



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 Reg
Washington, DC 20555-0001**



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 14, 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-02-24¹, 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
- 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

¹ 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.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)².

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

²Twenty-seven sets of duplicate comment documents were identified.

Table H-1 Commenter Identification

Commenter Name	Affiliation	Commenter No.
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
Bingaman, Jeff	United States Senator for the State of New Mexico	067

Commenter Name	Affiliation	Commenter No.
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
Claiborne, Claydean	City of Jal, New Mexico	018; Group E
Clark, Sharon	Economic Development Corporation of Lea County	Group J

Commenter Name	Affiliation	Commenter No.
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
Edmonson, Scott	Member of the Public	Group L
Ehrhardt, Erin	Member of the Public	Group L
Enszer, Julie	Member of the Public	Group L

Commenter Name	Affiliation	Commenter No.
Ervin, John	Member of the Public	Group L
Espinos, 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
Grove, John	Member of the Public	151
Grover, Ravi	Member of the Public	Group L
Habibi, Anoushka	Member of the Public	Group L

Commenter Name	Affiliation	Commenter No.
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
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

Commenter Name	Affiliation	Commenter No.
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
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

Commenter Name	Affiliation	Commenter No.
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
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

Commenter Name	Affiliation	Commenter No.
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
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

Commenter Name	Affiliation	Commenter No.
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
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

Commenter Name	Affiliation	Commenter No.
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
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

Commenter Name	Affiliation	Commenter No.
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
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

Commenter Name	Affiliation	Commenter No.
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
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

Commenter Name	Affiliation	Commenter No.
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 Baumwald, Keith	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 Goldstein, Sidney	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 Markham, Thomas	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 Schtick, Nici

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

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 transcript³; (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.

³A notation (a) 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	Comment No.	Appendix H Section	Commenter
M-27	I.10.1	Group M	M-59	I.24.1	Group M
M-28	I.10.1		M-60	I.6	
M-29	I.7.3		M-61	I.6	
M-30	I.7.3		M-62	I.5.2	
M-31	I.13.2		M-63	I.5.2	
M-32	I.13.2		M-64	I.5.2	
M-33	I.14.3		M-65	I.8.2	
M-34	I.14.1		M-66	I.18.1	
M-35	I.15		M-67	I.18.2	
M-36	I.9		M-68	I.19.1	
M-37	I.10.2		M-69	I.19.2	
M-38	I.10.2		M-70	I.19.1	
M-39	I.11.1		M-71	I.19.3	
M-40	I.12.2		M-72	I.19.2	
M-41	I.12.3		N-1	I.7.3	Group N
M-42	I.12.3		O-1	I.20.5	Group O
M-43	I.14.1		P-1	I.20.2	Group P
M-44	I.14.2		Q-1	I.20.3	Group Q
M-45	I.12.5; I.27		Q-2	I.12.5	
M-46	I.17.2		R-1	I.20.2	Group R
M-47	I.20.2		S-1	I.4	Group S
M-48	I.20.3		T-1	I.10.3	Group T
M-49	I.18.1		T-2	I.10.3; I.21	
M-50	I.22		U-1	I.14.1	Group U
M-51	I.23.1		U-2	I.14.2	
M-52	I.23.1		V-1	I.23.2	Group V
M-53	I.23.2		W-1	I.6	Group W
M-54	I.23.1		X-1	I.7.3	Group X
M-55	I.23.1		Y-1	I.15	Group Y
M-56	I.23.1		Z-1	I.4	Group Z
M-57	I.21		AA-1	I.25	Group AA
M-58	I.24.2		001-4	I.2	Illegible - 22

Comment No.	Appendix H Section	Commenter	Comment No.	Appendix H Section	Commenter
001-19	I.2	Illegible - 22	025-2 ^a	I.2	Debra P. Hicks
002-1	I.2	Glen E. Hackler and Robert Zap	025-3 ^a	I.3.6	
002-2	I.2		025-4 ^a	I.2	
005-2 ^a	I.2	Harry Teague	026-1	I.2	Steve McCleery
005-3 ^a	I.2		026-2 ^a	I.2	
006-1	I.2	Ray Battaglini	026-3 ^a	I.14.2	
007-1	I.2	Toni Nolan Trujillo	026-4	I.2	
007-2 ^a	I.2		026-5 ^a	I.2	
007-3 ^a	I.2		027-1	I.2	Joe Calderon
007-4 ^a	I.2		027-2 ^a	I.2	
007-5	I.2		027-3 ^a	I.2	
007-6	I.2		027-4	I.2	
007-7	I.2		028-1	I.2	DeeDee Wallace
009-1	I.2	Albert Caballero	028-2 ^a	I.2	
010-1	I.2	Suzanne Holler	028-3 ^a	I.2	
010-2 ^a	I.2		028-4 ^a	I.2	
010-3	I.2		029-1	I.2	Kelly Holladay
011-2 ^a	I.2	Darrold Stephenson	029-2 ^a	I.2	
011-3 ^a	I.2		029-3 ^a	I.20.3	
016-1	I.2	David Cole	029-4	I.2	
016-2	I.2		029-5 ^a	I.12.2	
018-2 ^a	I.2	Claydean Claiborne	029-6	I.20.3	
018-3 ^a	I.2		030-2	I.2	Tanya White
020-2 ^a	I.2	Mary J. Fuller	031-1	I.5.3	Lee Cheney
021-1	I.2	Stan Rounds	031-2	I.12.3	
021-2 ^a	I.2		031-3	I.20.4	
022-1	I.2	Carroll H. Leavell	031-4 ^a	I.3.4	
022-2 ^a	I.2		031-5 ^a	I.3.4	
022-3 ^a	I.2		031-6	I.1	
022-4	I.2		031-7	I.24.1	
024-1	I.2	Alicia N. Montanez	031-8	I.24.1	
025-1	I.2	Debra P. Hicks	031-9	I.24.1	

Comment No.	Appendix H Section	Commenter	Comment No.	Appendix H Section	Commenter
031-10	I.5.1	Lee Cheney	032-31	I.7.1; I.20.2; I.20.4	Rose Gardner
032-1	I.19.2	Rose Gardner	032-32	I.5.3	
032-2	I.25		032-33	I.20.2	
032-3	I.20.4		032-34	I.12.5	
032-4	I.12.5		032-35	I.14.3	
032-5	I.22		032-36	I.14.3	
032-6 ^a	I.25		032-37	I.15	
032-7 ^a	I.20.4		032-38	I.10.2	
032-8 ^a	I.3.4		032-39	I.12.5	
032-9 ^a	I.20.4		032-40	I.19.2	
032-10 ^a	I.12.5		032-41	I.19.2	
032-11 ^a	I.22		032-42	I.17.4	
032-12 ^a	I.18.2		032-43	I.18.2	
032-13 ^a	I.1		032-44	I.19.3	
032-14	I.10.2		032-45	I.19.2	
032-15	I.12.5		032-46	I.10.2; I.20.2	
032-16	I.20.4		032-47	I.18.2	
032-17	I.10.2		032-48	I.20.1	
032-18	I.1		032-49 ^a	I.5.1	
032-19	I.25		032-50	I.1	
032-20	I.7.1		033-1	I.18.1	Phillip Barr
032-21	I.19.2		033-2	I.10.2	
032-22	I.5.3		033-3	I.12.3	
032-23	I.20.1		033-4	I.5.3	
032-24	I.26		033-5	I.1	
032-25	I.5.1		033-6	I.10.2	
032-26	I.14.1		033-7	I.18.2	
032-27	I.12.1		034-1	I.3.1	Karen Fisher
032-28	I.20.2		034-2	I.7.3	
032-29	I.20.2		034-3	I.12.2	
032-30	I.20.2		034-4	I.12.2	

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034-5	I.12.3	Karen Fisher	034-37	I.17.1	Karen Fisher
034-6	I.20.1		034-38	I.17.1	
034-7	I.6		034-39	I.17.1	
034-8	I.20.7		034-40	I.17.4	
034-9	I.27		034-41	I.17.2	
034-10	I.27		034-42	I.17.4	
034-11	I.27		034-43	I.17.1	
034-12	I.27		034-44	I.17.4	
034-13	I.20.4		034-45	I.17.1	
034-14	I.27		034-46	I.18.1	
034-15	I.10.2		034-47	I.19.1	
034-16	I.10.2		034-48	I.27	
034-17	I.27		034-49	I.20.9	
034-18	I.11.1		034-50	I.10.2	
034-19	I.11.1		034-51	I.14.1	
034-20	I.11.1		034-52	I.15	
034-21	I.12.5		034-53	I.16	
034-22	I.12.3		034-54	I.22	
034-23	I.12.3		034-55	I.12.5	
034-24	I.12.3		034-56	I.27	
034-25	I.12.3		034-57	I.15	
034-26	I.13.1		034-58	I.8.2	
034-27	I.13.1		034-59	I.13.4	
034-28	I.13.4		034-60	I.27	
034-29	I.17.1		034-61	I.27	
034-30	I.18.2		034-62	I.23.1	
034-31	I.15		034-63	I.23.1	
034-32	I.15		034-64	I.27	
034-33	I.16		034-65	I.23.1	
034-34	I.16		034-66	I.27	
034-35	I.16		034-67	I.23.2	
034-36	I.17.1		034-68	I.23.2	

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034-69	I.6	Karen Fisher	040-5	I.10.2	Stephen R. Spencer
035-1	I.6	William B. Mackie	040-6	I.13.3	
036-1	I.7.3	Citizens' Nuclear Information Center	041-1	I.12.2	Melanie Barnes
036-2	I.7.3		041-2	I.23.1	
036-3	I.15		041-3	I.23.2	
036-4	I.14.1		041-4	I.14.2	
036-5	I.14.2		041-5	I.3.2; I.3.3	
036-6	I.20.4		042-1	I.20.1	Tannis Fox
036-7	I.20.2		042-2	I.12.4	
036-8	I.6		042-3	I.12.3	
036-9	I.23.1		042-4	I.12.2	
036-10	I.21		042-5	I.12.2	
036-11	I.23.2		042-6	I.12.5	
036-12	I.23.1		042-7	I.11.1	
037-1	I.3.1; I.3.2	Michael Mariotte and Wenonah Hauter	042-8	I.11.1; I.12.2	
037-2	I.3.2		042-9	I.11.1	
038-1	I.13.4	Lisa Kirkpatrick	042-10	I.12.2	
038-2	I.13.4		042-11	I.12.3	
038-3	I.13.2		042-12	I.12.2	
038-4	I.27		042-13	I.12.2	
038-5	I.27		042-14	I.12.2	
038-6	I.27		042-15	I.12.2	
038-7	I.13.3		042-16	I.12.2	
038-8	I.13.4		042-17	I.12.2	
038-9	I.4		042-18	I.12.3	
038-10	I.13.2		042-19	I.12.2	
039-1	I.11.2	Joe Lara	042-20	I.12.4	
040-1	I.13.4	Stephen R. Spencer	042-21	I.12.2; I.12.4	
040-2	I.13.4		042-22	I.12.2	
040-3	I.13.4		042-23	I.21	
040-4	I.10.2		042-24	I.12.3	
			042-25	I.23.1	
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042-26	I.12.4	Tannis Fox	046-3 ^a	I.2	Donald F. Petersen
042-27	I.12.4		046-4 ^a	I.25	
042-28	I.12.3		046-5	I.2	
042-29	I.12.1		046-6	I.2	
042-30	I.12.1		046-7	I.25	
042-31	I.12.1		047-1	I.2	W.R. Stratton
042-32	I.10.2		047-2	I.20.3	
042-33	I.10.2		047-3	I.2	
042-34	I.10.2		047-4	I.2	
042-35	I.10.3		047-5	I.2	
042-36	I.10.3		047-6	I.2	
042-37	I.19.1		047-7	I.5.1	
042-38	I.19.2		047-8	I.20.8	
042-39	I.27		048-1	I.4	R.M. Krich
042-40	I.27		048-2	I.27	
042-41	I.12.3		048-3	I.10.3	
042-42	I.11.2		048-4	I.20.3	
042-43	I.20.3		048-5	I.12.3	
042-44	I.23.1		048-6	I.27	
042-45	I.6		048-7	I.8.1	
042-46	I.19.1		048-8	I.27	
043-1	I.13.3	Nicole J. Rosmarino	048-9	I.5.6	
043-2	I.22		048-10	I.5.6	
043-3	I.13.3		048-11	I.27	
043-4	I.6		048-12	I.27	
043-5	I.13.1		048-13	I.13.4	
043-6	I.1		048-14	I.12.3	
043-7	I.13.1; I.13.3		048-15	I.27	
044-1	I.6	Michael P. Jansky	048-16	I.5.5	
045-1	I.2	Glen A. Graves	048-17	I.10.2	
046-1	I.2	Donald F. Petersen	048-18	I.10.3	
046-2 ^a	I.2		048-19	I.20.3	

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048-20	I.27	R.M. Krich
048-21	I.27	
048-22	I.27	
048-23	I.27	
048-24	I.27	
048-25	I.27	
048-26	I.27	
048-27	I.27	
048-28	I.27	
048-29	I.27	
048-30	I.27	
048-31	I.27	
048-32	I.13.1	
048-33	I.27	
048-34	I.27	
048-35	I.15	
048-36	I.18.1	
048-37	I.27	
048-38	I.27	
048-39	I.27	
048-40	I.8.1	
048-41	I.27	
048-42	I.12.3	
048-43	I.12.3	
048-44	I.12.2	
048-45	I.27	
048-46	I.12.3	
048-47	I.12.2	
048-48	I.12.3	
048-49	I.13.4	
048-50	I.13.4	
048-51	I.27	

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048-52	I.27	R.M. Krich
048-53	I.27	
048-54	I.27	
048-55	I.27	
048-56	I.27	
048-57	I.27	
048-58	I.20.3	
048-59	I.21	
048-60	I.27	
048-61	I.27	
048-62	I.27	
048-63	I.27	
048-64	I.27	
048-65	I.12.3	
048-66	I.27	
048-67	I.27	
048-68	I.27	
048-69	I.27	
048-70	I.27	
048-71	I.27	
048-72	I.27	
048-73	I.27	
048-74	I.27	
048-75	I.27	
048-76	I.27	
048-77	I.27	
048-78	I.27	
048-79	I.23.2	
048-80	I.27	
048-81	I.27	
048-82	I.23.2	
048-83	I.23.1	

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048-84	I.27	R.M. Krich
048-85	I.18.1	
048-86	I.12.3	
048-87	I.23.1	
048-88	I.27	
048-89	I.19.1	
048-90	I.17.3	
048-91	I.27	
048-92	I.27	
048-93	I.27	
048-94	I.27	
048-95	I.27	
048-96	I.27	
048-97	I.27	
048-98	I.27	
048-99	I.15	
051-1	I.2	Kathi Bearden
051-2	I.2	
052-2 ^a	I.2	Karen Stevens
053-1	I.2	Jennifer L. Jordon
053-2 ^a	I.2	
054-1	I.2	Ben A. Kendrick
054-2 ^a	I.2	
054-3 ^a	I.2	
058-1	I.2	Donald E. Bratton
058-2	I.2	
059-2 ^a	I.2	Hermilo Ojeda
060-1	I.2	Representative
061-2 ^a	I.2	John Good
061-3 ^a	I.2	
062-1	I.2	Gay G. Kernan
062-2 ^a	I.2	

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

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079-2	I.2	Hector Ramirez
079-3	I.2	
080-1 ^a	I.2	Robert Wallach
080-2 ^a	I.2	
080-3 ^a	I.2	
081-1 ^a	I.2	Ray Betzen
082-1 ^a	I.2	Johnny Cope
082-2 ^a	I.2	
082-3 ^a	I.17.1	
082-4 ^a	I.2	
083-1 ^a	I.12.5	Buster Goff
084-1 ^a	I.2	Ron Abousleman
084-2 ^a	I.2	
084-3 ^a	I.2	
085-1 ^a	I.2	Pat Lyons
085-2 ^a	I.2	
085-3 ^a	I.2	
086-1 ^a	I.2	Richard Dolgener
086-2 ^a	I.2	
087-1 ^a	I.2	Lana Bavel
088-1 ^a	I.2	Jerry Harper
088-2 ^a	I.2	
089-1 ^a	I.2	Mike Bundick
089-2 ^a	I.2	
090-1 ^a	I.2	Marilyn Dill
090-2 ^a	I.2	
090-3 ^a	I.2	
091-1 ^a	I.2	Gary Dill
091-2 ^a	I.2	
092-1 ^a	I.2	Justin McGrath
093-1 ^a	I.2	Pat McCasland
093-2 ^a	I.12.1	

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093-3 ^a	I.20.3	Pat McCasland
093-4 ^a	I.3.1	
093-5 ^a	I.19.1	
094-1 ^a	I.2	Brian Norwood
095-1 ^a	I.2	Will Palmer
095-2 ^a	I.2	
096-1 ^a	I.2	Twillla Preston
096-2 ^a	I.2	
097-1 ^a	I.2	Scott Smith
097-2 ^a	I.2	
097-3 ^a	I.2	
098-1 ^a	I.2	Lynn White
098-2 ^a	I.2	
099-1 ^a	I.2	Lee White
100-1 ^a	I.2	Kim Fulfer
100-2 ^a	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	
103-8	I.20.2	
103-9	I.24.2	
103-10	I.4	
103-11	I.4	
103-12	I.10.2	

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103-13	I.20.4	Pam O. Inmann
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103-14	I.20.4	
103-15	I.20.2; I.20.4	
103-16	I.27	
103-17	I.27	
103-18	I.17.1	
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	
103-25	I.5.3	
103-26	I.24.1	
104-1	I.20.2; I.20.4	Sandy Rogers
104-2	I.17.3; I.20.1	
104-3	I.25	
105-1	I.17.3	Phil Silberman
105-2	I.17.3	
105-3	I.25	
105-4	I.17.4	
105-5	I.25	
105-6	I.5.1	
105-7	I.20.4	
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
151-2	I.3.2	
151-3	I.3.2	
151-4	I.4	
Comment No.	Appendix H Section	Commenter
151-5	I.25	John Grove

151-6	I.3.4	
151-7	I.8.1; I.12.5	
151-8	I.6	
151-9	I.3.5	
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	
284-13	I.12.2	
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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316-8	I.22	Joseph Malherek and Michael Mariotte
316-9	I.22	

316-10	I.24.3		316-42	I.8.2	
316-11	I.25		316-43	I.11.1	
316-12	I.7.1; I.25		316-44	I.10.2	
316-13	I.4		316-45	I.22	
316-14	I.14.4		316-46	I.10.2	
316-15	I.14.1		316-47	I.5.5	
316-16	I.15		316-48	I.5.1	
316-17	I.15		316-49	I.21	
316-18	I.22		316-50	I.13.2;I.13.3	
316-19	I.12.5		316-51	I.13.3	
316-20	I.12.5		316-52	I.13.3	
316-21	I.12.2		316-53	I.19.1	
316-22	I.12.2; I.12.3		316-54	I.19.1	
316-23	I.12.2		316-55	I.20.3	
316-24	I.11.1		316-56	I.27	
316-25	I.12.2		316-57	I.1	
316-26	I.20.7		343-1	I.1	Patricia Birnie
316-27	I.20.4		343-2	I.4	
316-28	I.20.4		343-3	I.7.3	
316-29	I.20.7		343-4	I.12.5	
316-30	I.20.3		343-5	I.10.2; I.12.3; I.20.7; I.20.8;	
316-31	I.20.7		343-6	I.19.1	
316-32	I.20.5		343-7	I.14.4	
316-33	I.20.6		343-8	I.9	
316-34	I.24.1		343-9	I.3.6	
316-35	I.20.4; I.20.8		355-1	I.10.1	Cyrus Reed
316-36	I.20.4		355-2	I.12.2	
316-37	I.20.4		355-3	I.12.3	
316-38	I.20.8		355-4	I.12.2	
316-39	I.20.9				
Comment No.	Appendix H Section	Commenter	Comment No.	Appendix H Section	Commenter
316-40	I.9	Joseph Malherek and Michael Mariotte	355-5	I.20.1; I.20.4; I.20.7	Cyrus Reed
316-41	I.9		355-6	I.22	

356-1	I.1	Margot Clarke	358-25	I.24.1	
356-2	I.4		358-26	I.24.1	
356-3	I.3.5		358-27	I.24.1	
356-4	I.20.4; I.20.7		358-28	I.3.1; I.3.5	
356-5	I.12.2; I.12.3		358-29	I.3.5	
356-6	I.7.3		358-30	I.17.4	
356-7	I.12.2		358-31	I.19.2	
356-8	I.12.5		358-32	I.19.1	
356-9	I.3.4		358-33	I.22	
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358-1	I.3.5	Donald Hancock	358-34	I.1; I.4; I.14.4	
358-2	I.3.1; I.3.5		358-35	I.3.2	
358-3	I.3.1		358-36	I.3.1; I.3.2	
358-4	I.3.5		358-37	I.3.5	
358-5	I.3.5		358-38	I.3.1	
358-6	I.20.3		358-39	I.3.1	
358-7	I.4		<hr/>		
358-8	I.5.3; I.7.1		365-1	I.9	Jan Saecker
358-9	I.20.3		365-2	I.11.2	
358-10	I.14.4		365-3	I.7.1	
358-11	I.20.3		365-4	I.12.5	
358-12	I.20.3		365-5	I.14.4	
358-13	I.20.7		365-6	I.10.2	
358-14	I.20.6		365-7	I.19.2	
358-15	I.20.2		365-8	I.3.5	
358-16	I.20.3; I.20.5; I.20.6		365-9	I.1	
358-17	I.20.2		<hr/>		
358-18	I.20.4		^a Verbal comment received during the Louisiana Energy Services Public Meeting held on October 14, 2004.		
358-19	I.20.4				
358-20	I.12.5; I.27				

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358-21	I.12.5	Donald Hancock
358-22	I.12.5	
358-23	I.12.1	
358-24	I.12.5	

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 [DUF₆] 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 UF₆ 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 UF₆ 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 (UF₆) 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 UF₆ 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 DUF₆ 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 DUF₆, 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 "wooed" 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 (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 CO₂ 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 CO₂ 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 transmission 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 8.4×10^{-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 (PM₁₀) has been recorded in Hobbs, New Mexico. The EIS should contain a more detailed explanation of how an exceedance for PM₁₀ 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 PM₁₀ 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 PM₁₀.
- Table 3-6 of the Draft EIS erroneously identifies the PM₁₀ 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 PM₁₀ 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 PM₁₀ concentrations in the area. Table 3-6 of the Draft EIS identifies the standard for PM₁₀ 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_{10} 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 Environmental 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, Ecktor, 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 UF₆. 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 UF₆ 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 DUF₆ 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 DUF₆. 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 UF₆; 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 UF₆ 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.

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 UF₆ 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 UF₆-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 UF₆. 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 UF₆ 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 UF₆ shipping cylinders would release less radioactivity than full UF₆ 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 UF₆ shipping cylinders would release more radioactivity than full UF₆ shipping containers. This occurs for two reasons. First, after UF₆ 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 UF₆, 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 UF₆ and the heel concentrates the more highly radioactive uranium daughters near the inner cylinder surface, the radiation levels of the empty UF₆ 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, DUF₆, triuraniumoctaoxide [U₃O₈], and uranyl fluoride [UO₂F₂]) 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 8.4×10^{-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 UF₆ gas during an accident. The commenters stated that the Draft EIS identifies an accidental release of UF₆ 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 50th 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 UF₆ 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 UF₆ gas.

Response: The risks from the release of UF₆ 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 UF₆.

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 DUF₆ 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 UF₆ 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 UF₆ 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 DUF₆.

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 U₃O₈.

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 DUF₆ 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 DUF₆.

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 U₃O₈. The disposition of the depleted U₃O₈ 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 U₃O₈ 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 DUF₆. 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 DUF₆

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 DUF₆ 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 DUF₆ 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 DUF₆ 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 DUF₆ 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 DUF₆.
- 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 DUF₆. 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 UF₆ 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 UF₆.

Response: The NRC staff revised section 2.1.7 to state that LES would not conduct internal cleaning or decontamination of the UF₆ cylinders at the proposed NEF site. Cylinders containing DUF₆ 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 DUF₆ 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 DUF₆ 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 U₃O₈ 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 DUF₆. 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 DUF₆ 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 DUF₆ 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 U₃O₈ 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 DUF₆ disposal and should address the national capacity for converting and disposing of DUF₆.

Response: As presented in section 4.2.14.4 of the Draft EIS regarding existing disposal capacity, DUF₆ cannot be disposed of without first being converted into an acceptable form (such as U₃O₈). DUF₆ 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 DUF₆.

Comment: 103-13

The commenter stated that the NRC acknowledges LES proposals for DUF₆ 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_6 .

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 I.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_6 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_6 at DOE conversion facilities cannot be considered a plausible strategy; the magnitude of DOE's DUF_6 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_6 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_6 from the proposed NEF. The Portsmouth conversion facility could process 129,600 metric tons (142,860 tons) of DUF_6 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_6 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_6 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_6 , 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 DUF₆

Comment: 047-8; 343-5

A commenter asked whether DUF₆ 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 DUF₆ 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 DUF₆ is for informational purposes to support the discussion regarding DUF₆ disposition alternatives.

I.20.9 Non-DUF₆ 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(I)(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 DUF₆ 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 DUF₆ 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 DUF₆ 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 DUF₆ to a private conversion facility in Texas. The depleted U₃O₈ 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 UF₆ 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 DUF₆ 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 DUF₆ 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 DUF₆ 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 DUF₆ 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 DUF₆ 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 U₃O₈ and CaF₂ 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 DUF₆ 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 DUF₆ 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 UF₆ 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 DUF₆ 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.

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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