# UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

### BEFORE THE COMMISSION

In the Matter of	)	
LOUISIANA ENERGY SERVICES, L.P.	)	Docket No. 70-3103
(National Enrichment Facility)	)	ASLBP No. 04-826-01-ML

NRC STAFF RESPONSE TO NIRS/PC'S PETITION FOR REVIEW OF SECOND PARTIAL INITIAL DECISION ON ENVIRONMENTAL CONTENTIONS

#### INTRODUCTION

Pursuant to 10 C.F.R. §2.342(b)(3), the NRC Staff hereby responds to the petition filed by Nuclear Information Resource Services and Public Citizen ("NIRS/PC")<sup>1</sup> requesting Commission review of the *Second Partial Initial Decision* (Environmental Impacts of Disposal of Depleted Uranium) resolving issues regarding the impacts of disposal of depleted uranium tails which would be produced by the proposed uranium enrichment facility which is the subject of the application filed by Louisiana Energy Services, L.P. ("LES").<sup>2</sup> As discussed below, the Staff opposes the Petition and urges that it be denied.

#### BACKGROUND

This proceeding concerns the application by LES to construct and operate a uranium enrichment facility near Eunice, New Mexico, to be known as the National Enrichment Facility ("NEF"). NIRS/PC has been admitted as a party to the proceeding and has advanced contentions raising environmental and technical concerns. The Board initially held evidentiary

<sup>&</sup>lt;sup>1</sup> "Petition on Behalf of Nuclear Information and Resource Service and Public Citizen for Review of Second Partial Initial Decision on Environmental Contentions," March 20, 2006, ("Petition").

<sup>&</sup>lt;sup>2</sup> Louisiana Energy Services, L.P. (National Enrichment Facility), LBP-06-08, 63 NRC --, (March 3, 2006).

hearings on the environmental contentions and issued a ruling on those contentions, resolving them in favor of LES and the Staff in *Louisiana Energy Services*, *L.P.* (National Enrichment Facility), LBP-05-13, 61 NRC 385 (2005). NIRS/PC appealed the decision and the Commission, in *Louisiana Energy Services*, *L.P.* (National Enrichment Facility), CLI-05-20, 62 NRC 523 (2005), remanded additional environmental contentions, challenging the adequacy of the Staff's environmental review of the impacts of disposal of depleted uranium tails, to be generated by the NEF to the Board for further proceedings. *Id.* at 536-37.

Shortly after issuance of the Commission's remand, the Board and parties proceeded with an evidentiary hearing which had been scheduled to hear evidence concerning NIRS/PC technical contentions. During that hearing, the parties submitted oral testimony to address certain aspects of the remanded issues. In addition, both the Staff and NIRS/PC filed motions for summary disposition addressing other aspects of the remanded issues.<sup>3</sup>

As relevant here, the issues addressed by the Board during the evidentiary hearing on the remanded contentions were, as described by the Board:

NIRS/PC EC-4 – Impacts of Waste Storage and Disposal CONTENTION: The FEIS contains an incorrect analysis of the environmental impacts of the disposal of depleted uranium hexafluoride waste. The FEIS assumes that depleted uranium may be disposed of as low-level waste, which is incorrect. The FEIS fails to recognize the Commission's stated position that depleted uranium is not appropriate for near-surface disposal.

(A) The FEIS states that depleted uranium may be disposed of as Class A low-level waste. This is erroneous, because the Commission's adoption of 10 CFR Part 61 included no analysis of the environmental impact of disposal of depleted uranium as low-level waste, and the Commission could not lawfully decide that such disposal is permissible without undertaking a full environmental impact analysis. Further, NIRS/PC have previously explained, in support of contention NIRS/PC EC-3/TC-1, that depleted uranium should be managed and disposed of in accordance with rules applicable to Greater than Class C waste, not low-level waste.

<sup>&</sup>lt;sup>3</sup> "NRC Staff Motion for Summary Disposition," November 18, 2005 and "Motion for Partial Summary Disposition Submitted on Behalf of Intervenors Nuclear Information and Resource Service and Public Citizen," November 18, 2005.

The FEIS fails to recognize the Commission's repeatedly stated position that depleted uranium is not appropriate for near-surface disposal. The CEC Final EIS concluded that near-surface disposal of DU<sub>3</sub>O<sub>8</sub> would not comply with 10 CFR Part 61 and suggested some form of deep disposal. (CEC Final EIS at 4-67). In 1995, during the scoping process for [the Department of Energy's (DOE)] Programmatic EIS concerning long-term management of DU, NRC stated that large quantities of DU<sub>3</sub>O<sub>8</sub> such as those derived from the DOE enrichment tailings inventory suggest the need for a unique disposal facility, such as a mined cavity or exhausted uranium mine. See Croff, A.G., et al., Evaluation of the Acceptability of Potential Depleted Uranium Hexafluoride Conversion Products at the Envirocare Disposal Site, ORNL/TM-2000/355, at 12 (Dec. 2000). On October 18, 2000, in commenting on the DOE Roadmap for management of DU, the Commission stated that "[s]hallow land (near-surface) disposal was not a likely option because a generic performance assessment indicated the dose requirements of 10 CFR Part 61 could be exceeded by a wide margin." (Letter, E. Leeds, NRC, to Depleted Uranium Hexafluoride Management Program, DOE, Oct. 18, 2000). The FEIS for the NEF fails to account for the NRC's repeated positions on the subject of disposal of DU and simply assumes that disposal may occur at a near-surface site. An explanation of such a change in agency position is required.

Louisiana Energy Services, LBP-06-08, slip op. at 29-30. These issues were resolved in favor of the Staff in the Board's Second Partial Initial Decision. The Board initially resolved the issues raised in Basis (B), and then turned to the question of whether the Staff's environmental analysis of the impacts of near surface disposal of depleted uranium was adequate to comply with the National Environmental Policy Act ("NEPA"). Focusing on the Staff's review of the impacts of near-surface disposal of depleted uranium tails, the Board noted that the Staff had considered Envirocare as a "reference site" for the purpose of its analysis, *id.* at 43-44, and had made the following points with regard to that site:

- 1) the environmental impacts of disposal at a given licensed near-surface disposal site, such as Envirocare, would have been examined at the time the facility received its initial license, or in conjunction with any amendment to that license;
- (2) under the terms of its license, Envirocare is authorized by the State of Utah to accept depleted uranium without any volume restrictions;
- (3) certain site-specific characteristics make disposal of depleted uranium acceptable at the Envirocare site; and
- (4) because disposal of depleted uranium at Envirocare meets the State of Utah

low-level waste licensing requirements, impacts of disposal of depleted uranium from the NEF at Envirocare would be "small."

*Id.* With regard to the last point, the Board noted that the Staff's assessment that the impacts would be small was predicated upon the fact that the performance criteria of 10 C.F.R. Part 61 would have been satisfied for the Envirocare site when it was licensed to accept the depleted uranium tails in the quantities to be generated by the NEF.<sup>4</sup> *Id.* at 44. After considering the oral testimony presented during the hearing, the Board found that the Staff's Final Environmental Impact Statement, as supplemented by the testimony presented during the hearing, was sufficient to demonstrate that the Staff had satisfied its NEPA obligations to take a "hard look" at the environmental impacts of near surface disposal of the depleted uranium tails generated by the NEF. *Id.* at 53.

The Board premised this conclusion on two underlying determinations by the Staff.

First, the Board found that the Staff must determine that Envirocare was licensed to accept the quantities of depleted uranium at issue, meaning that the State of Utah had assessed the impacts of near surface disposal of large quantities of depleted uranium and determined that they did not exceed the relevant performance criteria. *Id.* at 44. Secondly, the Board found that the Staff must independently review the determination of the State and exercise independent judgment in determining the radiological impacts of disposal at that particular site. *Id.* 

As noted in the Board's decision, *Id.* at 11, certain other issues on remand were disposed of by virtue of its rulings on summary disposition. These issues arose from the Staff's adoption in the NEF Draft and Final Environmental Impact Statements of analyses of deep (mine) disposal impacts for depleted uranium tails from the Final Environmental Impact Statement ("FEIS") for the Claiborne Enrichment Facility ("CEC"), the original enrichment facility

<sup>&</sup>lt;sup>4</sup> Envirocare is licensed by the Utah, which is an agreement state and as such applied state regulations which are essentially equivalent to those in 10 C.F.R. Part 61.

proposed by LES. NIRS/PC raised issues concerning discrepancies between the numbers reported in the CEC and NEF environmental reports. In addition, and as relevant to NIRS/PC's petition for review, NIRS/PC raised the following issue as described by the Board:

In its second contention EC-4 -related challenge to the validity of the NEF DEIS/FEIS now before the Board, NIRS/PC asserts that these documents, as well as the CEC FEIS upon which they rely, are inadequate to fulfill the agency's NEPA responsibilities. According to NIRS/PC, these environmental impact analyses fail to contain information that is adequate to enable other scientists to verify independently the dose results published in the DEIS/FEIS or, alternatively, to determine what other errors may be behind the modeling efforts underlying the CEC FEIS and, accordingly, the NEF DEIS/FEIS as they rely on the CEC FEIS.

*Id.* at 29. The Board ruled in favor of the Staff's motion, finding that the Staff had met the test previously put forth by the Board and approved by the Commission; namely that (1) the documents were publically available, and (2) the Staff had assessed the reasonableness of the DOE assumptions, calculations and conclusions. *Id.* at 30.

#### DISCUSSION

I. Legal Standard Applicable to Commission Review

The Commission's regulations in 10 C.F.R. §2.342(b)(4) provide that the Commission may, in its discretion, grant a petition for review upon consideration of the following considerations:

- (i) A finding of material fact is clearly erroneous or in conflict with a finding as to the same fact in a different proceeding;
- (ii) A necessary legal conclusion is without governing precedent or is a departure from or contrary to established law;
- (iii) A substantial and important question of law, policy, or discretion has been raised;
- (iv) The conduct of the proceeding involved a prejudicial procedural error; or
- (v) Any other consideration which the Commission may deem to be in the public interest.

As discussed below, NIRS/PC has failed to identify any substantial question as to any of

the specified considerations which could warrant Commission review. Although NIRS/PC restates evidentiary claims it presented to the Board and complains that they were not sufficiently considered or accepted, NIRS/PC presents only two fundamental claims of error in the Board's decision which are addressed below.

# II. Near Surface Disposal Impacts

NIRS/PC claims that the Board erred in failing to follow the Commission's directive in the remand to, in NIRS/PC's words, "estimate the impacts of near-surface 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." Petition at 15-16.

Contrary to NIRS/PC's claim, however, the Commission did not direct the Board to inquire as to whether the Staff had independently assessed whether the State of Utah had properly performed the necessary site-specific pathway analysis to evaluate the potential disposal impacts at Envirocare, the reference site considered by the Staff in the FEIS. The actual guidance provided by the Commission on this point was as follows:

An NRC 'impacts' analysis does not require a full-scale site-specific review, an inquiry in the purview of the responsible licensing agency, such as an Agreement State. NEPA also does not call for certainty or precision, but an *estimate* of anticipated (not unduly speculative) impacts. An assessment of the estimated impacts at one or more representative or reference sites can be sufficient. In this type of analysis, the impacts for a range of potential facilities or locations having common site or design features can be bounded. The LES facility will generate large new quantities of depleted uranium for disposal and therefore it is appropriate for the NRC in its impacts analysis to assess whether the impacts of disposing of the LES depleted uranium are expected to be small, moderate, or otherwise.

Louisiana Energy Services, CLI-05-20, 62 NRC at 536. Thus, it is clear that the Commission did not contemplate that NEPA requires the Staff to perform the independent, site-specific, detailed pathway analysis NIRS/PC claims is necessary when assessing the environmental impacts of a representative, or a so-called reference disposal site for the depleted uranium tails.

NIRS/PC cites numerous claims of errors relating to the Board's application of the Commission's guidance. While these claims are set forth in a somewhat haphazard manner in NIRS/PC's filing, the Staff will address them in the context of the two fundamental Staff requirements established by the Board; namely that (1) the Staff ascertained that Envirocare is licensed to accept large quantities of the depleted uranium, and (2) the Staff independently reviewed the determination of the State and exercised independent judgment in determining the radiological impacts of disposal.

With regard to the determination that Envirocare is licensed to accept the depleted uranium tails which will be produced by the NEF, NIRS/PC claims that the decision by the State of Utah to license Envirocare to accept large quantities of depleted uranium does not comply with NEPA requirements. Petition at 16. Significantly, however, NIRS/PC does not relate its complaints with the State's licensing decision to the Staff's obligations under NEPA. In fact, the licensing of the Envirocare site is an independent licensing decision made by the State under its agreement state responsibilities and therefore is not a matter that is within the jurisdiction of the Board or the Commission under NEPA.<sup>5</sup> Thus, NIRS/PC's speculation that Utah regulators improperly reached this licensing decision by, for example, improperly relying on county zoning ordinances, Petition at 17, is simply not a matter subject ot review by the board or, for htat matter, by the Commission.

Further, the type of site-specific analysis which would be necessary to independently evaluate and confirm the State's licensing determination is not necessary to support the Staff's environmental analysis as is clear by the Commission guidance quoted. Thus, NIRS/PC's

<sup>&</sup>lt;sup>5</sup> The Board has repeatedly rejected attempts by NIRS/PC to raise the issue of the validity of the State's decision to license Envirocare. Most recently, in the Board's *Memorandum and Order* (Ruling on Motion to Amend Contention NIRS/PC EC-4), the Board stated "neither the validity and substance of the Envirocare license nor the State of Utah's decisionmaking as to that license is a matter for the Board. Licensing Boards do not have jurisdiction over matters properly before state regulatory bodies. . ." Slip op at 15.

complaints that the Board erred by not requiring such an analysis are without merit. These include claims that the Staff failed to satisfy its NEPA obligations because it failed to present an independent pathway analysis or an evaluation of the factors underlying the State's licensing decision, such as specific data regarding ground water and soil salinity. Petition at 18-19.

This is not to say that the Board found that the Staff need not consider the environmental impacts of disposal at Envirocare or similar facilities as part of its responsibilities under NEPA. As the Board recognized, the Staff must take an independent look at the environmental impacts of disposal at the reference site selected - Envirocare - and assess them for the purpose of determining whether those consequences are "small," "moderate," or otherwise. See, Louisiana Energy Services, LBP-06-08 at 44. Further, the Board found that the Staff had complied with this requirement by reviewing the report which was the principal basis for the licensing of Envirocare by the State, which was a site-specific pathway analysis, and the factors considered by the State in permitting disposal of large quantities of depleted uranium. In the Board's view, this review was sufficient to support the Staff's conclusion that disposal of the quantities of uranium to be generated by the NEF at that site would be small by virtue of the fact that the performance criteria in Part 61 would not be exceeded. *Id.* at 47-51. Notwithstanding NIRS/PC's complaints that the evidence presented by its expert was not sufficiently considered, the Board's opinion documents a thorough consideration and weighing of the testimony of all parties underlying the finding that the Staff had sufficiently examined the State's assessment and concluded that that the radiological impacts of disposal at the Envirocare would satisfy the Part 61 performance requirements and therefore be small. *Id.* at 45-52. While NIRS/PC claims that the Staff should have been required to do more, and references certain specified data and analysis NIRS/PC would like to see, these claims amount to yet another allegation that the Staff should have been required to perform an independent pathway analysis to confirm the State's licensing decision and do not present any substantial

issue with regard to the Board's decision. Thus, NIRS/PC has not raised any proper grounds for Commission review.

#### III. Deep Disposal Impacts

NIRS/PC claims that the Board erred in granting summary disposition in favor of the Staff regarding the challenge to the adequacy of the Staff's documentation explaining the modeling that was used to obtain the results for mine disposal of depleted uranium tails, which are set forth in the CEC FEIS and incorporated by reference in the NEF FEIS. Specifically, NIRS/PC claims that the Board erred because the Staff was unable to reproduce the results of the original analysis, and therefore "applied a rubber stamp to a study that no one participating in the NEF licensing proceeding can reproduce or adequately defend." Petition at 24-25.6

These same claims were extensively discussed and dismissed by the Board in its ruling. As the Board initially noted, NIRS/PC has provided no judicial or agency authority for the claim that when an agency relies on a previous analysis it need reproduce, or provide sufficient information to permit another entity to reproduce, the results of the earlier analysis. *Louisiana Energy Services*, LBP-06-09 at 29. Rather, the Board applied the same test it had applied in an earlier ruling which was affirmed by the Commission in *Louisiana Energy Services*, *L.P.* (National Enrichment Facility), CLI-05-28, 62 NRC 721, 730, namely that the Staff could rely on analyses in DOE environmental documents provided that (1) the documents were publically available, and (2) the Staff's expert had assessed the reasonableness of the underlying assumptions, calculations and conclusions without redoing the calculations. *Id.* at 30.

Applying that test, the Board noted that the CEC FEIS from which the Staff derived the

<sup>&</sup>lt;sup>6</sup> In the background section of its filing, NIRS/PC also cites to statements of material facts it presented in its motion for summary disposition and which it claims that the Board must accept as true for the purpose of ruling on summary disposition. Petition at 12-14. However, these facts all go to disputes with the CEC analysis which were entirely new and unrelated to the admitted contentions, and were therefore rejected as grounds for summary disposition by the Board. *Louisiana Energy Services*, LBP-06-09, slip op. at 27-28.

analysis was clearly publically available. Additionally, the Board noted that affidavits submitted by staff experts demonstrated that they had reviewed the analysis and the underlying assumptions, and concluded that it was reasonable and appropriate. Id. at 30-31. NIRS/PC does not dispute these conclusions, but instead claims that the Board should have required more, alleging that it is not enough to explain and evaluate the approach and methodology used in the CEC analysis. According to NIRS/PC, the Staff must provide the actual input and output data necessary to reproduce the results of the analysis. Petition at 23. NIRS/PC, again, does not provide any support for the allegation that the Staff must go so far as to reproduce the previous results. Indeed, this is contrary to the Commission's recent finding that redoing previous calculations would be a duplication of resources not required by law. Louisiana Energy Services, CLI-05-28, 62 NRC at 730. What is necessary is that the Staff independently evaluate the conclusions, a standard the Board found satisfied in this case. Significantly, NIRS/PC claims that is seeking to have the Staff evaluate, understand, endorse and explain its use of analysis relied upon. Petition at 25. As the Board explained, this is precisely what the Staff has done. Thus, NIRS/PC has failed to raise a substantive issue with regard to deep disposal impacts warranting Commission review.

#### CONCLUSION

For the reasons stated above, NIRS/PC's petition for Commission review of the Board's Second Partial Initial Decision should be denied.

Respectfully submitted,

/RA/

Lisa B. Clark Counsel for NRC Staff

Dated at Rockville, Maryland this 30<sup>th</sup> day of March, 2006

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(National Enrichment Facility)	) ) )	ASLBP No. 04-826-01-ML

### CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF RESPONSE TO NIRS/PC'S PETITION FOR REVIEW OF SECOND PARTIAL INITIAL DECISION ON ENVIRONMENTAL CONTENTIONS" in the above-captioned proceedings have been served on the following by deposit in the United States mail; through deposit in the Nuclear Regulatory Commission's internal system as indicated by an asterisk (\*), and by electronic mail as indicated by a double asterisk (\*\*) on this 30<sup>th</sup> day of March, 2006.

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