

November 28, 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 RESPONSE TO NIRS/PC'S
PARTIAL MOTION FOR SUMMARY DISPOSITION

INTRODUCTION

Pursuant to the Board's Order of November 9, 2005, the Nuclear Regulatory Commission ("NRC") Staff hereby opposes the Motion for Partial Summary Disposition Submitted on Behalf of Intervenors Nuclear Information Resource Service and Public Citizen ("NIRS/PC") on the issue remanded by the Commission regarding the adequacy of the Staff's assessment of the environmental impacts of deep disposal of depleted uranium from the National Enrichment Facility ("NEF").¹ NIRS/PC has failed to demonstrate undisputed material facts upon which it is entitled to a decision as a matter of law on the issue remanded by the Commission. Instead, NIRS/PC has, through this motion, improperly attempted to raise new issues and amend its contentions.

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,

¹ "Motion for Partial Summary Disposition Submitted on Behalf of Intervenors Nuclear Information Resource Service and Public Citizen," November 18, 2005 (NIRS/PC Summary Disposition Motion).

New Mexico. LES submitted an Environmental Report ("ER") in December, 2003.² In that ER, LES stated that it relied upon the deep disposal dose estimates included in Appendix A from the Claiborne Enrichment Center ("CEC") Final Environmental Impact Statement ("CEC FEIS").³ 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). None of these contentions challenged the sufficiency of the underlying deep disposal dose estimates from the CEC FEIS.

In September 2004, the Staff published a Draft EIS for the NEF ("NEF DEIS").⁴ The NEF DEIS included an analysis of deep disposal impacts, which explicitly stated that it was based upon the analysis of deep disposal impacts found in Appendix A of the CEC FEIS. NEF DEIS at 4-59. On October 20, 2004 NIRS/PC filed a motion to amend or supplement previously admitted contentions based on certain additional information contained in the NEF DEIS. Motion on Behalf of [NIRS/PC] To Amend and Supplement Contentions (Oct. 20, 2004) ("October Motion"). In the October motion, NIRS/PC alleged that the "DEIS fails to support or explain the modeling of disposal of depleted uranium." *Id.* at 13. Specifically, NIRS/PC asserted that the "results are unlike any reported in connection with the CEC facility." *Id.* at 16. However, NIRS/PC did not challenge the underlying deep disposal analysis from the CEC FEIS except to allege that the model used in the CEC analysis addressed only hypothetical sites and not an actual location for disposal. October Motion at 16.

² National Enrichment Facility Environmental Report (Dec. 2003) ("NEF ER").

³ 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, Appendix A (August 1994) ("CEC FEIS").

⁴ 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").

On February 2, 2005, NIRS/PC filed a second motion for the admission of late-filed contentions, which included an attempt to supplement its previously filed deep disposal contentions. Motion on Behalf of Intervenors For Admission of Late-Filed Contentions (Feb. 2, 2005) ("February Motion"). Again, NIRS/PC challenged discrepancies between the estimated doses found in the NEF DEIS and those found in Appendix A to the CEC FEIS, but did not challenge the sufficiency of the underlying deep disposal analysis from the CEC FEIS. In June 2005, the Staff published a Final Environmental Impact Statement for the NEF ("NEF FEIS").⁵

The Board disallowed the new impacts contentions in the October and February Motions. Following the hearing and issuance of a decision on the admitted contentions, NIRS/PC appealed to the Commission, which issued a Memorandum and Order on October 19, 2005, limited to the issue of whether the Board erred in denying NIRS/PC's proffered amendment to Contention EC-4--Impacts of Waste Storage. *Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-05-20, 62 NRC ____ (2005). The Commission found that the Board erred in determining NIRS/PC's supplemental claims in the October, 2004 motion untimely to the extent they were based on new information contained in the DEIS. *Id.* slip. op. at 11. The Commission directed the Board and parties to focus on the terms and bases of the contention as submitted in the October motion and only consider the February motion to the extent that it elaborates upon the same arguments made in the October motion. *Id.* at 12-13.

The Commission included a very important point in a footnote in its Order:

NIRS/PC's support for their challenge to the DEIS estimates of doses from a geological repository is more sparse. They question whether the DEIS used the same models used in the earlier *Claiborne* proceeding because, they say, it is not clear how the

⁵ 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").

DEIS used the earlier *Claiborne* dose estimates to calculate new estimates. Given corrections made in the FEIS, this issue appears amenable to summary disposition. Significantly, the NRC Staff in the FEIS corrected the DEIS dose discrepancy highlighted by NIRS/PC. See LES FEIS (NUREG-1790), Vol. 1 at 4-64. **If NIRS/PC actually mean to challenge the dose estimates used in the *Claiborne* proceeding, such a challenge appears untimely, given that the LES Environmental Report said that it was relying on the *Claiborne* dose estimates. 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, slip. op. at 14 n. 48 (emphasis added).

Thus, the Commission disagreed with the Board's timeliness determination only to the extent that it was premised upon NIRS/PC's claim that the NEF DEIS failed to disclose the models or parameter values used for the analysis of deep disposal impacts. Therefore, only that aspect of the contention was remanded for further consideration. That contention, as propounded by NIRS/PC alleges that "[t]he DEIS fails to support or explain the modeling of disposal of depleted uranium," as "the DEIS fails to disclose the models used or the parameter values" because, while the text suggests that the models used in analyzing the CEC site were used in the DEIS, "the results are unlike any reported in connection with the CEC facility." October Motion at 12-13, 16.

DISCUSSION

I. 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).

However, the party is limited in seeking summary judgement to the scope of the contentions which have been admitted into in the proceeding. While a contention contesting a Draft Environmental Impact Statement need not be amended following publication of the Final Environmental Impact Statement, a party is not free to enlarge or alter the focus of its contentions at will. CLI-05-20 slip op. at 13. In other words, intervenors cannot seek to cure deficiencies of earlier pleadings by later introducing wholly new issues that could have been raised earlier, particularly in a motion for summary disposition. *Id.* (citing *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 386 (2002)). Any significant change in the nature of a contention, from one focused on a comprehensive information omission to one centered on a deficient analysis of subsequently supplied information requires a late-filed revision to the contention to constitute a litigable issue. *Private Fuel Storage* (Independent Spent Fuel Storage Installation), LBP-01-26, 54 NRC 199, 208 (2001).

The movant bears the initial burden of showing that there is no genuine issue as to any material fact 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.

As more fully set forth below, NIRS/PC has failed to demonstrate that it is entitled to a favorable decision on its deep disposal impacts contention. In fact, NIRS/PC has failed to even reference the legal standard for summary disposition or attempt to apply that standard to the facts in this case.

II. NIRS/PC's Challenge to the CEC FEIS Dose Estimates is Outside the Scope of the Admitted Contentions

As discussed above, the only issue which is before this Board regarding the Staff's DEIS issued for the NEF is the claim, raised in NIRS/PC's October 2004 motion to supplement contentions, that the DEIS fails to adequately support or explain the modeling that was used to obtain the results for mine disposal. As explained in the Staff's Motion for Summary Disposition filed November 18, 2005, these have now been fully explained and this issue can be resolved in favor of the Staff. Significantly, NIRS/PC does not address this specific issue in its motion for summary disposition. Indeed, the supporting information submitted by NIRS/PC is virtually devoid of any reference to the projected doses for deep disposal in the NEF DEIS, as corrected by the FEIS. Instead, NIRS/PC has challenged the CEC analysis through expert affidavits containing entirely new information and a listing of material facts premised upon that new information.

Because these are new issues, they can only be raised by NIRS/PC through a motion for the admission of late-filed contentions. Indeed, NIRS/PC has once again filed such a motion,⁶ although even this motion does not directly challenge the analysis performed to assess deep disposal impacts in the CEC FEIS. Unless and until these new issues are admitted into this proceeding summary disposition is clearly inappropriate. Further, these new issues are clearly untimely. As discussed above, this motion represents the first time NIRS/PC has

⁶ Motion on Behalf of Intervenor Nuclear Information Resource Service and Public Citizen for Admission of Supplemental and Additional Late-Filed Contentions Under 10 C.F.R. § 2.309(c) ("November Supplemental Motion").

addressed the alleged insufficiency of the CEC FEIS analysis.

Pursuant to 10 C.F.R. § 2.309(f)(2), for issues arising under the National Environmental Policy Act ("NEPA"), the petitioner shall file contentions based upon the applicant's ER. The petitioner may amend those contentions only if there are data or conclusions in the NRC draft or final EIS that differ significantly from the data or conclusions in the applicant's documents.

Id. The Commission recently explained the rationale for this rule:

Our contention pleading rule requires a petitioner to file NEPA contentions on the applicant's ER so that environmental issues are raised as soon as possible in the proceeding. The requirement that a petitioner raise NEPA contentions in response to the ER gives the Staff the opportunity to request additional information from the applicant and work to resolve any deficiencies as the Staff develops its own Environmental Impact Statement (EIS).
Private Fuel Storage (Independent Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 130 (2004).

In this proceeding, the applicant's ER referenced the CEC FEIS.⁷ NIRS/PC's subsequent contentions failed to challenge the CEC FEIS analysis. The Staff's NEF DEIS, published over a year ago, explicitly relied upon the CEC analysis.⁸ NIRS/PC filed *two* separate motions to supplement its contentions in response to the NEF DEIS and yet failed to challenge the sufficiency of the CEC FEIS analysis. In fact, NIRS/PC's challenged the NEF DEIS because its values differed from those in the CEC FEIS. NIRS/PC recently filed a third motion to supplement its deep disposal contention and once again failed to explicitly challenge the CEC FEIS deep disposal analysis. However, every substantive allegation in NIRS/PC's motion for summary disposition directly attacks the sufficiency of the analysis in Appendix A of the CEC FEIS.

⁷ NEF ER at 4.13-13, 13-14.

⁸ NEF DEIS at 4-59.

NIRS/PC may only seek summary disposition on those contentions properly admitted before the Board. Here, the focus of NIRS/PC's contention has changed from an allegation of omissions in the NEF DEIS to an allegation of a deficient analysis in the underlying CEC FEIS. This change of focus requires a late-filed contention amendment in order to constitute a litigable issue. CLI-02-28, 54 NRC at 208. No such amendment has been granted.

III. Staff Response to NIRS/PC's Statement of Undisputed Facts

Pursuant to 10 C.F.R. § 2.710, NIRS/PC submitted a Statement of Undisputed Facts along with its motion for summary disposition. Section 2.710(a) requires a separate, short, and concise statement of material facts as to which the moving party contends that there is no genuine issue to be heard.

A. NIRS/PC Fact Paragraphs 1 Through 5

The Staff declines to challenge the accuracy and materiality of paragraphs 1 through 5, regarding procedural history.

B. NIRS/PC Fact Paragraph 6

The Staff disputes alleged material fact 6, which states that “[b]y its ruling dated October 19, 2005 in CLI-05-20, the Commission held that NIRS/PC’s contention about deep disposal is timely.” The Commission determined that the Board had improperly ruled that a portion of NIRS/PC’s October 2004 contention supplement was untimely. Specifically, the issue raised by NIRS/PC regarding deep disposal was that “[t]he DEIS fails to support or explain the modeling of disposal of depleted uranium,” as “the DEIS fails to disclose the models used or the parameter values” because, while the text suggests that the models used in analyzing the CEC site were used in the NEF DEIS, “the results are unlike any reported in connection with the CEC facility.” October Motion at 12-13, 16. The Commission explicitly stated that any challenge to the analysis in the CEC FEIS was untimely because it had been referenced in the NEF ER. Similarly, NIRS/PC’s challenge to the use of two representative deep disposal sites was not

remanded because the Commission found it untimely. CLI-05-20 at 14 n. 48. Thus, NIRS/PC's characterization of the Commission's decision is incorrect.

C. NIRS/PC Fact Paragraphs 7 Through 18

The remaining paragraphs, 7 through 18, are simply not material to the issue before the Board. As discussed above, the only issue raised by NIRS/PC in the contention that is now before the Board is the alleged failure of the Staff to disclose the models used or the parameter values in the NEF DEIS. Thus, there are no genuine issues of material fact bearing on the admitted contention which only challenges disclosure of models and parameters used in the NEF DEIS. The allegations regarding the analysis performed for the CEC FEIS set forth by NIRS/PC are simply not relevant to the issue before the Board and therefore do not meet the materiality requirement of section 2.710(a). Because the Staff disputes these paragraphs on the grounds of materiality, it is not necessary to address the merits of the challenges to the CEC analysis NIRS/PC has presented now for the first time in this proceeding.

In addition to being immaterial, however, some of NIRS/PC's facts are so obviously wrong that they demand immediate contravention. For instance, in paragraph 7, NIRS/PC claims:

The information in the CEC Final EIS does not include all necessary source data, does not fully disclose modeling methodology, and is inadequate to enable other scientist [sic] to reproduce dose results published in that EIS. The Commission Staff itself has been unable or unwilling to reproduce these results.

It was recently settled by the Commission that the Staff is under no obligation to reproduce these results. *Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-05-28, slip. op. at 12. As the Commission found, it is perfectly acceptable for the Staff to incorporate other analysis and data after assessing its reasonableness. *Id.* As demonstrated by the affidavits of Dr. Don Palmrose and Dr. Rateb Abu-Eid attached to the Staff's Motion for Summary Disposition, filed November 18, 2005, the Staff has reviewed the CEC analysis and found it to

be reasonable and appropriate. (Attachment A, Staff Motion for Summary Disposition; Attachment B, Staff Motion for Summary Disposition).

In paragraphs 9 and 10, NIRS/PC states:

The analysis by Kozak et al. of Sandia National Laboratory, performed by a Department of Energy laboratory for the Commission Staff in connection with the Claiborne proceeding, considered the behavior of depleted uranium and estimated solubility values in the range of 10^{-6} to 10^{-5} moles per liter for uranium. (NIRS/PC Ex. 128 at 31).

Other recent work conducted by George Rice modeled depleted uranium in deep disposal and identified solubility values in the range of 10^{-6} moles per liter for uranium in the form of U_3O_8 (NIRS/PC Ex. 190 at 22).

Citizens Against Nuclear Trash ("CANT"), and its expert Dr. Arjun Makhijani, challenged this same issue - the solubility values used in the CEC deep disposal analysis - in the *Claiborne* proceeding. *Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), LBP-97-3, 45 NRC 99 (1997).⁹ Pertinent to this issue, CANT challenged the pH value, an important factor governing uranium solubility, and the redox potential, a measure of the potential of groundwater to either oxidize or reduce. After being fully litigated, the Board found these values reasonable. *Id.* at 120-21.

Further, NIRS/PC fails to acknowledge that the Sandia analysis assumed the disposal site would be in the humid southeast and assumed near surface disposal.¹⁰ In the *Claiborne* proceeding, the Staff filed an affidavit of its expert, Dr. Yawar Faraz, which states:

Groundwater conditions in a near-surface disposal facility are expected to be oxidizing while conditions in a greater-depth

⁹ 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).

¹⁰ NIRS/PC Ex. 128 at 5 "We have assumed disposal site characteristics based on the humid southeast case study presented in Appendix E of the DEIS for 10 C.F.R. Part 61 (DEIS) [NRC, 1981]." For near surface disposal, see NIRS/PC Ex. 128 at 22-23.

disposal facility are expected to be reducing. This difference is of great significance for uranium whose solubility under reducing conditions could be as much as three orders of magnitude lower than under oxidizing conditions. Affidavit of Yawar Faraz, ¶ 7d (February 6, 1995) (Attachment A to Staff's Response).

The distinction between near surface and deep disposal, therefore, is crucial and the fact that CEC FEIS analysis differs from the Sandia results, as noted in paragraph 11 of NIRS/PC's proffered undisputed facts, is irrelevant. Further, the cited page (22) of NIRS/PC exhibit 190 does not reference recent solubility modeling by George Rice. Instead, it simply discusses the solubility values found in the Sandia study.

In paragraphs 13 and 14, NIRC/PC claim the retardation coefficients used to model the flow of radionuclides in groundwater are high. Dr. Faraz's affidavit from the *Claiborne* proceeding again proves useful:

Groundwater conditions in a near-surface disposal facility are expected to be oxidizing while conditions in a greater-depth disposal facility are expected to be reducing. . . . In addition, the solid/water distribution coefficient is expected to be increased under reducing conditions resulting in a slower rate of transport through the environment. Affidavit of Yawar Faraz, ¶ 7d (February 6, 1995).

The high retardation coefficients are reasonable due to the reducing conditions (lack of oxygen) at such a depth. CANT and Dr. Makhijani challenged the retardation factor of 1200 in the *Claiborne* proceeding as being too high. The Board found the retardation factor reasonable because the Staff's value was based on "actual experimental observation for a comparable medium and were corroborated by a second study." LBP-97-3, 45 NRC at 120-121.¹¹

In paragraphs 17 and 18, NIRS/PC generally alleges that the estimated doses are so low as to be incredible, calling them "extreme ratios" and "likely to be wrong by several orders

¹¹ Again, 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).

of magnitude.” However, the mere fact that values are low does not mean that they are incredible. The NRC staff has performed an independent evaluation of the CEC FEIS’s deep disposal impacts analysis and found it to be reasonable. See Affidavit of Donald E. Palmrose, ¶ 3 (Attachment A, Staff Motion for Summary Disposition) and Affidavit of Rateb Abu-Eid, ¶ 4, (Attachment B, Staff Motion for Summary Disposition).¹²

CONCLUSION

NIRS/PC’s motion for summary disposition should be denied as NIRS/PC has failed to demonstrate that it is entitled to a decision as a matter of law regarding any issue before this Board. Instead, NIRS/PC has improperly used this motion to broaden the scope of this proceeding and to present an untimely attack on the sufficiency of the CEC FEIS dose estimates.

Respectfully submitted,

/RA/

Lisa B. Clark
Counsel for NRC Staff

Dated at Rockville, Maryland
this 28th day of November, 2005

¹² The emplacement horizons envisioned in the CEC FEIS analysis are well below the water table. In the case of the sandstone/basalt site, it is 635 meters below the surface and over 300 meters below the cemented sand and gravel strata (deep aquifer). CEC EIS at A-10, A-11 (NIRS/PC Ex. 58). Radionuclides in groundwater must overcome gravity for hundreds of meters in order to reach the aquifer. Further, both U_3O_8 and UO_2 are classified as insoluble by the CRC Handbook of Chemistry and Physics. (75th Edition, David R. Lide and F.R. Frederiksie, 1994-1995) See Affidavit of Rateb-Abu-Eid, (Attachment B to Staff Motion for Summary Disposition). Low dose estimates are hardly unexpected.

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LOUISIANA ENERGY SERVICES, L.P.)	Docket No. 70-3103
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CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF'S RESPONSE TO NIRS/PC'S MOTION FOR PARTIAL SUMMARY DISPOSITION" 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 28th day of November, 2005.

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