

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

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

NRC STAFF BRIEF IN REPLY TO NIRS/PC AND NMAG'S BRIEFS  
ON CLASSIFICATION OF DEPLETED URANIUM AS WASTE

INTRODUCTION

Pursuant to the Commission's Order of August 18, 2004,<sup>1</sup> the Nuclear Regulatory Commission Staff ("Staff") hereby files its brief addressing the issue raised in a contention submitted by Nuclear Information and Resource Service and Public Citizen ("NIRS/PC") concerning the appropriate classification of depleted uranium tails produced by the proposed enrichment facility to be constructed and operated by Louisiana Energy Services ("LES"). As discussed below, the Staff submits that, contrary to assertions made by NIRS/PC in its Brief on the matter, NIRS/PC's arguments constitute an impermissible attack on the Commission's regulations as the depleted uranium ("DU") material meets the definition of low-level waste as provided in 10 C.F.R. § 61.2. Additionally, contrary to arguments raised by both NIRS/PC and the New Mexico Attorney General ("NMAG"), the DU meets the criteria for Class A waste pursuant to 10 C.F.R. § 61.55(a)(6).

BACKGROUND

The Commission, in CLI-04-25, accepted for further review a basis in support of a contention referred to the Commission by the Licensing Board concerning the classification of

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<sup>1</sup> *Louisiana Energy Services, L.P.*, (National Enrichment Facility), CLI-04-25, 60 NRC \_\_\_\_\_, (August 18, 2004).

depleted uranium under 10 C.F.R. Part 61.<sup>2</sup> In response to the Commission's request for briefs on the matter, initial briefs on the referral at issue were filed by the Staff, LES, NMAG and NIRS/PC.<sup>3</sup> Pursuant to the Commission's direction in its Order, the Staff now files its reply brief.<sup>4</sup>

### DISCUSSION

In its Brief on this matter, NIRS/PC and AGNM argue that, because the Commission has not determined that depleted uranium constitutes low-level waste, as contemplated by section 3113 of the U.S. Enrichment Corporation Privatization Act ("Privatization Act"), transfer of the depleted uranium ("DU") to the Department of Energy ("DOE") cannot be considered a plausible strategy. NIRS/PC additionally challenges the application of Part 61 to the DU. Finally, NIRS/PC argues that the Board's ruling in the *Claiborne Enrichment Center* proceeding does not affect this case since they are not requesting a waiver.<sup>5</sup> The Staff submits that none of the arguments presented by NIRS/PC or the AGNM prevent the DU from meeting the Part 61 definition of waste and that, contrary to the NIRS/PC's assertion in its Brief that it is not attacking the Commission's regulations, the NIRS/PC Brief clearly exhibits that this is precisely what NIRS/PC is attempting.

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<sup>2</sup> *Id.*, slip op at 1, 4-5.

<sup>3</sup> See "NRC Staff Brief on Classification of Depleted Uranium as Waste;" "Response of Louisiana Energy Services, L.P. to the Question Certified to the Commission by Memorandum and Order (Rulings Regarding Standing, Contentions, and Procedural/Administrative Matters);" and "Brief on Behalf of Petitioners Nuclear Information and Resource Service/Public Citizen in Support of NIRS/PC Contention EC-3/TC-1". Additionally, The New Mexico Attorney General filed "New Mexico Attorney General's Motion for Leave to File a Late-Filed Contention" and "New Mexico Attorney General's Brief in Response to Commission's Order on NIRS/PC Contention D and Attorney General's Late-Filed Contention." The Staff responded to the NMAG filings under separate cover on September 17, 2004. See NRC Staff Response to New Mexico Attorney General's Motion for Leave to File a Late-Filed Contention."

<sup>4</sup> CLI-04-25, slip op. at 6

<sup>5</sup> *Louisiana Energy Services, L.P. (Clairborne Enrichment Center)*, LBP-91-641-02-ML, 1995 WL 110611, (March 2, 1995).

A. The Issue Before the Commission is the Classification of the Depleted Uranium

NIRS/PC begins with the claim that the issue before the Commission is whether or not the basis of the contention at issue meets the admissibility requirements outlined in 10 C.F.R. § 2.309(f) rather than the merits of the issue - whether DU can be classified as low-level radioactive waste under the Commission's regulations. This interpretation is clearly wrong given the actions of the Licensing Board and the Commission. In referring contentions to the Commission, the Board was not referring admitted contentions for the purpose of obtaining guidance on whether the standards of admissibility had been satisfied. Instead, the Board referred this issue to the Commission because it stated that admitting the contention raised a "novel legal or policy question regarding the status of depleted uranium hexafluoride waste as low-level waste".<sup>6</sup> It is in response to that referral that the Commission acted in taking the issue of classification for consideration.<sup>7</sup> In doing so, the issue for the Commission is precisely consideration of the merits of the argument. The Commission acknowledged as much by noting that there appeared to be possible confusion regarding its direction in the Order and the fact that it should not be interpreted to permit a challenge to the regulations, and by explicitly asking parties to submit briefs before addressing the merits.<sup>8</sup>

B. The Commission Must Determine Whether DU Should be Classified as Low-Level Waste

Under the Privatization Act, low-level radioactive waste is defined as radioactive material that is not high-level radioactive waste, spent nuclear fuel, or byproduct material and the NRC

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<sup>6</sup> See *Memorandum and Order* (Rulings Regarding Standing, Contentions, and Procedural/Administrative Matters), LBP-04-14, 60 NRC \_\_\_\_ (July 19, 2004), slip op. at 27.

<sup>7</sup> *Louisiana Energy Services, L.P.*, (National Enrichment Facility), CLI-04-25, 60 NRC \_\_\_\_, slip op. at 4-5 (August 18, 2004).

<sup>8</sup> *Id.* at 6.

classifies such material as low-level waste. 42 U.S.C. § 3102(6). If such material, including depleted uranium from NRC licensed enrichment facilities is determined to be low-level waste, the Privatization Act mandates that DOE accept such waste for disposal if requested by the generator. 42 U.S.C. § 3113. Based upon these provisions, NIRS/PC and the AGNM attempt to make the argument that, because the NRC has not yet made a formal determination whether this material is low-level waste, DOE is not yet required to take the material for disposal and thus, DOE disposal cannot be considered a “plausible strategy”. First, the issue of “plausible strategy” is not now before the Commission, but remains with the Board. In any event, as the Staff explained in its Initial Brief, the fact that the Commission has not yet made the formal determination regarding the classification of DU from NRC licensed enrichment facilities, does not mean that the Commission may not yet do so in the present proceeding.

C. Application of Part 61 to DU

NIRS/PC additionally argues that the depleted uranium (DU) that would be produced as a result of its enrichment process cannot yet be classified because the form that the uranium would take at the time of disposal has not yet been established. While it is true that at some point the DU will be converted for disposal into a form more stable than  $UF_6$ , such a conversion will not affect the aspects that govern classification - the radionuclides present. Therefore, irregardless of whether the material for disposal is  $UF_6$  or a more stable form such as  $U_3O_8$ , either material will still meet the definition of Class A low-level radioactive waste under the Commission’s regulations.

Next, NIRS/PC argues that DU, in large quantities, cannot be considered Class A waste under 10 CFR Part 61 because the Commission did not consider the consequences of disposing of large quantities of DU when developing the Part 61 classification system.<sup>9</sup> This argument, too, lacks merit. The fact that uranium is not specifically identified in the tables in 10 C.F.R. § 61.55

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<sup>9</sup> See NIRS/PC Brief at 10-11.

does not foreclose the classification of the DU as Class A low-level radioactive waste because the Part 61 regulatory scheme was written to accommodate all manner of low-level wastes as long as the disposal meets the performance objectives of Subpart C.<sup>10</sup> As the Licensing Board in the *Claiborne* proceeding noted, “a regulation... is often designed broadly in order to accommodate unanticipated future situations as well as situations that, for a variety of reasons, were specifically not addressed during the rulemaking.”<sup>11</sup>

Furthermore, the fact that the Commission removed uranium from the classification tables in Part 61 when promulgating the final rule does not support the claim by NIRS/PC that, therefore, uranium should not be considered a Class A low-level waste under Part 61. To the contrary, Part 61 contains a specific provision assigning Class A status to any low-level radioactive waste that does not contain the radionuclides identified in the tables. 10 C.F.R. § 61.55(a)(6). Thus, the Commission clearly intended Part 61 to apply to waste containing radionuclides omitted from the tables. In fact, the history of Part 61 (which evidences that uranium was identified in the tables in 10 C.F.R. § 61.55 at the proposed rule stage, and then removed by the Commission in the final rule) provides strong evidence that the Commission was aware that the “catch all” provision in 10 C.F.R. § 61.55(a)(6) would be used when dealing with uranium.

The Commission was confident that such an approach would continue to protect public health and safety because Part 61 was designed so that, regardless of the classification of the waste, compliance with performance standards is also required. Thus, even if a substance fits within a classification of material which would not prevent its land disposal, certain technical and safety requirements must nonetheless be met before land disposal can be authorized. Consequently, if the DU produced by LES could not meet these performance standards, it could

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<sup>10</sup> *Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), LBP-91-641-02-ML, 1995 WL 110611, \*4 (March 2, 1995).

<sup>11</sup> *Id.* at \*9, fn. 20.

not be disposed of in a land disposal.<sup>12</sup> However, whether or not the DU meets the performance standards to allow for land disposal, the DU would retain its classification as Class A low-level radioactive waste. Put more simply, mere classification of the applicant's material as Class A waste does not guarantee, as is implicit in NIRS/PC's argument, that the waste can be disposed of in a near-surface facility.<sup>13</sup>

D. NIRS/PC Is Directly Attacking the Commission's Regulations

NIRS/PC specifically state that they are not requesting a waiver of the regulations under 10 C.F.R. § 2.335, as the intervenors in the *Claiborne* proceeding requested, but instead are asking the Commission to reconsider the application of its Part 61 regulations to this DU material. NIRS/PC Initial Brief at 18. In the *Claiborne* Proceeding, the Licensing Board, after considering almost identical arguments to those presented by NIRS/PC, held that Part 61 did, in fact, apply to DU waste.<sup>14</sup> In deciding that no special circumstances existed such that a waiver of the regulations was necessary, the Licensing Board reasoned that even though the DU was Class A waste, surface disposal would only be authorized if the performance requirements were satisfied.<sup>15</sup>

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<sup>12</sup> While the NMAG concedes that the DU is low-level waste under the Commission's Part 61 regulations, the NMAG misunderstands this important aspect of the Part 61 regulatory scheme. The NMAG asserts that the material might expose an inadvertent intruder to unacceptable levels of radiation following the 100 year institutional control period established for Class A low-level radioactive waste. However, classification of the material alone is not enough to authorize land disposal. Instead 10 C.F.R. § 61.40 clearly states that, in order for land disposal to be authorized, regardless of the classification of the material, reasonable assurance must exist that humans, including inadvertent intruders are protected as required by 10 C.F.R. § 61.42. Thus, as stated above, if the DU were unable to meet these performance objectives, land disposal would not be authorized.

<sup>13</sup> *Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), LBP-91-641-02-ML, 1995 WL 110611, \*6 (March 2, 1995).

<sup>14</sup> *Id.* \*4-\*5

<sup>15</sup> *Id.*

Not requesting a waiver of the regulation in this instance provides additional support that NIRS/PC is seeking to resolve a much larger concern about DU in general in the inappropriately narrow forum of a proceeding which can only resolve issues surrounding the DU generated by a single applicant, LES. Certainly, if NIRS/PC contended that there were special circumstances regarding this DU material which would render the application of Part 61 inadequate to protect public health and safety in this instance, NIRS/PC would have argued for a waiver of the regulation. Instead, NIRS/PC is arguing that the regulation itself on a generic level is flawed. In fact, NIRS/PC specifically states in its Initial Brief:

Moreover, the regulatory status of DU produced in enrichment facilities is a question that involves significant quantities of waste at several locations, in addition to the proposed NEF, and affects persons who are not parties to this proceeding. Only a procedure that allows all interested parties to be heard should be employed to address such an issue.

NIRS/PC Initial Brief at 5.<sup>16</sup>

Therefore, despite NIRS/PC's assertions that they are simply challenging the application of Part 61 to the DU material produced by LES, in fact NIRS/PC is seeking to challenge Part 61 as it relates to DU from *any* enrichment facility, not just from LES's enrichment facility. As NIRS/PC recognizes, such a challenge to the Commission's regulations necessarily involves interests far beyond those represented in the LES proceeding and is, thus, more appropriately styled as a petition for rulemaking.

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<sup>16</sup> NIRS/PC makes this argument in support of its claim that the Commission is limited to ruling upon the admissibility of the NIRS/PC contention at issue. However, by making this argument, NIRS/PC is essentially conceding that if the referred basis of the contention is admitted, even an evidentiary hearing on the LES application would not provide NIRS/PC with an appropriate forum to address their concern with the regulation itself.

CONCLUSION

For the reasons discussed above, the Staff submits that DU is a Class A low-level radioactive waste under 10 C.F.R. Part 61. All arguments presented by NIRS/PC and the NMAG to the contrary improperly challenge the Commission's regulations.

Respectfully submitted,

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Angela B. Coggins  
Counsel for NRC Staff

Dated at Rockville, Maryland  
this 17<sup>th</sup> day of September, 2004

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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

CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF REPLY TO NERS/PC AND AGNM'S BRIEFS ON CLASSIFICATION OF DEPLETED URANIUM AS WASTE" 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 17<sup>th</sup> day of September, 2004.

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