



LES's Flawed Waste Disposal Plan

A legal challenge being pursued by citizens' groups Public Citizen and the Nuclear Information and Resource Service (NIRS) is bringing to light the seriously flawed radioactive waste disposal strategy of a company that is seeking a license to build and operate a uranium enrichment plant in southeastern New Mexico. There is no established repository in the country suitable for the long-term disposal of the plant's uranium waste. Moreover, deals with the State of New Mexico to remove the waste from the state may prove to be unenforceable.

Legal intervention against LES

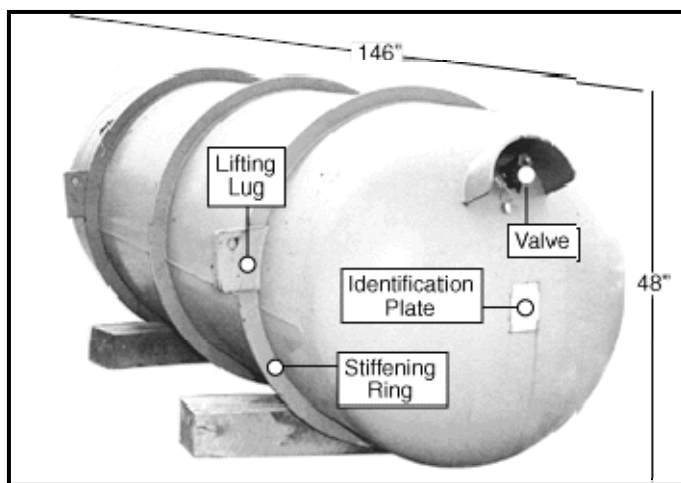
Public Citizen and NIRS are engaged in an intervention against the license application of Louisiana Energy Services (LES), the European-led consortium seeking approval for its nuclear fuel refinery. Public Citizen and NIRS contend that LES doesn't have a realistic strategy for the disposition and disposal of the very large quantities of depleted uranium (DU)—a long-lived radioactive and hazardous waste—that would be produced by the plant. The U.S. Nuclear Regulatory Commission (NRC), the licensing authority in the case, is requiring that LES present a "plausible strategy" for the disposition of DU. The waste disposal issue has become the most contentious concern in the licensing case.

LES's flawed waste disposal plans

There is currently no national repository for the long-term disposal of depleted uranium, but LES and the NRC have identified several possible sites. However, evaluations performed by experts at the Institute for Energy and Environmental Research (IEER) have shown that the waste disposal options presented by LES are not reasonable strategies to handle the massive amount of uranium waste that would be produced by the plant. There is also a great likelihood that the agreement between LES and the State of New Mexico to remove the plant's waste from the State will not be enforced.

WCS option

LES has identified the Waste Control Specialists (WCS) site in West Texas—less than two miles from the site of its proposed uranium enrichment facility



A typical "uranium byproduct cylinder" (UBC), used for storing depleted uranium hexafluoride (DUF₆) waste.

(called the National Enrichment Facility, or NEF)—as a probable disposal destination for its DU waste. But investigations performed by IEER reveal serious flaws in WCS's application for a license to establish a low-level radioactive waste dump at its Andrews County site. For example, the waste streams considered in WCS's application are mostly from reactor sites, not depleted uranium waste in the large quantities that would come from fuel cycle facilities like the proposed NEF. Furthermore, gross inaccuracies and misrepresentations in the application demonstrate this company's lack of fitness to accept waste from LES. Indeed, the Texas Commission on Environmental Quality (TCEQ), the licensing authority in Texas, severely criticized WCS's license application and site in a July 20, 2005 letter to the company, warning WCS that its facility design "appears inadequate to appropriately stabilize certain wastes for disposal, segregate different classes of

radioactive waste, [and] verify by testing the accurate classification of waste received for disposal," among other problems, such as an "inadequate" decommissioning plan, security plan, and emergency plan.

Envirocare option

Envirocare of Utah, LLC, a low-level radioactive waste dump licensed by the State of Utah to accept "Class A" low-level waste for disposal, is cited in the NRC's final Environmental Impact Statement (EIS) as a disposal option for LES. The NRC notes that Envirocare's operating license authorizes it to accept DU in oxide form in the quantities expected to be produced by LES. However, recent changes in Envirocare's operating license bring into question whether the company may legally accept waste from LES. In February 2005, Envirocare withdrew its application to accept the more highly-radioactive "Class B" and "Class C" waste for disposal.

Though the NRC has termed depleted uranium as low-level waste, it has not specified a subcategory. Public Citizen and NIRS believe that its proper classification would be "Greater Than Class C" waste, which would preclude Envirocare as a disposal option. Moreover, it appears that an amendment to Envirocare's operating license, formally adopted on June 13, 2005, would effectively prohibit the company from accepting depleted uranium waste in the large quantities that would be generated by LES, thereby eliminating it as a disposal option.

DOE option

The final EIS cites the U.S. Department of Energy's (DOE) Nevada Test Site as a possible long-term disposal site for LES's depleted uranium if ownership of the waste is transferred to the DOE. However, the DOE has an abysmal record of radioactive waste management, exemplified by the massive stockpiles of DU waste sitting idle at sites in Kentucky, Ohio, and Tennessee, as well as the DOE's failure to manage the country's high-level radioactive waste, which continues to accumulate at nuclear power plants across the country.

Flawed deal with the State of New Mexico

Having had most of its contentions excluded from hearing in the LES licensing case, the State of New Mexico has engaged in an effort to establish licensing conditions for LES that would require it to ultimately remove its DU waste from the state.

However, the NRC rejected the initial agreement because the enforceability of the conditions that the parties agreed on is unclear. The parties have since offered a new Settlement Agreement that no longer stipulates as a *licensing requirement* that the DOE not operate a DU processing plant or dispose of DU waste produced by LES within New Mexico. The DOE is required to accept the plant's DU waste by law. However, the NRC has made it clear that it does not have jurisdiction over DU waste once it is transferred to the DOE and could not possibly enforce a condition that DOE remove such waste from New Mexico.

Unrealistic cost estimates

The cost estimates offered by LES for DU processing and disposal are extremely low because they are based on these flawed and implausible disposal options. Proper disposal of LES's DU waste—in a deep geologic repository—would raise LES's waste disposal estimates exponentially.

Conclusion

There is no established site in this country for the safe, long-term disposal of depleted uranium, and the options presented by LES and the NRC are either impracticable, legally implausible, or physically unsuitable. It would not be prudent to move forward with this new facility in the absence of a reasonable strategy for properly disposing of this waste. The net result of LES's flawed waste disposal plans may be a legacy of long-lived radioactive waste contamination in New Mexico.

Public Citizen and NIRS will continue to challenge the license application and waste disposal plans of LES in hearings set for fall 2005.

Public Citizen's Critical Mass Energy Program

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