiv

Comment #103-9

Comment 5

The final EIS should provide a complete estimate, including contingencies and interest.

Item 6:

"For the no-action alternative, the proposed NEF would not be constructed, operated, and decommissioned in Lea County, New Mexico. The Paducah Gaseous Diffusion Plant in Paducah, Kentucky, and the down-blending of highly enriched uranium covered under the "Megatons to Megawatts" program (both are managed by USEC) would remain the sole source of domestically generated low-enriched uranium for U.S. commercial nuclear power plants. Foreign enrichment

sources would continue supplying more than 85 percent of the U.S. nuclear power plants demand until other new domestic suppliers are constructed and operated. In the long term, this could lead to increase reliance on foreign suppliers for enrichment services." DEIS page xxiv

**Comment 6**

Currently over 30 reactors in Europe (Belgium, Switzerland, Germany and France) are using MOX and a further 20 have been licensed to do so. Japan also plans to use MOX in around a third of its reactors by 2010. Most reactors use it as about one third of their core, but some will accept up to 50% MOX assemblies. France aims to have all its 900 MWe series of reactors running with at least one third MOX.

Russia and the United States have held extensive discussions on plutonium disposition, culminating in a September 2000 agreement to dispose of 34 metric tons of surplus weapons-grade plutonium in each country. That is 68 tonnes (68,000 kilograms)! And that is not all the weapons grade Pu available in the US and Russia. (Please see NUREG/BR-0284, *Mixed Oxide Exchange*, published by the U.S. Regulatory Commission relating to the licensing of a mixed oxide (MOX) nuclear fuel fabrication facility.)

In view of the plans by the US NRC to license an MOX fabrication plant, the associated plans by the DOE to dispose of 68,000 kilograms of weapons grade plutonium, plans of others to fabricate MOX for use by US light water power reactors, and the potential increase in enriching services (from Brazil, Communist China, and others), the final EIS should address the actual need for the NEF.

Comment #103-10

This is particularly important because if the NEF is constructed but is uneconomical to operate (its capital costs should be greater than \$1.8 billion including interest, escalation and contingencies), the operators could assert commercial impracticability (declare bankruptcy) and the facility would revert to the owners of the facility in a diminished, yet highly competitive, market for enriched uranium.

The final EIS should provide information on the source of supply of the uranium used in US power reactors and what fraction is provided by foreign sources.

Comment #103-11

**Item 7:**

"Non-radioactive gaseous effluents include argon, helium, nitrogen, hydrogen fluoride, and methylene chloride (LES, 2004a)." DEIS page 2-23

Comment #103-12

**Comment 7**

The final EIS should indicate the source(s) of the hydrogen fluoride.

**Item 8:**

"The Programmatic EIS evaluated the potential environmental impacts of disposal in shallow earthen structures, below-grade vaults and underground mines." DEIS page 2-42

**Comment 8 (a)**

The final EIS should specifically clarify that costs are the reason that placement in underground mines was not considered viable and not discussed further. NRC acknowledges that LES proposed several disposal options for DUF<sub>6</sub>, including placement of depleted U<sub>3</sub>O<sub>8</sub> in underground mines (specifically, LES proposed using exhausted Ur mines owned by Colter in Colorado), shallow earthen structures, below-grade vaults, and several international treatment options. The text, however, is unclear in attaching the non-viability to the international options or to the underground options or to all options listed in this paragraph.

Comment #103-13

**Comment 8 (b)**

If costs were the reason why placement of DUF<sub>6</sub>/U<sub>3</sub>O<sub>8</sub> in underground mines was not considered, the final EIS should provide additional information on why the costs are considered to be so high for such a low technology alternative as well as the additional factors that may have contributed to NRC's rejection of that alternative.

Comment #103-14

**Comment 8 (c)**

NRC's statements throughout the DEIS that all radioactive wastes from the LES facility go to appropriate licensed facilities is strongly supported. Currently, there are no such licensed disposal facilities (in the State of Colorado, for example) and the states have no knowledge of any entity proposing disposal in old mines. Additionally, disposal in mines seems to be inconsistent with DOE's preferred alternative in the Depleted Uranium PEIS of 1999 (DOE/EIS-0269, April 1999).

Comment #103-15

**Item 9:**

The information at the bottom of page 2-55 is incomplete. It reads as follows:

Comment #103-16

"SMALL to MODERATE during accidents. If a rail accident involving the shipment of DUF<sub>6</sub> occurs in an urban area, approximately 28,000 people could suffer" ... ????

**Comment 9**

The final EIS should include the missing information.

**Item 10:**

The information at the bottom of 2-56 is incomplete. It reads as follows:

Comment #103-17

J-163

\*SMALL to MODERATE for accidents. Although highly unlikely, the most severe accident is estimated to be the release of UF<sub>6</sub> caused by rupturing an over-filled and/or over-heated cylinder, which could incur a collective" . . . ????

Comment  
#103-17  
(cont.)

Comment 10

The final EIS should include the missing information.

Item 11:

Table 3-21, Current Traffic Volume for the Road systems in the Vicinity of the Proposed NEF Site (page 3-67) lists traffic volume per day. Average volume per day includes evening and nighttime traffic (which is very low) as well as traffic on Saturdays and Sundays. A more meaningful measure is average volume per hour for the peak load traffic period (6 AM to 6 PM, Monday through Friday). With this measure the reported traffic volume would not be diluted by off-hours and low weekend traffic.

Comment  
#103-18

Comment 11

The final EIS should show the more meaningful measure, which would reflect, not an average traffic volume, but traffic volume during the time construction related traffic and school busses are on the road.

Item 12:

"The surrounding air quality would be affected by non-radioactive gaseous effluent releases during operation of the proposed NEF. Non-radioactive gaseous effluents include hydrogen fluoride and acetone. The proposed NEF would release approximately 1 kilogram (2.2 pounds) per year of hydrogen fluoride, 40 liters (11 gallons) of ethanol, and 610 liters (161 gallons) of methylene chloride per year (LES, 2004a)." DEIS page 4-8

Comment  
#103-19

Comment 12

The final EIS should indicate the sources of hydrogen fluoride.

Item 13:

"The highest employment would occur in the second through fifth construction years with employment peaking at 800 jobs in the fourth year (LES,, 2004a)." DEIS page 4-19

Comment  
#103-20

Comment 13

The final EIS should provide an analysis that shows the local roads can handle the increased vehicle (construction workers, deliveries to the site) traffic during normal work hours (that is, 6 AM to 6 PM, Monday through Friday) in the fourth year.

Item 14:

Page 4-34 of the DEIS presents many "candidate" solutions to the disposal of the DUF<sub>6</sub> waste materials.

"The impact of transporting the depleted uranium to a conversion facility were also analyzed. Conversion could be performed either at a DOE or a private conversion facility. Currently DOE conversion facilities are being constructed at Paducah, Kentucky, and Portsmouth, Ohio. For the purpose of this analysis, it is assumed that the private conversion facility will be located at Metropolis, Illinois. As discussed previously in Section 2.1.9 of Chapter 2 of this Draft EIS, LES suggested the construction of a DUF<sub>6</sub> to U<sub>3</sub>O<sub>8</sub> conversion facility near Metropolis, Illinois. The existing ConverDyn plant at Metropolis, Illinois, converts natural uranium dioxide (UO<sub>2</sub>) (yellow cake) from mining and milling operations into UF<sub>4</sub> and UF<sub>6</sub> for feed to enrichment facilities such as the proposed NEF (ConverDyn, 2004). Construction of a private DUF<sub>6</sub> to U<sub>3</sub>O<sub>8</sub> conversion facility near the ConverDyn plant in Metropolis, Illinois, would allow the hydrogen fluoride produced during the DUF<sub>6</sub> to U<sub>3</sub>O<sub>8</sub> conversion process to be reused to generate more UF<sub>6</sub> feed material while the U<sub>3</sub>O<sub>8</sub> would be shipped for final disposition. The NRC staff has determined that construction of a private DUF<sub>6</sub> to U<sub>3</sub>O<sub>8</sub> conversion plant near Metropolis, Illinois, would have similar environmental impacts as construction of an equivalent facility anywhere in the United States. The advantage of selecting the Metropolis, Illinois, location is the proximity of the ConverDyn UO<sub>2</sub> to UF<sub>6</sub> conversion facility and, for the purposes of assessing impacts, the DOE conversion facility in nearby Paducah, Kentucky, for converting DOE-owned DUF<sub>6</sub> to U<sub>3</sub>O<sub>8</sub>. Because the proposed private plant would be similar in size and the effective area would be the same as the Paducah conversion plant, the environmental impacts would be similar.

The DUF<sub>6</sub> would be placed in Type 48Y cylinders for either temporary onsite storage or shipment offsite. If the DUF<sub>6</sub> were shipped offsite, 627 truck shipments with 1 cylinder per truck would be transported to a conversion facility located near Paducah, Kentucky; Portsmouth, Ohio; or Metropolis, Illinois. At the conversion facility, the DUF<sub>6</sub> would be converted into U<sub>3</sub>O<sub>8</sub>. After conversion, the U<sub>3</sub>O<sub>8</sub> could be shipped from Paducah, Kentucky and Portsmouth, Ohio to Envirocare near Clive, Utah, or, if converted at a DOE facility, the Nevada Test Site for disposal. The U<sub>3</sub>O<sub>8</sub> from Metropolis, Illinois could be shipped to Envirocare. If the DUF<sub>6</sub> were converted to the more chemically stable form of U<sub>3</sub>O<sub>8</sub> at an adjacent conversion facility to the proposed NEF, the conversion product of U<sub>3</sub>O<sub>8</sub> and calcium fluoride (CaF<sub>2</sub>) could be shipped to Envirocare or U.S. Ecology in Hanford, Washington. The hydrofluoric acid generated during the process of converting the DUF<sub>6</sub> to U<sub>3</sub>O<sub>8</sub> could be reused in the process of generating UF<sub>6</sub> or neutralized to CaF<sub>2</sub> for potential disposal at the same site as the U<sub>3</sub>O<sub>8</sub>. The conversion process would generate over 6,200 metric tons (6,800 tons) of U<sub>3</sub>O<sub>8</sub> and 5,200 metric tons (5,700 tons) of CaF<sub>2</sub> annually. Assuming that this material would be shipped in 11.3 metric ton (25,000 pound)

J-164

capacity bulk bags, 547 and 461 bulk bags would be required annually to ship the  $U_3O_8$  and  $CaF_2$ , respectively, with one bulk bag per truck."

**Comment 14**

In order to determine the commercial practicality of the scenario, the final EIS should include a cost estimate for each element of the above scenario as well as the basis of the cost estimate (engineering study, information from a vendor, published report (other than that from the Applicant). For the facilities that are already in existence, like Envirocare, a letter from the firm indicating that it can accept the material ( $U_3O_8$  as well as very large quantities of  $CaF_2$ ) at a cost or range of costs for service would be acceptable documentation.

**Comment #103-21**

**Item 15:**

Beginning on page 4-39 of the DEIS, the Chemical Impacts From Transportation Accidents are summarized. The assumptions supporting the impacts presented in Table 4-7 are provided in Appendix D, Section D.5. Page D-26 presents some of the assumptions used in the accident analysis. The "maximally exposed individual" is not defined in the DEIS, but generally is considered an adult male.

"DOE evaluated chemical impacts to rural (8 persons per square kilometer [15 persons per square mile]), suburban (719 persons per square kilometer [1,798 persons per square mile]), and urban (1,600 persons per square kilometer [4,000 persons per square mile]) areas." DEIS page D-26

**Comment 15**

If the "maximally exposed individual" used in the analysis is an adult male, then the consequences of the analyzed accidents (that is "potential health effects" and "irreversible adverse health effects") should reflect the fact that a representative population includes females, the embryo-fetus, children, infants, the elderly and the infirm. Moreover, occupational exposure levels must not be used as a guideline for exposure of the public to HF. Many segments of the public do not have the characteristics of "Reference Man". The final EIS should specifically define the "maximally exposed individual".

**Comment #103-22**

**Item 16:**

With regard to transportation accidents involving  $UF_6$  and fire (page D-26, Section D.5), First Responders may not be currently versed in necessary safety precautions. The transportation of  $UF_6$  is not a routine occurrence along some of the proposed routes. It appears that an inherent assumption in the accident scenarios is that First Responders provide prompt and effective countermeasures that minimize the effects of the accident.

**Comment 16**

The final EIS should evaluate transportation scenarios that include a range of countermeasures and various times after the accident at which the

**Comment #103-23**

countermeasures are initiated. Moreover, the final EIS should require the Applicant to provide periodic (annual) training to First Responders along the routes.

**Comment #103-23 (cont.)**

**Item 17:**

**Facility Worker Uranium Intake and Exposure to Hydrogen Fluoride**

The accident consequences to a facility worker include the risks of toxicological effects of uranium intake, radiation dose from uranium intake, and exposure to hydrogen fluoride concentration in air. The amount of uranium a facility worker could inhale (uranium intake) is calculated by assuming the worker is exposed to C1(t) until T1 = 5 minutes after the start of the release (LES, 2004a). By T1 = 5 minutes, a worker is assumed to successfully escape the affected room. The uranium intake is calculated by assuming the worker inhales at a constant breathing rate of  $3.33 \times 10^{-4}$  cubic meters per second (20 liters per minute, which is consistent with the breathing rate used by NRC in 10 CFR Part 20, Appendix B, for Reference Man performing "light work." Similarly, the hydrogen fluoride concentration to which a facility worker could be exposed is calculated by evaluating the time-averaged hydrogen fluoride concentration during the first T1 = 5 minutes.

"For the uranium intake and hydrogen fluoride exposure calculations, it is assumed that sufficient moisture (i.e., humidity) is present in the room to completely convert released  $UF_6$  gas to  $UO_2F_2$  particulate matter and hydrogen fluoride vapor. This assumption results in a conservative estimate of the concentration of hydrogen fluoride vapor that would be present in both the affected room of the proposed NEF and downwind." DEIS page C-18

A key assumption is that: "The uranium intake is calculated by assuming the worker inhales at a constant breathing rate . . . used by NRC in 10 CFR Part 20, Appendix B, for Reference Man performing "light work." Similarly, the hydrogen fluoride concentration to which a facility worker could be exposed is calculated by evaluating the time-averaged hydrogen fluoride concentration during the first T1 = 5 minutes."

**Comment 17**

In an accident situation, it is unreasonable to assume that the breathing rate of a male worker involved in the accident is identical as the breathing rate of a worker (Reference Man) performing "light work". In an accident situation, blood pressure increases, heart rate increases, blood stream adrenaline values increase (Adrenaline causes quickening of the heart beat, strengthens the force of the heart's contraction, opens up the bronchioles in the lungs and has numerous other effects. The secretion of adrenaline by the adrenal is part of the "fight-or-flight" reaction that we have in response to being frightened,) and breathing rate increases.

Table 5A-6 (from EPA/600/P-95/002Fa, August 1997, VOLUME I - GENERAL FACTORS EXPOSURE FACTORS HANDBOOK) provides a summary of reasonable assumptions regarding breathing rates for various activities. Based upon the EPA (and clearly a more reasonable assessment of what transpires to the breathing rate during an accident situation) a greater breathing rate must be used in order for the analysis to somewhat reflect reality. Accordingly, the final EIS Appendix C should show new calculations using a breathing rate representative of the breathing rate for a worker involved in an accident not a worker performing routing tasks in "light activity".

Comment #103-24

Item 18:

"The cost for decontamination and decommissioning of the proposed NEF would be approximately \$837.5 million in 2002 dollars. The majority of this cost estimate (\$731 million) is the fee for disposal of the DUF<sub>6</sub> generated during operation assuming the DUF<sub>6</sub> would be not be disposed of prior to decommissioning." DEIS page 4-63

Comment 18 (a)

It is unclear if the Applicant plans to own the DUF<sub>6</sub> or the customer of the facility will own the DUF<sub>6</sub>. If the Applicant owns the DUF<sub>6</sub>, then at what time does the ownership transfer from the customer to the Applicant? The final EIS should clarify ownership of all UF<sub>6</sub> and DUF<sub>6</sub> during various stages.

Comment #103-25

Comment 18 (b)

If, for whatever reason or combination of reasons (use of MOX, longer burnup of fuel at reactors, foreign competitors reduce price of SWU, the cost of U increases thus making MOX more attractive, regulatory requirements for additional safety equipment are put in place, etc.), it is commercially impractical to continue providing enriching services (after 5 years, after 10 years, after 15 years of operations), will there be sufficient funds to dispose of the DUF<sub>6</sub> and will the facilities and firms that are discussed in the DEIS as thoughts for treatment and disposal of DUF<sub>6</sub> be in existence at those times? The final EIS should discuss these contingencies.

Comment #103-26

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

RE: Public Comments, Docket No. 70-3103 National Enrichment Facility, Eunice NM

To whom it may concern:

I recently read in the Denver Post (11/28/04) about the N.E.F project and the plans to ship nuclear materials through the front range and mountains of Colorado. Being a part-time resident of Canon City, Colorado, I am familiar with the negative consequences of having a "legally permitted" nuclear waste facility as a neighbor. In fact, I continuously hear about my friends and neighbors who have succumbed to various forms of cancer—a seemingly common fate around the Canon City area.

My initial reaction after reading the article was to investigate the facts, myself. You should know that in my first search of the NRC website, I was frustrated to learn that the public comment period for this project had already been closed (on November 6<sup>th</sup>), so I gave up my search. By chance, I learned yesterday from a friend that the comment period had been changed to December 18<sup>th</sup>. Accordingly, I submit the following abbreviated commentary for your consideration.

Living first hand with the consequences of the Cotter Corporation in my community, I find it wholly inconceivable that any project the size of the NEF can be adequately evaluated based solely on the irresponsible notion that the wastes generated will be deposited "somewhere" outside the State of New Mexico. I question the fundamental competency of the existing environmental review, which seems to have successfully divorced the project from responsibility for the wastes it will generate. Is it, in fact, legal to permit a project without concrete knowledge of the ultimate fate of these wastes? Will other States have any authority to assert in such cases?

Comment #104-1

I am disturbed by comments such as those of LES spokesperson April Wade concerning the fact that actual supply and waste transport routes for the project still remain to be concretely determined. Being a resident of a State "somewhere" other than NM, I think it is only fair that the applicant be compelled to disclose complete and definitive plans for regional nuclear transportation, as well as comprehensive waste management plans. Obviously, only after affected communities become aware of the plans will they be able to undertake a truly complete review of the potential environmental and economic impacts involved.

Comment #104-2

Lastly, I am aware that other shipments of radioactive materials are a relatively common occurrence in the front range. Regardless of this fact, I do not believe that any adequate investigation has been conducted regarding the potential diversion of these existing and future shipments intentionally in terrorist situations, or even the more likely eventuality of a derailment or other vehicle accident. I see no reason to exclude these very possible contingencies from environmental review.

Comment #104-3

Thank you for the opportunity to send my comments.

*Sandy Rogers*  
Sandy Rogers

991-1

Commenter 105

From: "Phil Silberman" <phil@poetrycardsusa.com>  
 To: <nrcprep@nrc.gov>  
 Date: Wed, Dec 15, 2004 1:35 AM  
 Subject: Attention: Anna Bradford

Re: Docket No. 70-3103

Dear Ms Bradford,

I am writing to express my grave concerns about the proposed Nuclear Enrichment Facility in Eunice, New Mexico. As I understand it, if it is constructed, about 3 shipments per day of raw, enriched and waste depleted uranium and other wastes would be shipped via truck and train right up I-25 through Denver. With all of the concern about the terrorist attacks using "dirty bombs", is it not ironic to allow the transport of THREE truckloads per day of such deadly materials right through the middle of a major US metropolitan area?

Comment  
 #105-1

As a citizen and father to be this is quite disconcerting. Will these trucks travel with a military escort? Has the Dept. of homeland security submitted any comments on this project? Given all the discussion regarding dirty bombs of late, has adequate attention been devoted to the question of potential terrorist activity relating to these shipments? What assurances can the NRC provide a pregnant mother-to-be that this possibility has been addressed? Can the NRC demonstrate that DHS has even been notified for comment on the project? What training or information/disclosures have been made to notify first responders along these routes of the special problems associated with accidents or attack.

Comment  
 #105-2

Comment  
 #105-3

Comment  
 #105-4

Thinking on the project seems at best incomplete and at worse horribly misguided. How is it possible for a thorough or even adequate environmental review to be accomplished on a project that has so many "options" and variables still under consideration. More importantly,

given the excess supply of nuclear materials available on the black market that can be blended down for electrical purposes, we should question whether adequate attention is being paid to the "no action" alternative, i.e. not building the facility at all, while keeping the stuff out of the hands of terrorists. If the plant is to be built, is it not necessary to fully evaluate each and every contingency of operation that is still on the table here?

Comment  
 #105-5

Comment  
 #105-6

Given that the project hinges on an LES promise that waste won't stay in New Mexico, what gives New Mexico and the NRC the right to assume the project can go ahead without a comprehensive management plan in place, with firm contractual arrangements as to where all the wastes will go?

Comment  
 #105-7

This plan has numerous built potential disasters and should be halted.

Comment  
 #105-8

Thank you.

Phil Silberman

McCormick &amp; Sons Tire &amp; Service Center

Commenter 109

215 S. Turner  
 Hobbs, NM 88240  
 505-397-3782  
 Fax 505-397-6316

December 15, 2004

Chairman Nils Diaz  
 U.S. Nuclear Regulatory  
 Office of Public Affairs  
 Washington, D.C. 20555

Dear Chairman Diaz:

I am writing this letter in Support of the proposed National Enrichment Facility in Eunice, New Mexico.

Comment  
 #109-1

Being a business owner for the past twenty-two years in Hobbs, New Mexico, I understand the need for diversification in our county. Relying on the highs and lows of the oil industry can be very unpredictable for businesses and for our citizens trying to retain their employment.

After visiting the Urenco facility in Almelo, Netherlands and with their local citizens, I came to realize the facility will be both safe and environmentally sound. According to the Draft Environmental Impact Statement, there would be no significant impact on our land, water or air. The positive socioeconomic impact, with respect to jobs and revenue will help our economy grow.

I support the Louisiana Energy Services' application to operate the National Enrichment Facility in Eunice, New Mexico. With 102 nuclear power plants open in the United States today the need for a uranium enrichment facility that is more cost effective is in demand today and will increase in the future. The National Enrichment Facility will benefit our cities, county and provide energy independence for America as an additional, reliable, and economical domestic source of enrichment services.

Thank you for your time and consideration of this proposed facility.

Sincerely,



Randall D. McCormick  
 Newly elected Lea County Commissioner - District 1

Cc: Governor Bill Richardson  
 Secretary Ron Curry  
 New Mexico Attorney General Patricia Madrid

J-167



Commenter 149

Commenter 151

December 15, 2004

Chairman Nils Diaz  
U.S. Nuclear Regulatory  
Office of Public Affairs  
Washington, D.C. 20555

Dear Chairman Diaz:

I am writing this letter in support of the proposed National Enrichment Facility in Eunice, New Mexico.

Comment #149-1

I am a native of Eunice, New Mexico living most of my life here and continuing to raise my family in Lea County. My children having grown up as military dependents with the lifestyle that implies made it known to me they wanted to settle in Eunice. Here they experience the love of their relatives and neighbors. The close contact and care provided by our local educators as well as a feeling of security and well being that comes from living in a small community is paramount. Through their lifetime experiences they have developed a broad view of the world and now support the work and efforts of LES in its endeavors to bring the licensing for the National Enrichment Facility. As a family we have encouraged the expeditious licensing process and are pleased with the progress thus far. We have been extremely pleased with the findings of the Draft Environmental Impact Statement and feel that NEF will bring our community long needed changes as well as economic and social stability. Each of us feels secure in supporting the National Enrichment Facility.

I was afforded the opportunity to recently visit the Ureco site in Almelo, Nederland B.V. I was impressed with the professionalism of its employees and marveled at the high standards of which Ureco adheres to in the area of safety as well as the exceptional quality of technical equipment and procedures implemented at this plant. I personally believe that not only would NEF be an asset to our community, but its impact would be felt nationally and internationally. NEF would set the standard for future industry in Lea County.

Approval and licensing of LES/NEF would heighten the prospect of economic, educational, and social growth that would revitalize this area giving us hope for a brighter future. We are proud to be a part of the production of fossil fuels through our oil and gas industry. Unfortunately, its lifetime appears to be limited. While we research and develop other fuel and energy sources, NEF would be in place for the more immediate demands as well as embracing the demands of the future.

On behalf of my family and myself, I urge you to continue to move quickly forward with the licensing process for the National Enrichment Facility. Thank you for your time and consideration of this request.

Comment #149-2

With warm regards,

Paula B. Hayes & Family  
P.O. Box 1973  
Eunice, NM 88231

Cc: Governor Bill Richard  
Secretary Ron Curry  
New Mexico Attorney General Patricia Madrid

Chief, Rules Review and Directives Branch  
Mail Stop 16-D59, U.S. Nuclear Regulatory Commission,  
Washington, DC 20555-0001

Dec. 18<sup>th</sup>, 2004

RE: Docket No. 70-3103 National Enrichment Facility, Eunice NM

To whom it may concern:

I am writing to express profound concern about the regulatory review currently underway regarding the proposed N.E.F project near Eunice, NM.

I have serious concerns relating to what appears to be the functional barriers to public participation and scrutiny of this project, arising from: 1) General inaccessibility of technical information both directly related to this project and reference information used as tier supporting information for this application; 2) Inadequate solicitation of comment and/or incomplete consultation with appropriate regulatory, governmental, tribal and public stakeholders; 3) Incorrect, out-dated and misleading information disseminated via official NRC websites regarding the actual closing date for public comment/participation.

From what information I have been able to access, I have noted numerous apparent deficiencies in the scoping/D.E.I.S. process to date, specifically relating to: 1) Inconsistent and general exclusion of implicit security risks and other security-related issues associated with the project; 2) Connectivity and critical dependency of this facility on associated radioactive source and waste material transportation issues; 3) Connectivity of this facility with power transmission lines intended to supply the project; 4) Water and Wastewater management impacts on ground/surface water resources; 5) Legal issues associated with relevant interstate and international compacts concerning government, energy, economy, etc.

Barriers to public review and scrutiny:

As you well know, access to the NRC website supporting this permit action has been commonly closed to the general public for due to security concerns. In denying access to this information, the effect has been to deflect inquiry and delay investigation. As a result, both myself and the general public are deprived of an adequate opportunity to access and scrutinize information, and therefore, denied both the right and ability to fully engage in the public review process.

Comment #151-1

More disturbing is the continued reliance of this permitting action upon dated references and questionably relevant studies which are practically and effectively unavailable for independent review. For example, within the transportation analysis sections, requirements for additional detailed scrutiny into several potentially relevant issues were dismissed based on existence NRC-EIS documents that were prepared in 1977 and 1980. I

was personally unable to retrieve these documents through the NRC website to be sure, but given the interim growth in population associated problems with air quality, and numerous sensitive environments along the interstate routes connected with the project, I am suspicious that such dated information is relevant today. I question true compliance with N.E.P.A. in this regard: to functionally rely on previous studies, such documents must at least be both accurate and timely. Referenced documents are over 20 years old! The public relies on certain assumptions regarding appropriate standards of "freshness" and accuracy when consuming information presented by its government in such proceedings.

J-168

Comment #151-2

Inadequate notification and solicitation of comment: Pursuant to 10 CFR 51.71 (d) as referenced in the D.E.I.S. "due consideration will be given to compliance with Federal, State, regional and local agencies having responsibilities for environmental protection." I question whether due consideration has in fact been given to the solicitation of necessary stakeholders and/or consultation with appropriate regional authorities. In view of the extensive regional/interstate and tribal issues potentially involved in power supply transmission routes, as well as transportation routing of both nuclear source and waste materials, it seems highly inappropriate that the comment of obvious regional and State authorities, as well as other stakeholders were not solicited for input.

Additional factors which serve to create a barrier to public participation in this action include the incompetent operation of official NRC website: For example, when accessed via "google" or other popular internet search engines, the link to NRC website provides information that has not been updated to reflect the extension of the public comment period to December 18<sup>th</sup>. Even as of the evening of Friday December 17, 2004, when accessing the site: <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1790/>, one is provided the following message, beneath the official NRC logo: Comment #151-3

"Environmental Impact Statement for the Proposed National Enrichment Facility in Lea County, New Mexico (NUREG-1790) Draft Report for Comment This NUREG publication has been issued for public comment. The public comment period closed November 6, 2004."

Because significant press regarding potentially controversial issues such as interstate nuclear waste transportation didn't occur outside New Mexico until after November 28, (see Denver Post: West Way of Nuclear Waste Route)-any citizen using the internet to investigate this matter has been incorrectly informed that the public comment period was closed Nov. 6<sup>th</sup>. Only if you were to follow links listed well-below the official website listing would internet users find notice that the comment period was extended. In addition to the general difficulties arising from sporadic closure and limited access to the NRC website, I believe that failure to reliably update the content of official information has served to functionally confuse and deflect additional public scrutiny of this project.

Deficiencies in project scoping and D.E.I.S. process: Comment #151-4

Significant ambiguity exists regarding the overall purpose and need of this facility. The stated basic premise for the N.E.F. is to supply domestic demands, with many scenarios illustrating potential reliance on foreign source material for power generation if the project is not constructed. However, the applicant suggests in the D.E.I.S. that the plant will supply continuing demand "both in the U.S. and abroad". Definitive uses for all material produced by this facility must be provided. It should be very clear if any material produced by the facility will be used outside the U.S., or for any other purpose than power generation within the U.S. This raises basic questions regarding actual production from U.S. enrichment facilities as compared to actual demand from existing generating facilities. Is there an as yet 'unstated' administration policy which seeks to dramatically expand the construction of nuclear generators in the near future?

Regarding security concerns, I find it curiously paradoxical that information necessary to a basic review of this project, sufficiently sensitive as to warrant shutting down web access to shield it from the public eye, yet throughout the process, general concerns of terrorism (i.e. at the plant and the potential hijacking of source and waste shipments for dirty bombs) have been completely dismissed from consideration. It would seem that if

Comment #151-5

#151-5 (cont.)

security issues are a rationale to dismiss for any aspect of this project, security concerns must be addressed with regard to all other issues. Clearly, there are very real issues associated with security of the plant, and the security of transported source/waste materials that have been simply dismissed in this process. It is only fair that if a decision is made to open this door on security for one aspect of analysis, security should be open to discussion for all other concerns as well. Lastly, if construction and operation of the project is accomplished in "phases", what has been done to address the special security issues associated with the presence of construction crews near operating nuclear facilities?

I have serious concerns that this application process has effectively segmented many activities that are directly connected to this permit action. For example, basic management plans for interstate transport of nuclear source and waste materials are left completely vague. Obviously, the plant cannot operate without the transportation of source material to supply it, and without waste material eventually hauled away. It seems equally obvious that those activities are connected actions -necessary to meet the purposes and need of the N.E.F. In recent press, LES Spokesperson April Wade has confirmed that even the multiple modes and routes currently described in the D.E.I.S. may change in the future. How is it possible to adequately scope, much less perform an environmental review for this project with so many critically important components left unresolved? How is it possible to solicit the input of affected communities at some future point when the 'option' of 'no-action' is no longer available to them? Comment #151-6

Similarly, the construction of power transmission lines are critically necessary to the operation of the facility, and should therefore also be considered connected actions to this application. The same case can be made regarding water supply and wastewater infrastructures for the project. In both instances, detailed plans do not exist, and management strategies are, at best, vague. What is the source of the 'municipal' supply? What investigations have been performed to assure protection of the quantity and quality of aquifer/surface waters in the area? Environmental reviews for the construction and maintenance of utility infrastructure cannot be segmented from this project and should be included as part of this action. Comment #151-7

Lastly, I question whether this project will be reviewed by existing regional entities. The existence of very important regional government organizations (i.e. Western Governor's Association, Western Interstate Energy Board, State/Regional Departments of Transportation, Economic Development and Utility Commissions) has been brought to the attention of the NRC by myself previously in scoping documents. Continued exclusion of these vested regional entities calls into question the good faith and discretion of both the applicant and the reviewing agency. To simply ignore the existence of both relevant interstate and international legal compacts in this action is at best dangerously arrogant, and at worst, unseemly and functionally prejudicial. Comment #151-8

Thank you for the opportunity to submit these comments.

John Grove  
  
 P.O. Box 1549  
 Buena Vista, CO 81211

From: "John Grove" <wetlands@challeco.net>  
 To: <nrcprep@nrc.gov>  
 Date: Fri, Jan 7, 2005 1:34 PM  
 Subject: Docket No. 70-3103

Chief

Rules Review and Directives Branch

Mail Stop T6-D59,

U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001

Attention: Anna Bradford.

RE: Docket No. 70-3103, Addendum to previous comments:

Sirs:

J-170

I send this additional comment as an addendum to my previous written commentary, originally submitted in accordance with the December 18th comment period.

I wish to bring additional attention to the obvious paradox concerning the subject of 'security-related issues' associated with the N.E.F. project.

I find it strange that the public comment periods have been necessarily extended as a result of on-going security reviews of project documents, yet previously, broad and sweeping dismissals have been made regarding numerous security-related issues raised by myself and others concerning this proposed project.

For example, numerous questions remain regarding the proposed 'phased construction and operation' of the N.E.F, whereas no detailed information is provided regarding obvious and significant security issues associated with construction crews working in the vicinity of an operational nuclear facility. Further, the consequences of the poor track record of URENCO management in previous handling of sensitive technology information are well known, yet such concerns have been previously dismissed from consideration. With the protracted review of security information for ADAMS purposes, the NRC has implicitly raised the question of security review for the entire project. Therefore, the Agency must reverse previous dismissals, and

Comment  
 #151-9

specifically respond to all security related questions raised in the process to-date.

Comment  
 #151-9  
 (cont.)

As a matter of information regarding the general function of the public notice process, it should be noted that even as a listed stakeholder, participation in the on-going process has been 'user-hostile', i.e. the written notice I received regarding the comment period being extended to January 7th was postmarked DEC 29, 2004 from Rockville, MD. I received this stakeholder mailed notice only on Monday, January 03, 2005. Given the obvious short window in turn around notifications, I believe this final extension for such a short period of additional time was essentially useless. This final extension date essentially acknowledges the shortcomings of the process to date, but offers no functionally-effective amount of time to mitigate the damage to public participation.

Comment  
 #151-10

Thank you for the opportunity to send comments.

John Grove  
 Po Box 1549  
 Buena Vista CO 81211

Commenter 185

From: "Charles Hersh" <chuck101@optonline.net>  
 To: "Anna Bradford" <nrcprep@nrc.gov>  
 Date: Thu, Jan 6, 2005 4:25 PM  
 Subject: Comments on the Draft Environmental Impact Statement for the Proposed National Enrichment Facility in Lea County, New Mexico

Charles Hersh  
 291 Sioux Ave  
 Amityville, NY 11701

January 6, 2005

Anna Bradford

Anna Bradford:

Chief, Rules and Directives Branch  
 U.S. Nuclear Regulatory Commission  
 Mail Stop T6-D59  
 Washington, D.C. 20555-0001

Re: Comments on the Draft Environmental Impact Statement for the Proposed National Enrichment Facility in Lea County, New Mexico (NUREG-1790); Docket No. 70-3103

To Whom It May Concern:

Subject: Stop Mining and Enriching Uranium and Start Reprocessing and Using the "Spent" Fuel You Already Have

Will you please stop mining and enriching uranium and instead start reprocessing and using the "spent" nuclear fuel that you already have?

Comment #185-1

Right now our entire commercial nuclear industry is using less than 4% of the fuel and discarding the rest as waste. This is because we don't reprocess the so-called "spent" nuclear fuel and recover the unused fuel, which is greater than 96%. Most of the other nuclear nations are aware of this and use MOX fuel, which is mixed oxides of uranium and plutonium.

Since this has been going on for over 30 years, we have accumulated huge reserves of "dirty" fuel that can be cleaned up—the so-called "spent" fuel. Furthermore, we have even larger accumulations of depleted uranium available for use as nuclear fuel. There is no need to enrich uranium for probably the next one thousand years, at least. Let's stop all the waste and inefficiency and finally start managing both our fuel and nuclear waste wisely.

If you examine uranium ore, it consists mostly of U238 and only 0.7% is U235. A sensible policy would utilize the U238 by incorporating it in a nuclear reactor where it is converted to Pu239, (plutonium) and then used as fuel. Of course this would mean using MOX fuels as they are made. At present, our entire nuclear industry uses the fuel once and then throws it away. We need to stop making all this waste immediately and we can, just

5-171

by reprocessing the dirty fuel we already have into usable MOX fuel.

So how much fuel do we have in the waste? For 30 years we used 4%, leaving 96% available. We have been saving 24 times as much fuel as we have been using each year for over 30 years. This amounts to a 720-year supply, (24 times 30 = 720). This is amazing. We accumulated a 720-year supply of fuel to run our entire industry! Unbelievable! Guess what? Congress wants to permanently dispose of this dirty fuel in Yucca Mountain! How dumb!

So how much fuel do we have from enriching uranium and thereby leaving depleted uranium? My estimate is a 5,600-year supply!

Enriched / Depleted Uranium Ore

Enriched uranium ore is between 3-5% uranium 235 and the rest is uranium 238. Uranium ore is roughly 0.7% uranium 235 and the rest is uranium 238. Depleted uranium ore is roughly 0.3% uranium 235 and the rest uranium 238.

Problem: How much uranium ore do you need to make 1 lb of 4% enriched uranium oxide and how much depleted uranium is left over?

Start with X amount of U ore

Equate the amount of U235 for your 3 samples, the ore, the enriched U and the depleted U.

$$X(0.7\%) = 1(4\%) + (x-1)(0.3\%) \text{ or } 0.7x = 4 + 0.3(x-1)$$

Solve for x and x-1

$$0.4x = 3.7 \quad x = 37/4 \quad x = 9.25 \quad x-1 = 8.25$$

You need about 9 lbs of ore and you are left with about 8 lbs of depleted U.

Based upon this simple problem, we would have 8 times as much fuel in depleted uranium as we have in the so-called "spent" fuel. This is about 5,600 years or 8 times 700 years.

This is a huge surplus of fuel and it seems absolutely ridiculous to throw it away. Furthermore, it makes no sense to keep mining and enriching uranium when we have so much fuel already. All this fuel can greatly reduce our dependence on fossil fuels as well as reduce carbon dioxide greenhouse emissions. We could easily meet the Kyoto standards.

I'm aware of the "Overview of Generation IV Technology Roadmap" by the GIF countries dated 18 Sep 2002. The problem is what do we do in the meantime? We have 103 commercial nuclear power plants that are continuing to use the fuel once and throw it away. This is very wasteful and causes huge storage/disposal problems. We need to start reprocessing this waste and using the resulting MOX fuels. This will stop the further production of nuclear waste while keeping all of our nuclear power plants running and producing cheap non-polluting electricity. We need to start reprocessing and using the MOX fuels.

Reference the Cogema Website <http://cogema.fr/>. They are a major nuclear reprocessing facility in La Hague, France. They reprocess nuclear waste

Commenter 245

for England, France, Japan and other countries. Unfortunately, they reprocess the waste by first chemically removing the plutonium and then removing the true waste, dirt from the dirty uranium fuel. They then reincorporate the plutonium oxide back into the fuel. I believe this method can be safely done without leading to plutonium theft and nuclear proliferation. You need to look into this matter. I know that Russia did try an experimental technique of uranium-plutonium co-precipitation. They closed their facility out of health fears. Perhaps some research into how to reprocess "spent" nuclear fuel without first separating the plutonium is necessary. In any case, you need to start dealing with the excess nuclear fuel problem immediately.

Please consider this matter and thank you for your time. I'm a retired electronics engineer formerly employed by the US Army and this issue has been bothering me for years.

Regards,

Charles A. Hersh  
Please enter these comments into the official record on this proceeding.

Sincerely,

Charles Hersh  
631-789-3611

J-172

From: "John F. Galbraith Jr." <jfgjanalternativeway@rcn.com>  
To: <nrcprep@nrc.gov>  
Date: Thu, Jan 6, 2005 10:02 PM  
Subject: Re: Comments on Nuclear Energy

To: Anna Bradford

Dear Anna!

I have been asked to comment on the intended enrichment facility. I would first like you to read some quotes, from some of the most famous men of our time, that I have met personally over the last 68 years. In Chronological Order.

Ernest J. Rutherford, Considered by most, to be the Father of Nuclear Theory, Winner of the Nobel Prize in 1908. Stated... in 1912, "Those who think that the day will come, when Mankind will be able to Harness the Power of the Atom, have been Drinking to much Moonshine."

Albert Einstein, said,.....By Embracing the Atom, we have embarked on a Path, Fraught with Unparallel Catastrophe."

President John F. Kennedy, when asked about Nuclear Energy, responded.....The Reason that there are so many Burned out Planets in he Universe is, That Their Scientists, were ahead of Ours."

Fritz Capra, Scientist, Physicist and Professor Emeritus, Berkley. ...."Nuclear Energy, is the Greatest Malady, ever Foisted on Mankind, Those Responsible, Should be Tried for Genocide."

Anna, are you aware that we currently have over 25,000 Nuclear Accidents every year around the World. Thanks to these Screwballs we are all down wind and drowning in Radiation. I don't know who has so incidiously indoctrinated, any of these People that are involved with Nuclear Energy Expansion, but they have already taken 12,000 generations of life out of Our Planet. It takes 70,000 years, for 1000, generations to pass through this way.

They are tens of thousands of Real Scientists, including myself, that say end this insanity now.

Comment  
#245-1

Sincerely,

John F. Galbraith Jr. President

An Alternative Way

CC: "John F. Galbraith Jr." <jfgjanalternativeway@rcn.com>

From: "John F. Galbraith Jr." <jfg@ranalternativeway@rcn.com>  
 To: <nrcprep@nrc.gov>  
 Date: Thu, Jan 6, 2005 10:29 PM  
 Subject: Emailing: fact-sheet\_ne&w

Issues: Nuclear Energy & Waste: Nuclear Energy Fact Sheet/More follow-up, Anna. Read this through, and see if you still feel the same way.

Comment  
 #245-2

John Galbraith.

## Issues Nuclear Energy & Waste Nuclear Energy - Fact Sheet

### Introduction to Nuclear Energy for Civilian Purposes

- a.. Most early atomic research focused on developing an effective weapon for use in World War II. After the war, the United States government encouraged the development of nuclear energy for peaceful civilian purposes while continuing to develop, test, and deploy new nuclear weapons.
- b.. The Experimental Breeder Reactor I at a site in Idaho generated the first electricity from nuclear energy on December 20, 1951.
- c.. 16% of the world's electricity now comes from nuclear energy, 85% of which is concentrated in industrialized countries. A total of 441 nuclear power plants were operating as of February 2003. There were also 32 nuclear reactors under construction (Nuclear Energy Institute).
- d.. In the United States alone, there are 103 nuclear power plants, which provide about 20% of the nation's electricity.
- e.. A new nuclear power plant has not been ordered in the U.S. since 1973.
- f.. Today, President George W. Bush's energy policies call for a \$15 billion federal subsidy to build six or seven new nuclear power plants.

### 1. How It Works - The Scientific Process Behind Nuclear Energy

- a.. Nuclear energy relies on the fact that some elements can be split (in a process called fission) and will release part of their energy as heat.
- a.. Because it fissions easily, Uranium-235 (U-235) is one of the elements most commonly used to produce nuclear energy. It is generally used in a mixture with Uranium-238, and produces Plutonium-239 (Pu-239) as waste in the process.
- a.. A nuclear power plant generates electricity like any other steam-electric power plant. Water is heated, and steam from the boiling water turns turbines and generates electricity.
- a.. The main difference in the various types of steam-electric plants is the heat source. Coal, oil, or gas is burned in other power plants to heat the water. Heat from a chain reaction of fissioning Uranium-235 boils the water in a nuclear power plant. Some have compared this process to using a canon to kill a fly.

### 2. How It Doesn't Work - Risks and Dangers of Nuclear Energy

- a.. Proliferation Risks
- a.. Plutonium is a man-made waste product of nuclear fission, which can be used either for fuel in nuclear power plants or for bombs.
- b.. In the year 2000, an estimated 310 tons (620,000 pounds) of civilian, weapons-usable plutonium had been produced.
- c.. Less than 8 kilograms (about 18 pounds) of plutonium is enough for one Nagasaki-type bomb. Thus, in the year 2000 alone, enough plutonium was created to make more than 34,000 nuclear

weapons.

d.. The technology for producing nuclear energy that is shared among nations, particularly the process that turns raw uranium into lowly-enriched uranium, can also be used to produce highly-enriched, weapons-grade uranium.

e.. The International Atomic Energy Agency (IAEA) is responsible for monitoring the world's nuclear facilities and for preventing weapons proliferation, but their safeguards have serious shortcomings. Though the IAEA is promoting additional safeguards agreements to increase the effectiveness of their inspections, the agency acknowledges that, due to measurement uncertainties, it cannot detect all possible diversions of nuclear material. (Nuclear Control Institute)

### b.. Risk of Accident

a.. On April 26, 1986 the No. 4 reactor at the Chernobyl power plant (in the former U.S.S.R., present-day Ukraine) exploded, causing the worst nuclear accident ever.

a.. 30 people were killed instantly, including 28 from radiation exposure, and a further 209 on site were treated for acute radiation poisoning.

b.. The World Health Organization found that the fallout from the explosion was incredibly far-reaching. For a time, radiation levels in Scotland, over 1400 miles (about 2300 km) away, were 10,000 times the norm.

c.. Thousands of cancer deaths were a direct result of the accident.

d.. The accident cost the former Soviet Union more than three times the economical benefits accrued from the operation of every other Soviet nuclear power plant operated between 1954 and 1990.

b.. In March of 1979 equipment failures and human error contributed to an accident at the Three Mile Island nuclear reactor at Harrisburg, Pennsylvania, the worst such accident in U.S. history. Consequences of the incident include radiation contamination of surrounding areas, increased cases of thyroid cancer, and plant mutations.

c.. According to the US House of Representatives, Subcommittee on Oversight & Investigations, "Calculation of Reactor Accident Consequences (CRAC2) for US Nuclear Power Plants" (1982, 1997), an accident at a US nuclear power plant could kill more people than were killed by the atomic bomb dropped on Nagasaki.

### c.. Environmental Degradation

a.. All the steps in the complex process of creating nuclear energy entail environmental hazards.

b.. The mining of uranium, as well as its refining and enrichment, and the production of plutonium produce radioactive isotopes that contaminate the surrounding area, including the groundwater, air, land, plants, and equipment. As a result, humans and the entire ecosystem are adversely and profoundly affected.

c.. Some of these radioactive isotopes are extraordinarily long-lived, remaining toxic for hundreds of thousands of years. Presently, we are only beginning to observe and experience the consequences of producing nuclear energy

### d.. Nuclear Waste

a.. Nuclear waste is produced in many different ways. There are wastes produced in the reactor core, wastes created as a result of radioactive contamination, and wastes produced as a byproduct of uranium mining, refining, and enrichment. The vast majority of radiation in nuclear waste is given off from spent fuel rods.

b.. A typical reactor will generate 20 to 30 tons of high-level nuclear waste annually. There is no known way to safely dispose of this waste, which remains dangerously radioactive until it naturally decays.

c.. The rate of decay of a radioactive isotope is called its half-life, the time in which half the initial amount of atoms present takes to decay. The half-life of Plutonium-239, one particularly lethal component of nuclear waste, is 24,000 years.

d.. The hazardous life of a radioactive element (the length of time that must elapse before the material is considered safe) is at least 10 half-lives. Therefore, Plutonium-239 will remain hazardous for at least 240,000 years.

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e.. There is a current proposal to dump nuclear waste at Yucca Mountain, Nevada.  
a.. The plan is for Yucca Mountain to hold all of the high level nuclear waste ever produced from every nuclear power plant in the US. However, that would completely fill up the site and not account for future waste.

b.. Transporting the wastes by truck and rail would be extremely dangerous.

c.. For a more detailed analysis of the problems of and risks incurred by the plan, see Top Ten Reasons to Oppose the DoE's Yucca Mountain Plan

f.. Repository sites in Australia, Argentina, China, southern Africa, and Russia have also been considered.

g.. Though some countries reprocess nuclear waste (in essence, preparing it to send through the cycle again to create more energy), this process is banned in the U.S. due to increased proliferation risks, as the reprocessed materials can also be used for making bombs. Reprocessing is also not a solution because it just creates additional nuclear waste.

h.. The best action would be to cease producing nuclear energy (and waste), to leave the existing waste where it is, and to immobilize it. There are a few different methods of waste immobilization. In the vitrification process, waste is combined with glass-forming materials and melted. Once the materials solidify, the waste is trapped inside and can't easily be released.

### 3. Sustainable Energy Alternatives

There are many alternative energy sources that are sustainable and do not pose the accident risks inherent in nuclear energy production. These sources include:

a.. Bioenergy: biomass, such as plant matter and animal waste, can yield power, heat, steam, and fuel.

b.. Geothermal: renewable heat energy can be harnessed from deep within the earth.

c.. Wind: turbines turning in the air convert kinetic energy in the wind into electricity.

d.. Solar: the sun's energy can be captured and used to produce heat and electricity.

e.. Hydrogen: if produced by renewable sources, it can power fuel cells to convert chemical energy directly into electricity, with useful heat and water as the only byproducts.

f.. Tidal: using the movement of the ocean to power turbines and generate electricity.

g.. Many more sustainable resources could be found and current resources improved if better technology were available and if the government and utilities actively promoted their development.

h.. Sustainable energy links:

a.. Renewable Energy Policy Project (a CREST site)

b.. Sustainable Energy Coalition

c.. Renewable Energy

### 4. Additional Online Resources on Nuclear Energy

1.. History of Nuclear Energy

2.. Institute for Energy and Environmental Research (IEER)

3.. Nuclear Energy Information Service (NEIS)

4.. Nuclearfiles, Nuclear Energy

5.. Nuclear Information and Resource Service (NIRS)

6.. Nuclear Control Institute (NCI)

Issues Nuclear Energy & Waste Nuclear Energy - Fact Sheet

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From: "rjs.mail@netzero.net" <rjs.mail@netzero.net>  
To: <nrcprep@nrc.gov>  
Date: Fri, Jan 7, 2005 5:32 AM  
Subject: Docket No. 70-3103, Altin-Anna Bradford

Attached comments on NUREG 1790,  
Docket No. 70-3103  
Attention: Anna Bradford

CC: <rjs.mail@netzero.net>

J-174

January 7, 2005

Chief, Rules Review and Directives Branch  
 Division of Administrative Services, Office of Administration  
 U.S. Nuclear Regulatory Commission  
 Mail Stop T6-D59  
 Washington, DC 20555-0001

RE: Docket No. 70-3103; NUREG 1790, Draft Environmental Impact Statement for the Proposed National Enrichment Facility in Lea County, New Mexico

Dear Sirs:

I am submitting the following comments on the Draft Environmental Impact Statement in the above captioned matter. Please enter these comments into the official record of the proceeding.

Rather than taking issue with a long list of specific problems in the Draft EIS, I will confine my comments to two areas of the analysis that are particularly significant. These areas are: I) The Institutional Environment & Cumulative Impacts and II) The Physical Environment. Although these problem areas are interactive, for the sake of simplicity, I will treat them separately.

I) THE INSTITUTIONAL ENVIRONMENT AND CUMULATIVE IMPACTS

In the analysis of the institutional context in which the DEIS takes place, there are several problems that affect the selection of facts deemed relevant to the license application and that condition the argument used by NRC to justify its approval of the LES/NEF project. These problems reflect the influence of relationships among legal and regulatory institutions (e.g. NRC, DOE and other "persons" authorized to represent the public at federal, state and local levels of government) and self-interested corporations and individuals (e.g. LES, WCS, ATLI and other "persons" that represent private economic, political or cultural goals). Problems occur in a wide range of issues relevant to the DEIS such as:

- \* conflict of interest when public "persons" (e.g. NRC, Sen Dominici, etc.) become interdependent with private interests (e.g. ATLI, Urenco, Westinghouse, WCS, etc.)
- \* failure to identify negative impacts ("opportunity costs") of taxpayer-supported revival of a moribund nuclear power industry at the expense of emerging industries in the renewable energy sector (wind, solar, geothermal, etc.)
- \* inability to discern disparate impacts on geographic regions with relatively high ratios of disadvantaged populations versus benefits that accrue to already privileged groups in national and international contexts
- \* the DEIS' frequent shifts of focus between various levels of analysis (local, regional, state, national, global, etc.) without accounting for problems ignored when shifting from one level to another
- \* contradictions regarding the relevance of terrorism/espionage to the DEIS (e.g. finding that these issues are "...speculative and simply too far removed from the

Comment #284-1

Comment #284-2

Comment #284-3

Comment #284-4

Comment #284-5

Comment #284-6

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natural or expected consequences of agency action," (DEIS, Appendix A, p. 19) versus the imposition of censorship due to fears of terrorists with access to public documents, including the DEIS]. Because of NRC's ambivalence evidenced in these contradictions, the license proceeding should be halted until a consistent policy can be defined. Terrorism is either a significant threat and relevant for inclusion in the discussion of potential environmental impacts, or it is not relevant, and NRC's censorship of public documents due to security concerns should be rescinded.

Comment #284-6 (cont.)

Although these issues are examples of problems that permeate the entire analysis of institutions in the DEIS, I will not address them in detail in these comments.

However, within the DEIS' analysis of the institutional environment, there are two topics in the discussion of waste disposition that demand scrutiny. These issues are: A) The definition of depleted uranium as Class A low-level radioactive waste; and B) The discussion of Option 1(b) (and Option 2) regarding uranium byproduct disposal. The final EIS should not be issued without extensive revisions of these two topics.

A) Definition of Depleted Uranium As Class A Low-Level Radioactive Waste

In several places, the DEIS asserts that depleted uranium (both uranium hexafluoride, § 2-27, lines 38-41, and triuranium octoxide, § 2-31, lines 15-19) is a Class A low-level radioactive waste (DEIS, § 2-29, insert, lines 1-19). This assertion is based upon language in 10 CFR, Part 61.55(a), which is the default provision for unclassified wastes. The determination should be thoroughly explained and justified by NRC before the license procedure continues. Although the same declaration was made in the EIS for LES' Claiborne Enrichment Center application, it has never been supported by NRC analysis commensurate with its significance.

The enrichment process identifies the U-235 isotope as its product and the U-238 isotope as a byproduct. Depleted uranium radionuclides are primarily U-238, which eventually decay into other radionuclides, and finally into a stable isotope of lead-206. However the half-life of U-238 is 4.46 billion years, which means, in practical terms, that depleted uranium will always be radioactive. Uranium-238 can also be converted to plutonium-239, the "fissile" isotope of plutonium that is used in weapons. Furthermore, the specific activity of depleted uranium, measured in nanocuries per gram, is much greater than the activity of transuranic wastes (including wastes of plutonium), and DU is comparable to TRU wastes in the amount of radiation that is emitted in decay (Institute for Energy and Environmental Research, <www.ieer.org>).

Although there are differences between depleted uranium and transuranic waste, there are enough similarities in their potential hazards that they should be subject to similar disposal methods. The NRC's default declaration that DU is a Class A low-level radioactive waste is misleading and should be revisited before waste disposition policy is defined for a uranium enrichment facility. The DEIS is setting a dangerously low standard of environmental protection when it assumes that shallow land burial of depleted uranium byproduct will have no significant impact upon the environment (for 4.5 billion years?). In fact, the NRC acknowledges the potential for problems with DU disposal as Class A low-level waste in its discussion of potential impacts at 4-58, lines 30-32. "Final disposal of large quantities of depleted uranium at a licensed facility could require additional environmental impact evaluations depending on the location of the disposal facility and quantity of depleted uranium to be deposited." However, such re-evaluations should be preceded by a thorough revision of NRC standards for DU disposal issued prior to a license for the LES/NEF project.

Comment #284-7



## B) Discussion of Option 1(b) (and Option 2) Regarding Uranium Byproduct Disposal

Related to the issue of byproduct classification is the DEIS discussion of disposal options. Specifically, the discussion of disposition Option 1(b) contains some false assertions that are particularly significant in light of NRC's declaration that depleted uranium is Class A low-level waste. The DEIS contains errors of fact regarding the legal and regulatory environment of Waste Control Specialists. It also fails to identify the probability that WCS will be able to store, process and dispose of all radioactive, hazardous and mixed waste generated at the proposed NEF. In other words, the DEIS fails to evaluate the fact that waste generated by LES in Lea County, New Mexico may never leave the vicinity (although its disposition may be in Texas, not in New Mexico).

Comment  
#284-8

Waste Control Specialists currently is licensed by the Texas Department of State Health Services (formerly the Texas Department of Health) to process and store low-level radioactive waste (Classes A, B, C, greater-than-class-C and sealed sources) and mixed hazardous and radioactive waste. Contrary to the DEIS (03-3, lines 32-33), the license does not currently include 11e(2) byproduct waste. WCS has requested two amendments to its current license, one for storage and processing of 11e(2) material (now being stored in Fernald, Ohio), and one for the disposal of this material. The amendment requests will probably be granted this spring.

WCS is also licensed by the Texas Commission on Environmental Quality (formerly Texas Natural Resource Conservation Commission) to dispose of hazardous waste and Naturally Occurring Radioactive Material. In addition, the company has applied to TCEQ for a license to dispose of low-level radioactive waste and mixed waste. The license will allow WCS to dispose of low-level waste from the Texas-Vermont Interstate Compact and to open an adjacent site for "federal facility waste." On page 2-32, the DEIS asserts that LES/NEF could not dispose of its waste at either the Compact facility (lines 31-35) or at the federal facility (lines 43-45). If depleted uranium is considered Class A low-level waste, the DEIS is wrong on both counts.

The Texas-Vermont Compact states: "The commission may...Enter into an agreement with any person, state, regional body, or group of states for the importation of low-level radioactive waste into the compact for management or disposal, provided that the agreement receives a majority vote of the commission..." [TX-VT Compact, Article III, Sec. 3.05(6)]. The definition of "person" includes any "...individual, corporation, partnership or other legal entity, whether public or private" [TX-VT Compact, Article II, Sec. 2.01(14)]. Because of this Compact "loophole," both Louisiana Energy Services and the Department of Energy may contract with the Compact Commission (six of whom will be from Texas, one from Vermont) to dispose of low-level radioactive waste at the Compact facility. There is no statutory limit on the volume or activity of waste that can be received (limits apply only to Vermont), and the facility may receive either uranium hexafluoride or triuranium octoxide, if they are considered low-level waste.

If the Department of Energy takes possession of the uranium hexafluoride byproduct from LES (DEIS, 4-50, insert, lines 9-43), it can deal directly with the Compact facility license holder (i.e. Waste Control Specialists) to use the "federal facility waste disposal facility," adjacent to, and simultaneously licensed with, the Compact facility. Texas law regarding "federal facility waste" requires only that DOE have "responsibility" for its disposal, not that it must have been generated by DOE at a federal facility. "Federal facility waste" means low-level radioactive waste that is the responsibility of the federal government under the Low-Level Radioactive Waste Policy Act, as amended by the Low-Level Radioactive Waste Policy Amendments Act of 1985 (42 U.S.C. Sections 2021b-2021j) and "Federal facility waste disposal facility means a facility for the disposal of federal facility waste licensed under Section

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## 401.216" (Texas Health &amp; Safety Code, Sec. 401.2005, (4) &amp; (5)).

If DOE assumes responsibility for LES' uranium hexafluoride byproduct, and the DU byproduct is Class A low-level radioactive waste, then WCS may receive the waste for storage, processing and/or disposal at the "federal facility waste disposal facility." The byproduct material may be received for direct disposal, or for processing to the more stable triuranium octoxide form, then disposal. However, the federal facility waste disposal facility is subject to statutory limits on the volume of waste that it may receive for disposal.

The Compact facility license holder (WCS) may only dispose of six million cubic yards (162 million cubic feet) of low-level radioactive waste at the federal facility waste disposal facility, adjacent to the Compact facility (which has no such limits). By comparison, the Compact facility that was proposed for Sierra Blanca, Texas would have been limited to less than two million cubic feet (i.e. cubic FEET) of capacity. The currently proposed federal facility has approximately eighty times the capacity of Sierra Blanca, and the capacity of the proposed Compact facility is limited only for Vermont. The federal facility limit is initially set at three million cubic yards (300,000 cu. yds. of which may be Class B & C waste), but the totals are doubled after five years of operation [TH&SC, 401.216(a), (b), & (c)].

The facility is also authorized to receive Class A low-level waste with "high radiation levels," so long as it uses the disposal method prescribed for Class B & C waste (i.e. in reinforced concrete containers, or containers that are comparable to reinforced concrete) [TH&SC, Sec. 401.216(b) & (c)]. Apparently, Class B & C volume limits do not apply to Class A waste with "high radiation levels." This may allow burial of DUF6 cylinders without further processing, but would certainly accommodate burial of triuranium octoxide.

Although WCS does not currently have a permit for a depleted uranium byproduct conversion facility (converting uranium hexafluoride to triuranium octoxide), it would require only an amendment to its license for processing and storage, rather than a separate permit. A conversion facility amendment to its current license for storage and processing would provide one more path by which DEIS Option 1(b) could be met by WCS. Because of these problems in the DEIS analysis of waste disposition, the NRC should completely re-evaluate its position on this crucial topic.

In fact, it is reasonable to assume that WCS would seek amendments to its license for processing to allow it to develop facilities for fuel fabrication and several other functions that NRC licenses. There are existing activities (Waste Isolation Pilot Plant, about 45 miles west of Eureka, NM) and activities proposed [Modern (plutonium weapons) Pit Facility, near the WIPP site] that may potentially interact with the LES/NEF and WCS. In addition, Andrews County has a history of aggressively pursuing high-risk projects (e.g. designation as the high-level radioactive waste site and the site of the superconducting supercollider), and WCS has a long-standing ambition to attract a wide range of waste-related industries (e.g. a complex array of hazardous waste facilities and the effort by USEC to develop an AVLIS uranium enrichment project in 1998-1999).

This pattern of development associated with WCS/Andrews and southeast New Mexico suggests that it is unreasonable to assume that the proposed LES/NEF would not have cumulative impacts far beyond the level proposed in the DEIS, Section 4.4, pages 4-65 to 4-68. For this reason, the NRC should also re-evaluate the potential for cumulative impacts of the proposed LES/NEF.

## II) PHYSICAL ENVIRONMENT

Comment  
#284-8  
(cont.)

Comment  
#284-9

The need for revision of the DEIS analysis of the institutional environment and its cumulative impacts is compounded by problems with the DEIS description of the physical environment, primarily with site geology and meteorology. The DEIS does not give sufficient attention to potential effects of extreme weather conditions (e.g. high winds, tornados, flash floods, high heat) on operations and transportation related to the proposed LES/NEF. Furthermore, the Hobbs, NM rainfall data used as a basis for other parts of the analysis (DEIS, 3-13, Table 3-3) contain anomalies that raise questions. Although the data cover almost ninety years of measured rainfall, half of the maximum monthly measurements have occurred in the last twenty years, and three quarters of the minimum measurements occurred in the first ten years of record-keeping. Either the rainfall at the site has been increasing at an alarming rate, or earlier record-keeping was faulty and should not be used to calculate "average" rainfall.

Comment  
#284-10

Rainfall measurements are significant because they influence interpretations of surface and near-surface hydrology. Drainage patterns at the site trend to the west and south, toward Monument Draw, which runs parallel to the border between Texas and New Mexico. Monument Draw is above the western edge of the subsurface Central Basin Platform, the structure that describes the eastern rim of the Delaware Basin and the Capitan Reef. Monument Draw, and the LES/NEF site's connection to the West Platform area beneath Monument Draw constitute a significant problem in the DEIS analysis.

Comment  
#284-11

Although the DEIS identifies several facts about area geology that should be explored more fully, it assumes that chemical and radiological pollutants in airborne emissions and leachate will not affect the regional environment. However, pollutants from the facility may travel long distances in the air, regardless of surface wind conditions, and fast flow paths for water may undermine reliance on root system uptake and evapotranspiration as mitigation for water contaminants. And if the potential for disposal of depleted uranium near the site is considered, longer term factors of site geology take on new significance.

Comment  
#284-12

Descriptions of local geology may be interpreted to suggest that the Ogallala Aquifer is at risk, and despite the DEIS' assurance to the contrary, this is a valid concern. Yet there is another view of geological processes that is also plausible, but it directs concerns for water contamination to the south, beneath Monument Draw and along the West Platform Fault Zone. This is a well-known area of interconnected faults that has proven to be a prolific source of oil and gas production.

Comment  
#284-13

Hydrocarbon production is thought to be the cause of the area's frequent seismicity (Luo, et al., 1991), but the DEIS' assertion that oil and gas production is the only cause of seismic activity is contradicted by other geologists (Sanchez, 1992; Hill, 1995). The 1992 earthquake at Eunice (magnitude 5.0) was probably tectonic in origin, and the presence of oil and gas deposits may be as much an effect of seismicity, as a cause. In addition, there are many dissolution features (fissures, sink holes, beccia pipes, etc.), also associated with hydrocarbon, salt, and sulfur resources that accompany karst formation and increased probability of fast flow paths (DuChene & McLean, 1989; Hill, 1992). Furthermore, the use of secondary oil recovery methods, such as waterfloods, may also interact with site geology to accelerate water in unpredictable ways ("well blowouts") through hydrologic systems (Silva, 1996). Although oil deposits are much deeper than the water bearing formations at issue, the presence of thousands of wells and numerous fault pathways that connect widely separated strata makes the hydrology of the site impossible to characterize without more extensive data.

Unfortunately, the DEIS sheds no light on the potential for water to move through the

NEF and WCS sites. Water may enter local surface and groundwater systems from rainfall, water pumped to the surface for operations, perched lenses connected by preferred pathways such as faults and fractures, or wells connecting strata that are otherwise separated. Because there are known faults in the area, and the site is located above the West Platform Fault Zone, a detailed study of potential pathways should be completed before a final EIS is issued. In addition to polluting the Ogallala Aquifer, water from the site may reach the Pecos River Valley surface water, groundwater from the Capitan Reef formation, and possibly other sources of fresh water in Texas.

Comment  
#284-13

#### CONCLUSION

In conclusion, I respectfully request that these comments be entered in the record of this proceeding and that the Nuclear Regulatory Commission either reject the license application as inadequate or conduct a thorough revision of the EIS before continuing.

Comment  
#284-14

Sincerely,

Richard Simpson  
P.O. Box 13101  
Austin, TX 78711

Chief, Rules Review and Directives Branch  
Division of Administrative Services, Office of Administration  
U.S. Nuclear Regulatory Commission  
Mail Stop T6-D59  
Washington, DC 20555-0001

RE: Docket No. 70-3103; NUREG-1790, Draft Environmental Impact Statement for the  
Proposed National Enrichment Facility in Lea County, New Mexico

Dear Sirs:

On January 7, 2005, I sent comments to NRC regarding NUREG-1790, Docket No. 70-3103.

J-1-178  
Yesterday I learned that there were two errors in my comments, and while they are not crucial to the DEIS, I am submitting the following corrections. Although too late to be entered into the record, I am sending the corrections in the interest of accuracy.

In Section I), Part B), the second paragraph contained an error regarding WCS' storage and processing license. I stated that the current request for amendment is for permission to store and process 11e(2) byproduct material, when in fact the request is for an increase in levels of radioactivity allowed for 11e(2) material. A second license request is not for an amendment, but for permission to dispose of the higher concentration 11e(2) material. The paragraph should read as follows:

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\*\*

Waste Control Specialists currently is licensed by the Texas Department of State Health Services (formerly the Texas Department of Health) to process and store low-level radioactive waste (Classes A, B, C, greater-than-class-C and sealed sources),

Corrections to DEIS Comments.txt  
11e(2) uranium byproduct, and mixed hazardous and radioactive waste. Although the license includes 11e(2) byproduct material, WCS has requested an amendment which would allow it to store and process byproduct with much higher concentrations of radioisotopes (now being stored by DOE in Fernald, Ohio). WCS has also applied to TDSHS for a license to dispose of this highly concentrated form of 11e(2) material. The storage amendment request will probably be granted this spring, but a ruling on the disposal permit will take about another year.

\*\*\*\*\*  
\*\*

The fourth paragraph of Section I), Part B) also contains an error regarding the means by which LES' depleted uranium may be accepted for disposal by the Texas-Vermont Compact facility. I stated that LES may contract with the TX-VT Compact Commission, when in fact the contract must be arranged through the agency of the Rocky Mountain States Compact (or the DOE). The paragraph should read as follows:

\*\*\*\*\*  
\*\*

The Texas-Vermont Compact states: "The commission may:...Enter into an agreement with any person, state, regional body, or group of states for the importation of low-level radioactive waste into the compact for management or disposal, provided that the agreement receives a majority vote of the commission..." [TX-VT Compact, Article III, Sec. 3.05(6)]. The definition of "person" includes any "...individual, corporation, partnership or other legal entity, whether public or private" [TX-VT Compact, Article II, Sec. 2.01(14)]. Because of this Compact "loophole," both Louisiana Energy Services and the Department of Energy may contract with the Compact Commission (six of whom will be from Texas, one from Vermont) to dispose of low-level radioactive waste at the Compact facility. However LES would need to receive permission from the Rocky Mountain Compact (of which New Mexico is a member) to use the WCS facility, or the contract

Commenter 295

Corrections to DEIS Comments.txt

could be between the two compact commissions. There is no statutory limit on the volume or activity of waste that can be received at the Texas Compact site (limits apply only to Vermont), and the facility may receive any form of low-level waste that

is accepted by TCEQ rules.

\*\*\*\*\*  
\*\*

I would appreciate your adding these corrections to my previous comments, and I look forward to a Final Environmental Impact Statement.

Sincerely,

Richard Simpson  
P.O. Box 13101  
Austin, TX 78711

J-179

From: <contactus@cardnm.org>  
To: <nrcprep@nrc.gov>  
Date: Fri, Jan 7, 2005 10:33 AM

To whom it may concern,  
Please review attached comments.

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

RE: Docket No. 70-3103

To whom it may concern,

I am representing Citizens for Alternatives to Radioactive Dumping, a statewide organization with its office in Albuquerque and constituents in Southeastern New Mexico. We are concerned that the proposed LES uranium enrichment plant will be a danger to the environment and the communities surrounding the proposed facility. One only has to look at the record of LES to understand the reasons for these concerns.

We would like to comment in some detail on the Draft Environmental Impact Statement. However, the only version of the DEIS available to us [the one on the NRC website] does not include public and occupational safety risks and transportation accident impacts which are the very subjects on which we wish to comment.

We request that NRC require that complete information concerning LES be made available for public comment and that this DEIS be declared inadequate.

Sincerely,

Janet Greenwald  
Co-coordinator  
Citizens for Alternatives  
To Radioactive Dumping  
505-266-2663  
202 Harvard SE  
ALB. NM 87106

Comment  
#295-1

Commenter 316

From: "Joseph Malherek" <jmalherek@citizen.org>  
To: <nrcprep@nrc.gov>  
Date: Fri, Jan 7, 2005 2:23 PM  
Subject: PC-NIRS Comments on NEF DEIS

Attention: Anna Bradford

Attached you will find a PDF of the joint comments of Public Citizen and the Nuclear Information and Resource Service on the Draft Environmental Impact Statement for the National Enrichment Facility (NUREG-1790; Docket No. 70-3103).

To ensure delivery, these comments will also be submitted via fax and U.S. mail.

Please enter these comments into the official record on this proceeding. Thank you.

Sincerely,  
Joseph P. Malherek

Joseph P. Malherek

Policy Analyst  
Critical Mass Energy and Environment Program  
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J-180



January 7, 2005

Chief, Rules and Directives Branch  
U.S. Nuclear Regulatory Commission  
Mail Stop T6-D59  
Washington, D.C. 20555-0001

Re: Comments on the Draft Environmental Impact Statement for the Proposed National Enrichment Facility in Lea County, New Mexico (NUREG-1790); Docket No. 70-3103

To Whom It May Concern:

Enclosed you will find the joint comments of Public Citizen and the Nuclear Information and Resource Service (NIRS) on the NRC's Draft Environmental Impact Statement (Draft EIS) for the proposed National Enrichment Facility (NEF) in Lea County, New Mexico.

Public Citizen and NIRS have jointly been admitted as a party to the licensing proceeding for the NEF, a proposed uranium enrichment plant proffered by a firm called Louisiana Energy Services (LES). As formal participants with standing in this proceeding, we hope that our comments and recommendations on the Draft EIS are considered seriously and taken into account before the NRC issues its final EIS on the NEF.

Please enter these comments into the official record on this proceeding.

Sincerely,

Joseph P. Malherck  
Policy Analyst, Public Citizen's Critical Mass Energy and Environment Program

Michael Mariotte  
Executive Director, Nuclear Information and Resource Service

[Enclosure]

Public Citizen: 215 Pennsylvania Ave SE • Washington, DC 20003 • (202) 546-4996 • [www.citizen.org](http://www.citizen.org)  
NIRS: 1424 16th Street NW #404 • Washington, DC 20036 • (202) 328-0002 • [www.nirs.org](http://www.nirs.org)

#### A Note on the Public Comment Period

As a result of the NRC's security review of the documents posted on its website, the public was forced to submit comments under conditions that have greatly limited its ability to adequately review the environmental evaluation of the NEF as well as important related documents.

Included among these files were documents essential for preparing comments, including LES's license application for the NEF and the NRC's Draft EIS for this proposed plant. Additional items needed for drafting informed comments, such as the record of communications between the NRC and LES, were also restricted from public access.

Only recently have these documents been restored to the NRC's Web site, albeit in a limited form where parts deemed to contain sensitive security information have been removed. In the Draft EIS, the redacted portions include maps of the site and facility and all or parts of Sections 4.2.11.2 and 4.2.13, Tables 4-17 and 4-21, and large portions of Appendix C, which include evaluations of possible accidents at the NEF and their potential impacts on public and worker health. Moreover, a list of chemicals employed at the facility has been removed. This information is essential to public knowledge and understanding of the plant's operations and impacts. It is difficult to believe that an honest assessment of possible accidents and their consequences would be particularly useful to terrorists or others.

These conditions have made it difficult to perform a comprehensive review of the NRC's Draft EIS; nevertheless, Public Citizen and NIRS hereby present our comments based on the information available.

Comment  
#316-1

#### General Comments

The site of LES's proposed NEF sits in a region already negatively impacted by various industrial activities: there is a quarry and a petroleum-industry solid-waste treatment and disposal facility to the north, a hazardous and radioactive waste dump to the east, a municipal landfill to the southeast, and a petroleum-contaminated-soil treatment facility to the west—all of this among a landscape littered with 33,700 oil wells, several oil processing facilities with flame-off towers, and hundreds of associated pumps, jacks, and rigs (Draft EIS, § 3.2; § 4.2.3). The region has been thoroughly tapped for oil and gas resources, the ecological scars of which remain.

Amidst this, NRC has determined in its Draft EIS that the environmental impacts from building and operating a uranium enrichment facility on the site would be mostly "small" to "moderate," and has recommended that the proposed license be issued to LES (Draft EIS, § 2.4). Public Citizen and NIRS do not agree with this assessment.

Comment  
#316-2

It is also the view of Public Citizen and NIRS that the Draft EIS for the NEF falls short of the requirement of the National Environmental Policy Act (NEPA) that each federal agency must consider in an environmental impact statement "the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity" (42 U.S.C.

Comment  
#316-3

§ 4332(c)(iv)). But the NRC staff merely notes that a "detailed analysis of the impact of the proposed NEF on connected actions that include the overall nuclear fuel cycle activities were not considered" (Draft EIS § 1.4.3). The cumulative hazards and dangers of the nuclear fuel cycle, nuclear power generation, and nuclear waste management deserve a thorough accounting in the EIS, which is lacking in this draft version, where there is only a cursory consideration of these factors in chapter 4 on "Environmental Impacts." Considering the enormous problem of properly disposing of irradiated nuclear fuel—one of the ultimate products of this plant—and isolating it from the environment, this omission amounts to an evasion of responsibility. While the NRC, in the context of drafting an EIS for a uranium enrichment facility, may not have a statutory obligation to consider the long-term management of wastes produced by nuclear power reactors, it is the opinion of Public Citizen and NIRS that this necessary stage in the production of nuclear fuel is a proper forum for a consideration of its ultimate destination. We request that this be remedied in the final version.

Comment  
#316-3  
(cont.)

Furthermore, the analysis of "Alternatives to the Proposed Action" (Draft EIS, § 2.2) is perfunctory and myopic. NEPA requires agencies of the federal government to "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources" (42 U.S.C. § 4332(E)). Considering the fact that the problem of radioactive waste is, by virtually all accounts, an "unresolved conflict" (note the many years of contentious debate over the Yucca Mountain nuclear waste repository), the section covering alternatives to the proposed action should encompass a broader range of possibilities than merely other means of enriching uranium for use as fuel in nuclear reactors. The Final EIS should consider alternative energy sources—such as wind and solar—and the means required to employ them instead of nuclear power. Nuclear-generated power requires the use of finite resources while creating unique and dangerous environmental and health hazards; an alternative to this course should be evaluated before issuing a license for a nuclear fuel facility.

Comment  
#316-4

#### NEPA Requirements

Per the requirements of NEPA, an EIS is required to include a "detailed statement" on:

- (i) the environmental impact of the proposed action,
- (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,
- (iii) alternatives to the proposed action,
- (iv) the relationship between local short-term uses of man's environment and the maintenance of long-term productivity, and
- (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented. [42 U.S.C. § 4332(2)(c)]

Comment  
#316-5

Chapter 4 of the Draft EIS does include a discussion of these things, but it is far from being a "detailed statement"; rather, it is cursory, perfunctory, and limited in scope and vision. For example, Section 4.7, titled "Relationship Between Local Short-Term Uses of the Environment and the Maintenance and Enhancement of Long-Term Productivity," fails to adequately consider the long-term hazards created by depleted uranium waste (not to mention irradiated fuel rods, the

ultimate destination of the proposed NEF's product) upon the long-term productivity of our natural resources. In the Final EIS, these NEPA-required statements of environmental impact should be expanded in scope and detail to address such important questions.

Comment  
#316-5  
(cont.)

#### Site Selection

The description of LES's site selection process in Section 2.2.2.1 is misleading in that it only mentions certain objective criteria of respective sites and neglects the political situation that led to the selection of the site in New Mexico.

LES was opposed by many members of the communities in Louisiana, where it failed to attain a timely license for its proposed Claiborne Enrichment Center (CEC), as well as in Tennessee, where many local officials also opposed the project.

It has been reported that Sen. Pete Domenici of New Mexico, an ardent proponent of the nuclear industry, "wooed" the company to his home state when it was having trouble meeting zoning requirements established at its chosen site in Tennessee.<sup>1</sup> Officials at the federal, state, and local level in New Mexico were, unlike in Tennessee, generally favorable to the project.<sup>2</sup>

Comment  
#316-6

Yet nothing of this is mentioned in the Draft EIS; rather, the process used to select the site is described as a "multi-attribute-utility-analysis methodology" (page 2-35, line 5). Seven candidate sites were eliminated because of the risk of an earthquake (Draft EIS, Table 2-7), yet the site that was ultimately chosen lies in a seismically-active area near, possibly over, a geologic fault.<sup>3</sup> The site in Bellefonte, Alabama is said to have been eliminated because a "historic preservation assessment" may have been required (page 2-38, line 16); yet at the chosen site in Lea County, the presence of seven archaeological sites, each of which has been determined to be eligible for listing in the National Register of Historic Places, has been identified (page 3-9), requiring LES to negotiate a "Memorandum of Agreement" with the state of New Mexico (page 1-17). Also at the Bellefonte site, the "costly relocation" of high-voltage transmission lines is cited as a reason for lowering Bellefonte's rating below the Lea County site. Yet existing at the latter site is a high-pressure carbon-dioxide (CO<sub>2</sub>) gas line that would have to be relocated before the site is developed (page 2-9). Additionally, potable water pipelines from the nearby cities of Eunice and Hobbs—8 and 32 kilometers in length, respectively—would have to be constructed to serve the facility; and two independent electrical substations and two 115-kilovolt overhead transmission lines stretching 13 kilometers would be required to serve the NEF (Draft EIS, § 2.1.6). Considering this, why did LES judge the Bellefonte site to be inferior to the Lea County site?

<sup>1</sup> "LES to set up plant in New Mexico," *Nuclear Engineering International*, Oct. 31, 2003: 3; "Full Review - Enrichment - The race is on," *Nuclear Engineering International*, Sept. 30, 2003: 12.

<sup>2</sup> "Nuke fuel factory planned for Lea County; environmentalists oppose it," *Associated Press Newswires*, Sept. 3, 2003.

<sup>3</sup> National Enrichment Facility Environmental Report, Revision 2, Table 3.3-3, July 2004; for an account of the geologic fault discovered under the Waste Control Specialists site, see Memorandum from Herman L. Graves to Joseph G. Ginter, "May 27-28, 2004, Meeting Summary: Louisiana Energy Services' In-Office Review, Hobbs, New Mexico and Site Visit, Eunice, New Mexico," June 29, 2004.

**Proximity to Other Facilities**

As shown in the maps presented in figures 4-5 and 4-6, the location of the proposed NEF is remarkably isolated from other related nuclear fuel cycle facilities, requiring the shipment of radioactive and hazardous materials over great distances, increasing the possibility of a harmful accident, which could produce adverse health effects in up to 28,000 people in an urban area (Draft EIS, Table 4-7). In fact, none of the waste processing/disposal facilities cited by LES is closer than 1,000 miles from the site.<sup>4</sup> Yet proximity to these sites does not appear to have been a criterion considered in the selection of the Lea County site (Draft EIS, § 2.2.2.1). Considering the fact that the two previous sites chosen by LES—in Louisiana and Tennessee—would have been much nearer to these related facilities, would it be correct to assume that this was a factor considered by LES but neglected in its most recent site selection?

Comment  
#316-7**Contamination at Lea County Site**

Samples taken by LES at the NEF site reveal that the U.S. Environmental Protection Agency's maximum contaminant levels are exceeded for several substances, including boron, chloride, iron, manganese, sulfate, uranium-234 as well as "gross alpha" radioactive constituents (Draft EIS, Table 3-11). Considering the existing contamination at the site, what cumulative health effects would arise from an additional industrial development that would produce, among other things, mass quantities of uranium-238? What impact would this combination of substances have on the safety of water resources?

Comment  
#316-8

Cesium-137, a man-made radionuclide produced by past atmospheric atomic weapons testing, is "ubiquitous in the environment" around the NEF site, according to an LES survey (Draft EIS, page 3-31, line 40). Considering the already pervasive presence of this radionuclide, what are the cumulative health effects are anticipated from the combination of NEF radiation exposures and this already-ubiquitous radioactive element?

Comment  
#316-9**Need for Facility****Net Energy Output**

The NEF would require approximately 30 megawatts of electricity for operation (Draft EIS, § 2.1.6, line 35). The average nuclear reactor has a production capacity of just under 1,000 megawatts.<sup>5</sup> In the Final EIS, please calculate the length of time and the quantity of electricity consumed by the NEF before the fuel it produces creates electric power in excess of that which was used to enrich the fuel. Such a calculation is necessary to judge the value of this fuel source over others that may more quickly and efficiently recover the energy lost in attaining, capturing, refining, or exploiting a fuel.

Comment  
#316-10**Domestic Supply of Enriched Uranium**

The discussion of the need for the NEF in Section 1.3 of the Draft EIS underestimates the value to American national security that comes from the United States' 1993 agreement with Russia—known as "Megatons to Megawatts"—to convert 500 metric tons of highly enriched uranium

Comment  
#316-11

<sup>4</sup> National Enrichment Facility Environmental Report, Table 4.13-1, Dec. 2003.

<sup>5</sup> U.S. Energy Information Administration, Table: "Monthly Nuclear Generation by State, 2003 (Megawatt hours)," <<http://www.eia.doe.gov>>.

(HEU) from dismantled nuclear warheads into low-enriched uranium (LEU) for use in domestic nuclear power reactors. This program is essential to preventing nuclear proliferation by diverting this dangerous material to a beneficial use, but if another source of enriched uranium is introduced in the U.S. market—as with the proposed NEF—prices may become depressed, thus threatening this crucial program as well as our national security. The exposure of the Abdul Qadeer Khan nuclear network highlights the urgent need to eliminate surplus HEU from the international supply.

Comment #316-11 (cont.)

Furthermore, the discussion of the "No-Action Alternative" (Draft EIS, § 2.2.1) should contain an evaluation of the benefits to public health (from deferred mining, for example) and non-proliferation that would come from an acceleration of purchases of HEU from Russia as well as use of other down-blended reactor fuel—including fuel that could come from the United States' surplus HEU inventory.

Comment #316-12

**Future Nuclear Capacity**

The Draft EIS states that "nuclear-generating capacity within the United States is expected to increase, causing an increase in demand for low-enriched uranium" (page 2-23, lines 46-47). Given the facts that (1) no new nuclear power reactor has been ordered in a quarter of a century; (2) no company has received a license to build a new reactor; (3) no company has expounded an explicit plan to build a new nuclear reactor; and (4) Wall Street does not seem to have an interest in funding a new generation of nuclear reactors, even with government support,<sup>6</sup> how does the NRC justify the claim that nuclear-generating capacity is expected to increase in the United States?

Comment #316-13

**Socio-economic Impact**

The NRC judges the socio-economic impact of the proposed NEF to be "moderate," citing benefits to Lea County and the surrounding region in the form of jobs and taxes (Draft EIS, Table 2-8, page 2-52; see also § 4.2.9.7). However, per the terms of the agreement between LES and Lea County on the \$1.8 billion in industrial revenue bonds the county offered to finance the project, LES would not have to pay any property taxes for the duration of the operational life of the NEF—roughly 30 years—and it may be exempt from other taxes as well.<sup>7</sup> According to the Economic Development Corporation of Lea County, this kind of property tax exemption could be worth \$3 million over 30 years for a \$10 million project.<sup>8</sup> Considering that construction of the NEF is expected to cost \$1.2 billion (Draft EIS, Table 2-8, page 2-52), what does the NRC expect the total property tax exemption for the NEF to be? That is, how much revenue will this exemption cost Lea County compared to the \$177 million it is expected to earn from taxes on the NEF, according to LES estimates (Draft EIS, page 4-21, lines 9-11)? Such a calculation should

Comment #316-14

<sup>6</sup> *Time for a New Start for U.S. Nuclear Energy?*, Standard & Poor's, June 2004.

<sup>7</sup> Ben Neary, "Issues with LES Parent Company Might Be Red Flags," *The Santa Fe New Mexican*, Dec. 9, 2003; A4; Jim Carlton, "New Mexico Takes a New Look at Building of Uranium Plant," *The Wall Street Journal*, Jan. 7, 2004: B4B; see also Web site of the Economic Development Corporation of Lea County at the section entitled "Finance and Incentives: Industrial Revenue Bond," Nov. 24, 2004, <<http://www.leanm.org/irb.asp>>.

<sup>8</sup> Web site of the Economic Development Corporation of Lea County at the section entitled "Finance and Incentives: Property Tax Exemption," Nov. 24, 2004, <<http://www.leanm.org/pte.asp>>.



be integral to any assessment of alleged socio-economic benefits that the plant would bring to the community. Comment #316-14 (cont.)

Moreover, the job benefits cited for the local community contradict a later admission that the "current labor force...cannot currently supply the specialized skills needed for the proposed NEF operations" (Draft EIS, S 4.2.9.7, lines 9-10). Indeed, the percentage of persons in the region employed in the "Professional, Scientific, Management, Administration, and Waste Management" fields—presumably applicable to jobs that would be created at the NEF—is less than half the averages for New Mexico and Texas (Draft EIS, Table 3-15, line 27). Similarly, the percentage of persons in the region who have attained at least a bachelor's degree is about half the averages for the two states (Draft EIS, Table 3-14, line 24). The EIS should make clear the reality that most, if not all of the higher-wage jobs available as a result of the facility would go to people outside the region, and even outside the United States.

Comment #316-15

#### "Environmental Justice"

The NRC staff judges that the impact of the NEF in the area of "environmental justice" will be "small" because "no disproportionately high adverse impacts would occur to minority and low-income populations living near the proposed NEF..." (Draft EIS, Table 2-8, page 2-53; see also § 4.2.9.8). Yet the criteria used to determine whether or not the effects on minority or low-income populations would be "disproportionately high" stem from the narrowly defined data analyses recommended in Appendix C of NUREG-1748 ("Environmental Review Guidance for Licensing Actions Associated with NMSS Programs").

The guidelines described in NUREG-1748 strictly limit what qualifies as a high concentration of minority or low-income persons near the proposed site of a nuclear facility. The author of the regulatory guidelines, the Office of Nuclear Material Safety and Safeguards (NMSS), recommends a review of the demographic composition of the area encompassing a four-mile radius from the site. A high minority or low-income population percentage is considered to be at least 20 percentage points higher than the average county or state percentages. But comparing the minority and low-income population percentages to county and state averages, rather than to national averages, skews the data. According to data from the 2000 U.S. Census, Hispanics make up 42.1 percent of the population of New Mexico—the highest percentage of any state—and 39.6 percent of the population of Lea County, but only 12.5 percent of the U.S. population at-large, a difference significantly greater than 20 percentage points. The total minority population of New Mexico is 55.3 percent, compared to 30.9 percent nationally, a difference of more than 24 percentage points. Likewise, Texas has a very large Hispanic population of 32.0 percent and a total minority population of 47.6 percent. Moreover, New Mexico also had the third-highest percentage of people living in poverty between 2000 and 2002 among all states, according to the U.S. Census Bureau.<sup>9</sup>

Comment #316-16

The NMSS document clearly states that the criteria it defines are only intended to be used as guidelines and should not be followed absolutely, suggesting that even in cases where the

<sup>9</sup> Proctor, Bernadette D. and Joseph Dalaker, "Poverty in the United States: 2002," *Current Population Reports* (U.S. Department of Commerce, Economics and Statistics Administration, and U.S. Census Bureau) Sept. 2003.

defined demographic data analysis does not indicate a disproportionately high low-income or minority population, an environmental justice review may be conducted if it becomes apparent through public comments or scoping activities that such a population may be adversely affected by the proposed action.

Comment  
#316-16  
(cont.)

Furthermore, the Council on Environmental Quality, which drafted a guidance document for federal agencies to use in implementing the 1994 executive order that created a national "environmental justice" policy, identified a significant minority population as composing a population percentage "meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis."<sup>10</sup> While the NRC staff did adjust the methodology of its environmental justice evaluation to account for the extraordinarily large Hispanic and minority populations in New Mexico and Texas by considering U.S. Census "block groups" with minority and/or low-income population percentages at least as great as statewide percentages instead of 20 percent greater (Draft EIS, page 3-61, lines 1-4), per the NMSS recommendations, it still only compared these local groups to statewide populations, not nationwide populations, which would have produced a much greater disparity, presumably warranting a more detailed review. In the Final EIS, the NRC staff should consider the impacts of the NEF on minority and low-income populations, taking into account the fact that, relative to the rest of the country, these communities are highly concentrated in the area near the NEF site.

In Section 4.2.9.5, NRC staff describes the most significant kind of accident scenario involving the NEF, a release of uranium hexafluoride (UF<sub>6</sub>), which could result in seven latent cancer fatalities. NRC staff reasons that, in such an event, "minority and low-income populations would not be more obviously at risk than the majority population" (Draft EIS, page 4-25, lines 29-30). Yet this rationale betrays a faulty logic: if this event is more likely to occur in a situation where the NEF is permitted to operate, and this dangerous facility is located in an area of the country with a disproportionately large minority population, then these minority groups are, in fact, presented disproportionately high risk of ill health effects.

#### Consultations with Affected Groups

The Draft EIS records that 72 census block groups within a 50 mile radius of the site "were identified as satisfying the criteria used in this analysis to consider environmental justice in greater detail based on their minority population" (page 3-63, lines 1-3). NRC staff goes on to note the "extra effort" that was made to meet with minority groups to determine the effects construction of the NEF would have on them (page 3-63, lines 5-8). The staff also conducted inquiries into these communities and discovered no potential ill effects from the facility (§ 4.2.9.5). Were these inquiries and meetings, or attempts to arrange meetings, the "extra effort" described by NRC staff towards the end of its consideration of these groups "in greater detail"? Were these meetings recorded in any way? In the Final EIS, please describe, in detail, the content of these meetings and other methods by which NRC staff considered environmental justice "in greater detail."

Comment  
#316-17

<sup>10</sup> Council on Environmental Quality, "Environmental Justice Guidance Under the National Environmental Policy Act," Dec. 10, 1997: 25.

Cumulative Impacts

The NRC staff should take into account the entire constellation of industrial facilities that surround the NEF site, which may contribute to cumulative health effects that would be compounded by the addition of the NEF. These industrial operations include quarry and a petroleum-industry solid-waste treatment and disposal facility to the north, a hazardous and radioactive waste storage and treatment facility to the east, a municipal landfill to the southeast, and a petroleum-contaminated-soil treatment facility to the west—all of this within a regional landscape littered with 33,700 oil wells and associated pumps, jacks, and rigs (Draft EIS, § 3.2).<sup>11</sup> Waste Control Specialists, LLC (WCS), which operates the hazardous waste facility just across the border in Andrews County, Texas (less than a mile from the NEF site), has recently submitted several applications to Texas state regulators for permits to allow it to expand the capacity and breadth of hazardous and radioactive wastes stored and processed at its facility.<sup>12</sup> In the Final EIS, the NRC should evaluate the cumulative health and ecological effects of these facilities, located in an area of the country with an extraordinarily high percentage of minority and low-income populations.

Comment  
#316-19

Water ResourcesMunicipal Water Consumption

The NRC estimates that, during the construction phase of the NEF, annual water usage would be approximately 2 million gallons, a figure "based on the design estimates for the formerly proposed Claiborne Enrichment Center (CEC)" (Draft EIS, § 4.2.6.1). Was this figure adjusted to account for the fact that the size of the proposed CEC was half that of the proposed NEF (Draft EIS, page 6-5, line 31)?

Comment  
#316-19

In Section 4.1.2 ("Utilities Impacts") of the NEF Environmental Report (ER), LES notes that, in addition to two new electrical transmission lines, the NEF will require the construction of two new potable water supply lines in Lea County—one from the city of Eunice and the other from the city of Hobbs. In the Draft EIS, the NRC observes that the water requirements of the NEF—which would average 240 m<sup>3</sup>/day and peak at 2,040 m<sup>3</sup>/day—are well within the capacity of the Eunice and Hobbs municipal water systems, which together have a capacity of 92,050 m<sup>3</sup>/day and have excess water capacities of 66 and 69 percent, respectively (page 4-14 and § 3.8.2.2).

Comment  
#316-20

<sup>11</sup> See also National Enrichment Facility Environmental Report, Page 1.2-1, Dec. 2003.

<sup>12</sup> WCS filed an application in August 2004 with the Texas Commission on Environmental Quality (TCEQ) to construct and operate a low-level radioactive waste disposal facility that would dispose of low-level radioactive waste from the Texas Compact (an agreement between states to establish a common waste disposal facility), which includes Texas, Vermont, and Maine. Nebraska state officials are also conducting negotiations with Texas officials to send waste from the Central Interstate Low-Level Radioactive Waste Compact (which includes Nebraska, Kansas, Oklahoma, Louisiana, and Arkansas) to Texas for disposal, probably at the WCS site. The WCS application with the TCEQ would also permit the company to accept radioactive waste from the U.S. Department of Energy (DOE). In addition to this application, WCS has recently filed separate applications with the Texas Department of State Health Services that would (1) expand the volume of hazardous material that can be stored at the site and (2) permit WCS to accept for disposal uranium mill tailings waste, currently in possession of the DOE, derived from U.S. nuclear weapons programs. Texas is one of the NRC's "Agreement States," meaning that the federal agency has trusted the state with the authority to enforce its regulations in some areas.

Based on conversations with Eunice and Hobbs city officials, the NRC judges that the NEF would thus not affect local water uses.

Comment  
#316-20  
(cont.)

Yet this is a review of limited temporal scope: it totally neglects the severe long-term water shortage problem of Lea County, as documented in the *Lea County Regional Water Plan*. The majority of potable water in Lea County is drawn from the Lea County Underground Water Basin (UWB), which is part of the Ogallala aquifer—one of the largest aquifer systems in the world and an essential water source for agricultural irrigation, acknowledged by the NRC to be a "nonrenewable water source" (Draft EIS, § 3.8.2.1). According to the county's water plan, groundwater in the UWB is being withdrawn at a greater rate than it is being recharged, which has resulted in a water level drop of as much as 70 feet since the first use of groundwater in the 1920s. The report projects a doubling of water usage by 2040 and warns that "there is physically not enough water in the Basin to maintain an annual diversion of this magnitude."<sup>13</sup>

Moreover, the Draft EIS compares the NEF's lifetime water usage to the entire amount of Ogallala reserves in the State of New Mexico, rather than comparing NEF water usage to capacities in the Lea County Underground Water Basin; therefore, the anticipated "small" impact is based on a faulty comparison.

In an area with such finite water resources and a projected shortage, how can the NRC justify its judgment that the impact of the NEF on local water resources will be "small," especially considering the magnitude of this industrial operation and the acknowledgement that projected water shortages may force the NEF to comply with a drought management plan (Draft EIS, § 4.4.3)? In the Final EIS, please consider Lea County's documented long-term water shortage problem in evaluating the impact of the NEF on water resources in the region. Furthermore, in Section 4.7 ("Relationship Between Local Short-Term Uses of the Environment and the Maintenance and Enhancement of Long-Term Productivity"), please include a thorough consideration of the long-term effects of further depleting the Ogallala aquifer from a diversion of water to the NEF.

Effects of Seismicity

The site of the proposed NEF lies in the vicinity of several geologic faults, one of which was recently observed a mere mile from the project area at the waste processing and disposal site in Texas operated by Waste Control Specialists.<sup>14</sup> Moreover, earthquakes frequently occur around the designated NEF site, including one with a magnitude of 5.0 in 1992.<sup>15</sup> Despite this, the NRC has not conducted an investigation of the possible effects of earthquakes and faulting on groundwater flow; nor has it considered the possibility of contaminant infiltration into groundwater due to such seismic activity. In the Final EIS, we urge the NRC to record the results of a comprehensive analysis of such a possibility.

Comment  
#316-21

<sup>13</sup> *Lea County Regional Water Plan*, Prepared for the Lea County Water Users Association by Leedshill-Herkenhoff, Inc., John Shomaker & Associates, Inc., and Montgomery & Andrews, P.A. 7 Dec. 2000.

<sup>14</sup> Memorandum from Herman L. Graves to Joseph G. Gitter, "May 27-28, 2004, Meeting Summary: Louisiana Energy Services' In-Office Review, Hobbs, New Mexico and Site Visit, Eunice, New Mexico," June 29, 2004.

<sup>15</sup> National Enrichment Facility Environmental Report, Revision 2, Table 3.3-3, July 2004.

Groundwater Infiltration

Based on its investigations, the NRC reports that "no precipitation recharge (i.e., rainfall seeping deeply into the ground) occurs in thick, desert vadose zones with desert vegetation." Instead, the precipitation that infiltrates into the subsurface is "efficiently transpired by the native vegetation" (Draft EIS, page 3-35). Will this effect be compromised if the existing vegetation is removed in order to build the NEF, as one would expect? Alternatively, what precisely would be done to restore vegetation disturbed (Draft EIS, page, 2-9, line 41) by the construction of the NEF?

Comment  
#316-22

Even if the vegetation is restored, the purported effectiveness transpiration at the site appears to be questionable. For example, one of the subsurface borings drilled on the NEF site in September 2003 was described as "slightly moist" at 6 to 14 feet (ER Rev. 2, page 3.4-2), and boring B-2 revealed a stratum at 35 to 41 feet described as "moist" (SAR, Fig. 3.2-11). Moreover, the Draft EIS reports groundwater at the site at a depth of 220 feet within the Chinle Formation and a water-bearing sandstone layer at 600 feet below the surface (page 3-36). Also, notably, one well, MW-2, produced water that "continued to recharge throughout the monitoring period" (page 3-37). This well appears to be very near the proposed site of the storage pad that will host the Uranium Byproduct Cylinders (UBCs) containing DUF<sub>6</sub> (compare Draft EIS Figure 3-21 with NEF ER, Rev. 2, Figure 2.1-2).

Furthermore, the Draft EIS appears to indicate an assumption by the NRC that the liners employed to impound the contents of the NEF's wastewater basins will retain their integrity for the duration of the facility's operation, since there is no estimate of the likelihood of liner corruption and subsequent leakage of contaminated liquid effluents from the plant. How long does the NRC assume that the liners will contain the waste, and on what basis is this assumption made?

Geological Disturbance in Region

The proposed NEF is to be situated among several sites in which significant ground excavation has been performed. These sites are within a one-mile radius of the proposed NEF's center and would appear to have the possible effect of compromising the area's geological integrity. To the north of the NEF site, there is a sand and gravel quarry operated by Wallach Concrete; to the east of the site, just over the border in Texas, is a hazardous and radioactive waste processing and disposal facility operated by Waste Control Specialists, LLP, which includes a landfill with 11 million cubic yards of permitted disposal capacity<sup>18</sup>; to the southeast of the site is the Lea County Landfill (a municipal waste disposal site); and to the west lies the "DD Landfarm," a petroleum-contaminated soil treatment facility. In addition, much of the immediate region has been drilled by the oil and gas industry, which has produced more than 37,000 wells in southeastern New Mexico (Draft EIS, § 3.2)<sup>19</sup> and has contaminated groundwater in the region (Draft EIS, page 4-66, line 11).

Nevertheless, the Draft EIS gives only scant attention to these important factors in analyzing the site's hydrology. In the Final EIS, a full account of the effects of this kind of land-use on hydrology should be presented.

Comment  
#316-23

<sup>18</sup> Web site of Waste Control Specialists, LLP, Nov. 2, 2004 <<http://www.westexas.com/facilities.html>>.

<sup>19</sup> See also National Enrichment Facility Environmental Report, Revision 2, § 2.1.2.1, July 2004.

Preparation of the site for the NEF requires grading in order to create a level surface for the facility. This would require an excavation of up to 4 meters, cutting into the layer of caliche that lies below the surface. Moreover, a high-pressure CO<sub>2</sub> pipeline that crosses underneath the site would have to be relocated (Draft EIS § 2.1.4). What effect would these activities have on the permeability of the geologic formations that lie beneath the site? Could the excavation that is required to build the NEF increase the chance that site geology could be disturbed such that new pathways could be created through which contaminants could enter groundwater? Please consider this possibility in the Final EIS.

Comment  
#316-24

Regional Groundwater Quality

The NRC staff considers the proposed NEF's impact on water resources to be "small," reasoning, in part, that "groundwater resources under the proposed NEF site are not considered potable" (Draft EIS, Table 2-8, page 2-50). Yet the Santa Rosa aquifer, which lies below the NEF site,<sup>18</sup> has been described as "the principal source of ground-water for domestic and livestock uses in the southwestern portion of [Lea] County."<sup>19</sup> Moreover, the Draft EIS observes that "people in the area of the proposed NEF site do depend on ground water supplied from personal wells..." (page 3-63, lines 25-26). In the Final EIS, please address and/or resolve this apparent contradiction.

Comment  
#316-25

Waste ManagementWaste Classification

On page 2-27, the NRC states that "[f]or the purpose of this Draft EIS, the NRC considers the DUF<sub>6</sub> generated by the proposed NEF to be a Class A low-level radioactive waste as defined in 10 CFR § 61.55(a)(6)."

Why is it assumed in the Draft EIS that DUF<sub>6</sub> is low-level waste when (1) LES itself has not yet determined whether the DUF<sub>6</sub> it produces will be considered a waste or a resource,<sup>20</sup> and (2) the NRC has not finally determined the proper waste classification of depleted uranium?<sup>21</sup> On such an essential issue, the NRC staff should not proceed on a hypothetical basis.

Moreover, it is the position of Public Citizen and NIRS that the NRC may not arbitrarily classify DUF<sub>6</sub> as low-level waste under the agency's regulations at 10 C.F.R. § 61.55, a rule which was proposed when the country's stockpile of depleted uranium was under the jurisdiction of the U.S. Department of Energy (DOE), not the NRC. The rule explicitly did not consider the classification of depleted uranium (DU) waste for this reason. The box on page 2-29 which concludes that DU is Class A low-level waste ignores the fact that the regulations it cites omitted consideration of DU when they were originally drafted. The NRC may not conveniently judge

Comment  
#316-26

<sup>18</sup> National Enrichment Facility Environmental Report, Revision 2, page 4.12-9, July 2004.

<sup>19</sup> Leedshill-Herkenhoff, Inc., et al., *Lea County Regional Water Plan*, Dec. 7, 2000.

<sup>20</sup> National Enrichment Facility Environmental Report, Revision 2, Section 4.13.3.1.3, July 2004.

<sup>21</sup> U.S. Nuclear Regulatory Commission, "In the Matter of Louisiana Energy Services, L.P. (National Enrichment Facility); Notice of Receipt of Application for License; Notice of Availability of Applicant's Environmental Report; Notice of Consideration of Issuance of License; and Notice of Hearing and Commission Order," Docket No. 70-3103; CLI-04-03, *Federal Register*, Vol. 69, No. 25, February 6, 2004.

depleted uranium to be Class A low-level waste as it does in Section 4.2.14.4 of the Draft EIS; there must be a formal rulemaking and environmental analysis under the statutory obligations of NEPA before this waste attains a proper regulatory classification.<sup>22</sup> Comment #316-26 (cont.)

In this arbitrary classification, the Draft EIS fails to recognize the Commission's repeatedly stated position that depleted uranium is not appropriate for near-surface disposal. The Final EIS for the Claiborne Enrichment Center (CEC) concluded that near-surface disposal of  $DU_3O_8$  would not comply with 10 CFR Part 61 and suggested some form of deep disposal.<sup>23</sup> In 1995, during the scoping process for DOE's Programmatic EIS concerning long-term management of DU, NRC stated that large quantities of  $DU_3O_8$  such as those derived from the DOE enrichment tailings inventory suggest the need for a unique disposal facility, such as a mined cavity or exhausted uranium mine.<sup>24</sup> On October 18, 2000, in commenting on the DOE Roadmap for management of DU, the Commission stated that "[s]hallow land (near-surface) disposal was not a likely option because a generic performance assessment indicated the dose requirements of 10 CFR Part 61 could be exceeded by a wide margin."<sup>25</sup> The Draft EIS for the NEF fails to account for the NRC's repeated positions on the subject of disposal of DU and simply assumes that disposal may occur at a near-surface site. An explanation of such a change in agency position is required.

Comment #316-27

Finally, the Draft EIS attempts to estimate the impact of disposal of depleted uranium from the NEF in its modeling of the releases expected from the site (pages 4-58, 4-59 and Table 4-19). The Draft EIS fails to disclose the models used or the parameter values. The text suggests that models used in analyzing the CEC site were used; however, the results are unlike any reported in connection with the CEC facility. Further, the model addresses only two hypothetical disposal sites and fails to examine any actual location of disposal. Performance of a disposal site is highly site-specific.

Comment #316-28

<sup>22</sup> The regulations in Part 61 were initially proposed in 1981; see "Licensing Requirements for Land Disposal of Radioactive Waste, Proposed Rule," *Federal Register*, Vol. 46, page 38081, July 24, 1981. At this time, depleted uranium was under the jurisdiction of the U.S. Department of Energy and thus not considered in the drafting of Part 61 regulations, as stated in the Draft EIS for the rule: "[A]ll DOE wastes are now disposed of at DOE owned and operated facilities which are not subject to NRC or Agreement State licensing authority. Such wastes are thus not addressed in this EIS." See Draft Environmental Impact Statement on 10 C.F.R. Part 61, "Licensing Requirements for Land Disposal of Radioactive Waste," NUREG-0782, Vol. 2, at 3-8, Sept. 1981. For a complete and thorough argument on this point, see "Brief on Behalf of Petitioners Nuclear Information and Resource Service/Public Citizen in Support of NIRS/PC Contention EC-3/TC-1," *In the Matter of Louisiana Energy Services, L.P., National Enrichment Facility*, U.S. Nuclear Regulatory Commission, Docket No. 70-3103, ASLB No. 04-826-01-ML, Sept. 8, 2004.

<sup>23</sup> CEC Final EIS at 4-67.

<sup>24</sup> See Croft, A.G., et al., Evaluation of the Acceptability of Potential Depleted Uranium Hexafluoride Conversion Products at the Envirocare Disposal Site, ORNL/TM-2000/355, at 12 (Dec. 2000).

<sup>25</sup> Letter, E. Leeds, NRC, to Depleted Uranium Hexafluoride Management Program, DOE, Oct. 18, 2000.

*Depleted Uranium is analogous to Greater than Class C Waste<sup>26</sup>*

The assumption by the NRC staff stated in the Draft EIS that depleted uranium (DU) may be classified as Class A low-level radioactive waste (page 2-27) is imprudent. Instead, this waste should fall into the category of Greater than Class C Waste.

Comment #316-29

The classification of low-level waste can apply only to waste that would clearly be appropriate for shallow land disposal and 100-year institutional control. DU meets neither requirement. Greater than Class C (GTCC) waste requires special disposal methods. DU consists of long-lived alpha-radiation-emitting uranium isotopes, mainly uranium-238. The specific activity of DU is about 400 nanocuries per gram. It varies and can be slightly more or slightly less, depending on the U-234 content of the DU, but is always greater than about 340 nanocuries per gram, even at the theoretical limit when all U-235 has been extracted from the uranium. The limit for long-lived alpha emitting isotopes above which waste is normally classified as GTCC waste is 100 nanocuries per gram. It is true that the specific alpha-emitting radionuclides mentioned in the regulation are transuranic radionuclides (with atomic number greater than 92, the atomic number of uranium). This is probably because DU has never been formally viewed as a waste. Throughout the nuclear era, uranium-238, the main component of DU, has been considered as a resource because it can be converted into plutonium-239 in breeder reactor blankets. For such reasons, many, including DOE personnel, still regard DU as a resource. However, now that plutonium dreams have become far too costly to be realized on a large scale, DU is on the verge of formally being considered a waste, and its classification must be based upon criteria that were used to classify other wastes.

The long half-life of all three uranium isotopes (the shortest half-life, that of U-234, is more than 200,000 years), the fact that they are all alpha emitters, and the specific activity of DU being well over 100 nanocuries per gram ( $U_3O_8$ , the suggested disposal waste form, has a specific activity of over 300 nanocuries per gram) all point to the classification of DU as GTCC waste.

The conclusion that DU is analogous to GTCC waste fits squarely within the NRC definition for that category, if we focus on the substance of the rule. In 10 CFR 61.55 (3)(iii) and (iv), NRC defines wastes containing more than 100 nanocuries per gram of alpha-emitting transuranic radionuclides with half-lives of more than 5 years as "not generally acceptable for near-surface disposal." Indeed, such wastes are clearly comparable to the wastes defined as transuranic (TRU) waste by DOE and EPA (with small differences—the NRC definition is more stringent) (See 40 CFR § 191.02(i)). Such wastes must be disposed of in a deep geologic repository. The DOE is currently spending \$20 billion to dispose of TRU waste in a deep repository; DU cannot

<sup>26</sup> The argument in this section is based in part of that developed by Dr. Arjun Makhijani, who is serving as an expert witness for Public Citizen and NIRS in our intervention against the LES license application for the NEF. Elements of the text in this section appeared in the Petition to Intervene by Nuclear Information and Resource Service and Public Citizen, *In the Matter of Louisiana Energy Services National Enrichment Facility*, Docket No. 70-3103, U.S. Nuclear Regulatory Commission, April 6, 2004: 29-31. Whatever the ultimate classification of depleted uranium may be, should it be declared a waste by the Commission, the disposal of DU through shallow land burial is extremely unlikely to be able to satisfy health and safety standards even under arid conditions and the disposal of depleted uranium in a deep repository should proceed under the assumption that DU is at least as risky as GTCC waste at the 100 nCi/gm threshold, and that DU must therefore be disposed of with a similar level of care in order to minimize the long-term impacts.

logically be considered in any other way than as being in a category that would mark it for deep geologic disposal.

#### UBC Storage

The Uranium Byproduct Cylinders (UBC) Storage Pad is described on page 2-6 of the Draft EIS. The UBCs would be stored on a concrete pad that could be expanded to a maximum size of 9 hectares, on which 15,727 cylinders could be stored. The stormwater collected in the UBC Storage Pad Stormwater Retention Basin would be monitored for contaminants (Draft EIS § 6.2.3), and the LES would institute a management program whereby UBCs would be inspected for such things as corrosion and valve leakage (Draft EIS, page 2-27, lines 14-17; § 4.2.14.3).

Why is it unfeasible or imprudent to house the UBCs in a contained, controlled environment in which they are not exposed to the elements and thus less likely to corrode or disintegrate? Would not such a measure create the desired "optimum storage conditions" (Draft EIS, § 4.2.14.5) to avoid the potential for public exposures from the "direct and scatter (skyshine) radiation" described on page 6-13 of the Draft EIS? Comment #316-30

Furthermore, it is stated in Section 4.2.7.2 that the "potentially highest exposures to wildlife are expected to be to small animals occupying the UBC Storage Pad." Again, would not an effective mitigation measure (which could be included in Table 5-2) be to impound the UBCs in a storage shelter, thereby isolating them from penetration by wildlife?

#### Ultimate Disposal of Depleted Uranium

The Draft EIS lists as a second plausible disposition strategy a scenario in which LES would pay the U.S. Department of Energy (DOE) for conversion and disposal of its waste under Section 3113 of the 1996 *United States Enrichment Privatization Act* which states that the DOE "shall accept for disposal low-level radioactive waste, including depleted uranium if it were ultimately determined to be low-level waste..." (Draft EIS, page 2-31; the law is codified as 42 U.S.C. § 2297h-11). The NRC has yet to make a final determination on the waste classification of depleted uranium, as acknowledged in the Notice of Hearing<sup>27</sup> on the application for the NEF as well as in communications from officials at the NRC and DOE.<sup>28</sup> This being the case, transfer to the DOE cannot be considered a plausible option for disposal of DUF<sub>6</sub>. Comment #316-31

<sup>27</sup> U.S. Nuclear Regulatory Commission, "In the Matter of Louisiana Energy Services, L.P. (National Enrichment Facility): Notice of Receipt of Application for License; Notice of Availability of Applicant's Environmental Report; Notice of Consideration of Issuance of License; and Notice of Hearing and Commission Order," Docket No. 70-3103; CLI-04-03, *Federal Register*, Vol. 69, No. 25, February 6, 2004.

<sup>28</sup> "NRC staff considers that Section 3113 would be a 'plausible strategy' for dispositioning depleted uranium tails if NRC determines that depleted uranium is a low-level radioactive waste. In that regard, the staff expects that LES will indicate in its application whether it will treat the tails as a waste or a resource." (Emphasis supplied.) Letter from Robert C. Pierson, Director of the NRC's Division of Fuel Cycle Safety and Safeguards, Office of Nuclear Material Safety and Safeguards, to Rod M. Krich, Director of Licensing for Louisiana Energy Services, March 24, 2003. A recent letter from a DOE official confirms that the agency will not accept depleted uranium waste for disposal until it is properly classified: "There has been no formal determination by NRC that depleted uranium is low-level radioactive waste for purposes of Section 3113 of the 1996 USEC Privatization Act. Consequently, the Department is not obligated to accept it for disposal unless and until NRC makes such a determination." Letter, W.D. Magwood, Director of the Office of Nuclear Energy, Science, and Technology, to M.J. Virgilio, Director of the Office of Nuclear Material Safety and Safeguards, July 25, 2002.

Furthermore, if LES is to abide by the terms of its agreement with the governor of New Mexico,<sup>29</sup> which necessitate a timely disposal of depleted uranium outside of the state, it would require a conversion facility that will not be burdened by an already enormous inventory of waste. Deconversion of DUF<sub>6</sub> at the DOE's facilities, which are not yet operational, cannot be considered a plausible strategy, because the DOE's existing DUF<sub>6</sub> stockpile is so great that the queue for conversion would preclude acceptance of LES's waste. DOE possesses 704,000 metric tons of DUF<sub>6</sub> and predicts that converting its own waste will take 25 years.<sup>30</sup> LES acknowledges this fact,<sup>31</sup> and the Draft EIS acknowledges that processing NEF waste could extend the operational life of one of the DOE facilities by as much as 15 years (page 4-56, lines 5-7). And this calculation does not even take into account the processing of DUF<sub>6</sub> waste from the American Centrifuge Plant proposed by USEC, Inc. Comment #316-32

#### Environmental Evaluation of Conversion Facility

The Draft EIS fails to discuss the environmental impacts of the construction and operation of a conversion plant for the DUF<sub>6</sub> waste. The Draft EIS entirely relies upon final EISs issued in connection with the construction of two conversion plants at Paducah, Kentucky, and Portsmouth, Ohio, that will convert the DOE's inventory of depleted uranium (Draft EIS, pages 2-28, 2-30, 4-53, 4-54). Such reliance is erroneous, because the DOE plants are unlike the private conversion plant contemplated by LES. Comment #316-33

LES has chosen to focus its planning for a private conversion facility on a process different from the process to be used in the DOE plants. LES will adopt a process that generates anhydrous hydrofluoric acid (AHF).<sup>32</sup> The process discussed in the EISs for the Paducah and Portsmouth conversion plants is a different one, which generate aqueous HF and calcium fluoride (CaF<sub>2</sub>).<sup>33</sup>

Thus, the facilities and processes analyzed in the conversion plant EISs do not fully correspond to the configuration proposed for construction by LES. In particular, the use of a distillation process to upgrade the HF resulting from the conversion process to AHF is not considered in the EIS for either the Paducah or Portsmouth facilities. In addition, when the engineering analysis for these proposed facilities was conducted, the distillation option was not even commercially developed. The Draft Engineering Analysis Report for the Long-Term Management of Depleted Uranium Hexafluoride - Rev. 2, Lawrence Livermore National Laboratory (LLNL)(1997), which is included as supporting material to the conversion plant EISs, states:

Distillation is a common industrial process and was the design basis for this suboption. The processing of the azeotrope and the process parameters for the conversion reactors were patterned after the General Atomics/Allied Signal response to the RFR and the

<sup>29</sup> National Enrichment Facility Environmental Report, Revision 2, Page 4.13-8, July 2004.

<sup>30</sup> Audit Report: Depleted Uranium Hexafluoride Conversion, DOE/IG-0642, U.S. Department of Energy, Office of Inspector General, March 2004.

<sup>31</sup> National Enrichment Facility Environmental Report, Revision 2, Page 4.13-15, July 2004.

<sup>32</sup> LES Answer to Petitions of NIRS/PC and New Mexico Attorney General, May 3, 2004, at 72.

<sup>33</sup> See Paducah EIS, DOE-0359, at S-19, 1-18; Portsmouth EIS, DOE-0360, at S-17, 1-19.

Sequoyah Fuels Corp. patented process. This representative process has not been industrialized, but the initial research and development have been completed.<sup>34</sup>

Comment  
#316-33  
(cont.)

Therefore, the EISs for the DOE plants do not consider the impacts of the distillation process chosen by LES to generate AHF, nor the safety aspects of such operation, nor the impacts of sale, transportation, and use of AHF. The distillation process is not commercially established and projection of its impact will be speculative.

The conversion plant for the DUF<sub>6</sub> from the NEF would have much smaller scale than the DOE plants, creating different economics of operation and needed rates of return. The LLNL Report specifically estimates that a conversion plant of the size contemplated by LES—approximately 7,000 metric tons per year—would have costs nearly as high as the cost of operating a plant with a throughput of 28,000 tons per year.<sup>35</sup> The prospect of a high-cost facility raises the question what cost reductions will be attempted, and at what price to safety and the environment.

Comment  
#316-34

#### Depleted Uranium as a Resource

It cannot be assumed that this inventory of depleted uranium may have a beneficial use, since the current stockpile "far exceeds the existing and projected demand for the material" (Draft EIS, page 2-44, lines 12-13). Thus the DOE avenue of disposal cannot be considered plausible, and it should be eliminated as a possible DUF<sub>6</sub> waste management option (see Draft EIS, § 4.2.14.3). The Final EIS on the NEF should acknowledge this.

Comment  
#316-35

#### Jurisdiction of Radioactive Wastes

Regarding disposal options for waste generated by the NEF, the Draft EIS observes that, because New Mexico is not part of the "Texas Compact" agreement, "any radioactive wastes generated at the proposed NEF could not be shipped *directly* to [the Waste Control Specialists (WCS) disposal facility] for disposal" (emphasis supplied) (page 2-32, lines 34-35). Does this mean that some intermediary entity may take possession of the NEF's waste and, thereafter, transfer it to the WCS disposal site if DUF<sub>6</sub> is ultimately determined to be low-level waste and WCS's application for low-level waste disposal is approved? On the same page, in a discussion regarding WCS's request to become a Federal Waste Disposal Facility, the Draft EIS again states that "the proposed NEF would not be able to ship depleted uranium *directly* to the proposed WCS facility" (emphasis supplied) (lines 44-45). Is the implication here that the NEF would first transfer possession of its waste to the U.S. Department of Energy, whereupon it would then be qualified for disposal at the WCS facility if it achieves its license? In the Final EIS, please explain.

Comment  
#316-36

#### License Amendments

On page 4-34 of the Draft EIS, several deconversion and disposal alternatives are considered to address the depleted uranium waste that would be generated by the NEF. Included in this list is the possibility of disposal of U<sub>3</sub>O<sub>8</sub> (the form to which DUF<sub>6</sub> would be converted for disposal) at

Comment  
#316-37

<sup>34</sup> J.W. Dubrin et al., "DEPLETED URANIUM HEXAFLUORIDE MANAGEMENT PROGRAM: The Engineering Analysis Report for the Long-Term Management of Depleted Uranium Hexafluoride Volume I," Lawrence Livermore National Laboratory, May 1997 (UCRL-AR-124080 Vol. 1 Rev. 2), at 3-8.

<sup>35</sup> Hatem Elyat et al., "Cost Analysis Report for the Long-Term Management of Depleted Uranium Hexafluoride," UCRL-AR-127650, at Table 6.4 (May 1997).

Comment

the Nevada Test Site, the U.S. Ecology site in Hanford, Washington, or the Envirocare facility near Clive, Utah. Would it be necessary to amend the operating licenses of these facilities in order that they may legally accept depleted uranium for disposal? If so, would it be necessary to perform an EIS to evaluate the effects of such an action at these sites, as suggested in Section 4.2.14.4?

#316-37  
(cont.)

#### Depleted Uranium as a Resource

In Section 2.2.2.4, titled "Alternatives for DUF<sub>6</sub> Disposition," it is stated that the Draft EIS "will not further evaluate DUF<sub>6</sub> disposition alternatives involving its use as a resource" (page 2-43, lines 36-38). Yet, on the same page, several "Beneficial Uses of Depleted Uranium" are acknowledged in a box. Included among these is employment of depleted uranium for use in munitions, where it can be used "for tank armor and armor-piercing projectiles," a demand which is said to be decreasing "as environmental regulations become more complex." Considering the widespread and continuing concerns regarding the adverse health effects arising from exposure to depleted uranium in the battlefield,<sup>36</sup> does the NRC consider this a viable use of depleted uranium? And, if, prior to the issuance of the final version of this report, LES demonstrates that this is a "viable use" of depleted uranium, would the Final EIS include an evaluation of the potential environmental hazards created by this military application of the uranium tails from the NEF? Further, if the EIS will not evaluate DUF<sub>6</sub> as a resource, then the "Beneficial Uses of Depleted Uranium" box is inappropriate to include.

Comment  
#316-38

#### Nonhazardous Waste

The Draft EIS states that nonradioactive materials such as wood, paper, packing materials, and scrap metal would be disposed of in a commercial landfill (page 2-22, lines 5-7). In Figure 2-11, which illustrates the disposal pathways of waste from the NEF, one of the destinations is "recycle." Does LES have a specific plan to recycle its nonradioactive wastes, such as paper and scrap metal? The development of a "waste recycling plan" is listed as a mitigation measure in Table 5-2, but no specifics are provided.

Comment  
#316-39

#### Cultural Resources

Section 3.3.4 of the Draft EIS acknowledges the presence of seven archaeological sites within the proposed project area, each of which has been determined to be eligible for listing in the National Register of Historic Places, based on the expectation that "buried cultural deposits exist and/or the surface data indicate a definite research potential" (page 3-9). The New Mexico Department of Cultural Affairs, Historic Preservation Division has determined that the NEF "will have an adverse effect on cultural resources" (Draft EIS, page B-26).<sup>37</sup> Two or perhaps three of these archaeological sites would be impacted by construction activities, but it is noted that a Memorandum of Agreement is being prepared, setting the terms of a "historic properties treatment plan" that would, supposedly, mitigate any adverse impacts on cultural resources from building and operating the NEF (Draft EIS, page 2-46; § 4.2.2).

Comment  
#316-40

<sup>36</sup> See, for example, Lee Glendinning, "Gulf war uranium tests too late for many, say veterans," *The Guardian*, Sept. 24, 2004; 10; Deborah Blum, "A Dark Magic in America's Silver Bullets," *Los Angeles Times*, June 1, 2003: M2.

<sup>37</sup> Michelle M. Ensey, letter to Matthew Blevins, U.S. Nuclear Regulatory Commission, Washington, D.C., April 26, 2004.

In the Final EIS, please describe, in detail, the terms of this Memorandum of Agreement and the historic properties treatment plan it would require. Would there be a comprehensive archaeological investigation and excavation prior to initiation of construction activities? Can the preservation of important artifacts embedded in the site be guaranteed, such that a "small" impact can be assured? Moreover, what is the precise nature of these artifacts? Is it possible that some of these artifacts cannot be removed from the site without damaging them or corrupting their integrity?

Comment #316-40 (cont.)

Also, please justify the impact assessment on historical and cultural resources of "small to moderate" under the "no-action" alternative (Table 2-8, page 2-46; § 4.8.2). What evidence is relied upon to make the judgment that, in lieu of construction of the NEF and its concomitant "mitigation measures," "historical sites identified at the proposed NEF could be exposed to the possibility of human intrusion" (Table 2-8, page 2-46)? Is this mere conjecture? Since these sites have been identified, can they not be protected if the NEF is not constructed?

Comment  
#316-41

#### Land Use

In Section 2.1.4 and in Figure 2-6 of the Draft EIS, the site of the NEF is described and represented. About one-third of the total site area would be disturbed by construction of the NEF (Draft EIS, page 2-8, line 34; § 4.2.1.1, lines 24-28). Is this unused area necessary to the operation of the NEF? How likely is it that, following the 30-year lease period between LES and Lea County, when the ownership of the land is transferred from the State of New Mexico to LES (Draft EIS, § 4.2.1; page 4-3, lines 22-27), the remainder of the site property will be subjected to industrial development? The Draft EIS does acknowledge that "[t]his parcel of land would likely remain industrial even after the facility is decontaminated and decommissioned" (§ 4.5, lines 39-40). According to the Draft EIS, following decommissioning of the NEF, "only the building shells and site infrastructure would remain" (page 2-24, line 12). What potential use could these remaining structures serve? Would the site remain a brownfield?

Comment  
#316-42

#### Site Geology

According to the Draft EIS, "small" environmental impacts are those that "are not detectable or are so minor that they would neither destabilize nor noticeably alter any important attribute of the resource" (box, page 4-1). Yet, in the section describing the proposed NEF's impact on geology and soils, despite the fact that construction of the facility would require grading the site to make it flat and introducing a very large industrial facility covering 83 hectares that may require penetrating the subsurface soils and even the clay layer of the Chinle Formation—the average depth of which begins at 12 meters (Draft EIS, Table 3-8, lines 17-18)—NRC staff judges the impact of the facility to be "small" because "site preparations and construction result in only short-term effects to the geology and soils" (page 4-10, lines 21-22). Is such an action not more suitable for at least a "moderate" impact assessment, where the environmental effects are "sufficient to noticeably alter...important attributes of the resource"? The NEF will fundamentally alter the geology and soils of the site, far beyond the site preparations and constructions phase; it is thus inappropriate to consider the impacts of site preparation and

Comment  
#316-43

construction separate from the operational phase (considered in § 4.2.5.2)—this approach ignores the long-term effects of the initial development of the NEF.

Comment  
#316-43 (cont.)

#### Atmospheric Emissions

The Draft EIS notes that the NEF would annually discharge 440 cubic meters of helium, 190 cubic meters of argon, 53 cubic meters of nitrogen, 610 liters of methylene chloride, 40 liters of ethanol, 0.8 metric tons of volatile organic compounds, 0.5 metric tons of carbon monoxide, and 5.0 metric tons of nitrogen dioxide (page 2-23, lines 4-13). What mitigation measures are in place to limit these emissions, and what negative environmental and public health impacts would their dispersal into the atmosphere contribute to?

Comment  
#316-44

#### Cumulative Impact

Section 4.2.4.2 of the Draft EIS describes the air emissions—including hydrogen fluoride, acetone, volatile organic compounds, carbon monoxide, nitrogen dioxide, and particulate matter—that would be produced by the proposed NEF. NRC staff justifies the designation of a "small" environmental impact from these emissions because each pollutant is expected to fall below regulatory requirements for emissions. But how does NRC staff judge the cumulative impact of these emissions?

Comment  
#316-45

#### Diesel Generators

According to the Draft EIS, the NEF's emergency diesel generators have the potential to emit more than 90,700 kilograms of a "regulated air pollutant." What pollutant is this? What is the experience of comparable uranium enrichment plants, such as those operated by Urenco in Europe, in terms of reliance on these emergency diesel generators? Annually, what quantity of air pollutants do these generators typically emit?

Comment  
#316-46

#### Chlorofluorocarbons

Please indicate in the Final EIS whether any chlorofluorocarbons (CFCs and/or HCFCs) would be used, produced, or released by the NEF, as is the case at other uranium enrichment plants.

Comment  
#316-47

#### Decommissioning

Section 2.1.8 of the Draft EIS describes the processes of decontamination and decommissioning of the NEF, the operating license of which would expire in 30 years. The regulations at 10 C.F.R. § 70.33 allow for renewal of operating licenses for facilities such as the NEF. What is the likelihood that the operating license of the NEF would be extended after this initial 30-year period? What has been the duration of the operational life of the comparable facilities operated by Urenco in Europe?

Comment  
#316-48

#### Monitoring

During the course of the NEF's nine-year decommissioning period, it is estimated that more than 5,000 cubic meters of radioactive waste would be generated and disposed of in low-level radioactive waste facilities (Draft EIS, page 2-25). How will the NRC monitor the

Comment  
#316-49

decommissioning process to assure that all radioactive waste materials are disposed of properly rather than being shipped to unlicensed landfills or recycling facilities? Comment #316-49 (cont.)

#### Impacts on Wildlife

The Draft EIS refers to a field survey of the proposed NEF site conducted by LES in the fall of 2003 that "did not locate any lesser prairie chickens" (page 3-47, lines 44-45), yet the duration of this survey and the methodology was employed is not discussed.<sup>38</sup> A similar concern about the adequacy of this assessment was expressed by Lisa Kirkpatrick, Chief of the Conservation Services Division for the State of New Mexico's Department of Game and Fish, in a February 23, 2004 letter to the NRC responding to the Environmental Report on the NEF submitted by LES.<sup>39</sup> Ms. Kirkpatrick questioned the adequacy of the survey, noting that "the area around the project has not been adequately surveyed for lek [breeding area] sites" and "[s]urveys should be conducted in the spring," not the fall. But despite this criticism, it does not appear that NRC staff has supplemented this initial, inadequate survey for the Draft EIS, determining that "[t]here are no onsite important ecological systems...that contain important species habitats such as breeding areas..." (page 3-50, lines 6-7; see also § 4.2.7). Further, this statement appears to contradict a later admission that the swift fox (*Vulpes velox*) and the western burrowing owl (*Athene cunicularia hypugae*)—two "species of concern"—may have their habitats and livelihoods threatened by the construction and operation of the proposed NEF (§ 4.2.7). Please remedy this in the Final EIS. Comment #316-50

The Draft EIS provides further rationale for the moderate impact of the proposed NEF in that only one-third of the total site area would be impacted by construction and operation activities, allowing "highly mobile resident wildlife located within the disturbed areas of the proposed NEF site an opportunity to relocate to undisturbed onsite areas" (page 4-17, lines 16-18). Would these species—and please specify, which species this statement refers to—be able to subsist solely within the site boundaries, or, if not, would they be able to freely pass through, under, or over the fence that would be erected at the perimeter of the site? If, for any species, the answer to these questions is "no," it seems that this habitat would be rendered unsuitable. Comment #316-51

Moreover, it is questionable to consider the "permanent elimination" of 73 hectares of wildlife habitat a "small" impact (Draft EIS, § 4.3.7). Comment #316-52

#### Accidents

##### Release of Uranium Hexafluoride

The Draft EIS describes the most significant accident scenario at the proposed NEF to be an accidental release of uranium hexafluoride (UF<sub>6</sub>), which could cause seven latent cancer fatalities. NRC staff judges that the risk of such exposures would increase if the winds were Comment #316-53

<sup>38</sup> The survey referred to is mentioned in the National Enrichment Facility Environmental Report (Dec. 2003) at § 3.5.6. Details provided on the survey are scant.

<sup>39</sup> Lisa Kirkpatrick, letter to Chief, Rules and Directives Branch, U.S. Nuclear Regulatory Commission, Washington, D.C., Feb. 23, 2004.

from the south at the time of the accident, sending the plum of UF<sub>6</sub> towards Hobbs and Lovington, New Mexico (Draft EIS, page 4-25, lines 21-30). The local wind patterns documented in Section 3.5.2.4 and represented in Figures 3-8 and 3-10 show that southerly winds are predominant in the area; thus, the likelihood of this worst-case scenario, which is contingent upon winds from the south, is increased. Comment #316-53 (cont.)

##### Tornadoes

The frequency and severity of tornadoes in the vicinity of the NEF is described in Section 3.5.2.5 of the Draft EIS. Has the NRC staff evaluated the damage that an F5 tornado would cause to the NEF? Comment #316-54

##### Operations

The Draft EIS states that the proposed NEF "currently" has no plans for internal cleaning or decontamination of the [UF<sub>6</sub>] cylinders" (emphasis supplied) (page 2-15, line 36). Does this mean that it is possible that LES may decide, at some point in the future, to engage in the cleaning and decontamination of the emptied UF<sub>6</sub> cylinders at the NEF? If so, would the NRC undertake an evaluation of the environmental impacts of this practice? In the Final EIS, please consider the environmental effects of cleaning and decommissioning the Type 48X or Type 48Y cylinders that have contained UF<sub>6</sub>. Comment #316-55

##### Miscellaneous

The summary descriptions of the "proposed action" under the categories "Transportation" and "Public and Occupational Health," part of Table 2-8 at pages 2-55 and 2-56, appear to be truncated. Please correct this error in the Final EIS. Comment #316-56

##### Conclusion

In the areas described above, the NRC's Draft EIS for the National Enrichment Facility (NEF) falls short of a complete evaluation of the environmental impacts of the proposed facility as required by the National Environmental Policy Act. Until the above questions and criticisms are adequately addressed and resolved, the NRC staff's recommendation that the license for the NEF be approved is premature. Comment #316-57



## Commenter 343

From: "Birnie" <birnie@gcl-net.com>  
 To: <nrcprep@nrc.gov>  
 Date: Mon, Jan 10, 2005 5:47 PM  
 Subject: Comment on NEF (NUREG-1790)

Tucson Branch of the  
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Attn: Anna Bradford  
 To Chief, Rules Review and Directives Branch  
 United States Nuclear Regulatory Commission  
 Mail Stop T6-D59  
 Washington, DC 20555-0001

Re: Comments on the Draft EIS for the proposed National Enrichment Facility in Lea County, New Mexico (NUREG-1790); Docket No. 70-3103

To the Commissioners and Staff:

We are dismayed that the NRC could conclude that the proposed NEF would have "small" or "low" impact on a variety of considerations that we feel have received grossly inadequate review. *Comment #343-1*

First, the NEED for the facility is far from proven. We have heard no information that indicates that there will be an increase in demand for low-enriched uranium since no new U.S. reactors have been ordered since the 1970's, nor are the banks keen on loaning money for new construction. With many reactors facing an end to their legal operating lives, with doubtful renewal expected, the logical conclusion is that there will be a diminished demand for low-enriched uranium. This same would apply in case the promoters are planning to offer LEU for sale abroad. *Comment #343-2*

Second, the site selection process was greatly flawed, with a number of the criteria ignored or are in obvious conflict. These include seismic activity (Lea County is located over a geologic fault), the historical preservation assessment (Lea County has seven archeological sites within the area proposed for the NEF location), and costly relocation of existing service provisions (the high-pressure carbon-dioxide gas line that would have to be relocated). The site selection process used gives the impression that politics had more influence rather than scientific weighing of the criteria. We believe the site selected has too many risk factors involved for it to be given NRC approval. *Comment #343-3*

Third, the availability of water for use at the proposed NEF, as reported in the DEIS, totally ignores the assessment of the Lea County Regional Water Plan, which projects a doubling of water usage by 2040, warning that there is not enough water in the Basin to maintain an annual diversion of this magnitude (since water is being withdrawn at a greater rate than it is being recharged). Droughts are becoming more common in the Southwest, especially as we are feeling the effects of global warming. It is irresponsible to build a new project that would be a water-intensive user under these circumstances. *Comment #343-4*

Fourth, we are concerned about toxic emission of the proposed plant, both air and water discharges, and disposition of toxic solid wastes. Have there been adequate studies conducted about the health impact of the atmospheric emissions, and whether their impact affects minority residents (or workers) (environmental justice issues). Are there plans to mitigate these toxic emissions? Would water contaminants leach into the groundwater (would liners for wastewater basins retain their integrity for the duration of the plant's operation)? Has the NRC made a ruling about the waste classification of depleted uranium, DU6, and how it should be properly isolated? Or is DU being considered a "resource?" Please clarify this for us. From definitions we have read in other materials, DU is considered a radioactive waste, and must be disposed of in a manner consistent with regulations for other radioactive waste. In addition, *Comment #343-5*

*Comment #343-6*

we feel that possible accidents, releasing toxic hexafluoride (UF6) to the area is an unacceptable risk. We are concerned about the health and welfare of workers and residents within the air shed of the proposed facility. Why endanger these people when there is no demonstrated need for the product which is proposed to be processed and made at the NEF.

Next, we are concerned that the economic impact on the community would be less favorable than the impression given in the DEIS. Since the NEF would be tax exempt for its life, the main benefit to the community would be from the salaries earned by the employees. Yet, the number of jobs generated appear to be half of what other types of businesses would create. It appears to us, on a practical level, that just on economic terms, it would be disadvantageous to have NEF located in Lea County. That coupled with probable health costs due to toxic emissions and toxic waste, adds up to an undesirable cost to the community, rather than an economic benefit. *Comment #343-7*

Even if the Cultural Resources, or cultural impact, were the only criteria of importance, it is unacceptable to destroy the seven archaeological sites that are within the proposed project area. Each of these sites is eligible to be listed in the National Register of Historic Places. *Comment #343-8*

If the NEF is needed, there are too many objections for it to be located in Lea County, New Mexico.

The NRC is supposed to protect the lives of the public, not be advocates for the nuclear industry. Too often we have interpreted the rulings of the NRC as being industry-supporting, at the expense of protecting the health of the public. *Comment #343-9*

Thank you for the opportunity to comment on the proposed NEF.

Patricia Birnie, Legislative Chair, Tucson Branch  
 Women's International League for Peace and Freedom

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Commenter 355

From: "Cyrus Reed" <cr@texascenter.org>  
To: <nrcprep@nrc.gov>  
Date: Fri, Jan 7, 2005 4:25 PM  
Subject: comments on DEIS -- Anna Bradford

Please accept these comments on the DEIS for the LES proposed site in New Mexico. I have done them in simple text (note pad) for ease. Please let me know if I need to also send in a hard copy by mail.

Thanks,

Cyrus Reed  
Director  
Texas Center for Policy Studies  
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January 7, 2005

Chief, Rules Review and Directives Branch  
Division of Administrative Services, Office of Administration  
U.S. Nuclear Regulatory Commission  
Mail Stop T6-D59  
Washington, DC 20555-0001

RE: Docket No. 70-3103; NUREG 1790, Draft Environmental Impact Statement for the Proposed National Enrichment Facility in Lea County, New Mexico

Dear Sirs:

As a 501-C-3 non-profit research and policy organization headquartered in Austin, Texas, the Texas Center for Policy Studies does not usually comment on DEIS's in other states, or in federal issues such as radioactive facilities. However, given the possible impact on Texas's aquifers, land and air, as well as the possible disposal of the waste resulting from the proposed Uranium Enrichment Facility, we feel compelled to offer these brief comments on the Draft Environmental Impact Statement in the above captioned matter. Please enter these comments into the official record of the proceeding.

We wanted to make two substantive comments on the DEIS, both of which we believe, necessitate either rejection of the present proposal or at the very least, a substantially better and more inclusive final EIS. The first issue involves the physical environment of the proposed site and the failure of the EIS to accurately consider this environment and the possible cumulative impact. The second related issue is the failure to accurately consider the WCS Texas Disposal option and its potential impacts since it would be located within a few miles of the site.

First of all, we believe there is not sufficient detail to the physical geographer of the site. In particular, the DEIS shortchanges a discussion of the potential effects of extreme weather conditions (e.g. high winds, tornados, flash floods, high heat) on operations and transportation related to the proposed LES/NEF. Only last year, a sudden rainfall prevented locals from leaving towns in the area due to the high water. While this may have been an unusual rain event, the data used from the Hobbs, NM rainfall data used as a basis for other parts of the analysis (DEIS, 3-13, Table 3-3) show that half of the maximum monthly measurements have occurred in the last twenty years, and three quarters of the minimum measurements occurred in the first ten years of record-keeping. This may indicate that rainfall in the area is generally increasing or could also indicate earlier record-keeping was faulty. In either case, the data suggests that using the 90-year "average" of the Hobbs Station may not be the scientifically correct one. We would suggest revisiting these rainfall measurements, and augmenting them with data from other stations nearby, and potentially "weighting" the analysis toward newer readings suggesting higher rainfall measurements, since rainfall measurements impact interpretations of runoff, surface and below surface hydrology.

Comment #355-1

Similarly, we do not believe the geohydrological assessment performed is accurate or sufficient. The analysis only considers the potential impacts of the site in the immediate area, but does not -- at least in terms of what is contained in the public DEIS -- look at cumulative impacts of the site -- with its associated infiltration and stormwater ponds -- the nearby oil and gas industries, a nearby rockcrusher, and perhaps most importantly, the interplay between the proposed site and WCS just next door. Although oil deposits are much deeper than the water bearing formations at issue, the presence of thousands of wells and numerous fault pathways that connect widely separated strata makes the hydrology of the site impossible to characterize without more extensive data. In effect, the DEIS acts as if the border with Texas and New Mexico is a geographic border, and does not adequately explore possible subsurface connections between Monument Draw and the West Platform to the South, nor the possible contamination of the Ogallala Aquifer to the east. Instead, we call on the EIS to conduct a full geohydrological assessment of the entire area, including portions of Texas, and to consider the cumulative impact of the industries in the area, including WCS.

Comment  
#355-2

We are particularly concerned that the type of red clay soil relied upon in the DEIS to prevent any substantial movement of material could be undermined both by the on-site water retention facilities, as well as by the possible disposal of mixed -- radioactive and hazardous -- waste at the WCS facility, allowing for the red clay soils to be breached. The DEIS clearly fails to identify these potentials.

Comment  
#355-3

Thus, in summary, the DEIS sheds no light on the potential for water to move through the NEF and nearby sites, such as WCS (or for that matter vice-versa). Because there are known faults in the area, and the site is located above the West Platform Fault Zone, a detailed study of potential pathways should be completed before a final EIS is issued. In addition to polluting the Ogallala Aquifer, water from the site may reach the Pecos River Valley surface water, groundwater from the Capitan Reef formation, and possibly other sources of fresh water in Texas. Again, we call for a full geohydrological assessment of the entire area, not just the site itself.

Comment  
#355-4

Our second and related concern is the failure to adequately explore the option to dispose of the depleted uranium at the WCS, and the potential impacts this could have on the site itself. There are simply too many holes and unknowns at present to accurately portray whether or not the waste could be disposed of at WCS, and whether such disposal might provide hazards to public health and the environment of both Texans living near the WCS sites, and even New Mexicans living just a few miles away from the WCS site.

There is considerable confusion in the community and within the DEIS itself as to whether WCS -- once permitted by TCEQ -- could take the waste and if so, how much of it. If the waste is indeed considered "low-level radioactive waste," WCS could -- in its permitted "compact" site -- take it all, since there are presently no volume limits. However, though there is the assertion that this depleted uranium is low-level waste, we do not believe current law supports this assertion. In several places, the DEIS asserts that depleted uranium is a Class A low-level radioactive waste (DEIS, @ 2-29, insert, lines 1-19) based upon language in 10 CFR, Part 61.55(a), which is the default provision for unclassified wastes. The determination should be thoroughly explained and justified by NRC before the license procedure continues. Although the same declaration was made in the EIS for LES' Claiborne Enrichment Center application, it has never been supported by NRC analysis commensurate with its significance. The NRC's default declaration that DU is a Class A low-level radioactive waste is misleading and should be revisited before waste disposition policy is defined for a uranium enrichment facility. The DEIS is setting a dangerously low standard of environmental protection when it assumes that shallow land burial of depleted uranium byproduct will have no significant impact upon the environment (for 4.5 billion years?). Again, the DEIS should determine what classification the waste would be and why or the factors determining its classification.

Comment  
#355-5

If, on the other hand, the DOE assumes responsibility of the waste once generated, and it is considered a federal DOE waste, it could be shipped to WCS to the federal waste site (again if permitted). In this case, the limits on volume could impact WCS's ability to take all the waste generated again depending upon their receipt of other types of waste at the site. In addition, depending upon definitions and standards, then

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the waste could either be deposited directly for disposal or be required to go through a deconversion facility before disposal. While one does not presently exist on site at WCS, getting one would only require an amendment to the permit.

Comment  
#355-5  
(cont.)

In any case, the disposal options discussed fail to identify what impacts the likely disposal of the waste in WCS will have in the area. In other words, the DEIS fails to evaluate the fact that waste generated by LES in Lea County, New Mexico may never leave the vicinity (although its disposition may be in Texas, not in New Mexico). We know from news reports that WCS and LES have already held discussions on the subject. This pattern of development associated with WCS/Andrews and southeast New Mexico suggests that it is unreasonable to assume that the proposed LES/NEF would not have cumulative impacts far beyond the level proposed in the DEIS, Section 4.4, pages 4-65 to 4-68. For this reason, the NRC should also re-evaluate the potential for cumulative impacts of the proposed LES/NEF and related disposal of waste at WCS.

Comment  
#355-6

TCPS appreciates the opportunity to comment on this DEIS and wants our comments to be entered into the record. We believe that the permitting and operation of the LES/NEF site, as well as the likely disposal of waste generated in Andrews County, Texas at the WCS site will have major impacts on public health and the environment in the area and would urge you to reject the application. At the very least, we hope that the final EIS will provide a geohydrological analysis of the entire area -- not just the site -- and the very real possibility that all waste generated will be stored and disposed of within a few miles of the site will be considered as part of a real consideration of cumulative impacts.

Sincerely,

Cyrus Reed  
Director



Commenter 356

January 7, 2005

Chief, Rules & Directives Branch  
U.S. Nuclear Regulatory Commission  
Mail Stop T6-D59  
Washington, D.C. 20555-0001

Re: Comments on the Draft Environmental Impact Statement for the Proposed Uranium Enrichment Facility in Lea County, New Mexico (NUREG-1790); Docket No. 70-3103

To Whom it May Concern:

J-195

It is the contention of the Lone Star Chapter of the Sierra Club that the NRC's Draft EIS does not adequately address the potential problems with the proposed uranium enrichment plant.

Comment #356-1

There are several areas where the NRD's determination that the environmental impacts of the facility would be small to moderate seems unwarranted. In addition, the opinion in the Draft EIS that there is a need for this facility because of an "expected ... increase in demand for low-enriched uranium" is not supported by the facts.

Comment #356-2

Considering the enormous problems this country is already facing regarding disposal of the wastes generated by nuclear power, as well as the potential security threats associated with this industry, it is incumbent upon the NRC to exercise extreme caution in its considerations of this proposal.

Comment #356-3

Regarding the classification of the waste that will be produced by this facility, it is disturbing that the NRC is essentially declaring this waste will be Class A low-level radioactive waste (LLRW) without the absolutely necessary analysis and deliberation. As you are aware, there is currently a license application with the Texas Commission for Environmental Quality for a LLRW disposal facility in far west Texas. The rules for the operation of that facility were written to provide for the wastes currently classified as low-level and do not in any way account for the disposal of depleted uranium. As the Sierra Club opposes the creation of a private LLRW dump in Texas because of the health, safety, and environmental threats it poses, we certainly would not concur with a specious assignment of a "low-level" label to the DUF6 waste.

Comment #356-4

The issue of groundwater contamination by this facility is of extreme concern to us. The NRC's disregard of the potential for groundwater contamination as a result of seismic activity, in addition to its apparent assumption that the liners employed to impound the contents of the facility's wastewater basins will retain their integrity for the duration of the facility's operation,

Comment #356-5

clearly indicate the inadequacy of the Draft EIS. Indeed, it is unclear what the justification for choosing this site as appropriate for a uranium enrichment facility is, as other sites were rejected due to earthquake risks on par with Lea County's. The Draft EIS must include a regional analysis of threats to groundwater - water flows do not stop at state lines.

Comment #356-6  
Comment #356-7

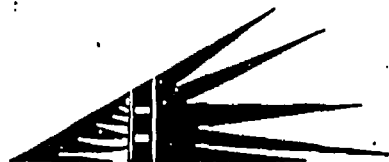
Water is a critical resource, particularly in this very dry part of the country. Both Texas and New Mexico have water plans that assess the current and future uses of this life-sustaining element. In this area (eastern New Mexico and west Texas), reliance on groundwater sources is already creating the potential, even likelihood, of shortages in the near future. Any water required by this new industry will only compound this problem.

Comment #356-8

These are only some of the issues regarding which we maintain that the Draft EIS is incomplete or mistaken in its conclusions. The Lone Star Chapter of the Sierra Club requests that the NRC's staff recommendation for approval of the license for the uranium enrichment facility be withdrawn and the EIS be revised and expanded to address these and other valid concerns.

Comment #356-9

Sincerely,  
*Margot Clarke*  
Margot Clarke  
Outreach Coordinator  
Sierra Club, Lone Star Chapter



Commenter 358

**SOUTHWEST RESEARCH AND INFORMATION CENTER**

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January 7, 2005

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

RE: Docket No. 70-3103  
DEIS Comments

Dear People,

Southwest Research and Information Center (SRIC) is a private nonprofit, educational organization based in Albuquerque, New Mexico, that has been involved in issues related to uranium development in New Mexico for decades. As a result of its more than 30 years of work, including analyzing and experiencing the enormous and continuing extremely negative impacts of uranium mining and milling on people's health and the water, soil, air, and spiritual environment in New Mexico, SRIC has great interest in the proposed LES Gas Centrifuge Uranium Enrichment Facility.

SRIC submitted scoping comments for NRC's environmental impact statement (EIS) of the LES plant. SRIC submits the following comments related to the original DEIS and the "redacted" DEIS, which are grossly legally and technically deficient.

1. The Draft Environmental Impact Statement (DEIS) is legally insufficient; a supplemental DEIS must be prepared and made available for at least 45 days of public comment

Under NEPA caselaw, it is well established that in an EIS, the agency must "take a hard look at the environmental consequences before taking a major action." *Baltimore Gas & Electric Co. v. Natural Resources Defense Council, Inc.*, 462 U.S. 87, 97 (1983), citing *Kleppe v. Sierra Club*, 427 U.S. 390, 410, n. 21 (1976).

Comment #358-1

It [The EIS] ensures that the agency, in reaching its decision, will have available and will carefully consider detailed information concerning significant environmental impacts; it also guarantees that the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision. *Robertson v. Methow Valley Citizens Council*, 487 U.S. 332, 349 (1989).

Publication of an EIS, both in draft and final form, also serves a larger informational role: It gives the public the assurance that the agency "has indeed considered environmental concerns in its decisionmaking process," *Baltimore Gas & Electric Co., supra*, at 97, and perhaps more significantly, provides a springboard for public comment, see L. Caldwell, Science and the National Environmental Policy Act 72 (1982). *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989).

Certainly, any adequate DEIS must include a "hard look" analysis of public and occupational health impacts from accidents during operations at the enrichment plant. Yet, the "redacted" DEIS has no such analysis. Thus, the public does not have the required information on such impacts and cannot appropriately comment except to point out that fatal deficiency. A supplemental DEIS must be issued to correct that fatal flaw.

Comment #358-1 (cont.)

Any adequate DEIS must have a "hard look" analysis of the impacts of transportation accidents. Yet the "redacted" DEIS has no such analysis. Thus, the public does not have the required information on such impacts and cannot appropriately comment except to point out that fatal deficiency. A supplemental DEIS must be issued to correct that fatal flaw.

Any adequate DEIS must include a "hard look" analysis of the impacts of the nearby natural gas and CO<sub>2</sub> pipelines. Yet the "redacted" DEIS has no such analysis, although it briefly mentions that the site has "an underground carbon dioxide (CO<sub>2</sub>) pipeline (p. 2-2)." The "redacted" DEIS has even eliminated several figures that show the existing nearby pipelines, thus leaving the totally inaccurate implication that no such pipelines exist and that there is no hazard from such pipelines. Thus, the public does not have the required information on such impacts and cannot appropriately comment except to point out that fatal deficiency. A supplemental DEIS must be issued to correct that fatal flaw.

Those and other deficiencies are especially egregious since the issues were identified in SRIC's scoping comments (and perhaps by other commentors). In its Notice of Intent, NRC committed to analyzing "[p]otential public and occupational consequences from construction, routine operation, transportation, and credible accident scenarios (including natural events)." 69 *Federal Register* 5375 (February 4, 2004). On page 18 of the Scoping Summary Report (DEIS, Appendix A), the NRC committed: "The draft EIS will analyze the potential environmental impacts resulting from credible accidents at the NEF." The "redacted" DEIS does not meet those commitments or the legal requirements. Thus, the public is misled into thinking that the environmental impacts of credible accidents are analyzed in the DEIS, when, in fact, no such analysis is provided.

The public cannot even know which DEIS it is commenting on -- the original DEIS issued in September 2004 or the "redacted DEIS" issued in December 2004. SRIC has asked that the following matters be made public in an email of December 29, 2004:

Comment #358-2

1961-1

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1. The criteria used to remove "potentially sensitive information" (the phrase used in the December 21 Federal Register notice). No criteria or rationale is included in the "redacted" DEIS. The public should be able to comment on the criteria in commenting on the DEIS.

2. What is the status of the September 2004 DEIS? The "redacted" version has much less information and analysis than the September 2004 version that it effectively replaces..

3. Will NRC make available to the public all of the comments received on the DEIS, including those comments related to "redacted" portions of the DEIS? If not all public comments will be made available, what is NRC's legal authority to withhold such comments? Comment #358-2 (cont.)

4. How will NRC respond to comments on the DEIS related to "redacted" portions? For example, are comments related to "potentially sensitive information" deemed unavailable to the public or outside of the scope of the DEIS?

Anna Bradford of the NRC called Don Hancock on Tuesday, January 4, 2005 in response to those requests. But she provided no response to the requests other than to say that the comment period will not be extended beyond January 7, 2005. SRIC reiterates its objections to the illegally and improperly short 14-day comment period on the "redacted" DEIS and the less than 45-day comment period when sources were available on the original DEIS.

NRC should answer those questions in releasing a supplemental DEIS for public comment, as the public should have an opportunity to comment on NRC's rationale for "redacting." Under NRC's rules, a minimum of a 45-day comment period must be provided on the DEIS and any supplemental DEIS. 10 CFR 51.73.

Further, as will be discussed below, the original DEIS also does not meet the requirements for an adequate DEIS. Once again, a supplemental DEIS must be released for public comment.

2. The "redacted" DEIS is not a legally or technically adequate DEIS, and there is no adequate basis given for the redactions.

Many pages of the original DEIS have been "redacted." According to the "redacted" DEIS, the portions were eliminated "under 10 CFR 2.390." However, that regulation makes no mention of NEPA documents, so the NRC has not provided an adequate basis for removal of portions of the DEIS based on NEPA. NRC should make its screening criteria available with the "redacted" DEIS so that the public can understand the basis for removals and comment on both the criteria and whether specific redactions are warranted. While Tim Johnson of the NRC staff said in a telephone conversation with Don Hancock on December 29, 2004 that the basis was subsection (d) of that regulation, that provision in fact does not apply to much of the material that has been removed from the DEIS. For example, how is an earthquake accident analysis related to "commercial or financial information" under 10 CFR 2.390(d)? Comment #358-3

There is nothing in NRC's own NEPA regulations (10 CFR 51) that allow for having two DEIS's on the same facility, nor for "redacting" a DEIS in the way that it has been done. Comment #358-3 (cont.)

In releasing a supplemental DEIS, the NRC should describe the specific basis for any "redactions" or failures to include required environmental analyses. It should also describe any other situations in which it has released two versions of a DEIS for public comment at the same time, since SRIC believes that there is no other circumstance that such a situation has occurred. SRIC believes that there has been no adequate basis expressed to remove any of the information in the "redacted" DEIS.

3. The "redacted" DEIS does not discuss many significant environmental impacts and it does not include required mitigation measures to address potential impacts.

Again, caselaw is clear that mitigation measures must be included and that the public must be able to comment on them. Comment #358-4

To be sure, one important ingredient of an EIS is the discussion of steps that can be taken to mitigate adverse environmental consequences. [footnote omitted] The requirement that an EIS contain a detailed discussion of possible mitigation measures flows both from the language of the Act and, more expressly, from CEQ's implementing regulations. Implicit in NEPA's demand that an agency prepare a detailed statement on "any adverse environmental effects which cannot be avoided should the proposal be implemented," 42 USC § 4332(C)(1)(ii), is an understanding that the EIS will discuss the extent to which adverse effects can be avoided. See D. Mandelker, NEPA Law and Litigation § 10:38 (1984). More generally, omission of a reasonably complete discussion of possible mitigation measures would undermine the "action-forcing" function of NEPA. Without such a discussion, neither the agency nor other interested groups and individuals can properly evaluate the severity of the adverse effects. Robertson at 351-352.

Despite that legal requirement, the "redacted" DEIS has no mitigation discussion or analysis of some issues, and a very truncated analysis of those for which data have been removed.

4. The "redacted" DEIS is incomplete, inaccurate, and misleading, is technically and legally inadequate; a revised supplemental DEIS must be issued for public comment.

Among the many examples of incomplete, inaccurate, and misleading portions are the following: Comment #358-5

\* On page 2-4, the "redacted" DEIS states that the "[p]rincipal structures within the proposed NEF are shown in Figure 2-4." However, there is no Figure 2-4, as page 2-5 of the "redacted" DEIS states: "Figure removed under 10 CFR 2.390." Thus, the text of the document is inaccurate, and the public is not provided that drawing of the site. Without such a figure, among other things, the public cannot adequately comment on the layout of the facility, including the possibility of structures conflicting with each other in ways that could cause accidents, measures that could be taken to mitigate those accidents, and to identify overall environmental impacts of the facility layout.

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\* On page 2-6, the "redacted" DEIS states that the "UBC Storage Pad (Item 1 in Figure 2-4) would be constructed on the north side of the controlled area to store transportation cylinders and UBCs." Of course, as noted above, there is no Figure 2-4 Item 1. There is no figure showing the controlled area.

\* Repeatedly on pages 2-6, 2-7, 2-8, 2-9, and 2-10, the "redacted" DEIS refers to "Items" on "Figure 2-4" even though no Figure 2-4 is included in the document. Thus, the "redacted" DEIS is repeatedly inaccurate in what it states.

\* On page 2-9, the "redacted" DEIS states that a "high-pressure CO<sub>2</sub> pipeline crosses the site diagonally from the southeast to the northwest. It would be relocated during the site preparation for safety considerations." The "redacted" DEIS contains no figure showing the location of the existing high-pressure CO<sub>2</sub> pipeline nor does it include a figure showing where that pipeline will be relocated. Thus, the public cannot appropriately comment on whether the relocation should be done to a different location, whether the relocated pipeline would pose safety considerations, and whether it could be relocated to other locations to better mitigate against any adverse impacts. *Comment #358-5 (cont.)*

\* Page 2-9 of the "redacted" DEIS states that Figure 2-6 is "Construction Area for the Proposed NEF Site." However, there is no actual Figure 2-6, which is "removed under 10 CFR 2.390." Thus, the "redacted" DEIS is inaccurate, and the public is not able to appropriately comment on the construction area, and whether construction could be handled to reduce adverse environmental impacts and on mitigation measures that should be taken.

\* On page 3-2, the "redacted" DEIS states that "[a]n underground natural gas pipeline is located along the southern property line (Figure 3-2)." However, there is no Figure 3-2, as it is "removed under 10 CFR 2.390." Thus, the "redacted" DEIS is inaccurate. The text could have referred to Figure 3-21, which does show the location of the natural gas pipeline, but it does not. Neither is there any explanation of why Figure 3-2 is removed and Figure 3-21 is not.

\* On page 4-41, line 1, the "redacted" DEIS contains a sentence fragment that makes no sense. The first part of the sentence is on page 4-40 and has been "removed under 10 CFR 2.390." There is no explanation of why the first part of the sentence is removed and the last part is not. But the result is that the "redacted" DEIS is incomplete and inaccurate, and the public cannot comment other than to note that the sentence makes no sense and that required information is missing from the "redacted" DEIS.

\* On page 4-57, the "redacted" DEIS states that Tables 4-17 and 4-18 show the environmental impacts from conversion of DUF6. However, there is no table 4-18, which is "removed under 10 CFR 2.390." Thus, the "redacted" DEIS is inaccurate, and the required information about the impacts of depleted uranium conversion is not included. The public is not provided that information or the data related to possible impacts from accidents at the facility.

\* On page 6-1, the "redacted" DEIS states that figure 6-1 show the locations of proposed release locations for gaseous and liquid effluents. However, there is no figure 6-1, which has been "removed under 10 CFR 2.390." Thus, the "redacted" DEIS is inaccurate, and the public is not provided information on the location of effluent releases and cannot comment on such locations or the kind of mitigation that could occur by relocating or eliminating such locations.

\* The table of contents of the "redacted" DEIS shows that from pages C-14 to C-29 there is discussion of public and occupational health impacts from accidents during operations.

However, 13 of those 16 pages are blank - "removed under 10 CFR 2.390." And major portions of the remaining three pages also are blank, "removed under 10 CFR 2.390." Thus, the "redacted" DEIS is inaccurate and contains no description of operational accidents, no analysis of the impacts of such accidents, no information about the methodology and used to generate any analysis. Thus, the public is able only to point out that the LES facility is obviously extremely dangerous, so much so that neither the kind of accidents - natural or human-made - nor their results can be shared with the public. The only legitimate conclusion for the public to make is that the facility is obviously too dangerous to be licensed in New Mexico or elsewhere. *Comment #358-5 (cont.)*

5. The original DEIS and the "redacted" DEIS do not consider all reasonable alternatives, as required by NEPA.

Neither the original DEIS nor the "redacted" DEIS consider the alternative of limiting on-site storage of Uranium Byproduct Containers (UBC) to one year. As briefly mentioned in the DEIS on page 4-52, LES has committed to the State of New Mexico that UBCs will not be stored at the LES facility indefinitely. To ensure that waste does not remain stored on-site indefinitely, the DEIS should analyze the alternative of limiting the amount of UBC storage to one year of production. Since the DEIS states that full production would generate 7,800 metric tons per year or 627 UBCs per year (p. 2-27), the DEIS should consider the alternative of limiting the storage capacity of the UBC Storage Pad to 627 UBCs. Such an analysis should include environmental impacts, including occupational and public impacts, as well as impacts on the operations of the facility. Such impacts could be compared with similar impacts of 30-year storage capacity or other more limited storage options. *Comment #358-6*

The DEIS should also consider the alternative of purchasing low-enriched uranium from foreign sources, an alternative which the DEIS and the "redacted" DEIS reject (p. 2-39). U.S. nuclear power plants have been purchasing low-enriched uranium from foreign sources for years, and the DEIS does not indicate that there have been any problems from that option. Indeed, such a practice will continue for many years, whether or not the LES facility is built. Moreover, the basis in the DEIS and the "redacted" DEIS for rejecting the alternative is the "national energy policy objective" from the Department of Energy (DOE) Report to Congress on Maintenance of Viable Domestic Uranium Conversion and Enrichment Industries. However, that report does not support the development of the LES plant. That report's enrichment recommendation is to "build an advanced centrifuge demonstration plant at Portsmouth" and "to place the Portsmouth GDP on cold standby for a 5-year period (p. 21)." Those actions have been taken. No where... does the report state a policy of LES building an enrichment plant in Eunice, New Mexico or any other location. Thus, the rationale used in the DEIS and "redacted" DEIS is spurious. The alternative of purchasing low-enriched uranium from foreign sources is reasonable and must be fully considered. *Comment #358-7*

Moreover, it is not reasonable to state that allowing European companies (who own LES) to build LES in Eunice, New Mexico could ever be considered a "domestic" enrichment source. If NRC maintains that a domestic uranium enrichment plant is necessary, it should consider the proposed USEC centrifuge plant at Portsmouth as a reasonable alternative to LES. *Comment #358-8*

An additional alternative that must be considered, which is not, and was included in SRIC's scoping comments is the alternative of storage of up to 15,727 UBCs beyond the operational lifetime of the facility. Since there remains no viable alternative storage or disposal location for the DUF<sub>6</sub> from the LES facility, this alternative and its environmental impacts must be fully analyzed. SRIC in no way endorses this alternative as a preferred one, because it poses unacceptable long-term risks to New Mexico, but it is a reasonable alternative, and neither the DEIS nor the "redacted" DEIS consider the alternative nor describe why it should not be considered. *Comment #358-9*

Conversely, NRC's preferred alternative is not reasonable, even from an economic standpoint. The "market" does not consider LES to be needed, since without the \$1.8 billion Industrial Revenue Bond, the facility admittedly would not be built because there would be no financing. The supplemental DEIS must discuss how LES, which is not a financially viable alternative is NRC's preferred alternative. *Comment #358-10*

7. The original DEIS and the "redacted" DEIS do not discuss important mitigation measures. As noted in #3 above, the "redacted" DEIS is grossly deficient in not providing information on many issues and providing inadequate or no discussion of possible mitigation measures.

The original DEIS is also seriously deficient. For example, limiting UBC storage pad capacity to 627 UBC (one year's production) would mitigate concerns about long-term storage of UBCs at the LES facility after the end of the operating license and mitigate the environmental, occupational and public risks associated with UBC storage. Such a mitigation measure must be considered in the supplemental DEIS. *Comment #358-11*

8. The discussion and analysis of waste conversion and disposal is totally inadequate in both the original DEIS and in the "redacted" DEIS.

New Mexico has the world's first geologic repository, the Waste Isolation Pilot Plant (WIPP), and the waste and contamination from the production of about 50% of the U.S. uranium supply over the past 60 years. As a result, New Mexicans are very concerned about any additional long-term storage or disposal sites. In addition to those strong citizen concerns, as already noted, Governor Richardson has stated that there can be no long-term waste storage or disposal in New Mexico. Neither the original nor the "redacted" DEIS discuss that historic role that New Mexico plays, another deficiency in the documents. *Comment #358-12*

Although both the original DEIS and the "redacted" DEIS provide some discussion of conversion and disposal facilities, it is incomplete and totally inadequate. First, the DEIS states that NRC considers the DUF<sub>6</sub> from LES "to be a Class A low-level radioactive waste as defined in 10 CFR 61.55(a)(6) (p. 2-27)." Neither the DEIS nor the "redacted" DEIS provide any citation for that conclusion. SRIC does not agree with that conclusion. Importantly, SRIC notes that in neither this DEIS nor in any other NRC EIS has such a conclusion described and analyzed. SRIC believes that NRC must conduct a rulemaking, including an EIS process to support whatever decision that it makes about the classification of waste from LES and other similar facilities. *Comment #358-13*

Second, in the original DEIS and the "redacted" DEIS, "it is assumed that the proposed conversion facility would use the same technology adapted for use by DOE in its conversion facilities (p. 2-28)." There is no adequate basis for such a conclusion. It has not been definitely established that the same technology would be used. Thus, the supplemental DEIS must consider the option that the LES conversion facility would use a different technology and fully describe the conversion technology to be used for LES waste as compared with that from the existing U.S. enrichment plants. *Comment #358-14*

Third, the original DEIS and the "redacted" DEIS presume that a private sector conversion facility is possible (p. 2-29). There is no basis for such a conclusion as there has never been such a facility in the United States, as the original DEIS and the "redacted" DEIS acknowledge (p. 2-29). The only two conversion facilities being planned are DOE funded facilities at Paducah, Kentucky and Portsmouth, Ohio. Thus, it is not a reasonable alternative to consider that they would be a private sector conversion facility, especially since the financing of such a facility is not included in the cost estimates for LES. Therefore, the private sector conversion facility is, at best, a speculative option and should not be included in the supplemental DEIS unless LES make a firm financial guarantee to finance such a facility. *Comment #358-15*

Fourth, the original DEIS and the "redacted" DEIS include as an option using the two planned DOE conversion facilities at Paducah, KY and Portsmouth, Ohio (p. 4-55). The Paducah facility is slated to operate until 2031 to convert the existing wastes there. Thus, it would take more than ten years to convert all of the LES wastes, if it could do so. Portsmouth would operate until 2024 and it would take until about 2040 to convert all of the LES wastes, if it could do so. In either case, UBCs could be left at LES well after the end of the 30-year license in 2036. This possibility and its impacts must be fully discussed in the supplemental DEIS, or the supplemental DEIS must describe in detail what would be required to avoid such a possibility. In addition, the supplemental DEIS must discuss the changes that would be needed in the conversion technology used at those two facilities in order for them to be able to handle LES's wastes, which will be different in composition compared with those wastes to be converted from the existing enrichment plants. SRIC also understands that LES has not even determined what conversion technology could be used (and which technologies could not be used) for the LES wastes. All of these matters must be discussed in the supplemental DEIS. *Comment #358-16*

Fifth, the original DEIS and the "redacted" DEIS include a private sector option that is not in the LES application - Option 1b, locating a conversion facility nearby. There is no basis to include such an option, and it must be eliminated from the supplemental DEIS. There is no proposal for such a facility. It has not been demonstrated that there is a suitable site for such a facility and neither the original DEIS nor the "redacted" DEIS include any such analysis. *Comment #358-17*

Sixth, there is no viable disposal location for wastes from LES. As noted above, the classification of the waste is in doubt. The original DEIS and the "redacted" DEIS state that the current viable disposal facilities are Hanford or Envirocare. However, neither document discuss the fact that the State of Utah has prohibited 11(e)(2) waste from Fernald from coming to *Comment #358-18*



Envirocare, so it is clearly possible that LES waste would not be allowed at Envirocare. Moreover, if, as noted above, there is no viable private conversion facility, Hanford also could not take the waste. Moreover, under the DOE conversion option, given the problems with the State of Utah regarding Envirocare; the only possible disposal option is the Nevada Test Site. But again, the State of Nevada has not allowed 11(e)(2) waste from Fernald, and it is not at all assured that it would accept LES waste. Indeed, neither the original DEIS nor the "redacted" DEIS include any documentation showing that either disposal facility and their affected states would accept waste from LES or that they even consider DUF<sub>6</sub> to be "low-level waste" and acceptable for disposal. Moreover, the original DEIS and the "redacted" DEIS dismiss the LES preferred disposal option in "an exhausted uranium mine (the Cotter Mines in Colorado)." (LES Environmental Report, Page 4.13-8). The stated rationale is that no existing mine is currently licensed (p. 2-31). Based on that rationale, clearly Barnwell and WCS must be excluded from consideration because they also are not currently licensed to take LES waste.

Comment  
#358-18  
(cont.)

Seventh, the original DEIS and the "redacted" DEIS include Waste Control Specialists (WCS) as a possible disposal facility (p. 2-32). There is no basis to include that facility. It was not included in the LES application. It cannot now legally accept LES wastes. It does not meet the spirit or letter of the commitment to dispose of LES's wastes outside of New Mexico, since the site is immediately adjacent to New Mexico and its impacts would affect New Mexico. The supplemental DEIS should exclude the WCS facility for its discussion and analysis.

Comment  
#358-19

9. The original DEIS and the "redacted" DEIS discussion and analysis of water quantity issues are grossly inadequate.

As an initial matter, the original DEIS and the "redacted" DEIS provide contradictory information about the amount of water that LES would use. Page 4-15 states that LES could use up to "2.63 million cubic meters (695 million gallons) of the Ogallala waters." Page 4-24 states that LES "would use up to 2.6 million cubic meters (687 million gallons) of water from the Ogallala Aquifer during its operation." While for the NRC, 8 million gallons of water may be insignificant, it is very significant for semi-arid New Mexico, where the State of New Mexico has had to pay billions of dollars to Texas for compensation for Pecos River water not delivered to Texas and where people have been killed for much less water than that.

Comment  
#358-20

The estimates are not limits, so the supplemental DEIS should discuss the maximum amounts of water that LES could use and their impacts. The original DEIS and the "redacted" DEIS state that the peak water use requirements for LES are 2,040 cubic meters (539,000) gallons per day (pp. 2-14 and 4-14). Since LES must operate continuously, the peak use for an entire year (365 days) is 744,600 cubic meters (196.735 million gallons). Given that the original DEIS and the "redacted" DEIS state that LES would operate at full capacity for 14 years (p. 2-2), those 14 years at the peak use 10.424 million cubic meters (2.754 billion gallons) or four times as much as the original DEIS and the "redacted" DEIS estimate. Given the proposed 30-year license (and there would be water use during those additional 16 years), the supplemental DEIS must discuss and analyze the impacts of using at least four times more water than currently estimated.

Comment  
#358-21

Moreover, that peak use is about 40 percent of the total daily usage of Eunice (5,600 cubic meters per day - page 2-14). Since there is no current requirement that LES receive its water from both municipalities, the supplemental DEIS must analyze the impacts of the peak LES use on the Eunice system. Such impacts would be major and unsustainable, and the supplemental DEIS should so state.

Comment  
#358-22

The original DEIS and the "redacted" DEIS do not discuss the impacts on LES operations of a reduction or cutoff of water use for hours or days. The supplemental DEIS must consider that realistic possibility. Alternatively, the supplemental DEIS must state what measures will be taken to ensure a redundant water supply (onsite wells, in addition to the two proposed water pipelines) and its requirements (permitting, for example) and impacts.

Comment  
#358-23

Comment  
#358-24

10. The original DEIS and the "redacted" DEIS use a grossly inaccurate funding requirement for waste disposal.

New Mexico has great experience with operators of uranium facilities not providing adequate funding for decommissioning and waste disposal. The private uranium mines, mills, and tailings sites in the state did not provide adequate funding, so federal and state funding has been required for the decommissioning of those sites. And many of the sites are still not adequately remediated, decades after their use. That results in continuing water contamination, air contamination, and health effects of thousands of people that have not been funded. Thus, waste disposal is an important issue, not only that it be done outside of the State (as required by the governor), but also that it be adequately funded to ensure that it is paid for and done well, and does not constitute a future burden on federal and state taxpayers.

Comment  
#358-25

The original DEIS and the "redacted" DEIS use LES's \$5.50 per kilogram of uranium funding estimate (p. 7-4). As an initial matter, the supplemental DEIS should use a more complete citation method, since the two sources are not easily available. While SRIC does have a copy of the LES Environmental Report, that document is three volumes and hundreds of pages. The basis for that \$5.50 per kilogram of uranium funding amount is not readily seen in that document, for example in Section 3.12 regarding waste management and in Section 7.4 Cost-Benefit analysis. The other source - June 4, 2004 letter from James Curtiss - is apparently not available, as SRIC has attempted without success to find it in the NRC online document sources.

Comment  
#358-26

SRIC's understanding is that the \$5.50 per kilogram estimate is based on Urenco's European experience, which is not applicable to LES. Among other things, that number does not include all costs of conversion and disposal. Additionally, European costs and regulatory requirements are different than in the U.S.

In the supplemental DEIS (not just in the Safety Evaluation Report as is stated on page 7-4), there must be a complete description and analysis of waste disposal costs. More realistic and higher cost (SRIC estimates that a doubling of the cost is likely) estimates must be used and justified in detail, so that the public can fully comment on the adequacy and reliability of those estimates and the funding mechanisms that will be required.

Comment  
#358-27

11. In addition to the inadequate and illegal "redacted" DEIS, other source documents are not available.

As noted in #4 above, the "redacted" DEIS is totally inadequate and does not provide required information to the public. As noted in #10 above, at least one important source document on waste disposal costs is unavailable. Many other documents cited as sources are not available to SRIC and other members of the public as there is no public document room in New Mexico and the electronic public document room has been unavailable for much of the comment period for the original DEIS and the "redacted" DEIS.

Comment  
#358-28

All documents used as sources must be available to the public for at least the required 45-day comment period on the supplemental DEIS.

12. The impacts of LES would not be "small to moderate," they are so major that the public cannot be appraised of the impacts.

The original DEIS and the "redacted" DEIS state repeatedly in Chapter 4 that the impacts of LES would be "SMALL" or "SMALL to MODERATE." Much of the discussion and analysis of important impacts - operational accidents and transportation - is totally missing and serious deficient in the "redacted" DEIS. Some of those instances have been noted above.

Comment  
#358-29

The original DEIS states that potential chemical consequences from severe railroad accidents for DUF6 is "adverse health effects" for 28,000 in urban areas, such as Albuquerque. That estimate is cited to the Paducah and Portsmouth EISs. SRIC believes that generic estimate is low. But it certainly is not specific to LES's waste and railway and meteorological conditions in New Mexico. SRIC, therefore, believes that they are underestimates. Nonetheless, 28,000 people suffering health effects in Albuquerque or any other urban area should not be considered "SMALL to MODERATE" (p. 4-40).

Comment  
#358-30

The original DEIS states that health effects from a hydraulic rupture of a UF<sub>6</sub> cylinder would be a 12,000 person-rem collective dose (p. 4-49). Again, the original DEIS considers that to pose "SMALL to MODERATE" impacts. Since that would be one of the largest nuclear releases in the history of New Mexico, the public and State of New Mexico would not consider it to be less than a MAJOR impact. (Even the original DEIS states that 7 latent cancer fatalities would have HIGH consequences.) The supplemental DEIS should compare a release of that amount with releases from other nuclear and uranium-related facilities within the state to provide a context for citizens as to the relative nature of such an accident.

Comment #358-31

The actual effect of any such accidents would be a strong public outcry to shut the facility down, even if that was not NRC's position at that time. The supplemental DEIS should consider not only the health effects, but also the economic impacts of such an accident, and compare that with other accidents that have occurred at licensed NRC facilities, including Three Mile Island-II.

Comment #358-32

Further, the cumulative effects of such accidents is not captured by the analysis provided. The supplemental DEIS should include an adequate cumulative effects analysis, including both

Comment  
#358-33

chemical and radioactive health effects, as well as economic and socioeconomic (including public perception) impacts. *Comment #358-33 (cont.)*

Clearly, the LES facility is too dangerous to be built and operated in New Mexico or any other location, it is not needed, and it is not financially viable. The supplemental DEIS should reach the same conclusion.

*Comment #358-34*

Thank you for your publication of these comments and full consideration of all of these issues.

Sincerely,



Don Hancock

Commenter 365

From: Don Hancock <sricon@earthlink.net>  
 To: <nrcprep@nrc.gov>  
 Date: Wed, Dec 29, 2004 12:11 PM  
 Subject: Docket No. 70-3103 - Request for extension of time

Dear People,

Southwest Research and Information Center (SRIC) is a private nonprofit, educational organization based in Albuquerque, New Mexico, that has been involved in issues related to uranium development in New Mexico for decades. As a result of its more than 30 years of work, including analyzing and experiencing the enormous and continuing extremely negative impacts of uranium mining and milling on people's health and the water, soil, air, and spiritual environment in New Mexico, SRIC has great interest in the proposed LES Gas Centrifuge Uranium Enrichment Facility. SRIC submitted scoping comments for NRC's environmental impact statement (EIS) of the LES plant.

In response to your Federal Register notice of December 21, 2004 (page 76485), SRIC has examined the "redacted" LES DEIS on your website. SRIC requests at least a 30-day extension of the comment period, beyond the approximately two weeks (until January 7, 2005) being provided.

Comment #358-35

Moreover, the comment period extension should be from the time that NRC makes publicly available the following information:

Comment #358-36

1. The criteria used to remove "potentially sensitive information" (the phrase used in the December 21 FR notice). No criteria or rationale is included in the "redacted" DEIS. The public should be able to comment on the criteria in commenting on the DEIS.

Comment #358-37

2. What is the status of the September 2004 DEIS? The "redacted" version has much less information and analysis than the September 2004 version.

Comment #358-38

3. Will NRC make available to the public all of the comments received on the DEIS, including those comments related to "redacted" portions of the DEIS? If not all public comments will be made available, what is NRC's legal authority to withhold such comments?

Comment #358-39

4. How will NRC respond to comments on the DEIS related to "redacted" portions? For example, are comments related to "potentially sensitive information" deemed unavailable to the public or outside of the scope of the DEIS?

Thank you for your prompt response to this request.

.....  
 Don Hancock  
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 PO Box 4524  
 Albuquerque, NM 87196-4524  
 (505) 262-1862  
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Chief, Rules and Directives Branch  
 U.S. Nuclear Regulatory Commission  
 Mail Stop T6-D59  
 Washington, D.C. 20555-0001

Re: Comments on the Draft Environmental Impact Statement for the Proposed National Enrichment Facility in Lea County, New Mexico (NUREG-1790); Docket No. 70-3103

To Whom It May Concern:

The NRC supposes the environmental impacts from building and operating a uranium enrichment facility in Lea County would be "moderate" at worst. Seven archeological sites would be affected.

Comment #365-1

Lea County is possibly over a fault, and is in a seismically vulnerable place.

Comment #365-2

The safety and widespread promise of wind and solar power makes nuclear reactors obsolete. We are already incapable of safely handling old nuclear reactor wastes.

Comment #365-3

The water required for this project will certainly not be available, neither now nor in the future.

Comment #365-4

The project would be exempt from taxation and offer a handful of jobs to local citizens.

Comment #365-5

The danger of contaminating land, air and water by the emission of tons of carbon monoxide, nitrogen dioxide, and volatile compounds is not acceptable to American citizens. An accidental release of uranium hexafluoride would be devastating.

Comment #365-6  
 Comment #365-7

The National Environmental Policy Act requires that environmental impacts be discovered, revealed, and taken into consideration before approval of a project of this nature.

Comment #365-8

We believe the national Enrichment Facility will not pass the test.

Comment #365-9

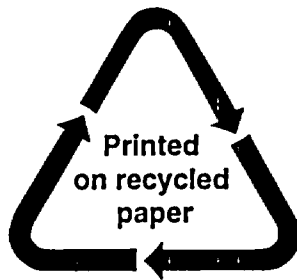
Please enter these comments into the official record on this proceeding.  
 Sincerely,

*Jan Saecker*

Jan Saecker  
 W2771 Circle Drive  
 Markesan WI 53946

J-202

<p>NRC FORM 335 (9-2004) NRCMD 3.7</p> <p style="text-align: center;"><b>BIBLIOGRAPHIC DATA SHEET</b> <i>(See instructions on the reverse)</i></p>	<p style="text-align: center;">U.S. NUCLEAR REGULATORY COMMISSION</p> <p>1. REPORT NUMBER <i>(Assigned by NRC, Add Vol., Supp., Rev., and Addendum Numbers, if any.)</i></p> <p style="text-align: center;">NUREG-1790, Vol. 2</p>				
<p>2. TITLE AND SUBTITLE</p> <p>Environmental Impact Statement for the Proposed National Enrichment Facility in Lea County, New Mexico Appendices H through J Final Report</p>	<p>3. DATE REPORT PUBLISHED</p> <table border="1"> <tr> <td>MONTH</td> <td>YEAR</td> </tr> <tr> <td>June</td> <td>2005</td> </tr> </table> <p>4. FIN OR GRANT NUMBER</p>	MONTH	YEAR	June	2005
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<p>9. SPONSORING ORGANIZATION - NAME AND ADDRESS <i>(If NRC, type "Same as above"; if contractor, provide NRC Division, Office or Region, U.S. Nuclear Regulatory Commission, and mailing address.)</i></p> <p>Same as above</p>					
<p>10. SUPPLEMENTARY NOTES</p>					
<p>11. ABSTRACT <i>(200 words or less)</i></p> <p>Louisiana Energy Services (LES) has submitted a license application to the U.S. Nuclear Regulatory Commission (NRC) to construct, operate, and decommission a gas centrifuge uranium enrichment facility near Eunice, New Mexico in Lea County. The proposed facility, referred to as the National Enrichment Facility (NEF), would produce enriched uranium-235 (235U) up to 5 weight percent by the gas centrifuge process with a production of 3 million separative work units per year. The enriched uranium would be used in commercial nuclear power plants. The proposed NEF would be licensed in accordance with the provisions of the Atomic Energy Act. Specifically, an NRC license under Title 10, "Energy," of the U.S. Code of Federal Regulations (10 CFR) Parts 30, 40, and 70 would be required to authorize LES to possess and use special nuclear material, source material, and byproduct material at the proposed NEF site.</p> <p>This final Environmental Impact Statement (EIS) was prepared in compliance with the National Environmental Policy Act (NEPA) and the NRC regulations for implementing NEPA. This final EIS evaluates the potential environmental impacts of the proposed action and its reasonable alternatives. This final EIS also describes the environment potentially affected by LES's proposal, presents and compares the potential environmental impacts resulting from the proposed action and its alternatives, and describes mitigation measures. The document also includes comments received on the draft EIS and NRC's responses.</p>					
<p>12. KEY WORDS/DESCRIPTORS <i>(List words or phrases that will assist researchers in locating the report.)</i></p> <p>National Enrichment Facility Gas Centrifuge Uranium Environmental Impact Statement Louisiana Energy Services</p>	<p>13. AVAILABILITY STATEMENT</p> <p style="text-align: center;">unlimited</p> <p>14. SECURITY CLASSIFICATION</p> <p><i>(This Page)</i></p> <p style="text-align: center;">unclassified</p> <p><i>(This Report)</i></p> <p style="text-align: center;">unclassified</p> <p>15. NUMBER OF PAGES</p> <p>16. PRICE</p>				



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