November 18, 2005

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
	)	

NRC STAFF MOTION FOR SUMMARY DISPOSITION

INTRODUCTION

Pursuant to 10 C.F.R. § 2.710, the NRC Staff files this motion for summary disposition of a portion of Intervenors Nuclear Information Resource Service and Public Citizen's ("NIRS/PC") environmental contention EC-4 "Impacts of Waste Storage." Specifically, the Staff seeks summary disposition of only that portion of EC-4 whereby NIRS/PC alleges that the Draft Environmental Impact Statement ("DEIS") fails to support or explain the modeling of disposal of depleted uranium. This aspect was recently remanded by the Commission to the Atomic Safety and Licensing Board ("Board").[1] Summary disposition is warranted on the grounds that there exists no genuine issue of material fact relevant to the contention and, under applicable Commission regulations, the Staff is entitled to a decision as a matter of law. Attached to this motion is a separate Statement of Material Facts, to which the Staff contends there is no genuine issue to be heard.

[1] CLI-05-20, 62 NRC ___ (2005). This motion deals with only the deep disposal analysis portion of the remanded issues. To clarify, this motion responds to issues raised in the last line of the first full paragraph of page 13 of NIRS/PC's October 20, 2004 motion, as supported in paragraph C on page 16 of the October motion and paragraph K on page 17 of the February 2, 2005 motion.

BACKGROUND

A. Procedural Background

On December 15, 2003, the Commission received an application from Louisiana Energy Services, L.P. ("LES") for a license for the construction and operation of the National Enrichment Facility ("NEF"), a gas centrifuge enrichment facility to be located near Eunice, New Mexico. In a July 14, 2004 memorandum and order, the Board admitted NIRS/PC as a party to this proceeding and admitted several contentions, including NIRS/PC EC-4. *Louisiana Energy Services, L.P.* (National Enrichment Facility), LBP-04-14, 60 NRC 40, 75-76 (2004). On October 20, 2004 NIRS/PC filed a motion to amend or supplement previously admitted contentions based on certain additional information contained in, among others, the Staff's Draft Environmental Impact Statement for the NEF.[2] Motion on Behalf of [NIRS/PC] To Amend and Supplement Contentions (Oct. 20, 2004) ("October Motion").

Specifically, in the October motion, NIRS/PC moved to supplement EC-4 "Impacts of Waste Storage and Disposal" with the claim: "[t]he DEIS fails to support or explain the modeling of disposal of depleted uranium."[3] NIRS/PC supported this allegation in Basis C, alleging:

> The DEIS attempts to estimate the impact of disposal of depleted uranium from the NEF in its modeling of the releases expected from the site. (At 4-58, 4-59 and Table 4-19). The DEIS fails to disclose the models used or the parameter values. The text suggests that models used in analyzing the CEC site were used; however, the results are unlike any reported in connection with the CEC facility. Further, the model addresses only two hypothetical

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[2] Staff Ex. 36. NUREG-1790 "Environmental Impact Statement for the Proposed National Enrichment Facility in Lea County, New Mexico," Draft Report for Comment (Sept. 2004) ("NEF DEIS").

[3] October Motion at 13. NIRS/PC also sought other amendments to Contention EC-4, alleging that the DEIS erroneously assumes depleted uranium may be disposed of as low-level waste and failed to recognize the Commission's position that depleted uranium is not appropriate for near-surface disposal. These issues are not the subject of this motion and will be addressed by the Staff in its proposed findings of fact and conclusions of law.

> disposal sites and fails to examine any actual location of disposal. Performance of a disposal site is highly site-specific.[4]

In a memorandum and order dated November 22, 2004, the Board admitted several amendments to NIRS/PC's contentions, finding that they met both the standard for late filing set forth in 10 C.F.R. § 2.309(c) and the general contention admissibility requirements of 10 C.F.R. § 2.309(f). *See* Licensing Board Order (Ruling on Late-Filed Contentions) (Nov. 22, 2004) at 8-18 (unpublished). However, the Board denied certain other amendments, including those challenging the adequacy of the Staff's DEIS.

On February 2, 2005, NIRS/PC filed a second motion for the admission of late-filed contentions, seeking to amend and/or supplement three contentions -- NIRS/PC EC-3/TC-1 – Depleted Uranium Hexafluoride Storage and Disposal; NIRS/PC EC-4 -- Impacts of Waste Storage; and NIRS/PC EC-5/TC-2 - AGNM TC-I – Decommissioning Costs – previously admitted in this proceeding. Motion on Behalf of Intervenors For Admission of Late-Filed Contentions (Feb. 2, 2005) ("February Motion"). The relevant proposed supplement of contention EC-4 in the February motion, contained in Basis K, read as follows:

> Staff also stated that doses from deep disposal of DU in a mine would be low and provided estimates of doses under a well water and river water scenario (DEIS Table 4-19) that are greatly below the limit of 25 mrem per year for LLW disposal [citing p. 4-59]. The estimates are said to be based on those in the CEC FEIS. However, NRC has declined to provide the methods and assumptions underlying the dose calculation. Moreover, doses in the DEIS are not broken down by radionuclide, and the totals are different from those in the CEC FEIS by nearly a factor of 2, with one notable exception. The difference may be partly explained by the NEF's generation of roughly twice the amount of DU of the CEC proposal. However, the estimate for the drinking water dose in the river scenario with a sandstone/basalt site is almost 54,000 times lower in the current DEIS than in the CEC FEIS. This

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[4] October Motion at 16.

discrepancy remains unexplained.[5]

In a memorandum and order dated May 3, 2005 the Board granted the second motion for admission with respect to the amendment of EC-5/TC-2 -- Decommissioning Costs, but denied the motion for admission with respect to the amendment of EC-3/TC-1 -- Depleted Uranium Hexafluoride Storage and Disposal and EC-4 -- Impacts of Waste Storage. *Louisiana Energy Services, L.P.* (National Enrichment Facility), slip. op. (May 3, 2005). The Board found that NIRS/PC had not shown good cause for these untimely amendments under the criteria found in 10 C.F.R. § 2.309. *Id.* at 10.

Following the issuance of the Board's Partial Initial Decision on the admitted environmental contentions, (*Louisiana Energy Services, L.P.* (National Enrichment Facility), LBP-05-13, 61 NRC 385 (June 8, 2005)), NIRS/PC appealed to the Commission. On October 19, 2005, the Commission issued a Memorandum and Order limited to the issue of whether the Board erred in not allowing NIRS/PC to amend contention EC-4--Impacts of Waste Storage, to include allegations concerning the adequacy of the NEF DEIS discussion of waste disposal impacts. The Commission found that the Board erred in determining NIRS/PC's supplemental claims untimely to the extent they were based on new information contained in the DEIS and remanded those issues to the Board. *Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-05-20, slip. op. at 11, 62 NRC ___ (2005). These included the contention that the DEIS failed to disclose the models or parameters used in assessing the impacts of mine disposal. The Commission did not disagree with the Board's timeliness decision regarding matters that could have been raised based on information in the Environmental Report ("ER"), which referenced the CEC FEIS. *Id.* at 14 n.48. Therefore, to the extent that NIRS/PC's supplemental contentions challenge the use of two hypothetical disposal

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[5] February Motion at 17.

sites, this issue not remanded for further consideration.[6]

In its remand order, the Commission also directed the Board and the parties to focus on the terms and bases of the contention submitted in the October motion rather than the overbroad claims in the February motion. *Id.* at 12. Thus, the issues raised in the February motion are to be considered only to the extent that they elaborate upon issues already raised in the October motion. *Id.* at 12-13.

Therefore the contention language upon which the parties are to focus is as follows: "[t]he DEIS fails to support or explain the modeling of disposal of depleted uranium," and NIRS/PC's assertion that "the DEIS fails to disclose the models used or the parameter values" because, while the text suggests that the models used in analyzing the Claiborne Enrichment Center (CEC) site were used in the DEIS, "the results are unlike any reported in connection with the CEC facility."[7] NIRS/PC did elaborate upon the first issue in the February motion, claiming that (a) the NRC has declined to provide the methods and assumptions underlying the dose calculation; (b) the estimate for the drinking water dose in the river scenario with a sandstone/basalt site is almost 54,000 times lower in the current DEIS than in the CEC FEIS; and (c) the total dose estimates are different from those in the CEC FEIS by nearly a factor of 2.[8]

B. Technical Background

In order to understand NIRS/PC's claims, it is necessary to explain the history of how Table 4-19 of the proposed NEF DEIS addressing deep disposal dose estimates was

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[6] "Similarly, if NIRS/PC seek to challenge the dose analysis because it is based upon two representative disposal sites, such a claim seemingly also could have been based upon the Environmental Report, which addressed the same two representative sites." CLI-05-20 at 14 n. 48.

[7] October Motion at 12-13,16.

[8] February Motion at 17.

developed. Originally, LES proposed to build its proposed enrichment facility, to be known as the Claiborne Enrichment Center ("CEC"), in Louisiana. The Staff completed a Final EIS regarding that facility in 1994.[9] In that analysis, the Staff determined that the depleted uranium would require deep disposal, such as in an abandoned mine. However, because a mine was not available, the Staff conducted an analysis to determine the potential exposures for two postulated types of mine, granite and sandstone/basalt.[10]

The Staff modeled the potential water impacts for both postulated sites. The analysis assumed that contaminated water could discharge into a well or river. The models and parameters were explicitly stated.[11] The Staff determined that the analysis from the CEC FEIS was appropriate for utilization in the NEF evaluation with respect to the models and parameters used.[12] Therefore, the results of this CEC FEIS analysis were relied upon in developing the NEF EIS to assess impacts of disposal.[13]

While the results of these evaluations were incorporated into the NEF EIS from the CEC FEIS, the tables differ. The CEC FEIS divides the data into two separate tables, one for the well scenario (Table A.7) and one for the river scenario (Table A.8). In the NEF DEIS, this information was consolidated into one table (4-19), which incorporates both the river and well scenarios. Additionally, the CEC FEIS listed the estimated dose from each associated radionuclide separately. Table 4-19 of the NEF DEIS listed the sum of the dose estimates from

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[9] NIRS/PC Ex. 58. NUREG-1484 "Final Environmental Impact Statement for the Construction and Operation of Claiborne Enrichment Center, Homer, Louisiana," Public Comments and NRC Response (August 1994) ("CEC FEIS").

[10] *See* Attachment A - Affidavit of Dr. Donald E. Palmrose ("Palmrose Aff.) ¶ 4; *See generally* CEC FEIS at Appendix A.

[11] *Id.*

[12] Testimony of Dr. Don Palmrose, Oct. 26, 2005 ("Palmrose Testimony") at 2850.

[13] Palmrose Testimony at 2841-2842.

all associated radionuclides. Lastly, the Staff revised the dose estimates upwards to account for the increased quantity of material expected from the NEF.[14] In June 2005, the Staff published a Final Environmental Impact Statement for the NEF ("NEF FEIS"), which also includes Table 4-19.[15]

DISCUSSION

A. Legal Standards Governing Motions for Summary Disposition

A party is entitled to summary disposition as to all or any part of the matters involved in the proceeding "if the filings in the proceeding, depositions, answers to interrogatories, and admissions on file, together with the statements of the parties and the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a decision as a matter of law." 10 C.F.R. § 2.710 (d)(2).

The movant bears the initial burden of showing that there is no genuine issue as to any material fact, which it attempts to do by means of a required statement of material facts not at issue and any supporting materials that accompany its dispositive motion. *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-99-23, 49 NRC 485, 451 (1999). If the opposing party fails to counter each adequately supported material fact with its own statement of material facts in dispute and supporting materials, the movant's facts will be deemed admitted. *Id*.

Finally, where a contention presents essentially a legal issue, summary disposition is "the appropriate procedural avenue" for resolving the contention. *General Public Utilities Nuclear Corp.* (Oyster Creek Nuclear Generating Station), LBP-97-1, 45 NRC 7, 12 (1997), *citing* LBP-96-23, 44 NRC 143, 166-67.

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[14] Palmrose Aff. ¶ 5.

[15] Staff Ex. 47. NUREG-1790 "Environmental Impact Statement for the Proposed National Enrichment Facility in Lea County, New Mexico," Final Report (June 2005) ("NEF FEIS").

As more fully set forth below, the Staff submits that summary disposition is appropriate for that portion of NIRS/PC EC-4 alleging that the DEIS for the proposed NEF fails to support or explain the modeling of disposal of depleted uranium because no genuine issue of material facts exists.

B. Application of Legal Standards to NIRS/PC's Specific Contentions

1. Failure to Support or Explain the Modeling of Disposal of Depleted Uranium

NIRS/PC claims that the NEF DEIS fails to support or explain the modeling of disposal of depleted uranium, because, while the text asserts that the models used in analyzing the CEC site were used in the DEIS for the proposed NEF, the results did not match those from the CEC FEIS. NIRS/PC elaborated upon this claim in the February motion by alleging that (a) the NRC has declined to provide the methods and assumptions underlying the dose calculation; (b) the total dose estimates are different from those in the CEC FEIS by nearly a factor of 2; and (c) the estimate for the drinking water dose in the river scenario with a sandstone/basalt site is almost 54,000 times lower in the current DEIS than in the CEC FEIS.

As discussed below, each of these claims are invalid and the staff is entitled to a favorable decision as a matter of law. The modeling for the underlying analysis was disclosed in the CEC FEIS. A typographical error from the text of the CEC FEIS was incorporated into the NEF analysis, resulting in erroneous values in the NEF DEIS. Those errors are discussed below and have been corrected in the NEF FEIS. Additionally, the methodology employed by the Staff in translating the analysis from the CEC context to the NEF context has been disclosed as detailed below. Therefore, the modeling used to generate the values in Table 4-19 of the NEF FEIS has been fully explained, rendering this aspect of contention EC-4 moot.

a. The NRC has Declined to Provide the Methods and Assumptions Underlying the Dose Calculation

The CEC FEIS explains the models used to calculate impacts from geological disposal and is referenced in both the draft and final NEF EIS.[16] Those methods and assumptions were litigated in the CEC case, where the Licensing Board found that the Applicant presented a plausible disposal strategy.[17] *Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), LBP-97-3, 45 NRC 99, 108 (1997). Testifying for Intervenor Citizens Against Nuclear Trash ("CANT"), Dr. Arjun Makhijhani challenged many aspects of the CEC disposal dose estimates, including the values chosen by the Staff for groundwater pH, retardation factor, and redox potential, and the failure to perform an uncertainty analysis, among other challenges to methods and assumptions underlying the CEC dose estimates.[18] The Board found those aspects of the Staff's environmental analysis to be reasonable. *Id.* Further, when the Staff decided to rely upon the CEC dose analysis in its evaluation of the proposed NEF, it undertook a review of the analysis and found it appropriate and reasonable.[19] The reasonableness of the CEC analysis was recently reviewed again and confirmed by Dr. Rateb Abu-Eid of the NRC Staff.[20]

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[16] *See* Attachment B - Affidavit of Dr. Rateb Abu-Eid ("Abu-Eid Aff.") ¶ 2; Palmrose Testimony at 2849.

[17] This decision was vacated at the conclusion of the CEC proceeding and has no precedential value. *See Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), CLI-98-5, 47 NRC 113 (1998). However, it certainly helps demonstrate that the modeling was sufficiently explained. In fact, it was explained well enough for Dr. Makhijani to make multiple specific challenges to the methods and assumptions underlying the CEC dose estimates.

[18] *See* Attachment C - "Testimony of Dr. Arjun Makhijani Regarding Citizen's Against Nuclear Trash's Contentions B, J.3, and W," *Louisiana Energy Services* (Claiborne Enrichment Center), Feb. 27, 1995 (Makhijani CEC Testimony).

[19] Palmrose Aff. ¶ 3.

[20] Abu-Eid Aff. ¶ 4.

Reliance upon and reference to information, studies, and analyses already conducted that show environmental effects of a similar project under substantially identical conditions can be used to supply the necessary detail to comply with NEPA requirements. *See Brooks v. Volpe*, 350 F. Supp. 269, 279-80 (W.D. Wash. 1972). The NEPA process is not an exercise in unnecessary scientific analysis. NEPA is intended to ensure agencies take a "hard look" at the impacts of proposed action. *See Natural Resources Defense Council, Inc. v. Hodel,* 865 F.2d 288, 294 (D.C. Cir. 1988). If the pertinent analysis has already been performed, agencies do not need to start over. *See* LBP-05-13, 61 NRC at 429-30 (Board's Partial Initial Decision finding that the Staff appropriately relied upon and incorporated portions of a Department of Energy Programmatic Environmental Impact Statement into the NEF DEIS). Here, the radiological dose estimates for two postulated generic sites had already been performed and the methods, assumptions and results of that analysis were properly incorporated by reference into both the draft and final EIS.

b. The Estimate for the Drinking Water Dose in the River Scenario with a Sandstone/Basalt Site is Almost 54,000 Times Lower in the Current DEIS than in the CEC FEIS

As NIRS/PC observed, the numbers were not properly incorporated from the CEC FEIS to the NEF DEIS. One cause for this was a mathematical error in the text of the CEC FEIS. While the CEC FEIS tables listed the estimated dose for each radionucliude separately, the total estimated dose was included in the EIS text. The total dose estimate for the drinking water pathway from the sandstone/basalt site in Table A.8 (River Scenario) was listed in the text as 1.6×10^{-9} Sievert (1.6×10^{-14} millirem).[21] This value was incorrect and should have been 1.6×10^{-14} Sievert (1.6×10^{-9} millirem).[22] This was not a mistake in the CEC analysis, but merely a

[21] CEC FEIS at 4-67.

[22] Palmrose Aff. ¶ 6.

typographical error in the description of that analysis in the text of the CEC FEIS.[23]

When the Staff incorporated the CEC FEIS values into the computations for radiological dose for the NEF DEIS, this incorrect value from the text of the CEC FEIS was used. This resulted in the unusual value described by NIRS/PC in the February motion as being 54,000 times lower in the NEF DEIS than in the CEC FEIS.[24] The Staff corrected this mistake in the NEF FEIS. Specifically the listed dose for the drinking water pathway under the river scenario for a sandstone/basalt disposal site, which read $3x10^{-16}$ millisieverts and $3x10^{-14}$ millirem in the NEF DEIS,[25] has been corrected to read $3x10^{-11}$ millisieverts and $3x10^{-9}$ millirem in Table 4-19 of the NEF FEIS.[26]

A second discrepancy in the NEF DEIS was also the result of a typographical error. It listed the dose for the drinking water pathway under the river scenario for the granite disposal site as $3x10^{-11}$ millirem. That value is incorrect. In the FEIS, it has been corrected to read $9x10^{-11}$ millirem.[27]

c. The Total Dose Estimates are Different From Those in the CEC FEIS by Nearly a Factor of 2

Typographical and mathematical errors alone do not completely explain the differences between the estimated doses listed in the DEIS and those in the CEC FEIS. As stated in the NEF FEIS, the "potential impacts from the disposal of the proposed NEF-generated U_3O_8 for similar geologic disposal sites would be proportional to the quantity of material postulated from

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[23] Palmrose Aff. ¶ 6; Palmrose Testimony at 2853-2854.

[24] Palmrose Aff. ¶ 7; Palmrose Testimony at 2853-2854.

[25] NEF DEIS at 4-59, Table 4-1.9

[26] NEF FEIS at 4-64, Table 4-19.

[27] Palmrose Aff. ¶ 8.

the Claiborne Enrichment Center."[28] In other words, because the quantity of material expected from the proposed NEF is larger than that of the previously analyzed CEC, the Staff determined that the NEF's potential impacts, in the form of radiological dose, will be proportionately larger.[29] This explains NIRS/PC's concern that the totals "are different from those in the CEC FEIS by nearly a factor of 2."[30]

d. The Staff is Entitled to a Decision as a Matter of Law

NIRS/PC challenged the omission of information that supports or explains the modeling of disposal of depleted uranium. While Dr. Makhijani was unable to replicate the incorrect values in Table 4-19 of the DEIS because it contained errors, they have now been fully explained and corrected. The underlying methods and assumptions for the CEC analysis were fully explained in the CEC FEIS.[31] Indeed, as shown in the testimony presented by Dr. Makhijani during the CEC proceeding, the explanation was sufficient to allow NIRS/PC's expert to make specific challenges to the methods and assumptions in the CEC analysis.[32] LBP-97-3, 45 NRC at 108.

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[28] NEF FEIS at 4-63; *see also* NEF DEIS at 4-59.

[29] If the amount of waste was expected to be the same, the same values could have been employed. However, the waste generation fo the NEF is expected to be larger than that of the CEC. The CEC was expected to generate approximately 91,000 metric tons of depleted U_3O_8 over the life of the facility. The NEF is expected to generate approximately 157,000 metric tons of U_3O_8 over the life of the facility. Therefore, the NEF will generate roughly 1.72 times as much waste for disposal. Because the disposed waste associated with the NEF will be greater than that from the previously planned CEC, the estimated doses from the CEC analysis must be revised upward. Therefore, the values associated with the CEC FEIS were multiplied by 1.72 to obtain the values for the NEF EIS. Palmrose Aff. ¶ 5.

[30] February Motion at 17.

[31] Palmrose Aff. ¶ 3; Abu-Eid Aff. ¶¶ 2,4.

[32] *See generally* Makhijani CEC Testimony.

As the Commission has held:

> Where a contention alleges the omission of particular information or an issue from an application, and the information is later supplied by the applicant or considered by the Staff in a draft EIS, the contention is moot. Intervenors must timely file a new or amended contention that addresses the factors in section 2.714(b) [now 2.309] in order to raise specific challenges regarding the new information.

Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2, Catawba Nuclear Station Units 1 and 2) CLI-02-28, 53 NRC 373, 382-83 (2002).

The Staff has corrected both deficiencies raised by NIRS/PC in its February motion. Further, through the accompanying affidavit of Dr. Palmrose, the Staff has supported and explained how the CEC FEIS's modeling of disposal of depleted uranium was utilized for the NEF EIS. There is no genuine issue of material dispute regarding the Staff's explanation of the modeling of the impacts associated with the disposal of depleted uranium. The Staff is entitled to a decision as a matter of law.

2. Failure to Model Disposal in a Site-Specific Manner

NIRS/PC also challenged the disposal analysis because performance of a disposal site is highly site-specific, but the DEIS only addresses two hypothetical sites. The Commission did not disagree with the Board's decision as to the untimeliness of this contention.[33] The Board's decision to deny admission of this contention was, therefore, not disturbed. NEPA contentions are to be based upon the ER. 10 C.F.R. § 2.309 (f)(2). Amendments will only be allowed if the draft or final EIS differs significantly from the data or conclusions in the applicant's documents, or with leave of the presiding officer under specific circumstances not applicable here.[34]

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[33] "Similarly, if NIRS/PC seek to challenge the dose analysis because it is based upon two representative disposal sites, such a claim seemingly also could have been based upon the Environmental Report, which addressed the same two representative sites." CLI-05-20 at 14 n. 48.

[34] 10 C.F.R. §§ 2.309 (f)(2)(i);(ii);(iii).

The NEF ER plainly relied upon the CEC FEIS radiological dose estimates and referenced the fact that it studied two representative sites in Section 4.13.3.1.5, *Potential Impacts of Each Disposal Option*:

> In NUREG-1484 (NRC 1994a), Section 4.2.2.8, the NRC provided a generic evaluation of the impacts of disposal of depleted uranium oxides. . . In order to compensate for the lack of knowledge of a specific deep disposal site, two representative sites whose geological structures have previously been characterized were selected for the NRC analysis. Potential consequences of emplacement of U_3O_8 in a geological disposal unit include intake of radionuclides from drinking water, irrigated crops, and fish. Under the assumed conditions for the undisturbed performance scenario, groundwater would be discharged to a river. Under conditions not expected to occur, an individual would obtain groundwater by drilling a well down gradient from the disposal unit. . .[35]

The draft and final EIS have not differed significantly in this respect from the ER. Each relied upon the CEC's two representative site analysis in the same manner. The ER was filed in December 2003. This issue was not raised until October 20, 2004, following the publication of the NEF DEIS. Therefore, the Commission correctly upheld the Board's timeliness finding as to the use of two representative sites.[36]

Even if this aspect were now before the Board for reconsideration, it would nonetheless appropriate for summary disposition. No existing mine is currently licensed to receive or dispose of low-level radioactive waste, nor has any application been made to license such a facility.[37] Given the absence of an available mine, it would be impossible for the Staff to conduct a site specific assessment of the deep disposal option. As the Board concluded in the CEC proceeding, the use of two representative deep disposal sites is an acceptable method of

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[35] National Enrichment Facility Environmental Report (Dec. 2003) ("NEF ER"), at 4.13-13.

[36] *See also Private Fuel Storage L.L.C.* (Independent Spent Fuel Storage Installation), CLI-00-21, 52 NRC 261, 264 n.6 (2000).

[37] NEF FEIS at 4-63.

demonstrating the required plausibility.[38] No genuine issue of material fact exists.

3. New Claims Raised by NIRS/PC

At the recent hearing in this proceeding, counsel for Intervenors raised new concerns, specifically that the corrected values in Table 4-19 of the NEF FEIS are still inaccurate.[39] This idea is also contained in NIRS/PC's most recent motion for the admission of supplemental and late-filed contentions, stating, "[t]he results are quite literally incredibly low and cannot be viewed as scientifically credible."[40] Insofar as NIRS/PC attempted to raise any new contentions at the hearing, such new contentions should be denied for failure to follow the procedure set forth in section 2.309. However, the Staff maintains that these assertions fail substantively as well. As the affidavits of Dr. Palmrose and Dr. Abu-Eid demonstrate, the CEC dose impact analysis was reasonable and appropriate for incorporation into the NEF EIS.[41] Further, Dr. Palmrose has explained how the values in Table 4-19 of the NEF FEIS were generated and that, in his professional judgment, the values are reasonable. Intervenors' latest challenge to the accuracy of the values in Table 4-19 should be rejected.

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[38] "Further, the Intervenor's witness [Dr. Makhijhani] claimed that the FEIS analysis is deficient for considering only two geologic settings, a granite formation and a basalt formation, instead of considering a wide range of potential geologic settings. Dr. Makhijani indicated that the Staff first should have performed a preliminary screening of all potential geologic settings for their respective advantages and disadvantages and only then selected particular rock types for study. (Makhijani at 9 fol. Tr. 1081.) The Staff witnesses, Dr. Price and Mr. Faraz, both testified that the use of two representative geologic settings was appropriate because the objective of the FEIS analysis was to determine whether deep burial of depleted uranium tails was plausible. (Tr. 1112-13.) All of the Applicant's witnesses concurred in this same view. (Tr. 1163.) Contrary to Dr. Makhijani's charge, we find that the Staff's use of two representative geologic settings was reasonable in light of the purpose of the FEIS evaluation." LBP-97-3, 45 NRC 99, 122 (1997). While this decision was vacated at the conclusion of the *Claiborne* proceeding and has no precedential value, it is nonetheless useful in evaluating NIRS/PC's claims. CLI-98-5, 47 NRC 113 (1998).

[39] *See* Transcript 10/26/05, at 2581-2586.

[40] Motion on Behalf of NIRS/PC To Amend and Supplement Contentions (Nov. 11, 2005) ("November Motion") at 9. The Staff will submit a separate response to this motion.

[41] Palmrose Aff. ¶ 3; Abu-Eid Aff. ¶ 4.

CONCLUSION

NIRS/PC's allegation that the DEIS fails explain the modeling of the dose estimate fails, as a matter of law. The CEC FEIS adequately explains the origin of tables A.7 and A.8. The Staff has since adequately explained how those tables were incorporated into the DEIS and ultimately, the FEIS for this proceeding. NIRS/PC's allegation that the DEIS only addresses two hypothetical disposal sites and fails to examine any actual location for disposal also fails as a matter of law. That contention should have been raised in response to the applicant's ER, not following publication of the DEIS. Finally, the estimated doses in Table 4-19 of the NEF FEIS are reasonable. There are no disputes as to any genuine issue of material fact regarding the Staff's deep disposal dose estimate analysis and the Staff is entitled to a decision as a matter of law.

Respectfully submitted,

/RA/

Lisa B. Clark
Counsel for NRC Staff

Dated at Rockville, Maryland
this 18th day of November, 2005

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STATEMENT OF MATERIAL FACTS
ON WHICH NO GENUINE DISPUTE EXISTS

The Staff submits, in support of its motion for summary disposition of that portion of environmental contention EC-4 whereby NIRS/PC alleges that the Draft Environmental Impact Statement ("DEIS") fails to support or explain the modeling of disposal of depleted uranium, this statement of material facts, to which the Staff contends that there is no genuine issue to be heard.

1. On October 20, 2004, NIRS/PC filed as part of its late filed contentions an amendment to NIRS/PC EC-4 whereby it alleged that the DEIS for the proposed NEF failed to support or explain the modeling of disposal of depleted uranium. This was supported by bases alleging that: (1) the DEIS fails to disclose the models used or the parameter values because, while the text asserts that the models used in analyzing the Claiborne Enrichment Center (CEC) site were used in the DEIS, the results did not match those from the CEC FEIS; and (2) the model addresses only two hypothetical disposal sites and fails to examine any actual location of disposal, even though performance of a disposal site is highly site-specific.

2. On February 5, 2005, NIRS/PC filed as part of additional late filed contentions, another amendment to NIRS/PC EC-4. This motion elaborated upon the first issue discussed in paragraph 1 above, specifically claiming that (a) the NRC had declined to provide the methods and assumptions underlying the dose calculation; (b) the total dose estimates were different from those in the CEC EIS by nearly a factor of 2; and (c) the estimate for the drinking water dose in the river scenario with a sandstone/basalt site was almost 54,000 times lower in the current DEIS than in the CEC EIS.

3. The Licensing Board denied these late filed supplemental contentions on the grounds that the amended contentions were untimely without good cause. In its Memorandum and Order of October 19, 2005, CLI-05-20, the Commission reversed the Board's timeliness determination with regard to issue (1) stated above, claiming that the DEIS fails to disclose the models used or the parameter values and remanded that issue to the Board for further consideration. The Commission did not disturb the Board's timeliness ruling with regard to issue (2) stated above, claiming that the dose analysis model in insufficient because it addresses only two hypothetical disposal sites on the grounds that this claim could have been raised based upon the Environmental Report.

4. The NRC Staff published a FEIS for the Claiborne Enrichment Center ("CEC") in August 1994. This FEIS contained an analysis of the estimated dose impacts associated with disposal of depleted uranium in an abandoned mine

5. The dose impact analysis found in Appendix A to the CEC FEIS provided a description of the models and parameters used to analyze the impacts of disposal in two generic sites; a granite site and a sandstone/basalt site. These parameters included hydraulic conductivity, flow area, and gradient.

6. In developing the Draft Environmental Impact Statement (DEIS) for the National Enrichment Facility (NEF), the Staff reviewed CEC FEIS's deep disposal dose estimate analysis and determined that the models and parameters used were reasonable and appropriate. The Staff incorporated the CEC results directly into the FEIS for the proposed NEF, adjusting them by a factor of 1.72 to account for the larger amount of depleted uranium. In doing so, certain mathematical errors were made in the proposed NEF DEIS numbers. These errors were corrected in the NEF FEIS.

7. The mathematical errors in the DEIS for the NEF explain the fact that the estimate for the drinking water dose in the river scenario with a sandstone/basalt site was almost 54,000 times lower in the DEIS than in the CEC EIS.

8. The fact that the numbers from the CEC FEIS were multiplied by a factor of 1.72 to account for the larger amount of depleted uranium generated by the NEF explains the fact that the numbers in the NEF FEIS are nearly two times higher than those in the CEC FEIS.

9. The Staff has conducted another review of the CEC analysis and confirmed that the models and parameters used were appropriate and reasonable. The models used (PHREEQE code) in the CEC deep disposal impact analysis have been updated since 1994, hence the values cannot be reproduced using the current version. However, the Staff has concluded that the values appear reasonable and represent doses that are much smaller the applicable dose limits.

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 MOTION FOR SUMMARY DISPOSITION" and "STATEMENT OF MATERIAL FACTS ON WHICH NO GENUINE DISPUTE EXISTS" 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 18th day of November, 2005.

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