April 4, 2006

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

April 5, 2006 (7:35am) OFFICE ()F SECRETARY

RULENAKINGS AND ADJUDICATIONS STAFF

DOCKETED USNRC

In the Matter of

11519

Docket No. 70-3103

Louisiana Energy Services, L.P. National Enrichment Facility ASLBP No. 04-826-01-ML

REPLY ON BEHALF OF NUCLEAR INFORMATION AND RESOURCE SERVICE AND PUBLIC CITIZEN ON PETITION FOR REVIEW OF SECOND PARTIAL INITIAL DECISION (ENVIRONMENTAL IMPACTS OF DISPOSAL OF DEPLETED URANIUM)

Preliminary statement

This Reply is submitted on behalf of Intervenors Nuclear Information and Resource

Service and Public Citizen ("NIRS/PC"), seeking Commission review of the Second Partial

Initial Decision (Environmental Impacts of Disposal of Depleted Uranium)(the "Decision") of

the Atomic Safety and Licensing Board (the "Board"), dated March 3, 2006.

Argument

a. impacts of near-surface disposal.

The Commission in CLI-05-20 directed the Board to estimate impacts of DU disposal:

a. "at one or more representative or reference sites"

so that

b. "the impacts for a range of potential facilities or locations having common site or design features can be bounded."

Template= SECY-021

SECV-02

The Board approved a supposed analysis by Utah authorities of a single site that no party claims is "representative" and cannot possibly "bound" the impacts of "a range of potential facilities" since Utah excluded *all human use scenarios*—scenarios that Staff said are "normally evaluated for low level waste disposal facilities." (Tr. 2874-75). Utah ignored the recent history of use of the Envirocare site by humans for various purposes. (Tr. 2750, 2901, 2906, 2909-13, 2975-3005; NIRS/I'C Ex. 170 at 4-4, 4-5). As presented to the Staff, Utah's decision was based upon unquantified statements about the unsuitability of the site for agriculture—language that the Board dismissed as "conclusory" and "problematic." (Decision at 53 n.34). Utah even based its decision on zoning ordinances—institutional factors that cannot be effective in the long term future addressed by 10 CFR Part 61. (10 CFR 61.42, 61.59).

٦.

ţ

The Board recognized that Staff must independently review Utah's determination and exercise independent judgment in determining disposal impacts. (Decision at 51, 57). Staff, however, expressly admitted that they made no such analysis and did not even request the potentially relevant reports of Utah's analyses. (Tr. 2255, 2711, 2744).

LES and Staff argue that Utah's decision must be accepted, because this proceeding has no jurisdiction over Utah's licensing actions. (LES Ans. 10-11; NRC Ans. 7). But NIRS/PC have not "challenged the viability of the WCS application and the Envirocare license" (LES Ans. 11), and NEPA analysis is emphatically Staff's duty. In *admitting* in evidence the IEER reports—which demonstrate that neither the WCS site nor the Envirocare site can safely dispose of large quantities of depleted uranium—the Board acknowledged that performance of those sites is directly in issue.

As for that performance, LES asserts that the Board may "truncate site performance evaluations at 1,000 or 10,000 years." (LES Ans. 12). However, regulations allow no such

curtailment (See 10 CFR 61.42), as LES's witness (Tr. 2660) and the Board recognized. (Tr. 2699, 2910, 2914-15, 3076). The regulations, which the Board may not change, protect the public "at any time" (10 CFR 61.42).

ï

•

1

Staff argue that they did an independent review by reading the 1990 Baird report (NRC Ans. 8), which Staff deemed "reasonable" (Tr. 2885-87), but that report contains scientifically absurd results. (Tr. 2979-84). Moreover, the Baird report determined that, under 10 CFR Part 61, depleted uranium could not be disposed of at Envirocare. (Tr. 2709-10, 2897). Staff urge that they considered other "factors" in allowing disposal. (NRC Ans. 8). However, the claimed "factors" are the same "conclusory" and "problematic" terms that the Board held inadequate under NEPA. (Decision at 53 n.34).

LES claims that Staff determined that human use was "unrealistic" based on the reported salinity of soil and groundwater. (LES Ans. 12-13). There was no such Staff determination, and no supporting Staff analysis. The idea that Utah's conclusions can be assessed, when neither Staff nor the Board even saw Utah's data or criteria about ground water and soil salinity, clearly fails the Board's own tests: that "a foundation for excluding intruder scenarios" is required and unexplained conclusions are "problematic." (Decision at 53 n.34). And Staff's acceptance of Utah's exclusion of human use scenarios is belied by the known fact of recent human use. (NIRS/PC Ex. 170 at 4-4, 4-5).

It is claimed that Staff need do no "independent pathway analysis." (LES Ans. 15; NRC Ans. 7). However, when Staff rely upon an analysis by another entity, Staff must conduct an independent review and "exercise independent judgment in determining the radiological impacts of disposal at that particular site." (Decision at 51). Decisions allowing the Staff to rely upon the NEPA compliance of another federal agency (LES Ans. 16) play no role here, where

the State of Utah has no delegated authority under NEPA and, in any case, performed no proper analysis that has been brought to light in this proceeding.

Finally, LES's statement that the DOE PEIS found that disposal of DU_3O_8 in a dry environment "would have essentially no radiological health impacts" (LES Ans. 20) is simply wrong. Such conclusion requires truncating analysis at 1,000 years after a release and therefore is no bounding analysis. (Decision at 60 n.38). The DOE study expressly showed that after 1,000 years, the cover of the site could erode, delivering doses of 10 rem per year—far exceeding the limits of 10 CFR Part 61. (LES Ex. 18 at I-19).

b. impacts of deep disposal

٦

<u>^</u>

r.

LES asserts that the only issues involving deep disposal were the typographical error in preparing EIS Table 4-19 and Staff's modification of the CEC analysis to account for a larger disposal inventory, and that other problems with Staff's deep disposal analysis are barred. (LES Ans. 21). However, the Board itself recognized that NIRS/PC's contention properly challenged the incredibly low dose estimates in Table 4-19, and it allowed the contentions to be heard. (Tr. 2844-46). LES's Environmental Report ("ER") referred briefly to the CEC analysis of deep disposal, saying only that the estimated impacts fell below the limits in 10 CFR Part 61. (NIRS/PC Ex. 133 at 4.13-14). LES did *not* include or even mention the dose results for individual radionuclides in the CEC FEIS (NIRS/PC Ex. 58 at A-14, A-15), nor did it assert that the CEC analysis applied to the larger NEF disposal quantities.

The Draft EIS first estimated doses from the NEF in Table 4-19. It stated that deep disposal was analyzed in the CEC EIS and that impacts from the NEF would be "proportional to the quantity of material." (NIRS/PC Ex. 152 at 4-59). However, the figures in Table 4-19 were not all "proportional" to CEC data, and their origins were not explained. Through discovery,

NIRS/PC learned that the figures (a) derived from data in the CEC FEIS, (b) but were summed rather than stating values for individual radionuclides, (c) were multiplied by 1.72 to adjust for a larger inventory, (d) three of the numbers were grossly misstated by confusing values in mSv for values in mrem, and (e) there was another typographical error. (NRC Motion, at 10, 15-17 (Nov. 18, 2005)). The figures in Table 4-19 were so altered from the CEC FEIS that their derivation could not be identified. NIRS/PC promptly challenged the figures, and the Board held that, cnce the mistakes were corrected, NIRS/C could challenge the underlying analysis. (Tr. 2844-46).

٦

;

.

LES now argues that Staff correctly assumed that disposal of DU_3O_8 would result in the solid phase DUO_2 , controlling solubility (LES Ans. 24-25)—recognizing the issue as to evolution of that solid phase. The affidavit of George Rice showed that, for groundwater with the same redox potential in Table A.5 of the CEC FEIS, the solubility of DU_3O_8 would be 1,800 to 7,000 times larger than that reported in the CEC FEIS. (Rice Dec. at par. 4-8, Nov. 18, 2005)

LES and Staff assert that NIRS/PC may not question the incredible—and irreproducible—numbers in Table 4-19, and Staff may rely on them, because NEPA does not require disclosure of underlying calculations. (LES Ans. 23, NRC Ans. 10). But NIRS/PC seek no wasteful repetition of calculations. On this issue, the Commission has spoken: For Staff to rubber-stamp an earlier analysis that Staff cannot even find in the files, and without access to the models and assumptions underlying that analysis, conflicts with the Commission's decision in CLI-05-28 (at 21-22).

Conclusion

For the foregoing reasons, the Commission should undertake review and reverse the Board's Decision on the environmental impacts of disposal of depleted uranium.

Respectfully submitted,

- **x**

ĩ

Σ,

Jar-1 x** in der an

Lindsay A. Lovejoy, Jr. 618 Paseo de Peralta, Unit B Santa Fe, NM 87501 (505) 983-1800 (505) 983-0036 (facsimile) E-mail: lindsay@lindsaylovejoy.com

Counsel for Petitioners Nuclear Information and Resource Service 1424 16th St., N.W. Suite 404 Washington, D.C. 20036 (202) 328-0002

and

Public Citizen 1600 20th St., N.W. Washington, D.C. 20009 (202) 538-1000

April 4, 2006

CERTIFICATE OF SERVICE

Pursuant to 10 CFR § 2.305 the undersigned attorney of record certifies that on April 4, 2006, the foregoing Reply on behalf of Nuclear Information and Resource Service and Public Citizen on Petition for Review of Second Partial Initial Decision was served electronically and by first class mail upon the following:

G. Paul Bollwerk, III Atomic Safety and Licensing Board Panel U.S. Nuclear Regulatory Commission Washington, D.C. 20555-0001 e-mail: <u>gpb@nrc.gov</u>

2 . . .

1

Dr. Paul B. Abramson Atomic Safety and Licensing Board Panel U.S. Nuclear Regulatory Commission Washington, D.C. 20555-0001 e-mail: <u>pba@nrc.gov</u>

Dr. Charles N. Kelber Atomic Safety and Licensing Board Panel U.S. Nuclear Regulatory Commission Washington, D.C. 20555-0001 e-mail: <u>CKelber@att.net</u>

James R. Curtiss, Esq. David A. Repka, Esq. Martin J. O'Neill, Esq. Winston & Strawn 1700 K St., N.W. Washington, D.C. 20006 c-mail: jcurtiss@winston.com drepka@winston.com moneill@winston.com

John W. Lawrence, Esq. National Enrichment Facility 100 Sun Avenue, N.E. Albuquerque, NM 87109 e-mail: jlawrence@nefnm.com Office of the General Counsel U.S. Nuclear Regulatory Commission Washington, D.C. 20555-0001 Attention: Associate General Counsel for Hearings, Enforcement. and Administration e-mail: OGCMailCenter@nrc.gov

<u>lbc@nrc.gov</u> <u>abc1@nrc.gov</u> <u>jth@nrc.gov</u> <u>dmr1@nrc.gov</u> <u>dac3@nrc.gov</u>

.....

Office of Commission Appellate Adjudication Mail Stop O-16C1 U.S. Nuclear Regulatory Commission Washington, D.C. 20555-0001

Secretary U.S. Nuclear Regulatory Commission Washington, D.C. 20555-0001 Attention: Rulemakings and Adjudications Staff (original and two copies) e-mail: <u>hearingdocket@nrc.gov</u>

Lindsay A. Lovejoy, Jr.

Lindsay A. Lovejoy, Jr. 618 Paseo de Peralta, Unit B Santa Fe, NM 87501 (505) 983-1800 (505) 983-0036 (facsimile) e-mail: <u>lindsay@lindsaylovejoy.com</u>