

**RELATED CORRESPONDENCE**

February 3, 2005

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

February 3, 2005 (11:38am)

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

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

**REVISED PREFILED REBUTTAL TESTIMONY OF MICHAEL H. SCHWARTZ ON BEHALF OF LOUISIANA ENERGY SERVICES, L.P. REGARDING CONTENTION NIRS/PC EC-7 ("NEED FOR THE FACILITY")**

**I. WITNESS BACKGROUND**

**Q1.** Please state your name, occupation, employer, and responsibilities relative to the licensing of Louisiana Energy Services, L.P.'s ("LES") proposed National Enrichment Facility ("NEF").

**A1.** I, Michael H. Schwartz, am Chairman of the Board of Energy Resources International, Inc. ("ERI"), a consulting firm located in Washington, D.C. that specializes in technical and economic consulting, nuclear fuels planning and procurement, and resource and market analyses. I am providing this testimony under a technical assistance contract between ERI and Louisiana Energy Services, L.P. ("LES"). A full statement of my professional qualifications was included with LES's initial prefiled testimony in this proceeding, originally submitted on January 7, 2005.

Q2. What is the purpose of this rebuttal testimony?

A2. The purpose of this rebuttal testimony is to address specifically the written direct testimony of Nuclear Information and Resource Service/Public Citizen ("NIRS/PC") witness Michael F. Sheehan. This rebuttal testimony is limited to those portions of Dr. Sheehan's testimony that were not excluded by the Licensing Board in its Memorandum and Order (Ruling on Motions in Limine and Providing Administrative Directives) of January 21, 2005. See "Direct Testimony of Michael F. Sheehan on Behalf of Nuclear Information and Resource Service and Public Citizen NIRS/PC Contention EC-7 (Revised Jan. 28, 2005)" ("Sheehan Direct Testimony"). Certain statements contained in Section II of Dr. Sheehan's direct testimony are inaccurate and require clarification.

II. RESPONSE TO SPECIFIC CLAIMS MADE IN THE PREFILED DIRECT TESTIMONY OF NIRS/PC WITNESS MICHAEL SHEEHAN

Q3. What portions of Dr. Sheehan's direct testimony require clarification?

A3. The first portion requiring clarification relates to the Answers 11 and 12 under Section II of Dr. Sheehan's testimony. Referring to the "supply situation in the United States today," Dr. Sheehan states that "LEU [low-enriched uranium] is the relevant product." Specifically, Dr. Sheehan states:

. . . [T]he issue of supply becomes obscured when there is ambiguity over whether "supply" refers to the flow of LEU or whether it refers to enrichment capacity. In my view it is quite important to keep this distinction straight. Nuclear power plants use LEU, not SWUs. LEU is the relevant product; SWUs are an input to the product. One way to get LEU for use in the United States is to run uranium through an enrichment plant in the United States, but there are other ways to get LEU as well, most notably through downblending HEU.

Sheehan Direct Testimony (Answer 12), at 8-9.

In the context of Contention NIRS/PC EC-7, the relevant "product" is, in fact, enrichment services, which is measured in Separative Work Units ("SWU"). LES plans to offer such services via operation of the proposed National Enrichment Facility ("NEF"). Specifically, prospective LES customers would arrange for the delivery of natural uranium feed (owned by the customers themselves) to the NEF for enriching in the uranium-235 isotope. The enrichment process thus would transform natural uranium into LEU. Typically, LEU, which comes out of a uranium enrichment plant as enriched uranium hexafluoride ("UF<sub>6</sub>"), is subsequently converted at a fuel fabrication facility to enriched uranium oxide ("UO<sub>2</sub>"). The UO<sub>2</sub>, in turn, is fabricated into ceramic pellets and loaded into metal rods, which are incorporated into the fuel assemblies that are loaded into nuclear power plants. Thus, while LEU is ultimately used in the nuclear fuel assemblies, utilities generally obtain the LEU by separately contracting for natural uranium and enrichment services.

In some instances, certain LEU may be viewed as an alternative source of enrichment "services." For example, the United States Enrichment Corporation ("USEC") is primarily a supplier of enrichment services, but also sells limited quantities of LEU for fabrication into nuclear fuel. In considering alternative sources of enrichment services in the market analysis presented in Section 1.1.2 of the NEF Environmental Report (*see* LES Exhibit 30), ERI therefore considered, as appropriate, the "enrichment services component" of LEU (*e.g.*, LEU obtained from the down-blending of high-enriched uranium). That being said, the specific product being offered by LES is enrichment services, not LEU. As such, it is somewhat misleading to state that "supply" in the context of Contention NIRS/PC EC-7 refers to the "flow of LEU."

Q4. Are there any other portions of Dr. Sheehan's testimony which warrant clarification? If so, please explain.

A4. Yes. In Answer 13 of his direct testimony, Dr. Sheehan discusses the roles of the U.S. Department of Energy ("DOE") and USEC as "supplier[s] of LEU." See Sheehan Direct Testimony (Answer 13), at 9. Consistent with the foregoing discussion, I would note that, between roughly 1969 and the privatization of USEC, DOE offered uranium enrichment services (*i.e.*, SWU), not LEU, on a commercial basis. DOE is no longer in the commercial business of providing uranium enrichment services. USEC, in its present form, resulted from the privatization of that part of DOE that provided commercial enrichment services. As U.S. Executive Agent under the U.S.-Russia HEU Agreement, USEC has the right to sell only the enrichment services component of the LEU derived from the Russian HEU, not the complete LEU (*i.e.*, USEC is not responsible for selling the natural uranium component of the LEU).

Q5. Does this conclude your rebuttal testimony?

A5. Yes.

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	)	
Louisiana Energy Services, L.P.	)	ASLBP No. 04-826-01-ML
	)	
(National Enrichment Facility)	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of the "REVISED PREFILED REBUTTAL TESTIMONY OF GEORGE A. HARPER AND ROGER L. PEERY ON BEHALF OF LOUISIANA ENERGY SERVICES, L.P. ON CONTENTION NIRS/PC EC-1 ("IMPACTS UPON GROUND AND SURFACE WATER"); "REVISED PREFILED REBUTTAL TESTIMONY OF ROGER L. PEERY, LEN R. STOKES AND TIMOTHY WOOPER ON BEHALF OF LOUISIANA ENERGY SERVICES, L.P. ON CONTENTION NIRS/PC EC-2 ("IMPACT UPON WATER SUPPLIES"); "REVISED PREFILED REBUTTAL TESTIMONY OF ROD M. KRICH AND PAUL G. SCHNEIDER ON BEHALF OF LOUISIANA ENERGY SERVICES, L.P. ON CONTENTION NIRS/PC EC-4 (IMPACTS OF WASTE STORAGE)"; and "REVISED PREFILED REBUTTAL TESTIMONY OF MICHAEL H. SCHWARTZ ON BEHALF OF LOUISIANA ENERGY SERVICES, L.P. REGARDING CONTENTION NIRS/PC-EC-7 ("NEED FOR THE FACILITY")" in the captioned proceeding have been served on the following by e-mail service, designated by \*\*, on February 3, 2005 as shown below. Additional service has been made by deposit in the United States mail, first class, this 3<sup>rd</sup> day of February 2005.

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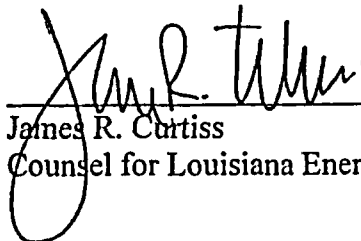
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