

**ENVIRONMENTAL IMPACT STATEMENT SCOPING  
PROCESS**

**SCOPING SUMMARY REPORT**

**Proposed Louisiana Energy Services  
National Enrichment Facility  
Lea County, New Mexico**

**April 2004**



U.S. Nuclear Regulatory Commission  
Rockville, Maryland

## 1. INTRODUCTION

By letter dated December 12, 2003, Louisiana Energy Services (LES) submitted an application to the U.S. Nuclear Regulatory Commission (NRC) for a license to construct, operate, and decommission a gas centrifuge uranium enrichment facility to be located near Eunice, New Mexico.

The LES facility, if licensed, would enrich uranium for use in commercial nuclear fuel for power reactors. Feed material would be natural (not enriched) uranium in the form of uranium hexafluoride (UF<sub>6</sub>). LES proposes to use centrifuge technology to enrich the isotope uranium-235 in the UF<sub>6</sub>, up to 5 percent. The centrifuge would operate at below atmospheric pressure. The capacity of the plant would be up to 3 million separative work units (SWU).<sup>1</sup>

In accordance with NRC regulations at 10 CFR Part 51 and the National Environmental Policy Act (NEPA), the NRC staff is preparing an Environmental Impact Statement (EIS) on the proposed facility as part of its decision-making process. The EIS will examine the potential environmental impacts associated with the proposed LES facility in parallel with the review of the license application. In addition to the EIS, the NRC staff will prepare a Safety Evaluation Report (SER) on health and safety issues raised by the proposed action. The SER will document the NRC staff evaluation of the safety of the activities proposed by LES in its license application and the compliance with applicable NRC regulations.

As part of the NEPA process, the scoping process was initiated on February 4, 2004, with the publication in the *Federal Register* of a Notice of Intent to prepare an EIS and to conduct the scoping process (69 *Federal Register* 5374-5375). Scoping is an early and open process designed to help determine the range of actions, alternatives, and potential impacts to be considered in the EIS, and to identify significant issues related to the proposed action. Input from the public and other agencies is solicited so the analysis can be more clearly focused on issues of genuine concern.

On March 4, 2004, the NRC staff held a public scoping meeting in Eunice, New Mexico, to solicit both oral and written comments from interested parties. The public scoping meeting began with NRC staff providing a description of the NRC's role, responsibilities, and mission. A brief overview of the safety review process (i.e., preparation of the SER) was followed by a description of the environmental review process and a discussion on how the public can effectively participate in the process. The bulk of the meeting was allotted for attendees to make comments on the scope of the review.

This report has been prepared to summarize the determinations and conclusions reached in the scoping process. After publication of a draft EIS, the public will be invited to comment on that document. Availability of the draft EIS, the dates of the public comment period, and information about the public meeting will be announced in the *Federal Register*, on NRC's LES website (<http://www.nrc.gov/materials/fuel-cycle-fac/lesfacility.html>) and in the local news media when the draft EIS is distributed. After evaluating comments on the draft EIS, the NRC staff will issue a final EIS that will serve as the basis for the NRC's consideration of environmental impacts in its decision on the proposed facility.

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<sup>1</sup>SWU relates to a measure of the work used to enrich uranium.

Section 2 of this report summarizes the comments and concerns expressed by government officials, agencies, and the public. Section 3 identifies the issues the draft EIS will address and Section 4 identifies those issues that are not within the scope of the draft EIS. Where appropriate, Section 4 identifies other places in the decisionmaking process where issues that are outside the scope of the draft EIS may be considered.

## 2. ISSUES RAISED DURING THE SCOPING PROCESS

### 2.1 OVERVIEW

Approximately, 250 individuals attended the March 4, 2004, public scoping meeting concerning the LES National Enrichment Facility (NEF). During the meeting, 43 individuals offered comments. Of these 43 commenters, 33 individuals fully supported construction of the LES NEF. Two commenters provided petitions to the NRC staff at the meeting with over 2,080 signatures in support of the NEF licensing and construction. This petition stated that “the signers of this petition believe this facility will be safely operated, contribute to energy independence and security for the United States and provide substantial economic benefits to our communities.” In addition, 127 written comments were received from various individuals during the public scoping period, which ended on March 18, 2004. Of these 127 written comments, the NRC staff received approximately 60 letters expressing support for the proposed project.

This active participation by the public in the scoping process is an important component in determining the major issues that the NRC should assess in the draft EIS. Individuals providing oral and written comments addressed several subject areas related to the proposed LES facility and the draft EIS development. In addition to private citizens, the various commenters included:

- A Member of Congress.
- New Mexico State Representatives.
- Local officials from the cities of Eunice, Hobbs, Jal, Lovington and Andrews.
- Representatives of Federal agencies or organizations.
- Representatives of State of New Mexico agencies or departments.
- Representatives of other organizations including:
  - Citizens for Alternatives to Radioactive Dumping
  - Citizens Nuclear Information Center
  - Concerned Citizens for Nuclear Safety
  - Creative Commotion
  - *Eunice News*
  - Forest Guardians
  - Institute for Energy and Environmental Research
  - Hispanic Workers Council
  - National Association for the Advancement of Colored People
  - New Mexico Audubon Council
  - New Mexico Junior College
  - Nuclear Information and Resource Service
  - Nuclear Workers for Justice
  - Public Citizen
  - Southwest Research and Information Center
  - United Way of Lea County.

The following general topics categorize the comments received during the public scoping period:

- NEPA and public participation.

- Land use and site selection.
- Need.
- Alternatives.
- Ecology, geology, emissions, soil, and water resources.
- Socioeconomics.
- Environmental justice.
- Transportation.
- Waste management.
- Cumulative impacts.
- Decommissioning.
- Safety and risk.
- Nonproliferation and security.
- Terrorism.
- Credibility.

In addition to raising important issues about the potential environmental impacts of the proposed facility, some commenters offered opinions and concerns that typically would not be included in the subject matter of an EIS—these include general opinions about LES or issues that are more appropriately considered in the SER. Comments of this type are taken into consideration by the NRC staff, but they do not point to significant environmental issues to be analyzed. Other statements may be relevant to the proposed action, but they have no direct bearing on the evaluation of alternatives or on the decision-making process involving the proposed action. For instance, general statements of support for or opposition to the proposed project fall into this category. Again, comments of this type have been noted but are not used in defining the scope and content of the EIS.

Section 2.2 summarizes the comments received during the public scoping period. Most of the issues raised have a direct bearing on the NRC’s analysis of potential environmental impacts.

## **2.2 SUMMARY OF ISSUES RAISED**

As noted above, a large number of commenters expressed support for the facility. On the other hand, several individuals raised concerns regarding the construction and operation of the NEF. The following summary groups the comments received during the scoping period by technical area and issues.

### **2.2.1 NEPA and public participation**

A commenter stated that given the level of interest in this EIS in New Mexico, a single scoping meeting in a remote location seemed inadequate. Another commenter stated that the public scoping meeting in Eunice, New Mexico, presented “no substance from LES or their supporters” but was a “really great pep rally.” Another commenter stated that the local community is capable of making its own decisions and does not want non-local intervener groups interfering with decision-making. Another commenter noted that “98% of the residents of Lea County are in favor of the enrichment facility.” Another commenter noted that “there are very few Nay

Sayers of the project” and most of the individuals, that the commenter has personal contact with, have “positive views” of the NEF.

Another commenter requested that the NRC include land use, transportation, geology and soils, water resources, ecology, air quality, noise, historical and cultural resources, visual and scenic resources, socioeconomics, environmental justice, public and occupational health, and waste management as topics for the EIS, and that particular attention be paid to environmental justice and waste management in the EIS and licensing process.

### **2.2.2 Land use and site selection**

A commenter recommended that the NRC staff consult with the administrator of the Land and Water Conservation Fund (L&WCF) program in the State of New Mexico to determine any potential conflicts with existing L&WCF projects.

Several commenters suggested that the EIS should explain why LES is no longer pursuing alternative locations in Louisiana and Tennessee and the circumstances under which LES was required to withdraw their proposals in these States. Another commenter questioned why the NRC would allow LES to prey upon impoverished areas to site the NEF and noted that Eunice is the third such area that LES has approached. Another commenter noted that the United States Enrichment Corporation (USEC) was previously interested in Lea County for uranium enrichment using the Atomic Vapor Laser Isotope Separation (AVLIS) process in 1998 to 1999, but the project was canceled when AVLIS was proven to be unfeasible. The commenter felt that siting the project in Lea County would be more feasible and welcomed by the community.

### **2.2.3 Need**

Several commenters raised concerns over the need for the facility. One commenter asked the NRC to explain (with accompanying facts and figures) where the need is for enriched uranium. Another commenter stated that the EIS must fully analyze the need for the proposed facility “in the light of the existing uranium enrichment capacity, which is meeting the domestic U.S. nuclear power plant requirements.” A commenter stated that the United States needs the LES NEF to help ensure national energy security by having a strong nuclear energy program nationwide.

### **2.2.4 Alternatives**

Several commenters stated that the EIS should address all environmental impacts of a range of reasonable alternatives, including the no-action alternative. A commenter stated that Lea County should consider alternative (i.e., safer) economic development projects other than the proposed action. Commenters stated that the no-action alternative in the EIS should consider the nonproliferation merits of using downblended low enriched uranium fuel from U.S. and Russian surplus highly enriched uranium. In addition, the EIS should add an alternative that increases the quantity and pace of downblending the surplus highly enriched uranium into reactor fuel. For the proposed action, the NRC should compare the generation of additional

depleted uranium tails from the proposed action to the no-action alternative. A commenter stated that, in addition to the no-action and proposed action alternatives, another alternative of “storage of up to 15,727 uranium byproduct cylinders (UBCs) beyond the operational lifetime of the facility must be fully analyzed.” The commenter emphasized that this alternative is reasonable because “LES has made no other arrangements for the materials and wastes contained in those UBCs,” and no existing disposal option for the wastes exists. Another commenter suggested that windmills or other alternative power generators be considered as alternatives in the draft EIS.

## **2.2.5 Ecology, geology, emissions, soil and water resources**

**Ecology:** Several commenters expressed concerns that the construction and operation of the facility may have an undue impact on birds, other wildlife, and habitat in New Mexico. A commenter stated the EIS should consider the impacts to imperiled species such as the lesser prairie chicken, sand dune lizard, black-tailed prairie dogs, black-footed ferret, mountain plover, swift fox, ferruginous hawk, burrowing owl, and northern aplomado falcon. Another commenter expressed concern over the “unintentional habitat” that would be created by effluents and process cooling water that could attract and potentially harm local wildlife. Another commenter was concerned that local dove and quail could become contaminated due to the facility. Another commenter expressed concern about the adequacy of the LES Environmental Report as it pertains to local wildlife resources like sand dune lizards and the lesser prairie chicken. Another commenter was concerned with the potential for bioaccumulation in the foodchain resulting from the proposed facility.

**Geology, emissions, and soil:** Several commenters expressed concern over the long-term effects of any emissions (particularly gaseous) or contaminated soil (i.e., radioactive dust) being transported offsite. A number of commenters felt that the construction and operation of the proposed facility would be hazardous to the local community due to soil contamination similar to the contamination from the Paducah and Portsmouth facilities operations. A commenter stated that the EIS must fully examine the effects of the continuous releases of small amounts of uranium and other materials in the air, including the possible large releases of these materials in the case of a significant accident. Another commenter suggested those impacts from the treated effluent basin such as fugitive dust and monitoring must be included in the EIS. Another commenter suggested that the NRC must review the geology of the site. Another commenter questioned the location of the facility in one of the largest karstland.

Several commenters requested that the NRC consider the potential impact of air emissions on the health and safety of New Mexico and Texas residents. Several commenters requested that the NRC include a thorough examination of the potential impact to human health and the environment from radioactive dust storms. A commenter stated that the EIS should evaluate the effects from air releases traveling beyond 50 miles due to the persistent winds in the region. The commenter further suggested that any environmental studies should include the high prevailing southerly winds that could quickly spread emissions.

**Water resources:** Several commenters expressed concern over the long-term effects of any liquids being transported offsite. A commenter noted that the facility would not have a serious impact on existing water supplies or users and submitted a letter that summarized the county’s

water-use audit demonstrating this conclusion. On the other hand, several commenters expressed concerns about the water volumes that are expected to be used by the proposed facility (e.g., volumes, consumptive uses, and associated water rights) and future usage with anticipated growth in the population. A commenter stated that the EIS must analyze the total water use, not just the consumption, as the total amount of water used would not be available for other domestic uses of the Hobbs and Eunice communities. According to this commenter, this analysis must include impacts of peak water use, as well as the amounts of water use based on the LES NEF design. Another commenter stated that the EIS should address all impacts on water levels in the Ogallala Aquifer, as well as for the cities of Hobbs and Eunice arising from the facility's proposed use of cooling water from municipal water supplies that draw upon the Ogallala Aquifer.

A number of commenters felt that the construction and operation of the proposed facility would be hazardous to the local community due to groundwater contamination. Commenters expressed concern about the impact of the proposed facility on the groundwater, specifically the Ogallala Aquifer over which the facility would be built. A commenter suggested that the NRC must review the hydrology of the site, as well as the relation of area aquifers to larger, regional aquifers such as the Ogallala Aquifer.

Several commenters expressed doubt that the values given on water usage from the county/local governments, water-resource boards, and LES are correct, and that the declining water level in the Ogallala Aquifer was a concern. Another commenter stated that LES has admitted to lying about the proposed facility's air and water emissions, and LES' questionable credibility puts the Ogallala Aquifer water supply in jeopardy.

A commenter stated that the EIS must consider the possibility that the containers in which LES plans to store depleted UF<sub>6</sub> may leak and allow contaminants to seep into groundwater. The commenter further noted that the NRC must thoroughly evaluate the LES proposed wastewater containment system and its ability to prevent the permeation of contaminated groundwater in the future. Another commenter stated the EIS must analyze all possible water discharge points and their capacity. Another commenter expressed concerns of contamination by the onsite "open contamination water pit." The commenter questioned the construction of the pit and the type of liner. Ingestion from these holding ponds should be evaluated, should pond overflow occur. Uncertainty was expressed as to the resources available to clean up any contamination.

## **2.2.6 Socioeconomics**

**Economic benefit:** A number of commenters stated that the proposed facility would have a positive and beneficial economic impact on the community by bringing economic diversity and stability to the local area. A commenter stated that the project "will have a positive impact, not only on our economy in Lea County, but for the whole United States." Another commenter felt that it was necessary to bring in a variety of industries to keep jobs local for future generations and that the NEF would help stem the county's long-standing "brain-drain." Another commenter felt "this project and the many benefits that it will bring to the people of Lea County is very exciting." Commenters noted that "by supporting the construction of this facility, they were in reality, supporting the creation of 210 permanent jobs...[and] 400-800 short-term construction

jobs that will provide an estimated payroll of \$170 million.” Another commenter noted that the additions of these employees and families “would give needed stability and growth to the area.”

One U.S. Senator from New Mexico stated support for the proposed project because it would provide economic opportunity for southeastern New Mexico. Local officials from Hobbs submitted a resolution supporting efforts to locate the NEF in southeastern New Mexico, citing economic benefits that include stability, growth, job creation, and industry diversification. Other local politicians stated that they expected the LES to be a good corporate neighbor that would add to the quality of life in the area (e.g., LES donated money for the development of a safe playground).

Other commenters expressed reservations concerning the economic benefits of the proposed facility. A commenter stated concerns about the promise of jobs being used as motivation for public support of the NEF. Another commenter stated that many residents would move from Lea County before the NEF opens. Another commenter stated that the strengthened local economy as a result of the presence of the LES NEF is not enough reason to outweigh the possible cost in lives due to potential environmental contamination.

Another commenter requested the EIS to include an extensive and thorough examination of the number and quality of local jobs and to present a detailed job breakdown by number of local workers versus “imported” workers and by “worker upward mobility.” Other commenters requested that the EIS specify work titles and descriptions of duties, qualifications required, salary per job title, and quantity of workers. Another commenter also suggested the need for the economic multiplier that the LES NEF would add to the local economy. Also, the same commenter requested that the EIS investigate and document the number and nature of the potential jobs that LES can realistically offer the citizens of Lea County to establish any true economic benefits. Another commenter stated that businesses would have difficulty recruiting new employees. Another commenter questioned whether the revenue and product generated by the proposed facility would be staying within the United States or would it be sent overseas.

**Tax and bonds:** A commenter questioned why Lea County should provide tax breaks, municipal bonds, and other public funds for this project given both the questionable world market demand for enriched uranium and the financial health of at least one of its major partners, British Nuclear Fuels, Ltd. A commenter inquired as to what would be the impact of the \$1.8 billion bond agreement on Lea County if the project shuts down early or never opens. In addition, another commenter suggested that “the facility is not economical in that it can only operate if it has the \$1.8 billion Industrial Revenue Bonds,” and this fact must be included in the EIS. A commenter proposed a “socioeconomic alternative” (i.e., an across-the-board tax cut for the businesses and people of Lea County) that would give the people and businesses of Lea County a \$435 million tax break (instead of giving LES a \$180 million tax break) and would provide Lea County with “significantly more long-term jobs and free enterprise economic development.”

**Property value:** A commenter stated concern that, as a landowner of several properties, values for property could be adversely affected by a problem at the proposed LES NEF or by unintentional contamination of land or water resources. Another commenter suggested that the EIS should discuss the effects of effluents and potential accidents on the local property values.

**Foreign-Trade Zone:** A commenter questioned whether LES would be utilizing the Foreign-Trade Zone and possibly applying for a sub-zone. If so, the commenter asked if this information should be included in the EIS.

**Public Service:** A commenter expressed doubt that the local communities could handle the increased public service demands from an increased population.

### **2.2.7 Environmental justice**

Several commenters suggested a detailed environmental justice review including an analysis of the effects on minority and low-income populations. Any disproportionate effect of minority or low-income populations should be subject to further investigation. A commenter stated that the EIS should examine all environmental justice issues, including the racial and economic makeup, expected composition of the workforce, and whether any claim to the land is held by any Indian tribes in the area around the proposed facility.

Another commenter representing the National Association for the Advancement of Colored People stated that they “unequivocally and without reservation support the construction...[and] operation of the Louisiana Energy Services plant.” Another commenter stated that the local communities of Eunice, Hobbs, and Jal are ignorant concerning the proposed facility. The commenter further noted that because over one-third of the population is Mexican-American and do not understand English, information about the plant is not often comprehended and accepted. Another commenter noted that LES and NRC staff have shown concern regarding the impact of the proposed NEF on local minority populations. The commenter noted that they would be sharing this information with the minority population.

### **2.2.8 Transportation**

Several commenters expressed concerns regarding transportation to and from the proposed facility. A commenter stated that the EIS must consider the “wide variety of routes” and the impacts of the projected shipments of up to 16,000 UBCs. Another commenter voiced concern that all transportation routes should be evaluated to determine impacts (including environmental justice) on the public along the full length of those transport routes. A commenter expressed concern over the long-term road conditions of NM Highway 123 due to Waste Control Specialists (WCS), the landfill, and NEF traffic. The commenter noted surrounding roads are heavily used by pass-through recreational traffic (e.g., traffic to casinos and natural attractions).

Commenters stated that the EIS should include a precise, detailed analysis of the increased hazards of transporting  $UF_6$  over great distances, especially to a site accessible only by two-lane highways. A commenter expressed concern about the deteriorating conditions of some New Mexico roadways and the resulting high incidence of accidents that represent safety-related issues and aspects that need to be addressed.

A commenter stated that LES must demonstrate that it has the full understanding and support of the Western Interstate Energy Board, which is responsible for communication and cooperation among its membership with specific regard to the development and management of

nuclear energy projects. The commenter felt this was important because the LES project involves the interstate transport of nuclear waste materials.

### 2.2.9 Waste management

**General waste management:** A commenter expressed concern that it is misleading to describe the LES project only as a processing facility—in reality, it is a nuclear waste storage facility. Another commenter stated that the EIS must include a complete and thorough investigation into gaseous, liquid, and solid waste production, treatment, and disposal at the proposed facility. Another commenter asked what would happen to worn out parts, tools, solvents, chemicals, etc. that are radioactive and whether these contaminated items would be disposed onsite. The same commenter also asked how much the cleanup of the LES plant would cost and objected to any nuclear waste being disposed of in landfills. Another commenter suggested that low-level waste from the proposed LES NEF could be sent to WCS.

**Depleted uranium tails disposal:** While several commenters felt that the wastes are manageable, some commenters stated opposition to the approval of the LES' application because “no place has been approved to take the waste product.” A commenter asked why more waste should be added to waste already existing with no means of disposal. Another commenter expressed concern about the lack of a final disposal alternative for the depleted uranium tails that could lead to environmental exposure of radioactive materials in the long term. Another commenter proposed a condition for license approval to include final disposal of all waste must be out of State. Another commenter inquired as to where the waste would be stored and how soon it would be moved out of the State. Another commenter stated that the local community should mandate an agreement with LES prior to construction that any waste would be promptly removed. Another commenter stated that LES attempted to misrepresent to the public the amount of waste that would be stored in Lea County and, for this reason, LES' application for a license should be denied. Another commenter stated the NRC should evaluate waste characteristics of depleted uranium relative to transuranic waste in the scope of the EIS. Another commenter stated that “legitimate questions have been raised regarding the safe and secure storage and ultimate removal from New Mexico of the leftover uranium hexafluoride material, or tails, from the enrichment operation over the lifetime of the plant's operation.” Another commenter stated that the EIS should examine the veracity of LES' statement that waste would be shipped offsite to a licensed disposal facility. In addition, the EIS should examine all additional environmental, radiological, and chemical impacts from construction and operation of a possible additional UF<sub>6</sub> conversion facility for ultimate disposal nearby or even at the proposed LES site. Another commenter expressed concern about what would ultimately happen to the waste at the proposed LES NEF and what assurances exist that the waste would not be deconverted and stored at WCS. Another commenter stated the NRC must consider the effects of using the depleted uranium in warfare, a potential application. Another commenter suggested that the tails generated should be seen as a resource rather than as a waste product and should be used to entice another company to locate a deconversion facility adjacent to the LES NEF.

Commenters stated that the NRC must analyze the impacts of the two disposal options for UBCs. These options include 1) establishment of a private conversion facility for processing and disposal of the converted waste in “an exhausted uranium mine” and 2) having the UBCs taken by the U.S. Department of Energy. In addition, the commenters stated that the EIS must

analyze the plausibility of these options much more extensively than was done in the LES Environmental Report. The commenters also suggested that the EIS analyze the costs of indefinite waste storage at the LES facility. Another commenter suggested the EIS must analyze the financial assurance of disposition of the wastes.

**Life expectancy/safety of waste containers:** Commenters inquired as to the life expectancy of waste storage containers that may be used at the proposed LES NEF and expressed concern about their safety.

### **2.2.10 Cumulative Impacts**

Several commenters requested that the cumulative impacts of other activities such as oilfield operation be considered in the EIS and raised concern over the cumulative impacts of continued generation of depleted uranium. A commenter expressed concern that LES would not be able to contain radioactive contaminants in soil and plant life due to past and possibly ongoing contamination in southeast New Mexico. Another commenter stated that the environmental evaluation should include a consideration of long-term and cumulative environmental effects of the radioactive and hazardous waste created by the NEF, not excluding effects at any of the disposal or processing sites around the country. Commenters stated that in its EIS, the NRC should take into account past abuses and acts of malfeasance at domestic uranium enrichment facilities in determining the potential public health impact of the proposed plant. Commenters expressed concerns related to the Paducah and Portsmouth facilities' operations that involved cancer risks to workers and the public, impacts to wildlife, and adverse impacts on aquifer and groundwater, which they stated have damaged the environment and human health and safety. This damage would also occur at the proposed facility.

A commenter stated that LES must demonstrate that it has the full understanding and support of the Western Interstate Energy Board, which is responsible for communication and cooperation among its membership with specific regard to the development and management of nuclear energy projects. The commenter felt this was important because the proposed project involves potential impacts to the economies of both regional States and the Nation. Another commenter stated that the environmental analysis should include assessment of cumulative regional impacts on the sand dune lizards and the lesser prairie chicken. Commenters stated that the EIS must conduct a full investigation into the demographic makeup of the area near the proposed NEF, taking into account other nuclear facilities in the area near the proposed NEF such as the Waste Isolation Pilot Plant (WIPP) and the WCS toxic and radioactive waste repository and their cumulative effect on public health and ecological integrity. Another commenter noted two major accidents in Carlsbad and that they needed to be considered in the EIS analysis. The effects of such accidents at LES should be considered along with mitigation measures to prevent them.

### **2.2.11 Decommissioning**

A commenter suggested that the EIS should include a detailed disposition and closure plan for the site, supported by a cost analysis.

## 2.2.12 Safety and Risk

**Uranium hexafluoride (UF<sub>6</sub>):** A commenter asked who would regulate safety at the proposed facility. Another commenter inquired about the volatility of UF<sub>6</sub>, how much would be onsite at any given hour of the day, and the worst-case scenario if an accident with UF<sub>6</sub> should occur. Another commenter proposed a condition for license approval to include limiting the amount and time of UF<sub>6</sub> storage onsite.

**Risk and public health:** Several commenters felt that the risks are manageable. One commenter stated that the uranium enrichment industry used lessons learned from past and current U.S. enrichment facilities to improve the safety and operation of the LES NEF. Another commenter stated that the local community would be safe by ensuring that LES meets the regulatory requirements. Another commenter noted that the local community demonstrated due diligence during the licensing of WCS and that this was being repeated for the LES NEF. Having worked at large-scale nuclear and industrial facilities, a commenter felt the anti-NEF groups were exaggerating the dangers. Several commenters who toured the gas centrifuge facility in Europe (Almelo, Netherlands) stated that the technology is clean and safe for workers, the public, and the environment. Another commenter stated that the NEF “would not pose a threat to their [the public] health and safety, that it would not harm the environment, and that they [the public] would not be left with the plant’s wastes.” Another commenter noted that the proposed enrichment facility would be “tremendous addition to our technology.” Another commenter stated LES “take safety and security very seriously based on what they have heard about LES and the uranium enrichment plant.”

A number of commenters felt that the construction and operation of the proposed facility would be hazardous to the local community due to possible radiation exposure. A commenter stated that the EIS should address all impacts to public health arising from the increase in routine and accidental radioactive emissions to the air and water as a result of the operation of the proposed facility. This analysis should consider work by Dr. John Gofman and numerous other scientists showing that low-level radiation is a significant contributor to deaths from heart disease and cancer. Another commenter stated that the EIS should include a complete investigation into potential worker and public exposure to toxic and radioactive materials resulting from NEF operations. Another commenter suggested that the draft EIS should address the risks from effluent releases as latent cancer fatalities per 10,000 people. Another commenter suggested that the EIS should include a plan for maintaining and updating workers’ records in a secure and public location where NEF employees would be able to access their radiation records.

**Accident analysis:** A commenter stated that the EIS should address all impacts on public health and the environment arising from a severe accident and the impacts. Another commenter expressed concern that the accident analysis would not be properly completed and requested that the following be included: 1) risk of fire, 2) impacts beyond a 50-mile radius, 3) evaluation of impacts from all transportation paths (feed, tails, wastes) including collisions with local oil and gas transport trucks, and 4) identification of emergency response preparedness for Lea County and all transportation routes. Another commenter stated that the LES NEF would not be as safe as some individuals are saying and expressed the concern that industries want to take shortcuts in operations that may lead to accidents.

Another commenter inquired about what type of evacuation plan and procedure is in place in the case of an accident at the plant site, and how would information about these emergency evacuations be disseminated. Another commenter stated that the EIS should address the impacts of any emergency response measures such as relocation of the population. Another commenter stated that the NRC must promise to shut down the proposed facility if any effluent releases exceed regulatory limits. Another commenter suggested that an impartial (i.e., non-LES) expert be on the site at all times to provide emergency information. This commenter also stated that medical and emergency personnel should immediately start getting the necessary background training that would enable them to handle radiation situations now, not later.

### **2.2.13 Nonproliferation and security**

Several commenters expressed concern that advanced nuclear technology used at the LES NEF could be spread to other unfriendly governments as happened at Urenco. Another commenter expressed concern that there is “massive secrecy and cover up regarding the Urenco involvement in the spread of gas centrifuge uranium enrichment technology to Iraq, Pakistan, Iran, Libya, and North Korea which extends deep, far, and wide regarding nuclear proliferation and our national security problem.” For this reason, the commenter suggested that a thorough congressional investigation of Urenco and LES is desperately needed and that Congress should direct the NRC to withhold granting LES an operating license until that investigation is completed.

Several commenters stated that Urenco, Ltd. has been implicated in nonproliferation and security breaches and wondered what is going to be done to ensure this kind of security breach does not happen at the LES NEF. A commenter requested that “given the track records of both major backers of this project,” the EIS should provide “a detailed review of the national security and environmental policies of all the corporate participants in this project.” Another commenter expressed concern that Lea County leaders were unaware of these activities at Urenco, Ltd. Another commenter stated that the EIS should consider whether Urenco would likely adhere to U.S. national security policy that actively discourages the proliferation of nuclear technology worldwide.

Another commenter noted that local law enforcement was involved in the planning of security at the WIPP and it also intends to be involved in the planning of security at the proposed facility. Another commenter stated that the EIS should examine all impacts arising from increased security risks and tasks associated with the construction and operation of the proposed LES NEF.

### **2.2.14 Terrorism**

A commenter stated that accident consequences and risks should include terrorist attacks like September 11, 2001, regardless of the probability of such an event. Another commenter suggested the EIS include an analysis of the amount of gas and radiation that would be released into the atmosphere in the event of a 9/11-type terrorist catastrophe. Another commenter expressed concern that the LES NEF may “open up our country for controversy and risk for terror attacks” due to the nuclear materials and activities.

### **2.2.15 Credibility**

Several commenters stated that LES's officials have been straightforward, honest and complete in their responses with groups, the public and individuals. On the other hand, a commenter stated that LES seems to be less than truthful in their part of the licensing process. The commenter stated because LES has a record of polluting, future accountability should be an important factor in deciding whether the NEF should be constructed in a southeast New Mexico location. Another commenter suggested that LES needs to address why the operating license at the Almelo, Netherlands, facility was revoked twice and to discuss other multiple violations at the plant. Another commenter suggested that Urenco, Ltd. should open their books for audit.

Another commenter stated that LES was deceptive and misrepresented facts to local residents about air emissions, water contamination, waste disposal of tails, and planning for potential accidents. The same commenter questioned why the NRC would grant a license to a company that is both deceptive and incompetent to operate the proposed NEF.

Another commenter stated that NRC officials currently in charge of the licensing process are "ethically challenged and should be replaced" because they are not responding to LES' less than truthful statements.

### 3. SUMMARY AND CONCLUSIONS

#### 3.1 SCOPE OF THE ENVIRONMENTAL IMPACT STATEMENT AND SUMMARY OF ISSUES TO BE ADDRESSED

NEPA (Public Law 91-90, as amended), and the NRC's implementing regulations for NEPA (10 CFR Part 51), specify in general terms what should be included in an EIS prepared by the NRC staff. Regulations established by the Council on Environmental Quality (40 CFR Parts 1500-1508), while not binding on the NRC staff, provide useful guidance. The NRC staff has also prepared environmental review guidance to its staff for meeting NEPA requirements associated with licensing actions ("Environmental Review Guidance for Licensing Actions Associated with Office of Nuclear Material Safety and Safeguards (NMSS) Programs", NUREG -1748).

Pursuant to 10 CFR 51.71(a), in addition to public comments received during the scoping process, the contents of the draft EIS will depend in part on the environmental report. In accordance with 10 CFR 51.71(b), the draft EIS will consider major points of view and objections concerning the environmental impacts of the proposed action raised by other Federal, State, and local agencies, by any affected Indian tribes, and by other interested persons. Pursuant to 10 CFR 51.71(c), the draft EIS will list all Federal permits, licenses, approvals, and other entitlements which must be obtained in implementing the proposed action, and will describe the status of compliance with these requirements. Any uncertainty as to the applicability of these requirements will be addressed in the draft EIS.

Pursuant to 10 CFR 51.71(d), the draft EIS will include a consideration of the economic, technical, and other benefits and costs of the proposed action and alternatives to the proposed action. In the draft analysis, due consideration will be given to compliance with environmental quality standards and regulations that have been imposed by Federal, State, regional, and local agencies having responsibilities for environmental protection. The environmental impact of the proposed action will be evaluated in the draft EIS with respect to matters covered by such standards and requirements, regardless of whether a certification or license from the appropriate authority has been obtained. Compliance with applicable environmental quality standards and requirements does not negate the requirement for NRC to weigh all environmental effects of the proposed action, including the degradation, if any, of water quality, and to consider alternatives to the proposed action that are available for reducing adverse effects. While satisfaction of NRC standards and criteria pertaining to radiological effects will be necessary to meet the licensing requirements of the Atomic Energy Act, the draft EIS will also, for the purposes of NEPA, consider the radiological and non-radiological effects of the proposed action and alternatives.

Pursuant to 10 CFR 51.71(e), the draft EIS will normally include a preliminary recommendation by the NRC staff with respect to the proposed action. Any such recommendation would be reached after considering the environmental effects of the proposed action and reasonable alternatives, and after weighing the costs and benefits of the proposed action.

The scoping process summarized in this report will help determine the scope of the draft EIS for the proposed facility. The draft EIS will contain a discussion of the cumulative impacts of the proposed action. The development of the draft EIS will be closely coordinated with the SER prepared by the NRC staff to evaluate the health and safety impacts of the proposed action.

The goal in writing the EIS is to present the impact analyses in a manner that makes it easy for the public to understand. This EIS will provide the basis for the NRC decision with regard to potential environmental impacts. Significant impacts will be discussed in greater detail in the EIS, and explanations will be provided for determining the level of detail for different impacts. This should allow readers of the EIS to focus on issues that were determined to be important in reaching the conclusions supported by the EIS. The following topical areas and issues will be analyzed in the EIS.

- *Public and worker safety and health.* The draft EIS will include a determination of potentially adverse effects on human health that result from chronic and acute exposures to ionizing radiation and hazardous chemicals as well as from physical safety hazards. These potentially adverse effects on human health might occur during facility construction and operation. Impacts associated with the implementation of the proposed action will be assessed under normal operation and credible accident scenarios.
- *Alternatives.* The draft EIS will describe and assess the no-action alternative and other reasonable alternatives to the proposed action. Other reasonable alternatives to the proposed action will be considered such as alternative sites, enrichment sources, or technological alternatives to the proposed centrifuge technology.
- *Waste management.* The draft EIS will discuss the management of wastes, including byproduct materials, generated from the construction and operation of the NEF to assess the impacts of generation, storage, and disposition. Onsite storage of wastes will also be included in this assessment.
- *Depleted uranium disposition.* The draft EIS will address concerns about the depleted uranium hexafluoride material, or tails, resulting from the enrichment operation over the lifetime of the proposed plant's operation. These concerns include the safe and secure storage and ultimate removal of this material from New Mexico, and potential conversion of  $UF_6$  to  $U_3O_8$  and ultimate disposition.
- *Water resources.* The draft EIS will assess the potential impacts on groundwater quality and water use due to the implementation of the proposed action.
- *Geology and seismicity.* The draft EIS will describe the geologic and seismic characteristics of the proposed NEF site. Evaluation of the potential for earthquakes, ground motion, soil stability concerns, surface rupturing, and any other major geologic or seismic considerations that would affect the suitability of the proposed site will be addressed in the SER rather than in the draft EIS.
- *Compliance with applicable regulations.* The draft EIS will present a listing of the relevant permits and regulations that are believed to apply to the proposed NEF. These would include air, water, and solid waste regulations and disposal permits.
- *Air quality.* The draft EIS will make determinations concerning the meteorological conditions of the site location, the ambient air quality, and the contribution of other sources. In addition, the draft EIS will assess the impacts of the NEF's construction and operation on the local air quality.

- *Transportation.* The draft EIS will discuss impacts associated with the transportation of construction material, centrifuges, and feed and tails during both normal transportation and transportation under credible accident scenarios. The impacts on local transportation routes due to workers, large vehicles delivering needed equipment and materials, and vehicles removing waste from the proposed facility will be evaluated in the draft EIS.
- *Accidents.* The draft EIS will analyze the potential environmental impacts resulting from credible accidents at the NEF. The SER will assess the impacts associated with credible accidents at the proposed NEF, both from natural events and human activities. Based on the analyses, the EIS will summarize the potential environmental impacts resulting from credible bounding accidents at the proposed facility.
- *Land use.* The draft EIS will discuss the potential impacts associated with the changes in land use from predominately rangeland to industrial.
- *Socioeconomic impacts.* The draft EIS will address the demography, the economic base, labor pool, housing, utilities, public services, education, recreation, and cultural resources as impacted by NEF. The hiring of new workers from outside the area could lead to impacts on regional housing, public infrastructure, and economic resources. Population changes leading to changes to the housing market and demands on the public infrastructure will be assessed in the draft EIS.
- *Cost/benefits.* The draft EIS will address the potential cost/benefits of constructing and operating the NEF, and will discuss the cost/benefits of tails disposition options.
- *Cultural resources.* The draft EIS will assess the potential impacts of the proposed NEF on the historic and archaeological resources of the area and on the cultural traditions and lifestyle of Indian tribes.
- *Resource commitments.* The draft EIS will address the unavoidable adverse impacts, irreversible and irretrievable commitments of resources, and the relationship between local, short-term uses of the environment and the maintenance and enhancement of long-term productivity. In addition, associated mitigative measures and environmental monitoring will be presented.
- *Ecological resources.* The draft EIS will assess the potential environmental impacts of the proposed NEF on ecological resources including plant and animal species and threatened or endangered species or critical habitat that may occur in the area. As appropriate, the assessment will include an analysis of mitigation measures to address adverse impacts.
- *Need for the facility.* The draft EIS will provide a discussion of the need for the proposed NEF and the expected benefits.
- *Decommissioning.* The draft EIS will include a discussion of facility decommissioning and associated impacts.
- *Cumulative impacts.* The draft EIS will address the potential cumulative impacts from past, present, and reasonably foreseeable activities at and near the site.

#### **4.0 ISSUES CONSIDERED OUTSIDE THE SCOPE OF THE ENVIRONMENTAL IMPACT STATEMENT**

The purpose of an EIS is to assess the potential environmental impacts of a proposed action as part of the decision-making process of an agency-in this case, a licensing decision. As noted in Section 2.2, some issues and concerns raised during the scoping process are not relevant to the EIS because they are not directly related to the assessment of potential impacts or to the decision-making process. The lack of in depth discussion in the EIS, however, does not mean that an issue or concern lacks value. Issues beyond the scope of the EIS either may not yet be ripe for resolution or are more appropriately discussed and decided in other venues.

Some of these issues raised during the public scoping will not be addressed in the EIS. Major categories of these issues not analyzed in detail in the EIS include nonproliferation concerns, terrorism, security and safety issues, and credibility. The Commission has held that NRC staff is not required to consider terrorism in its EISs. In *The Matter of Private Fuel Storage, LLC* (Independent Spent Fuel Storage Installation), 56 NRC 340 (2002), the Commission held that NRC is not required to consider terrorism in EISs. The Commission indicated, “the possibility of a terrorist attack ... is speculative and simply too far removed from the natural or expected consequences of agency action to require a study under NEPA.”

Some of these issues raised during the public scoping process for the proposed facility are outside the scope of the draft EIS, but they will be analyzed in the SER. For example, health and safety issues will be considered in detail in the SER prepared by NRC staff for the proposed action and will be summarized in the EIS. The draft EIS and the SER are related in that they may cover the same topics and may contain similar information, but the analysis in the draft EIS is limited to an assessment of potential environmental impacts. In contrast, the SER primarily deals with safety evaluations and procedural requirements or license conditions to ensure the health and safety of workers and the general public. The SER also covers other aspects of the proposed action such as demonstrating that the applicant will provide adequate funding for the proposed facility in compliance with NRC’s financial assurance regulations.