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NUCLEAR REGULATORY COMMISSION

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BEFORE THE ATOMIC SAFETY AND LICENSING BOARDOFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

In the Matter of:

Louisiana Energy Services, L.P.

(National Enrichment Facility)

Docket No. 70-3103-ML

ASLBP No. 04-826-01-ML

LOUISIANA ENERGY SERVICES, L.P. OPPOSITION
TO NUCLEAR INFORMATION AND RESOURCE SERVICE
AND PUBLIC CITIZEN MOTION TO COMPEL RESPONSES TO INTERROGATORIESI. INTRODUCTION

On October 4, 2004, Intervenors Nuclear Information and Resource Service and Public Citizen ("NIRS/PC") filed a motion to compel Applicant Louisiana Energy Services, L.P. ("LES") to respond to certain interrogatories.¹ In accordance with the Atomic Safety and Licensing Board ("Licensing Board") Order dated October 5, 2004,² LES files this response to the NIRS/PC motion to compel.³ For the reasons discussed below, LES opposes the motion. As

¹ "Motion To Compel Responses To Interrogatories By Applicant Louisiana Energy Services, L.P. On Behalf Of Petitioners Nuclear Information And Resource Service And Public Citizen," October 4, 2004.

² "Order (Schedule for Responses to Motions to Compel)," October 5, 2004.

³ Contrary to the Licensing Board's April 15, 2004, Initial Prehearing Order, the NIRS/PC motion to compel far exceeds the ten-page limit placed on such motions, absent preapproval by the Licensing Board. Memorandum and Order at 6. In light of this deviation, LES has found it necessary to also exceed the page limitation in order to fully respond to Petitioners' twenty-three page motion. Further, contrary to the assertion of NIRS/PC that they filed only 65 interrogatories, the total number of interrogatories is at least 130 when all subparts and compound questions are counted separately.

indicated by NIRS/PC, the parties have conferred on this matter but have not been successful in resolving the underlying issues.

II. DISCUSSION

A. LES Should Not Be Compelled to Respond to Interrogatories Inquiring Into the Economics or "Business Case" for the Proposed National Enrichment Facility

1. *NIRS/PC Interrogatories 26, 30, 31, 32, 33, and 34 Seek Information that is Beyond the Scope of NIRS Contention EC-7 and the NRC's NEPA Analysis*

In Part A of their motion, NIRS/PC seek to compel LES responses to six interrogatories (Interrogatories 26, 30, 31, 32, 33, and 34) that purportedly relate to the "need for, costs of, and benefits of the proposed National Enrichment Facility ["NEF"]." (NIRS/PC Motion at 2-9.) However, as discussed below, it is clear that NIRS/PC are seeking to litigate issues that exceed not only the scope of the admitted contention at issue (NIRS/PC EC-7), but also the scope of the Commission's obligations under the National Environmental Policy Act ("NEPA"). Accordingly, the NIRS/PC motion to compel responses to the above-listed interrogatories should be rejected.

In particular, NIRS/PC seek to discover "economic evidence" regarding the proposed NEF. NIRS/PC seek to explore, *inter alia*, (1) the effect of the NEF upon existing competition and the U.S. enrichment market (*see* NIRS/PC Motion at 3-6, 8 & Interrog 33.);⁴ (2) detailed operational and cost-related information on USEC's Paducah facility operations (*see* NIRS/PC Motion at 7 & Interrogs. 26, 31); (3) information regarding the "cost of SWU" from the NEF, including the "derivation of such cost figures" (*see* NIRS/PC Motion at 6, 8 & Interrogs. 30, 33.); (4) "projections of Urenco's performance" so as to "shed light upon Urenco's

⁴ To the extent NIRS/PC are suggesting that the proposed NEF will have anti-competitive effects, such an inquiry clearly is beyond the scope of the admitted contention, and for that matter, beyond the purview of the Commission.

intentions with regard to the NEF” (see NIRS/PC Motion at 8 & Interrog. 32.); and (5) “[d]etailed construction cost information for the NEF.” (see NIRS/PC Motion at 9 & Interrog. 34.) In short, NIRS/PC seek improperly to transform Contention NIRS/PC EC-7 and the Commission’s “need” and “cost-benefit” analyses under NEPA into a free-ranging inquiry into the economics and market impacts of the proposed NEF.

The justification offered by NIRS/PC in support of their interrogatories is two-fold. First, NIRS/PC argue that the Licensing Board in Contention NIRS/PC EC-7 “specifically allowed NIRS/PC to pursue whether the Environmental Report ‘adequately describe[s] or weigh[s] the environmental, social, and economic impacts and costs of operating the’ NEF, including ‘how LES would effectively enter this market in the face of existing and anticipated competitors and contribute some public benefit.’” NIRS/PC Motion at 5. Second, NIRS/PC contend that NRC precedent — LBP-96-25 and CLI-98-3⁵ in particular — supports an inquiry into the market or price effects of the proposed NEF. (*Id.* at 3-4.) As demonstrated below, however, neither the Board’s admissibility ruling in LBP-04-14⁶ nor Commission case law supports such an inquiry *in this proceeding*. In fact, allowing such an inquiry would run counter to (1) the Licensing Board’s clear proviso in LBP-04-14 that LES need not present a “business plan,” and (2) more recent pronouncements by the Commission regarding the consideration of economic or market predictions in a “need” assessment under NEPA.

It is well-established that “the scope of discovery is limited to the particular proceeding and the contentions that have been admitted.” *See, e.g., Private Fuel Storage, L.L.C.*

⁵ *Louisiana Energy Servs., L.P.* (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 89 (1998), *aff’d in part & rev’d in part*, LBP-96-25, 44 NRC 331 (1996).

⁶ *Louisiana Energy Servs., L.P.* (National Enrichment Facility), LBP-04-14, 60 NRC __ (July 19, 2004) (slip op.).

(Independent Fuel Storage Installation), 2000 WL 1760952 (N.R.C.) (citation omitted). As admitted by the Licensing Board, Contention NIRS/PC EC-7 states as follows:

CONTENTION: Petitioners contend that the Environmental Report (ER) does not adequately describe or weigh the environmental, social, and economic impacts and costs of operating the National Enrichment Facility (See ER 1.1.1 et seq.) in that:

- (A) Louisiana Energy Services, L.P.'s (LES) presentation erroneously assumes that there is a shortage of enrichment capacity.
- (B) LES's statements of "need" for the LES plant (ER 1.1) depend primarily upon global projections of need rather than projections of need for enrichment services in the U.S.
- (C) LES has referred to supply and demand in the uranium enrichment market (ER 1.1), but it has not shown how LES would effectively enter this market in the face of existing and anticipated competitors and contribute some public benefit.

LBP-04-14, App. A at 43 (slip op.). Bases A and B contain no mention of potential price or market effects. The only basis that could be construed as permitting the type of economic analysis contemplated by NIRS/PC in their motion to compel would be Basis C (formerly Basis F of NIRS/PC proposed Contention 5.1). In admitting Contention NIRS/PC EC-7, however, the Licensing Board specifically noted that this basis should *not* be understood to mean that LES is under an obligation to present a "business plan." LBP-04-14, at 30 (slip op.). Moreover, in rejecting three other bases (Bases D, E, and G) offered to support the contention, the Board stated that "the applicant is under no obligation to present either a 'business case' or to demonstrate the profitability of the proposed facility." *Id.* Indeed the Board specifically rejected proposed Bases D and E, in which NIRS/PC raised issues related to LES's ability to win market share and the impact of the NEF on market prices.

The information that NIRS/PC seek to discover is plainly linked to the "business plan" and/or "business case" for the proposed NEF, and, therefore, falls outside the scope of

Contention NIRS/PC EC-7. While the terms may lack universal definitions, they must certainly encompass the operational and financial objectives of a business, including, for example, financial projections; business performance forecasts; assessments of market impacts; and marketing plans or strategies. As noted above, this is precisely the type of information sought by NIRS/PC through their interrogatories and motion to compel.

Moreover, as reflected in their May 10, 2004 reply brief on the admissibility of contention, NIRS/PC itself appeared to view the “business case” concept as encompassing the “market and price effects” and economic viability of the proposed NEF. In their reply, NIRS/PC stated as follows:

LES argues that NEPA does not require a “business case” supporting the viability of its project (LES Ans. 85). However, the impacts to be considered in a NEPA analysis include (but are not limited to) the *market and price effects* of a new plant; thus it is pertinent under NEPA to ask whether the new plant will be *economically viable at various different price levels*. (LES, 47 NRC at 94).⁷

However, the Licensing Board, having reviewed both the April 6, 2004 petition to intervene and May 10, 2004 reply submitted by NIRS/PC, expressly excluded “business case” or “profitability” considerations from litigation in this proceeding. The Board’s clear intent is further evidenced by the Board’s outright rejection of Basis E, in which NIRS/PC asserted that “LES has not proven that either *price* or availability of enrichment services would be different if the LES plant is not built and enrichment services are, to some degree, supplied by imports.”⁸ NIRS/PC added

⁷ See “Reply by Nuclear Information and Resource Service and Public Citizen to Answers of Nuclear Regulatory Commission Staff and Louisiana Energy Services, L.P.” (May 10, 2004) (“NIRS/PC Reply”), at 18-19 (emphasis added).

⁸ See Petition to Intervene by Nuclear Information and Resource Service and Public Citizen” (Apr. 6, 2004) (“NIRS/PC Petition”), at 40. In connection with proposed NIRS/PC Contention 5.2 (Basis E), the Board similarly rejected, in LBP-04-14, the NIRS/PC argument that “NRC should also consider the combined effect of the LES plant and the proposed USEC plant on *prices* and the potential that *depressed prices* may slow

that “LES has not shown that building a new enrichment facility in the U.S. would *reduce the cost* of uranium enrichment services,” nor that “such services would be appreciably *less expensive* or more reliable if placed on U.S. soil.” (NIRS/PC Petition at 40; emphasis added.) NIRS/PC is now plainly seeking to pursue the very issues previously rejected by the Board. The NIRS/PC motion to compel should be dismissed with respect to Interrogatories 26, 30, 31, 32, 33, and 34 insofar as these interrogatories clearly seek information — including information on the “market and price effects” of the proposed facility — that is directly tied to the “business case” for the proposed NEF.

In light of the ruling in LBP-04-14, rejecting all proposed bases for this contention that would raise issues related to SWU prices and production costs, together with Commission precedent rejecting inquiry into “business case” issues in a “need” analysis under NEPA, Basis C must be restricted to LES’s ability to “enter this market,” to become an additional domestic supplier of enrichment services, by securing advance commitments. LES will demonstrate its ability to “enter the market” by introducing specific contracts for services from the NEF.⁹ A challenge to the existence, quantity, and term of these initial contracts could properly be raised under Basis C; however, “business case” issues related to production cost, price, profitability, and market impacts after entry into the market are beyond the scope of the Board’s inquiry and the contention. This limitation on the contention is the only rational way to reconcile the admitted basis with the rest of the Board’s decision in LBP-04-14 and with the Commission’s precedent rejecting “business” issues. As such, the contention specifically does

downblending of surplus HEU [high-enriched uranium].” (NIRS/PC Petition at 45; emphasis added.)

⁹ As LES has previously noted, it has, in any event, already entered into contracts for over 50% of the NEF’s output for the first 10 years of operation.

not warrant or necessitate an economic analysis of the type now sought by NIRS/PC. The NIRS/PC argument that CLI-98-3 mandates or warrants an inquiry into the price or market effects of the NEF is unfounded, and premised on a severely skewed and selective reading of the decision.

For example, NIRS/PC point to the Commission's stated reluctance "not [to] disturb the [*Claiborne*] Board's core factual finding that the CEC is unlikely to have a major beneficial price effect." NIRS/PC Motion at 4, quoting *Claiborne*, CLI-98-3, 47 NRC at 90. Additionally, NIRS/PC extract following statement from CLI-98-3:

In sum, we hold that the Board had sufficient reason to examine the likely competitive price effects of the CEC, that the Board's price-effects finding should be added to the environmental record of decision, and that the Board, in performing its ultimate cost-benefit balancing under NEPA, must consider, in addition to price effects, the other benefits of the CEC."

Id., quoting CLI-98-3, 47 NRC at 97. When viewed out of context, as in the NIRS/PC motion, the foregoing Commission statement seemingly suggests that an NRC licensing board, when considering the cost-benefit analysis associated with a proposed uranium enrichment facility, is *required* to consider "price effects." This, however, is not the case. The operative words in the preceding Commission statement are "sufficient reason." Contrary to Intervenor's suggestion, in CLI-98-3 the Commission did *not* mandate that the agency's NEPA review invariably include an assessment of price and market effects or the "economic viability" of a proposed facility. Rather, the Commission held merely that, *in that proceeding*, the board was justified in looking at price effects. The following passage from CLI-98-3 confirms this point:

With LES having repeatedly advanced in this proceeding the argument that the CEC would act to "suppress" or "moderate" future SWU price increases, perhaps significantly, and with the FEIS at least implying a beneficial effect on prices, it was legitimate for the Board to evaluate this claimed economic benefit against CANT's [the intervenor's] vigorous challenge.

CLI-98-3, 47 NRC at 91. Indeed, at that time, LES maintained that “the fundamental case for the CEC is that it can and will compete on economic grounds, allowing U.S. electric utilities a competitive source of supply so that they can in turn achieve the *lowest cost* reliable supply of electricity to their rate payers.” *Claiborne*, LBP-96-25, 44 NRC at 350. However, LES has made no such assertion with respect to the proposed NEF, so a “price-effects” inquiry is not warranted here.

NIRS/PC also neglect to mention that the Commission found that the *Claiborne* licensing board had ascribed too much importance to price-effect considerations. On this point, the Commission stated:

We frankly confess some puzzlement over the Board’s exclusive focus on the CEC’s potential price effects as the sole possible benefit of the project. The FEIS on its face discusses other benefits, never addressed by the Board in LBP-96-25, including, for example, creation of a reliable American supplier of enriched uranium in addition to the United States Enrichment Corporation (USEC).

CLI-98-3, 47 NRC at 90. The Commission later added:

In short, the Board’s price projections reflect not ineluctable truth, but rather, a plausible scenario that in the Board’s view, with which we agree, should be added to the environmental record of decision. Giving disproportionate significance to the Board’s numerical price projections could prove misleading. “[T]he appearance of precision . . . tends to divert scrutiny from the difficult judgmental decisions involved in performing whether a genuine need for the facility exists.” *Vermont Yankee Nuclear Power Corp.* (Vermont Yankee Nuclear Power Station), ALAB-179, 7 AEC 159, 172 (1974).

Id. at 94. The Commission concluded that “LES and the NRC staff were right in pointing out that the Board’s price-driven approach entirely overlooks other benefits of the CEC discussed in the FEIS and elsewhere in the record.”¹⁰ *Id.* at 95. Finally, the Commission stated that:

¹⁰ According to the Commission, these benefits included, *inter alia*: helping to offset dependence on foreign suppliers; lessening reliance upon USEC’s older and more

It might fairly be said that not only the FEIS, but also national policy, establish a need for a reliable and economical domestic source of enrichment services.

...

Although these Congressional and NRC policy statements have come in a variety of contexts, they bear, in our view, on any evaluation of the 'need' for the CEC and its potential benefits.

Id.

As reflected in the NEF Environmental Report, the stated "need" for the NEF resides in the need for additional and reliable domestic enrichment capacity. *See* NEF Environmental Report, at 1.1-1 to 1.1-3. As recognized by the Commission and stated in the NEF Environmental Report, such additional domestic enrichment capacity would "further attainment of [] energy and national security policy objectives" and "enhance the diversity and security of the U.S. enriched uranium supply." *Id.* at 1.1-2, 1.1-3. In other words, the applicant's stated need for the NEF does not hinge on an avowed need to provide competition in the marketplace or to "suppress" or "moderate" future SWU price increases, as was the case in the *Claiborne* proceeding.

The Commission also made clear in CLI-98-3 that the ability of LES to "enter the market" — the focus of Basis C of Contention NIRS/PC EC-7 — is not exclusively contingent upon LES's ability to "suppress" or "moderate" the price of SWU. Specifically, the Commission noted:

In any event, we find that the record demonstrates a potential for LES entering the market, even without the "significantly lower prices that [intervenor] CANT believes necessary. LES has provided a strategy for capturing market share. Those plans include, among other things, obtaining a large percentage of its sales contracts through exploiting

energy-intensive gaseous diffusion plants; providing the U.S. with a more technologically advanced and more energy efficient uranium enrichment technology; and creating an alternative technology should the AVLIS technology run into technical problems as it is scaled up.

existing relationships in the industry (i.e., from its partners and affiliates, both domestic and European), a strategy that is not exclusively dependent upon significantly lower prices. Moreover, in our recent “financial qualification” decision, CLI-97-15, 46 NRC 294 (1997), we *required* that LES obtain advance funding commitments, including sales contracts, prior to building or operating the CEC. Thus, “if the market share does not allow LES to raise sufficient capital for construction or to obtain the promised advance purchase contracts, LES will not build or operate the CEC,” in which case neither adverse nor beneficial effects would ensue. *See id* at 308. But at this stage the Commission is unable to find, as a factual matter, that LES lacks the potential even to enter the enrichment services market.

CLI-98-3, 47 NRC at 96 (emphasis in original). Notably, in the Hearing Order for *this* proceeding, the Commission specifically described its holding in CLI-97-15 and confirmed the applicability of the specific license condition (requiring advance funding commitments) approved therein to the current LES Application. 69 Fed. Reg. 5,877-78. Moreover, as previously noted, LES has already secured commitments for the purchase of over 50% of its first ten years of planned NEF production. Given the existence of these commitments, the specific price of SWU in the contracts is irrelevant to the LES’s ability to “enter the market.”

In addition to misreading the Commission’s decision in CLI-98-3, NIRS/PC misapprehend the proper scope of the NEPA “need” and “cost-benefit” analyses in general. Indeed, in CLI-98-3, the Commission emphasized that NEPA’s “theme . . . is sounded by the adjective ‘environmental’: NEPA does not require the agency to assess every impact or effect of its proposed action, but only the impact or effect on the environment.” CLI-98-3, 47 NRC at 88 (quoting *Metropolitan Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766, 772 (1983)). An agency’s “primary duty” under NEPA is to take a “hard look” at environmental impacts. *Id.* at 88-89 (citing *Public Utilities Commission v. FERC*, 900 F.2d 269, 282 (D.C. Cir. 1990)). In this regard, the Commission added that “[d]etermination of economic benefits and costs that are tangential to environmental consequences are within [a] wide area of agency discretion.” *Id.* at

89 (quoting *South Louisiana Environmental Council, Inc. v. Sand*, 629 F.2d 1005, 1011 (5th Cir. 1980)).

As LES has previously stated, neither NEPA nor the Commission's NEPA-implementing regulations (10 C.F.R. Part 51) require a license applicant to demonstrate the "economic viability" of a proposed facility, including its effect on the relevant market. Stated otherwise, projections of the long-term financial success of the project are beyond the scope of a NEPA review. In a 2001 decision, the Commission made clear that "[t]he NRC . . . is not in the business of regulating the market strategies of licensees," and that it is within an applicant's "business discretion to determine whether market conditions warrant commencing [] operations." *Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-04, 53 NRC 31, 48 (2001). The Commission looks to whether an applicant "can conduct operations safely," and "leave[s] to [an applicant] the intricate ongoing business decisions that relate to cost and profit." *Id.* at 49.

In a 2003 denial of a Nuclear Energy Institute petition for rulemaking, the Commission reaffirmed its view that an analysis of market conditions is not required by NEPA or NRC case law, albeit in the context of nuclear power reactors. In doing so, however, the Commission cited the very case on which NIRS/PC rely in their motion, stating as follows:

The Commission emphasizes, however, that while a discussion of need for power is required, the Commission is not looking for burdensome attempts by the applicant to precisely identify future market conditions and energy demand, or to develop detailed analyses of system generating assets, costs of production, capital replacement ratios, and the like in order to establish with certainty that the construction and operation of a nuclear power plant is the most economical alternative for generation.¹¹

¹¹ This statement was included in response to specific directions from Commissioner Merrifield, who explicitly noted that "the Commission in *LES* put into perspective the Commission's expectations for discussions of need that depend on economic predictions." Commission Voting Record on SECY-02-0175, "Denial of Petition for

Nuclear Energy Institute; Denial of Petition for Rulemaking, 68 Fed. Reg. 55,905, 55,910 col. 1 (Sept. 29, 2003) (citing *Claiborne*, CLI-98-3, 47 NRC at 88, 94). Again, the information described in the passage is precisely the type of information that NIRS/PC seek to obtain through their various “need”-related interrogatories and motion to compel.

2. *NIRS/PC Interrogatories 26, 30, 31, 32, 33, and 34 Seek Additional Research, Analytical Work, and/or Information Available From Other Sources that is Beyond the Scope of LES’s Discovery Obligations*

Pursuant to 10 C.F.R. § 2.705(b)(5), interrogatories “may seek to elicit factual information reasonably related to a party’s position in the proceeding, including data used, assumptions made, and analyses performed by the party.” Interrogatories, however, “may not be addressed to, or be construed to require [p]erformance of *additional research or analytical work beyond that which is needed to support the party’s position on any particular matter.*” 10 C.F.R. § 2.705(b)(5)(ii). *Cf. Pennsylvania Power and Light Co.* (Susquehanna Electric Station, Units 1 and 2), ALAB-613, 12 NRC 317, 334 (1980) (stating that while a party may be required to perform some investigation to determine what information it actually possesses, “extensive independent research” is not required). Additionally, a party is not required to produce documents that are already *publicly available* from other sources. NIRS/PC Interrogatories 26, 30, 31, 32, 33, and 34 violate these basic principles of NRC discovery. Accordingly, the NIRS/PC motion to compel LES responses to those interrogatories should be rejected on this ground as well.

- Interrogatory 26: This interrogatory requests detailed information about hypothesized capital upgrades to USEC’s Paducah plant in response to LES’s statement that “the

Rulemaking to Eliminate Review of Alternative Sites, Alternative Energy Sources and Need for Power in Nuclear Power Reactor Siting and Licensing Reviews (PRM-52-2)” (May 7, 2003).

annual nameplate capability [of the Paducah gaseous diffusion plant] of 11.3 million [SWU] is not physically attainable without capital upgrades to the plant, which are not expected.” In its response to this interrogatory, LES identified the source document and relevant basis for this statement. No further response is required. The additional information sought by NIRS/PC would require extensive research, to the extent such information even could be obtained or would not amount to mere speculation.

- Interrogatories 30-34: These interrogatories request information that would require LES to perform unnecessary additional research or analytical work. Interrogatory 30, for example, asks LES to calculate the “average cost per SWU” for the eight “scenarios” discussed by LES in Section 1.1.2 of its Environmental Report. Clearly, responding to this interrogatory would require additional research or analytical work, which, for the reasons set forth above, is beyond that needed to support LES’s position on the “need” for the proposed NEF. LES has no obligation to perform the additional analyses. Interrogatories 31, 32, 33, and 34 also seek additional quantitative assessments, calculations, and financial projections that far exceed the scope of LES’s discovery obligations relative to Contention NIRS/PC EC-7. Accordingly, LES should not be compelled to respond.

B. LES Should Not Be Compelled to Respond to the Specific Interrogatories Related to Strategies for Conversion and Disposal of Depleted UF₆

In their motion, NIRS/PC request that LES be compelled to respond to the following interrogatories. Below are the LES responses to each such request.¹² Each of the responses below is provided notwithstanding, and without waiving, the objections previously set forth in Applicant’s Objections and Responses at 30-48.

¹² For purposes of brevity and efficiency, LES has not repeated the content of each interrogatory in this response.

- Interrogatory 38: The information requested by NIRS/PC should be set forth in the contract between the Department of Energy (“DOE”) and UDS, as well as in the supporting environmental impact statements. Both the contract and the environmental impact statements are a matter of public record. Petitioners have not demonstrated that such information is not publicly available. LES has no additional information relevant to when the planned DOE conversion facilities at Portsmouth, OH and Paducah, KY will be ready to receive depleted UF₆ from the NEF.

- Interrogatory 39: In this interrogatory, NIRS/PC asks LES to provide it with at least three examples of decommissioned facilities that qualify as templates to estimate the cost to decommission the NEF. This clearly would require LES to perform additional research and analytical work beyond that which was used and is needed to support LES’s position on the issue of decommissioning costs. 10 C.F.R. § 2.705(b)(5)(ii). The experience relied on by LES to estimate decommissioning costs (*i.e.*, Urenco decommissioning expenses) is fully described in the application at issue, as discussed in “Applicant’s Objections and Responses to Interrogatories From Nuclear Information and Resource Service and Public Citizen” (“Applicant’s Objections and Responses”), September 23, 2004, at 31-32, and the “Proprietary Supplement to Applicant’s Objections and Responses to Interrogatories and Document Requests From Nuclear Information and Resource Service and Public Citizen,” (“Proprietary Supplement”), September 23, 2004.

- Interrogatory 43: As a threshold matter, LES objects to this request on the grounds that it seeks information beyond the scope of any admitted contention. None of the NIRS/PC contentions admitted by the Licensing Board in LBP-04-14 pertains directly to the issue of decommissioning financial assurance. Furthermore, information indicating how LES will provide reasonable assurance that funds will be available to decommission the facility, as

required by 10 C.F.R. §§ 70.22(a)(9), 70.25, and 40.36, is provided in Chapter 10 of the Safety Analysis Report. Specific information requested by Petitioners regarding financial assurance is fully described in Section 10.2 of the NEF Safety Analysis Report, "Financial Assurance Mechanism," and Section 10.3, "Tails Disposition." These sections address decommissioning funds applicable to "(a) DUF₆ tails and (b) equipment and buildings," as requested by Petitioners. Motion to Compel at 12. NIRS/PC are further directed to Figure 10.1-1, "NEF — Conceptual Decommissioning Schedule," and Table 10.3-1, "Summary of Depleted UF₆ Disposal Costs From Four Sources." To present such information in a different format, as requested by the interrogatory, is not required by NRC and would involve additional analysis, contrary to 10 C.F.R. § 2.705(b)(5)(ii).

- Interrogatories 45-47: The issue of the classification of depleted uranium under 10 C.F.R. Part 61 has been addressed by the NRC Staff in the Draft Environmental Impact Statement and has also been referred to, and is pending before, the Commission. LES has fully set forth its position on the issue in filings with the Commission dated September 8 and 17, 2004.¹³ Further explanation of that position is not necessary. Moreover, LES does not believe it appropriate to speculate on alternatives that assume that its position is not accepted by the Commission. LES refers NIRS/PC to (1) the aforementioned September 8 and 17, 2004 LES filings; (2) SECY-91-019, "Disposition of Depleted Uranium Tails from Enrichment Plants" (Jan. 25, 1991), Enclosure at 3-4; (3) *Louisiana Energy Servs., L.P.* (Claiborne Enrichment Center), Memorandum and Order (Ruling on Intervenor's Petition to Waive Certain

¹³ "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)," September 8, 2004; "Reply Brief of Louisiana Energy Services, L.P. on the Certified Question Regarding the Proper Waste Classification of Depleted Uranium," September 17, 2004.

Regulations), 1995 WL 110611 (N.R.C. Mar. 2, 1995), *petition for interlocutory review denied*, CLI-95-7, 41 NRC 383 (1995), *vacated*, CLI-98-5, 47 NRC 113 (1998); and (4) NUREG-1790, *Environmental Impact Statement for the Proposed National Enrichment Facility – Draft Report for Comment*, Lea County, New Mexico, Docket No. 70-3103, Louisiana Energy Services L.P., NRC/NMSS (Sept. 2004), at 29; and (5) 10 C.F.R. Part 61 (particularly 10 C.F.R. §§ 61.2, 61.55(a)(3), and 61.55(a)(6)).

- Interrogatory 48: This interrogatory asks LES to identify certain environmental analyses prepared — perhaps — by DOE. However, LES is under no legal or regulatory obligation to identify “any such environmental analysis” — albeit unidentified and undefined by NIRS/PC — of depleted uranium disposal “either under the Commission’s Part 61 regulations or under DOE standards.” Motion to Compel at 15. NIRS/PC can perform their own research of the public record. NIRS/PC, instead, are asking LES for information that would require additional research and analysis that is unnecessary to support LES’ position in this case. 10 C.F.R. § 2.705(b)(5)(ii). Notwithstanding and without waiving these objections, LES refers NIRS/PC to the Department of Energy’s “Final Programmatic Environmental Impact Statement for Alternative Strategies for the Long-Term Management and Use of Depleted Uranium Hexafluoride” [Appendix I, DOE/EIS-0269, April 1999].

- Interrogatory 49: The information responsive to this request may be found in the record and in publicly available sources. *See, e.g.*, (1) NEF Environmental Report, Section 4.13; (2) NUREG-1790, *Environmental Impact Statement for the Proposed National Enrichment Facility – Draft Report for Comment*, Lea County, New Mexico, Docket No. 70-3103, Louisiana Energy Services L.P., NRC/NMSS (Sept. 2004); (3) “Affidavit of Timothy C. Johnson” [attached to “NRC Staff Brief on Classification of Depleted Uranium as Waste” (Sept. 8, 2004)];

and (4) Biwer, B., Ranek, N., Goldberg, M. and Avci, H., “Depleted Uranium Disposal Options,” *Practice Periodical of Hazardous, Toxic, and Radioactive Waste Management* (Apr. 2000). Further response is not necessary or warranted.

- Interrogatory 50: This interrogatory seeks information on “[o]ther United States enrichment plants located, or planned to be located, at Paducah, KY, or Piketon, OH.” Motion to Compel at 16. These plants, however, are not LES plants and are not the subject of this proceeding. The “form of depleted uranium waste (if any) generated, or planned to be generated” by such facilities is irrelevant to the NEF and, in any event, must be obtained from other sources. To the extent the NEF “waste form” is relevant to this proceeding, LES refers NIRS/PC to LES’s Response to NIRS/PC Interrogatory 49, *supra*.

- Interrogatory 51: With the exception of the Nevada Test Site, the “regulatory standards” sought by NIRS/PC in this interrogatory may be obtained from publicly available sources. For example, during the deposition of an LES witness with respect to the feasibility of disposing of depleted uranium as low-level radioactive waste, counsel for NIRS/PC presented the witness with materials obtained by NIRS/PC from the Envirocare website that addressed the “regulatory standards” applicable to that facility. Furthermore, the request — as a whole — seeks additional research by LES that is not needed to support LES’s position on any particular matter, contrary to 10 C.F.R. § 2.705(B)(5)(ii).

- Interrogatory 52: LES objects to this request for the same reasons set forth in the response to Interrogatory 51. Furthermore, any such “regulatory standards” would be discussed in the underlying DOE Request(s) for Proposals and/or the contract between DOE and UDS. The latter are publicly available sources of information.

- Interrogatory 53: LES objects to this interrogatory for the reasons stated in its reply to NIRS/PC. Additionally, however, LES has disclosed all documents it considers to be relevant to this interrogatory in connection with its mandatory initial disclosures and responses to the interrogatories of NIRS/PC. These documents include, but are not necessarily limited to: (1) NUREG-0782, *Draft Environmental Impact Statement on 10 CFR Part 61, Licensing Requirements for Land Disposal of Radioactive Waste* (Sept. 1981); (2) NUREG-0945, *Final Environmental Impact Statement on 10 C.F.R. Part 61, Licensing Requirements for Land Disposal of Radioactive Waste*, NRC/NMSS (Nov. 1982); (3) SECY-91-019, "Disposition of Depleted Uranium Tails from Enrichment Plants" (Jan. 25, 1991); (4) NUREG-1484, *Final Environmental Impact Statement for the Construction and Operation of Claiborne Enrichment Center, Homer Louisiana*, Docket No. 70-3070, Louisiana Energy Services L.P., NRC/NMSS (Aug. 1994); (5) *Louisiana Energy Servs., L.P. (Claiborne Enrichment Center), Memorandum and Order (Ruling on Intervenor's Petition to Waive Certain Regulations)*, 1995 WL 110611 (N.R.C. Mar. 2, 1995), *petition for interlocutory review denied*, CLI-95-7, 41 NRC 383 (1995), *vacated*, CLI-98-5, 47 NRC 113 (1998); (6) NEF Environmental Report, Section 4.13; (7) NUREG-1790, *Environmental Impact Statement for the Proposed National Enrichment Facility – Draft Report for Comment*, Lea County, New Mexico, Docket No. 70-3103, Louisiana Energy Services L.P., NRC/NMSS (Sept. 2004); and (8) Biwer, B., Ranek, N., Goldberg, M. and Avci, H., "Depleted Uranium Disposal Options," *Practice Periodical of Hazardous, Toxic, and Radioactive Waste Management* (Apr. 2000).

- Interrogatory 54: As a threshold matter, this "interrogatory" is tantamount to a request for admission. In addition, it is LES's understanding that the Environmental Protection Agency ("EPA") does not use the term "Regulatory Guide." Thus, it is unclear what

document is being referred to by NIRS/PC. Absent further information and/or clarification regarding the referenced “EPA Regulatory Guide,” LES cannot respond without performing additional research and analysis that is not needed to support LES’s position on any particular matter. 10 C.F.R. § 2.705(b)(5)(ii).

- Interrogatory 55: As set forth by LES in the NEF Environmental Report (Section 4.13) and its filings with the Commission of September 8 and September 17, 2004, LES’s position is that it is appropriate to dispose of depleted uranium as Class A low-level waste under 10 C.F.R. Part 61. As such, disposal as “Greater than Class C” waste in a deep geologic repository is not required per the terms of Part 61. LES has stated in this proceeding its basis for that conclusion. See “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)” (Sept. 8, 2004); “Reply Brief of Louisiana Energy Services, L.P. on the Certified Question Regarding the Proper Waste Classification of Depleted Uranium” (Sept. 17, 2004). This has also been further discussed in depositions conducted in this matter.

- Interrogatories 56 and 57: In response to these interrogatories, LES refers NIRS/PC to Section 4.13.3.1.4.3 of the Environmental Report, “Disposal in a Mine.” Furthermore, LES notes that it has no legal or regulatory obligation — under the “plausible strategy” standard — to define a site selection process or select a specific mine disposal site.¹⁴

- Interrogatory 60: In response to the NIRS/PC motion to compel a response to this interrogatory, LES states as follows: The most common forms of uranium oxide are U₃O₈ and UO₂. Both oxide forms are solids that have low solubility in water and are relatively stable over

¹⁴ See “Answer of Louisiana Energy Services, L.P. to the Request for Hearing and Petitions for Leave to Intervene of the New Mexico Attorney General and Nuclear Information and Resource Service and Public Citizen,” May 3, 2004, at 22, 27-29.

a wide range of environmental conditions. Triuranium octaoxide (U_3O_8) is the most stable form of uranium and is the form most commonly found in nature. At ambient temperatures, UO_2 will gradually convert to U_3O_8 . Because of their stability, uranium oxides are generally considered the preferred chemical form for storage or disposal.

The DOE describes the physical properties of the different chemical forms of uranium in its "Final Programmatic Environmental Impact Statement for Alternative Strategies for the Long-Term Management and Use of Depleted Uranium Hexafluoride" [Appendix A, DOE/EIS-0269, April 1999] ("PEIS"). The DOE states that:

Triuranium octaoxide (U_3O_8) occurs naturally as the olive-green-colored mineral pitchblende. U_3O_8 is readily produced from UF_6 and has potential long-term stability in a geological environment. In the presence of oxygen (O_2) uranium dioxide (UO_2) and uranium trioxide (UO_3) are oxidized to U_3O_8 . It is generally considered to be the more attractive form for disposal purposes because, under normal environmental conditions, U_3O_8 is one of the most kinetically and thermodynamically stable forms of uranium and also because it is the form of uranium found in nature.

It should be noted that even though U_3O_8 is the form found in nature, the deconversion to UF_6 to U_3O_8 would produce a pure form (likely to be powder) that is significantly more concentrated than that found as part of uranium ore.

Additionally, the Argonne National Laboratory, on its "Depleted UF_6 Guide" web page, provides the following properties for different forms of DU:

Table 1 – Physical Properties of Pertinent Uranium Compounds

Compound	Melting Point (°C)	Crystal/ Particle	Density (g/cm ³)		Solubility in Water at Ambient Temperature
			Bulk ^b		
UF ₆	64.1	4.68	4.6		Decomposes to UO ₂ F ₂
UF ₄	960 ± 5	6.7	2.0 – 4.5		Very slightly soluble
UO ₂ F ₂	Decomposes to U ₃ O ₈ at 300	6.37	~2.6		Soluble
U ₃ O ₈	Decomposes to UO ₂ at 1,300	8.30	1.5 – 4.0		Insoluble
UO ₂	2,878 ± 20	10.96	2.0 – 5.0		Insoluble
Uranium metal	1,132	19.05	19		Insoluble

^a Source: DOE (1999), Katz and Rabinowitch (1951), Kirk-Othmer (1977).

^b Bulk densities of UF₄, U₃O₈, and UO₂ are highly variable, depending on the production process and the properties of the starting uranium compounds.

Notation: UF₄ = uranium tetrafluoride; UF₆ = uranium hexafluoride; UO₂ = uranium dioxide; UO₂F₂ = uranyl fluoride; U₃O₈ = triuranium octaoxide.

Both the NRC in NUREG-1484, “Final Impact Statement for the Construction and Operation of Claiborne Enrichment Center, Homer, Louisiana”, and the DOE in the PEIS evaluation of disposal options of depleted uranium, assume that there could be some environmental movement, such as solubility of uranium compounds in the disposal environment. No specific solubility values appear to be quoted in a short review of these documents.

- Interrogatory 61: As a threshold matter, LES repeats its earlier objection to this interrogatory. The interrogatory is vague and ambiguous in its use of the phrases “in most

circumstances” and “more mobile.” *See* Applicant’s Objections and Responses at 45. It also is unclear to what form of uranium the interrogatory refers. In addition, Petitioners are — at bottom — challenging the waste classification of depleted uranium, arguing that it should be considered transuranic versus low-level, Class A waste. Thus, LES objects and incorporates by reference its response to Interrogatory 55, *supra*. LES has amply provided its basis for its position.

- Interrogatory 62: In this interrogatory, Petitioners seek to have LES conduct additional research to identify “each person and firm” that “within the past 20 years *considered* the *possible* construction of a plant to convert the depleted uranium hexafluoride produced by a uranium enrichment plant. . . .” Motion to Compel at 45 (emphasis added). LES objects to this interrogatory as overbroad and burdensome. Moreover, LES is under no obligation to identify entities that may have “considered,” yet not acted upon, the concept of a deconversion plant. Any response to this interrogatory would clearly require additional research and analysis into matters that are not within LES's control or knowledge, and that are clearly not germane to LES's position on the particular matters in issue in this case. *See* 10 C.F.R. § 2.705(b)(5)(ii). Without waiving this objection, LES has previously identified two parties, ConverDyn and Cogema, with whom LES has had discussions regarding construction of a deconversion facility. *See* Deposition of Rod Krich of October 8, 2004.

- Interrogatory 63: LES is not required to select, nor has it selected, “the exact process of conversion of DUF_6 to another form of uranium.” To the extent LES could answer the specific questions posed by NIRS/PC in Interrogatory 63 with respect to deconversion “byproducts or waste products,” any responsive information is already part of the record. This information includes, but is not necessarily limited to, information contained in

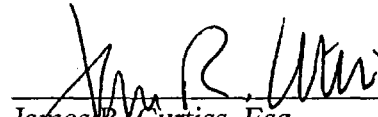
Section 4.13 of the NEF Environmental Report; NUREG-1790 (the NRC's draft environmental impact statement for the NEF); and the transcript for the October 4, 2004 deposition of LES's witnesses on the feasibility and costs of depleted uranium disposition (see in particular the responses of LES witnesses Bob Pratt, Paul Snyder, and Bernard Duperret).

- Interrogatory 64: This specific question was posed by counsel for NIRS/PC to LES expert witness Mike Schwartz during an October 4, 2004 deposition of Mr. Schwartz and several other LES witnesses regarding LES's cost estimate for the disposition of depleted uranium. Accordingly, LES's response to this question is already part of the record of this proceeding and LES refers NIRS/PC to the October 4, 2004 deposition transcript. LES offers no additional information in response to this interrogatory.

III. CONCLUSION

For the reasons set forth above, the NIRS/PC motion to compel responses to interrogatories should be denied.

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Dated at Washington, District of Columbia
this 12th day of October 2004

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of:)	Docket No. 70-3103-ML
)	
Louisiana Energy Services, L.P.)	ASLBP No. 04-826-01-ML
)	
(National Enrichment Facility))	

CERTIFICATE OF SERVICE

I hereby certify that copies of the "LOUISIANA ENERGY SERVICES, L.P. OPPOSITION TO NUCLEAR INFORMATION AND RESOURCE SERVICE AND PUBLIC CITIZEN MOTION TO COMPEL RESPONSES TO INTERROGATORIES" in the captioned proceeding have been served on the following by e-mail service, designated by **, on October 12, 2004 as shown below. Additional service has been made by deposit in the United States mail, first class, this 12th day of October 2004.

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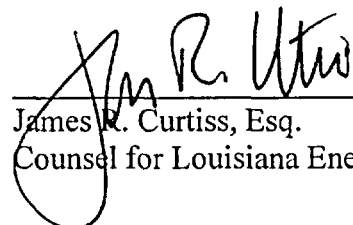
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