UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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Dale E. Klein, Chairman
Edward McGaffigan, Jr.
Jeffrey S. Merrifield
Gregory B. Jaczko
Peter B. Lyons

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

CLI-06-22

MEMORANDUM AND ORDER

The Licensing Board issued its Third Partial Initial Decision[1] in this proceeding on May 31, 2006. This Board decision focused on safety-related "financial assurance" contentions, resolving the final piece of the contested portion of this proceeding. Two parties filed petitions for review. The Nuclear Information and Resource Service and Public Citizen ("NIRS/PC") filed the first;[2] Louisiana Energy Services, L.P. ("LES" or the "Applicant") filed the second.[3] NIRS/PC argue that the Board wrongly refused to consider a challenge to a cost estimate provided by the Department of Energy ("DOE") for depleted uranium disposal. LES argues that the Board wrongly rejected LES's cost estimates for private disposal of depleted uranium.

[1]LBP-06-15, 63 NRC __, slip op. (May 31, 2006).

[2]Petition on Behalf of Nuclear Information and Resource Service and Public Citizen for Review of Third Partial Initial Decision on Safety-Related Contentions ("NIRS/PC Petition") (June 12, 2006).

[3]Applicant's Petition for Review of LBP-06-15 ("LES Petition") (June 15, 2006).

We grant review and affirm, although we modify the basis for the Board's ruling on the DOE cost estimate. We leave the Board's decision and reasoning undisturbed in all other respects.

I. BACKGROUND

The Board's decision details the complex procedural background of this portion of the contested proceeding exhaustively,[4] and we will not duplicate that discussion here.

The license application offers two alternative strategies for the deconversion and disposal of the depleted uranium hexafluoride ("DUF_6") that LES's proposed facility, the National Enrichment Facility, will generate.[5] Under the "private sector strategy," LES would transfer the DUF_6 to a private facility for deconversion, and transport the resultant depleted yellow cake ("DU_3O_8") to a licensed facility for disposal. Under the "DOE strategy," LES would transfer the DUF_6 to DOE for deconversion and disposal. Section 3113 of the USEC Privatization Act[6] requires DOE to accept for disposal depleted uranium from NRC-licensed uranium enrichment facilities so long as the depleted uranium is "ultimately determined to be low-level radioactive waste."

As the Board noted,[7] we already have found LES's depleted uranium to be low-level waste and accordingly have declared the DOE option a "plausible strategy."[8] The Board found that the private sector strategy was also a plausible option, both with respect to deconversion[9]

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[4]LBP-06-15, 63 NRC at __-__, slip op. at 3-31.

[5]*See id*. at __, slip op. at 39.

[6]*See* 42 U.S.C. § 2297h-11.

[7]LBP-06-15, 63 NRC at __, __, slip op. at 36, 40.

[8]*See* CLI-05-5, 61 NRC 22, 36 (2005); CLI-04-3, 59 NRC 10, 22 (2004).

[9]LBP-06-15, 63 NRC at __, slip op. at 53.

and disposal.[10] With both options defined as plausible strategies, the Board's decision addressed the question whether the cost estimates for the decommissioning funding of each option provide reasonable assurance of adequate funding. The Board found that LES had met its burden of proof with respect to the DOE strategy only. As a result, under the Board's decision, the level of decommissioning funding that LES must secure for deconversion and disposal of the DUF_6 will be based on the DOE strategy, at least initially.[11]

II. ANALYSIS

We take review of the Board's decision to clarify two important issues raised in the petitions.[12] First, we examine, and uphold, the Board's application of our "reasonable assurance" standard (and associated guidance in NUREG-1757) to LES's "private sector" decommissioning cost estimate. Second, we examine the Board's application of this same standard to the DOE decommissioning cost estimate. On the DOE issue, we reject the Board's analysis of section 3113 of the USEC Privatization Act, focus on the Board's alternate, *correct* reasons for rejecting NIRS/PC's proposed contentions challenging the DOE estimate, and affirm the Board's decision to base the initial level of decommissioning funding on the DOE estimate.

We do not undertake a point-by-point review of the Board's factual findings. As we stated in our decision on review of the Board's Second Partial Initial Decision in this proceeding, "[w]hile [we have] discretion to review all underlying factual issues *de novo*, we are disinclined to do so where a Board has weighed arguments presented by experts and rendered

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[10] *Id*. at __, slip op. at 96.

[11] The Board left open the possibility that the private sector strategy might become available in the future if LES becomes able to establish a sufficiently reliable and comprehensive cost estimate for this strategy. *Id*. at __, __ n.__, slip op. at 43, 122 n.82.

[12] *See* 10 C.F.R. § 2.341(b)(4)(iii).

reasonable, record-based factual findings. We generally step in only to correct 'clearly erroneous' findings – that is, findings 'not even plausible in light of the record viewed in its entirety.'"[13] As in our prior decision, this is decidedly not the case here, and, as in our prior decision, we will defer to the Board's factual findings. We see nothing in the record evidence, or in the parties' briefs, to controvert the reasonableness of the Board's factual findings.

A. LES Petition – "Private Sector" Decommissioning Cost Estimates

Both the NRC Staff and LES argue that, in its evaluation of the "private sector" option, the Board has significantly altered the applicable standard – discarding the traditional "reasonable assurance" standard in favor of a newly-minted "reliability" standard (with two parts). Both urge the Commission to take review on that basis. The NRC Staff acknowledges that, technically, the "private sector" option is moot because the Board approved using the DOE option as a basis for setting the initial level of decommissioning funding.[14] Thus, the Staff points out, the Board's rejection of the private sector option as a basis for calculating decommissioning funding did not stop LES from receiving its license. Nonetheless, the Staff argues (and LES agrees) that resolving questions regarding the applicable standard for evaluating decommissioning funding estimates is sufficiently important to justify review.

LES also argues that its "private sector cost estimate provides an independent basis for complying with the NRC's decommissioning funding requirements,"[15] and seeks review and reversal of the Board's rejection of the private disposal strategy as a foundation for calculating a

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[13]CLI-06-15, 64 NRC at __, slip op. at 14, citing *Hydro Resources, Inc*., (P.O. Box 777, Crownpoint, New Mexico 87313), CLI-06-01, 63 NRC 1, 2 (2006), *Anderson v. Bessemer City*, 470 U.S. 564, 573-76 (1985), and *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-03-8, 58 NRC 11, 25-26 (2003).

[14]NRC Staff Response to Applicant's Petition for Review of LBP-06-15 ("NRC Staff Answer to LES") (June 26, 2006), at 1, 9.

[15]Applicant's Reply to Intervenor and NRC Staff Responses to Applicant's Petition for Review of LBP-06-15 ("LES Reply") (July 3, 2006), at 4.

decommissioning funding cost estimate. On this point, the NRC Staff disagrees with LES. The Staff, like the Board, found a lack of "sufficient funding" for the private sector option.[16]

In analyzing the concept of "reasonable assurance," the Board took as its starting point language in NUREG-1757, Vol. 3, § 4.1, requiring both "documented" and "reasonable" underlying assumptions for cost estimates.[17] The Board melded the "documented" and

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[16]NRC Staff Answer to LES, at 7.

[17]LBP-06-15, 63 NRC at __, slip op. at 40. Section 4.1 of NUREG-1757, Vol. 3, provides Staff guidance for the review of cost estimates for decommissioning funding plans (and decommissioning plans). "The purpose of the review of the cost estimate is to ensure that the licensee or responsible party has developed a cost estimate for decommissioning the facility based on *documented* and *reasonable assumptions* and that the estimated cost is sufficient to allow an independent third party to assume responsibility for decommissioning the facility if the licensee or responsible party is unable to complete the decommissioning." NUREG-1757, Vol. 3, § 4.1, p. 4-9 (emphasis added). This section also sets out the evaluation criteria NRC Staff applies to all cost estimates:

> At a minimum, all cost estimates for unrestricted or restricted release must meet all nine of the following conditions:
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> 1. The cost estimate meets the applicable regulatory requirements in 10 CFR 20.1403(c), 20.1403(e)(2)(iii), 30.35(e), 30.36(e), 30.36(g)(4)(v), 40.36(d), 40.42(e), 40.42(g)(4)(v), 70.25(e), 70.38(e), 70.38(g)(4)(v), 72.30(b), and 72.54(g)(5).
> 2. The cost estimate is based on *documented* and *reasonable assumptions*.
> 3. The unit cost factors used in the cost estimate are reasonable and consistent with NRC cost estimation reference documents.
> 4. The cost estimate includes costs for labor, equipment and supplies, overhead and contractor profit, sampling and laboratory analysis, and miscellaneous expenses (e.g., license fees, insurance, and taxes).
> 5. The cost estimate applies a contingency factor of at least 25 percent to the sum of all estimated costs.
> 6. The cost estimate does not take credit for (a) any salvage value that might be realized from the sale of potential assets during or after decommissioning or (b) reduced taxes that might result from payment of decommissioning costs or site control and maintenance costs.
> 7. The means identified in the DFP [Decommissioning Funding Plan] or DP [Decommissioning Plan] for adjusting the cost estimate and associated funding level over the life of the facility and any storage or surveillance period is adequate.
> 8. The cost estimate reflects decommissioning under appropriate facility conditions (for a DFP, routine facility conditions should be assumed; for a DP, facility conditions at the end of licensed operations should be

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"reasonable" elements into one: "the combination of these two elements reflects the overall concept of 'reliability,' that is, an estimate that is sufficiently trustworthy and dependable to be utilized as a basis for making the requisite financial assurance findings."[18] The Board then applied its "reliability" approach to the specific facts of this case. The Board said that LES did not demonstrate the "reliability" of its estimate by providing "either (1) the cost a third party would charge in an arm's-length transaction with LES to provide that service; or (2) what it would cost LES if it constructed and operated such a facility on its own."[19] The NRC Staff and LES object to this portion of the Board's analysis, labeling the Board's two-part "reliability" approach as a "new" standard, which they believe is inconsistent with – and more rigid than – "reasonable assurance."

We do not view the Board's decision that way. The Board's "reliability" approach is nothing more than a restatement of the same NRC Staff guidance – NUREG-1757 – that the Staff itself uses routinely when it analyzes decommissioning cost estimates. The Board's focus on one (the second) of the nine criteria listed in NUREG-1757[20] does not invalidate its analysis. In fact, we find that the Board's analysis was tailored to the specifics of this proceeding – as our

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[17](...continued)
assumed).
9. The cost estimate includes costs for all major decommissioning and site control and maintenance activities specified in Section A.3 of this volume, including (a) planning and preparation, (b) decontamination and/or dismantling of facility components, (c) packaging, shipment, and disposal of radioactive wastes, (d) a final radiation survey, (e) restoration of contaminated areas on facility grounds (if necessary), and (f) site stabilization and long-term surveillance (if necessary). NUREG-1757, Vol. 3, § 4.1, pp. 4-9 to 4-10 (emphasis added).

[18]LBP-06-15, 63 NRC at __ n.__, slip op. at 40 n.30.

[19]*Id*. at __, slip op. at 43.

[20]*See* n.17, *supra*.

precedent requires.[21] Each decommissioning situation is unique; the reasonableness of costs and estimates must be assessed on a case-by-case basis. Our precedents, as well as NUREG-1757, call for objective, documented data, not self-serving conclusory statements. Here, where there is no wide-scale disposal market and little prior cost experience, the Board did not act unreasonably when it examined LES's estimates for "reliability" – an inquiry consistent with verifying whether the estimates provided "reasonable assurance" for decommissioning funding.

Notably, with respect to some pieces of LES's overall cost estimate – such as landfill disposal of calcium fluoride ("CaF_2")[22] and management of empty DUF_6 cylinders[23] – the Board found LES's estimates "sufficiently grounded in estimates of the actual cost of providing a service from experienced third parties so as to be sufficiently reliable for establishing the initial estimate of decommissioning funding associated" with those pieces.[24] The Board expressly stated – consistent with our precedent – that this finding did not mean "that obtaining an estimate from an experienced third-party vendor is the only way for an applicant to demonstrate that its cost estimate is documented and reasonable, although it clearly is one way to reach that end."[25] Thus, while the Board did not require a third-party estimate as the *only* way to

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[21]*See Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-04-33, 60 NRC 581, 602-603, 605-06 (2004), *Consolidated Edison Co. of New York and Entergy Nuclear Indian Point 2 LLC, and Entergy Nuclear Operations, Inc.* (Indian Point, Units 1 and 2), CLI-01-19, 54 NRC 109, 143-44 (2001), *North Atlantic Energy Service Corp.* (Seabrook Station, Unit 1), CLI-99-6, 49 NRC 201, 220-21 (1999), *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 257, 259-60 (1996), *Public Service Co. Of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-88-10, 28 NRC 573, 586 (1988).

[22]LBP-06-15, 63 NRC at __, slip op. at 73.

[23]*Id*. at __-__, slip op. at 77-78.

[24]*Id*. at __-__, slip op. at 42-43.

[25]*Id*. at __ n.__, slip op. at 43 n.31.

demonstrate the reasonableness of a cost estimate, for some pieces of the private disposal strategy, using a third-party vendor's estimate worked to demonstrate the reliability of the estimates.

On the other hand, for the remainder of LES's estimate, where no arm's-length third-party offer was available, the Board examined the basis and support for LES's cost claims. For one piece of the overall cost estimate, namely the cost of the deconversion of the DUF_6 to DU_3O_8, the Board found the LES estimate unreliable "in that LES has neither obtained an estimate from a qualified third party outlining what that party would charge to dispose of the DU [depleted uranium] nor conducted its own analysis to determine what that cost might be."[26] This finding rests on the Board's record-based factual determination that LES's showing was inadequate: "because the Board does not have confidence that the COGEMA cost estimate that is the basis for the Urenco business study accurately reflects all the variables customarily considered in establishing the cost of deconversion services (e.g., cost of capital), [the Board was] unable to conclude that the LES extrapolations from those numbers brings us to a reliable deconversion cost estimate."[27] We find no reason to upset this factual determination that the proof LES provided was insufficient to provide reasonable assurance of the validity of the estimate for purposes of setting an initial level for decommissioning costs.

LES reads too much into the Board's decision: we do not agree that the Board demanded "the preparation of a comprehensive, bottom-up cost analysis, perhaps of the sort

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[26] *Id*. at __, slip op. at 43. The Board recognized "the possibility that LES might, at some future date, establish a sufficiently reliable all-in cost estimate for a private disposition strategy . . . ." *Id*.

[27] *Id*. at __, slip op. at 60. COGEMA SA is a subsidiary of AREVA Enterprises, Inc., a competitor of Urenco. *Id*. at __ n.__, slip op. at 49 n.33. Urenco is LES's sole general partner. *Id*. at __, slip op. at 59. The record suggests that LES did not provide adequate evidence on a significant cost component – the cost of capital for financing a deconversion facility. *See id*. at __-__, slip op. at 62-66.

that might be prepared by the actual provider of the relevant service as part of a business plan or pricing analysis."[28] The Board simply was insisting on "documented" and "reasonable" submissions, as NUREG-1757 suggests.

We also disagree with the NRC Staff's interpretation of the Board's treatment of the Waste Control Specialists ("WCS") and Envirocare estimates. Even though the Board arguably looked to see if these estimates were the equivalent of arm's-length third party offers – finding that neither estimate rose to that level – that does not mean that the Board's analysis was inflexible or lacked a case-specific focus. In fact, as the Board explicitly acknowledged in its discussion of the cost of near-surface disposal of DU_3O_8 and the WCS and Envirocare estimates, "nothing in the applicable NRC regulations or guidance documents requires that LES provide a third-party estimate as a basis for its cost estimate for a particular element of decommissioning funding. But . . . an estimate from a third party certainly adds significantly to its reliability. Nonetheless, where, as here, no credible third-party estimate has been proffered, an applicant's summary showing to demonstrate the reliability of its cost estimate may well not suffice."[29]

In short, the Board held that if an arm's-length third-party estimate is unavailable, the balance of an applicant's showing must be sufficiently "reliable" – documented and reasonable – to carry the day. We concur. Here, the Board agreed that the record addressed possible charges to dispose of waste of different types, such as reactor decommissioning waste and bulk contaminated soil, that Envirocare might levy. The Board, however, found that the record did not adequately address the estimated cost of disposing of *the type and quantity of DU that the National Enrichment Facility will generate* (as opposed to the reactor decommissioning

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[28]LES Petition at 14.

[29]LBP-06-15, 63 NRC at __, slip op. at 106.

waste and bulk contaminated soil addressed on the record). In other words, case-specific or documented support for this particular cost component was lacking. Again, we find the Board's evaluation of the facts consistent with our flexible, case-specific approach for assessing whether an applicant has provided reasonable assurance for a decommissioning cost estimate. We find no basis for questioning the Board's analytical approach or findings of fact on this point.

B. NIRS/PC Petition – DOE Cost Estimate

In its petition, NIRS/PC ask us to reverse the Board's determination on the DOE cost estimate for disposal of LES's depleted uranium. We decline to do so. NIRS/PC's various claims are unpersuasive. First, NIRS/PC raised no admissible contention challenging DOE's decommissioning cost estimate. Second, the Board's decision did not purport to determine a permanent level of decommissioning funding and left room for future adjustments. Finally, the Board did not treat the private sector and DOE options inconsistently.

1. No Admissible Contention

NIRS/PC argue that the Board's evaluation of the DOE estimate rests upon the flawed assumption that section 3113 of the USEC Privatization Act makes the estimate binding and precludes NRC review of it.[30] NIRS/PC are correct on the section 3113 point. According to the Board, section 3113 means that "[n]either an intervenor nor an applicant/licensee (nor seemingly the NRC) has the authority to challenge or direct DOE's *estimates* of the fees it will charge to a uranium enrichment facility that requests DOE to disposition its DU waste."[31] But section 3113 says nothing at all about cost "estimates," and does not purport to give such

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[30]NIRS/PC Petition at 15. Section 3113 of the USEC Privatization Act is codified at 42 U.S.C. § 2297h-11.

[31]LBP-06-15, 63 NRC at __, slip op. at 41 (emphasis added).

estimates binding, conclusive effect.[32] Section 3113 simply says that DOE must recoup its costs for disposing of any depleted uranium that it accepts. Section 3113's *cost recovery* requirement is unrelated to the *cost estimate* DOE provided here, and does not preclude our examination of DOE's estimate. The NRC Staff understood this to be the case, as it looked behind DOE's estimate, and required changes in it.[33] The NRC Staff was right to do so, and the Board erred in giving the DOE estimate preclusive force under section 3113.

But the Board's misunderstanding of section 3113 does not require reinstatement of NIRS/PC's challenge to the DOE estimate. In an August 2005 order,[34] the Board rejected NIRS/PC's lengthy contention revisions questioning the DOE estimate on grounds additional to section 3113's supposed preclusive force. As the Board noted, all of the bases for the timely portions of the proposed revised contention, with a single exception (now moot), were inadmissible:

> Were the Board to find that section 3113 did not provide a rationale for excluding this proposed amendment, we would have found it admissible to the extent it is supported by basis (F), which is sufficient to establish a genuine material dispute adequate to warrant further inquiry. On the other hand, the remaining bases (A) through (E) fail to provide sufficient support for that amendment. Basis (A) is inadmissible in that it constitutes an impermissible challenge to Commission regulations. See LBP-04-14, 60 NRC at 54-55 [in this same proceeding]. Relative to bases (C) and (D), NIRS/PC has failed to provide adequate factual support or expert opinion for these propositions. See id. at 55-56. As to bases (B) and (E), given that HF disposal costs and depleted uranium storage costs, respectively, have in fact been accounted for by DOE and/or LMI Government Consulting, these bases fail to establish a genuine material dispute with the

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[32]This does not mean that DOE lacked authority to give LES an estimate.

[33]*See* NRC Staff Answer to NIRS/PC, at 8.

[34]Memorandum and Order (Ruling on Motion to Admit Late-Filed Amended and Supplemental Contentions), ASLBP No. 04-826-01-ML (August 4, 2005) ("August 4th Order") (unpublished), at 21-22. We declined to take interlocutory review of this decision, on referral from the Board, in CLI-05-21, 62 NRC 538 (2005).

application adequate to warrant further inquiry. See id. at 57.[35]

The one basis the Board found acceptable – basis (F) – concerned adding a "contingency" factor of at least 25 percent to the total estimated decommissioning costs. This basis is now moot. As the NRC Staff points out,[36] LES is now required to apply a 25 percent contingency factor to the DOE estimate as a condition of the license, so there no longer is a live controversy over whether to include a contingency factor. Significantly, NIRS/PC's petition for review makes no argument to revive this contingency claim; nor does the petition controvert the Board's finding that the other bases for NIRS/PC's challenges to the DOE estimate were not admissible. Their reply brief does offer a short argument along these lines,[37] but the Commission does not credit arguments made for the first time in a reply brief.[38] Since the

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[35]August 4th Order at 22 n.15.

[36]NRC Staff Response to Petition on Behalf of Nuclear Information and Resource Service and Public Citizen for Review of Third Partial Initial Decision on Safety-Related Contentions ("NRC Staff Answer to NIRS/PC") (June 22, 2006), at 8-9.

[37]*See* Reply on Behalf of Nuclear Information and Resource Service and Public Citizen in Support of Petition for Review of Third Partial Initial Decision on Safety-Related Contentions ("NIRS/PC Reply") (June 27, 2006), at 3-4.

[38]*See, e.g.*, *USEC, Inc.* (American Centrifuge Plant), CLI-06-9, 63 NRC 433, 438-39 & n.29 (2006). The reply brief arguments are, in any case, unpersuasive. For example, NIRS/PC argue that if the proceeding is remanded to the Board, the Board will have to consider certain of these bases. Specifically with respect to basis (F), NIRS/PC argue that the twenty-five percent allowance does not make "moot" their contention that twenty-five percent is inadequate. But NIRS/PC support their position merely by referring to DOE cost overruns on unrelated prior projects. NIR/PC Reply at 3-4.

NIRS/PC's reliance on historical anecdotes – allegedly amounting to a DOE pattern of making poor cost estimates – resembles "past misbehavior" arguments we have encountered and rejected in other contexts. We refer to situations where management integrity or character has been assailed and we have found that generalized historical "bad actor" testimony, absent special circumstances, is not germane. "We have . . . placed strict limits on 'management' and 'character' contentions. 'Allegations of management improprieties or poor "integrity" . . . must be of more than historical interest: they must relate directly to the proposed licensing action.' . . . When 'character' or 'integrity' issues are raised, we expect them to be directly germane to the

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Board's decision not to admit these bases rests on alternative grounds unchallenged by NIRS/PC, the Board's mistaken reliance on section 3113 is harmless. We sustain the Board's decision not to admit the proposed "DOE estimate" contentions, based on the alternative grounds detailed by the Board in its August 4th Order. As a result, the validity of DOE's cost estimate was not at issue in the contested portion of this proceeding.[39]

2. No Permanent Level of Decommissioning Funding

NIRS/PC characterize the Board's determination on DOE's cost estimate as follows: "the Board ruled that the cost estimate provided by DOE . . . conclusively establishes the cost of dispositioning – and thus the amount of financial assurance."[40] This is an overstatement. Actually, the Board did not find that the DOE cost estimate "conclusively establishe[d]" the funding required to ensure appropriate disposal of depleted uranium. Instead, the Board found "that the cost estimates provided relative to the DOE strategy are sufficiently reliable to provide the basis for *an initial estimate* of the portion of decommissioning funding for the [National Enrichment Facility] associated with disposition of the DUF_6 produced by the [National

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[38](...continued)
challenged licensing action." *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 366-67 (2001). "[T]here must be some direct and obvious relationship between the character issues and the licensing action in dispute." *Id*. at 365, citing *Commonwealth Edison Co.* (Zion Nuclear Power Station, Units 1 and 2), CLI-99-4, 49 NRC 185, 189 (1999). Similarly, we find no "direct and obvious relationship" between DOE's alleged historical failure to make valid estimates in some prior cases and the estimate DOE provided to LES here.

[39]Since no admitted contention challenged DOE's estimate, the Board (notwithstanding its view that section 3113 precluded review of DOE estimates) ultimately ruled on the issue in the mandatory portion of the proceeding, after the NRC Staff evaluated DOE's estimate pursuant to the relevant guidance documents (like NUREG-1757). The Board found the DOE estimate reasonable based upon the NRC Staff's evaluation – an evaluation that required DOE to update its estimate, and that resulted in the imposition of license conditions. *See* LBP-06-17, 64 NRC at __ - __, slip op. at 36-40.

[40]NIRS/PC Petition at 2, citing LBP-06-15, 63 NRC at __, slip op. at 42.

Enrichment Facility]."[41] This is a significant distinction. The Board's decision, on its face, does not purport to establish the level of decommissioning funding that the NRC will require for the life of the project, but only the starting point. Moreover, LES's decommissioning costs are subject to *annual* reevaluation.[42] This provides an established mechanism for frequent adjustments to the decommissioning fund, enabling the prompt correction of any under-funding that may be revealed as circumstances change and unforeseen costs arise.

As we have stressed, we do not lightly overturn the factual findings of our boards. Here we find the Board's determination reasonable based on the record. NIRS/PC points to nothing in the record to show that DOE's estimate is not a reasonable basis for setting the initial level of funding required for the disposal portion of decommissioning funding.

NIRS/PC also argue that the evaluation of the DOE estimate's utility for setting the appropriate decommissioning amount that the Board *did* make was inadequate, and that the Board should have permitted NIRS/PC to challenge the DOE estimate at hearing. But, as we already explained, NIRS/PC raised no admissible contention challenging the DOE estimate. Even as it criticizes the Board for not permitting the DOE cost estimate to be an issue addressed in the contested portion of the proceeding, NIRS/PC also recognize that the NRC Staff did scrutinize the estimate: "the DOE estimates have been tested by Staff, and even changed under their scrutiny."[43] Also, as LES points out, NIRS/PC did not present or solicit admissible testimony on the question whether the DOE estimate potentially left out any required decommissioning or disposal cost elements.[44]

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[41]LBP-06-15, 63 NRC at __, slip op. at 42 (emphasis added).

[42]LBP-06-17, 64 NRC at __, slip op. at 38.

[43]NIRS/PC Petition at 16.

[44]Answer of Applicant Louisiana Energy Services, L.P. in Opposition to NIRS/PC Petition (continued...)

3. No New Two-Part "Test"

NIRS/PC criticize the Board for not applying the same two-part "reliability" standard to the DOE estimate as it applied to the private disposal estimate: first, did the estimate reflect what a third party would charge LES to process the anticipated waste; alternatively, was there a thorough analysis of the costs to construct and operate a facility to process the waste. NIRS/PC argue that the DOE estimate was not a reliable, binding, third-party offer and that "DOE has *no experience* with deconversion at the Paducah or Portsmouth plants, which have not been built, and DOE has *no experience* with near-surface disposal of the product of those plants."[45] Therefore, NIRS/PC argue, if the Board had applied its "reliability" test to DOE's estimate it would have found the DOE estimate wanting.

As we already explained, we do not view the Board's decision as creating a new standard, two-part or otherwise. Nor do we agree that the Board's evaluation of the DOE estimate was inconsistent with its evaluation of the private sector estimate. The Board reasonably viewed the DOE estimate as "analogous" to a third-party estimate.[46] One of the hallmarks of a reliable third-party estimate is that it be an arm's-length estimate rather than, for example, an estimate provided by a parent or otherwise affiliated entity. The arm's-length

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[44](...continued)
for Review of LBP-06-15 ("LES Answer to NIRS/PC") (June 22, 2006), at 18. *See* Memorandum and Order (Ruling on In Limine Motions and Motion to Dismiss) (October 4, 2005) (unpublished), at 7-8 ("If, based on the LES and [S]taff prefiled testimony and exhibits, NIRS/PC identif[y] any element of decommissioning or disposal whose costs have not been included in the estimated costs for the DOE disposal option (except those elements that have been excluded by our prior rulings) [they] may provide prefiled rebuttal testimony (or cross-examine the appropriate LES or [S]taff witnesses) regarding the failure to include those items.") The Board found the "testimony" NIRS/PC presented on rebuttal inadmissible because it reintroduced testimony previously stricken. *See* Memorandum and Order (Ruling on In Limine Motions Regarding Prefiled Exhibits and Rebuttal Testimony) (October 20, 2005) (unpublished), at 2.

[45]NIRS/PC Petition at 14 (emphasis in original).

[46]*See* LBP-06-15, 63 NRC at __, slip op. at 42.

nature of a third-party estimate confers reliability on the estimate, providing "reasonable assurance" that the amount of decommissioning funding is being set at an appropriate initial level. The DOE estimate, unlike LES's private sector estimate, has the required arm's-length third-party characteristics.[47] Thus, even though we disagree with the Board that section 3113 of the USEC Privatization Act precludes an NRC inquiry into the reasonableness of the DOE estimate (as we explained above), we find that the Board's acceptance of the DOE estimate for the purpose of setting the initial level of decommissioning funding was reasonable.[48] Moreover, as we held above, NIRS/PC have not offered admissible contentions suggesting that the DOE estimate was fraudulent, unreasonable, or otherwise not acceptable as a third-party estimate.

C. NIRS/PC Petition – Plausible Strategy for Disposal of Depleted Uranium

In its petition, NIRS/PC argue that the Board erred when it decided that LES had shown a plausible "private sector" strategy for near-surface disposal of depleted uranium.[49] NIRS/PC argue that the Board's "plausible strategy" decision on the disposal of depleted uranium is unsupportable without a determination that depleted uranium is Class A waste, since only Class A waste can be accepted at the proposed disposal site, Envirocare. NIRS/PC argue further that the Board was not supposed to make a Class A determination under our remand

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[47]NIRS/PC apparent belief that a third-party "estimate" must also be a binding "offer" is incorrect. Requiring a binding offer so far in advance of the need for a waste disposal contract would be completely unrealistic – and likely insurmountable – for virtually all applicants.

[48]There also is a presumption that governmental officials, acting in their official capacities, have properly discharged their duties. "Clear evidence" is usually required to rebut this presumption. *See, e.g.*, *National Archives and Records Admin. v. Favish*, 541 U.S. 157, 174 (2004). NIRS/PC have not filed a contention alleging that the DOE official who provided the estimate to LES improperly discharged his duties, and we see no evidence in the record to suggest any impropriety in the DOE official's actions.

[49]NIRS/PC Petition at 3, 25.

decision,[50] and that the Board's decision should be reversed since it made and relied upon an unauthorized determination in reaching its decision.

In fact, the Board did not make an unauthorized determination on the Class A waste question; instead, the Board simply relied on our prior finding that "under a plain reading of the regulation, depleted uranium is a Class A waste."[51] As the NRC Staff points out in its brief,[52] our regulations currently dictate classifying depleted uranium as Class A low-level radioactive waste. In its decision, the Board explained that Envirocare's current license, issued by the state of Utah, allows Envirocare to accept depleted uranium in the quantities that would be produced by the LES facility, and that Utah's Division of Radiation Control ("DRC"), the relevant Agreement State regulatory agency, has explicitly verified to the NRC Staff that it would have "no reservations" about Envirocare accepting depleted uranium in an oxide form (DU_3O_8), without quantity limitation. Given information provided by Envirocare, the Utah DRC, and DOE, the Board concluded that near-surface disposal of deplete uranium at Envirocare, or another near-surface facility with similar characteristics, appears plausible.[53]

NIRS/PC also argue that our "[p]recedents establish that the 'plausible strategy' requirement is a licensing requirement that calls for a showing of compliance with the low-level waste disposal regulations, 10 CFR Part 61, Subpart C," and that "[n]o such showing has been

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[50] CLI-05-20, 63 NRC 523 (2005).

[51]CLI-05-20, 63 NRC at 535.

[52]NRC Staff Answer to NIRS/PC at 10. As the NRC Staff also points out in its brief, *id*., we have directed our Staff to examine whether the Part 61 waste classification rules should be amended in light of the potentially large quantities of depleted uranium from enrichment facilities. We directed Staff to perform this analysis outside this proceeding. CLI-05-20, 62 NRC at 536. However, even if the Staff ultimately were to alter the general classification rules, it would not follow that LES's depleted uranium could not be classified as Class A at Envirocare or another specific near-surface facility. *See* 10 C.F.R. § 61.58.

[53]LBP-06-15, 63 NRC at __, slip op. at 95-99.

made."[54] NIRS/PC argue that "[t]he record does not explain or support Utah's decision"[55] to allow Envirocare to accept waste of the kind that the National Enrichment Facility will generate. NIRS/PC present no arguments tailored to support this Part 61-based argument. Instead, NIRS/PC offer only a lengthy rehearsal of arguments we have considered before under the rubric of the National Environmental Policy Act ("NEPA"). NIRS/PC argue that "[i]t cannot be contended that the Board has correctly determined that LES met its burden of proof to show that near-surface disposal at the Envirocare site is a credible and reasonable plan for compliance with the long-term requirements of 10 C.F.R. Part 61, Subpart C" and that "[t]he requirements of a plausible strategy determination under 10 C.F.R. 70.25(e) have not been met."[56]

We reject NIRS/PC's arguments, which seek to reopen an issue we already decided. In our recent NEPA decision, we found that "at least one near-surface disposal facility, Envirocare, may be a plausible option for disposal of the National Enrichment Facility depleted uranium. . . ."[57] We stressed that selecting the disposal site for LES-generated depleted uranium is not the purpose of this proceeding; a disposal site will be selected later. As we stated, "[p]rior to a final determination on disposal, we would expect that the pertinent regulatory authority will have considered both the characteristics of the waste and the site-specific features of the disposal site to assure that all radiological dose limits and safety regulations indeed can be met."[58]

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[54]NIRS/PC Petition at 19.

[55]NIRS/PC Petition at 22.

[56]NIRS/PC Petition at 25.

[57]CLI-06-15, 64 NRC __, slip op. at 17.

[58]CLI-06-15, 64 NRC at __, slip op. at 16. As we stated in our prior decision, "under the (continued...)

CONCLUSION

We *accept* review of the Board's decision, and for the reasons given above and for the reasons given by the Board, we *affirm* its conclusion that LES has shown reasonable assurance of adequate decommissioning funding for the DOE option. We also *affirm* the Board's conclusion that LES did not show reasonable assurance of adequate decommissioning funding for the private sector option.

IT IS SO ORDERED.

For the Commission,

/RA/

Emile L. Julian
Acting Secretary of the Commission

Dated at Rockville, Maryland,
this 17th day of August, 2006.

[58](...continued)
Atomic Energy Act, the NRC in its oversight role periodically reviews state radiation control programs to confirm that they remain compatible with the Commission's programs and adequately protect public health and safety. The NRC retains authority to suspend or terminate agreements relinquishing regulatory authority to states." *Id*. at 17, citing 42 U.S.C. § 2021(j).