

From: "Chad Halsey" <chalsey@msu.edu>  
 To: "Anna Bradford" <nrcprep@nrc.gov>  
 Date: Thu, Jan 6, 2005 3:51 PM  
 Subject: Comments on the Draft Environmental Impact Statement for the Proposed National Enrichment Facility in Lea County, New Mexico

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January 6, 2005

Anna Bradford

Anna Bradford:

Chief, Rules and Directives Branch  
 U.S. Nuclear Regulatory Commission  
 Mail Stop T6-D59  
 Washington, D.C. 20555-0001

Re: Comments on the Draft Environmental Impact Statement for the Proposed National Enrichment Facility in Lea County, New Mexico (NUREG-1790);  
 Docket No. 70-3103

To Whom It May Concern:

The NRC has determined in its Draft EIS that the environmental impacts from building and operating a uranium enrichment facility on the site would be "small" to "moderate," and has recommended that the proposed license be issued to LES (Draft EIS, § 2.4).

However, it is my view that the Draft EIS fails to consider important factors that may contribute to substantial environmental impacts not adequately represented in this review.

Generally, the Draft EIS does not fully meet the requirement of the National Environmental Policy Act (NEPA) that each federal agency must consider in an environmental impact statement "the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity" (42 U.S.C. § 4332(c)(iv)). The cumulative hazards and dangers of the nuclear fuel cycle, nuclear power generation, and nuclear waste management weigh deserve a thorough accounting in the EIS, which is lacking in this draft version.

Specifically, the Draft EIS is insufficient in the following areas:

#### SITE SELECTION:

The description of LES's site selection process is misleading in that it only mentions certain objective criteria of respective sites and neglects the political situation that led to the selection of the site in New Mexico. It has been reported that Sen. Pete Domenici of New Mexico "wooed" the company to his home state when it was having trouble meeting

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zoning requirements established at its chosen site in Tennessee. Officials at the federal, state, and local level in New Mexico were, unlike in Tennessee, generally favorable to the project, yet nothing of this is mentioned in the Draft EIS; rather, the process used to select the site is described as a "multi-attribute-utility-analysis methodology" (page 2-35, line 5).

Seven candidate sites were eliminated because of the risk of an earthquake (Draft EIS, Table 2-7); yet the Lea County site lies in a seismically-active area near, possibly over, a geologic fault. The site in Bellefonte, Alabama is said to have been eliminated because a "historic preservation assessment" may have been required (page 2-38, line 16), but seven archaeological sites have been identified at the Lea County site. The "costly relocation" of high-voltage transmission lines is cited as a reason for lowering Bellefonte's rating, but at the Lea County site is a high-pressure carbon-dioxide (CO<sub>2</sub>) gas line that would have to be relocated before the site is developed (page 2-9). Considering this, why is the Bellefonte site considered to be inferior to the Lea County site?

#### NEED FOR THE FACILITY:

The Draft EIS states that "nuclear-generating capacity within the United States is expected to increase, causing an increase in demand for low-enriched uranium" (page 2-23, lines 46-47). Given the facts that (1) no new nuclear power reactor has been ordered in a quarter of a century; (2) no company has received a license to build a new reactor; (3) no company has expounded an explicit plan to build a new nuclear reactor; and (4) Wall Street does not seem to have an interest in funding a new generation of nuclear reactors, even with government support, how does the NRC justify the claim that nuclear-generating capacity is expected to increase in the United States?

#### SOCIO-ECONOMIC IMPACT:

The NRC judges the socio-economic impact of the proposed NEF to be "moderate," citing benefits to Lea County and the surrounding region in the form of jobs and taxes (Draft EIS, Table 2-8, page 2-52; see also § 4.2.9.7). However, per the terms of the agreement between LES and Lea County on the \$1.8 billion in industrial revenue bonds the county offered to finance the project, LES would not have to pay any property taxes for the duration of the operational life of the NEF—roughly 30 years—and it may be exempt from other taxes as well. According to the Economic Development Corporation of Lea County, this kind of property tax exemption could be worth \$3 million over 30 years for a \$10 million project. Considering that construction of the NEF is expected to cost \$1.2 billion (Draft EIS, Table 2-8, page 2-52), what does the NRC expect the total property tax exemption for the NEF to be? Moreover, the percentage of persons in the region employed in the "Professional, Scientific, Management, Administration, and Waste Management" fields—presumably applicable to jobs that would be created at the NEF—is less than half the averages for New Mexico and Texas (Draft EIS, Table 3-15, line 27).

#### "ENVIRONMENTAL JUSTICE":

The NRC staff judges that the impact of the NEF in the area of "environmental justice" will be "small." Yet the data are skewed by comparing the minority and low-income population percentages of the area to state averages, rather than to national averages. In fact, Hispanics make up 42.1 percent of the population of New Mexico—the highest

percentage of any state—and 39.6 percent of the population of Lea County, but only 12.5 percent of the U.S. population at-large.

#### WATER RESOURCES:

In the Draft EIS, the NRC observes that the water requirements of the NEF are well within the capacity of the Eunice and Hobbs municipal water systems, but this assessment totally neglects the severe long-term water shortage problem of Lea County, as documented in the Lea County Regional Water Plan. According to water plan, groundwater in the county is being withdrawn at a greater rate than it is being recharged. The report projects a doubling of water usage by 2040 and warns that "there is physically not enough water in the Basin to maintain an annual diversion of this magnitude."

#### WATER QUALITY:

The site of the proposed NEF lies in the vicinity of several geologic faults, and earthquakes frequently occur around the designated NEF site, including one with a magnitude of 5.0 in 1992. Despite this, the NRC has not conducted an investigation of the possible effects of earthquakes on groundwater flow; nor has it considered the possibility of contaminant infiltration into groundwater due to such seismic activity. Furthermore, the Draft EIS appears to indicate an assumption by the NRC that the liners employed to impound the contents of the NEF's wastewater basins will retain their integrity for the duration of the facility's operation, since there is no estimate of the likelihood of liner corruption and subsequent leakage of contaminated liquid effluents from the plant. How long does the NRC assume that the liners will contain the waste, and on what basis is this assumption made?

#### CLASSIFICATION OF DEPLETED URANIUM:

On page 2-27, the NRC states that "[f]or the purpose of this Draft EIS, the NRC considers the DUF6 generated by the proposed NEF to be a Class A low-level radioactive waste as defined in 10 CFR § 61.55(a)(6)." Why is it assumed in the Draft EIS that DUF6 is low-level waste when (1) LES itself has not yet determined whether the DUF6 it produces will be considered a waste or a resource, and (2) the NRC has not finally determined the proper waste classification of depleted uranium?

#### DISPOSAL OF DEPLETED URANIUM:

The Draft EIS lists as a second plausible disposition strategy a scenario in which LES would pay the U.S. Department of Energy (DOE) for conversion and disposal of its waste under Section 3113 of the 1996 United States Enrichment Privatization Act which states that the DOE "shall accept for disposal low-level radioactive waste, including depleted uranium if it were ultimately determined to be low-level waste..." (Draft EIS, page 2-31; the law is codified as 42 U.S.C. § 2297h-11). But the NRC has yet to make a final determination on the waste classification of depleted uranium; this being the case, transfer to the DOE cannot be considered a plausible option for disposal of DUF6.

#### ATMOSPHERIC EMISSIONS:

The Draft EIS notes that the NEF would annually discharge 440 cubic meters of helium, 190 cubic meters of argon, 53 cubic meters of nitrogen, 610 liters of methylene chloride, 40 liters of ethanol, 0.8 metric tons of volatile organic compounds, 0.5 metric tons of carbon monoxide, and 5.0 metric tons of nitrogen dioxide (page 2-23, lines 4-13). What mitigation

measures are in place to limit these emissions, and what negative environmental and public health impacts would their dispersal into the atmosphere contribute to?

#### ACCIDENTS:

The Draft EIS describes the most significant accident scenario at the proposed NEF to be an accidental release of uranium hexafluoride (UF<sub>6</sub>). NRC staff judges that the risk of such exposures would increase if the winds were from the south at the time of the accident, sending the plum of UF<sub>6</sub> towards Hobbs and Lovington, New Mexico (Draft EIS, page 4-25, lines 21-30). The local wind patterns documented in Section 3.5.2.4 and represented in Figures 3-8 and 3-10 show that southerly winds prevail in the area; thus, the likelihood of this worst-case scenario, which is contingent upon winds from the south, is increased.

#### CULTURAL RESOURCES:

There are seven archaeological sites within the proposed project area, each of which has been determined to be eligible for listing in the National Register of Historic Places. Considering this, how does NRC deem the NEF's impact on cultural resources as "small"?

#### CONCLUSION:

In the areas described above, the NRC's Draft EIS for the National Enrichment Facility (NEF) falls short of a complete evaluation of the environmental impacts of the proposed facility as required by the National Environmental Policy Act. Until the above questions and criticisms are adequately addressed and resolved, the NRC staff's recommendation that the license for the NEF be approved is premature.

Please enter these comments into the official record on this proceeding.

Sincerely,

Chad M. Halsey

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