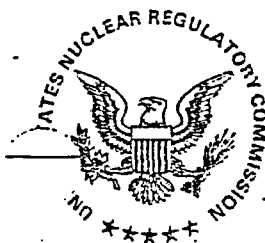


LES Meeting on FOCI, IAEA Safeguards, and Transportation Security
November 10, 2004

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LES Meeting on FOCI, IAEA Safeguards, and Transportation Security
November 10, 2004

[illegible]



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

MEETING NOTICE

Applicant: Louisiana Energy Services
Suite 610
2600 Virginia Avenue, NW
Washington, DC 20037

Docket: 70-3103

Date and Time: November 10, 2004; 2:00 P.M.

Location: U.S. Nuclear Regulatory Commission
One White Flint North, Room O8B4
11555 Rockville Pike
Rockville, Maryland 20852

Purpose: To discuss International Atomic Energy Agency safeguards; foreign ownership, control, and influence; and transportation security issues related to the Louisiana Energy Services application for a gas centrifuge uranium enrichment facility proposed to be constructed in Eunice, New Mexico. The transportation security portion of the meeting will be closed to the public.

NRC Attendees: J. Gitter, B. Smith, T. Johnson, B. Moran, K. Everly, L. Clark, and project staff

Other Attendees: R. Krich/LES and LES project staff

Contact: T. Johnson; 301-415-7299; tcj@nrc.gov

Category: Category 1 Meeting: The public is invited to observe this meeting and will have one or more opportunities to communicate with the NRC after the business portion, but before the meeting is adjourned.

NOTE: NRC Meetings are open for interested members of the public to attend pursuant to the "Enhanced Public Participation in NRC Meetings; Policy Statement," 67 *Federal Register* 36920, May 28, 2002.

Attachment: Meeting agenda

cc:	James Curtiss/W&S	James Ferland/LES	Rod Krich/LES
	Peter Miner/USEC	William Szymanski/DOE	James Brown/Eunice
	Dennis Holmberg/Lea County	Claydean Clairborne/Jal	Troy Harris/Lovington
	Betty Rickman/Tatum	Monty Newman/Hobbs	Glen Hackler/Andrews
	William Floyd/NM	Richard Ratliff/Texas	Carol O'Claire/Ohio
	Derrith Watchman-Moore/NM	Michael Marriotte/NIRS	Lee Cheney/CNIC
	Jerry Clift/Hartsville	Joseph Malherek/PC	Ron Curry/MNED
	Tannis Fox/NMED	Patricia Madrid/NMAG	Glen Smith/NMAG
	Lindsay Lovejoy/NIRS		

Louisiana Energy Services Meeting Agenda
November 10, 2004

Purpose/Introductions

International Atomic Energy Agency Safeguards Issues

Foreign Ownership, Control, or Influence Issues

Transportation Security Issues (Closed to the Public)

Questions and Answers

International Safeguards
Obligations Affecting
the LES National Enrichment
Facility

Bruce W. Moran, Senior International
Safeguards Technical Analyst,
NRC/NSIR/DNS
November 10, 2004

US-IAEA Safeguards Agreement

- Safeguards Agreement entered into force in December 1980
- All U.S. facilities not of direct national security significance to be placed on list of U.S. facilities eligible for IAEA inspections
- 19 U.S. facilities have been selected from the Eligible Facilities List, at some time

Hexapartite Approach

- U.S. Government participated in Hexapartite Safeguards Project (1980-83)
 - Australia, Germany, Japan, Netherlands, UK, and US, with Euratom and IAEA (as observers)
 - Safeguards approach designed to protect proliferation sensitive centrifuge enrichment design information
 - IAEA verification using Limited Frequency-Unannounced Access (LFUA) approach

Hexapartite Agreement

- Formal exchange of letters between governments
 - Implement LFUA at centrifuge plants existing, planned, or under consideration
 - Place centrifuge facilities under IAEA safeguards
- IAEA commitment to apply safeguards to centrifuge plants in U.K. and U.S.
- 20 years IAEA experience with centrifuge plants in Capenhurst, Gronau, and Almelo, as well as Japanese centrifuge plants

Hexapartite Commitments

- U.S. committed to place gas centrifuge enrichment plant on Eligible Facilities List one year before nuclear material received.
- U.S. and IAEA committed to maintain safeguards on gas centrifuge enrichment plant and not remove from safeguards inspections
- DOE determined that a gas centrifuge enrichment plant was not of direct national security significance and could be placed on Eligible Facilities List

GCEP

- The Portsmouth Gas Centrifuge Enrichment Plant (GCEP) was selected for IAEA inspections in 1983
- IAEA safeguards verification inspections were conducted from 1983 through facility shutdown in 1995
 - Design information verification
 - Material accountancy
 - Undeclared production of HEU

Pressures

- U.S. is urging other countries to meet safeguards commitments for centrifuge enrichment plants
- IAEA safeguarded centrifuge enrichment plants in China, Japan, U.K., Germany, The Netherlands, Brazil
- Safeguards implementation difficulties in Brazil
- Controversial centrifuge enrichment program in Iran
- Undeclared centrifuge enrichment programs discovered in North Korea, Iraq, and Libya
- Centrifuge enrichment in Pakistan outside NPT

Status

- USG Inter-Agency Meetings
- American Centrifuge Lead Cascade and National Enrichment Facility Added to Eligible Facilities List in October 2004
- American Centrifuge Plant to be Added when List Next Updated
- US-IAEA Discussions

Additional Protocol

- Additional Protocol to the U.S.-IAEA Safeguards Agreement approved by Senate
- General description of all buildings on designated site of facility selected from Eligible Facilities List
- Protection of proliferation sensitive, export controlled, and proprietary information is a common issue for all enrichment plants

Actions

- Provide General Facility Description to IAEA
- Coordinate with IAEA on priorities and schedule for selection and interactions
- Begin IAEA-USG-LES coordination
 - Urenco baseline
- Preliminary Design Information Questionnaire 180 days before construction begins
- Final Design Information Questionnaire 180 days before nuclear material received

10 CFR 73.67 Licensee fixed site and in-transit requirements for the physical protection of special nuclear material of moderate and low strategic significance.

73.67(c) submission, record retention, revision, and implementation of security plans

73.67(c) Each licensee who transports or delivers to a carrier for transport 10 kg or more of special nuclear material of low strategic significance shall

	REGULATORY REQUIREMENTS	REGULATORY GUIDE 5.59/ CONTENT*
73.67 (c) (1)	Submit a security plan describing how the licensee will comply with all the requirements of paragraph (g) including schedules of implementation.	NA
	Retain a copy of the effective security plan as a record for 3 years after the period ends when the licensee possesses SNM under each license for which the original [security] plan was submitted.	NA
	Retain a copy of any superseded [security plan] material for 3 years after each change [to the plan].	NA
73.67	Implement the security plan within 30 days of NRC approval of the plan or when specified by the NRC in writing.	NA

73.67 (g) In-transit requirements for special nuclear material of low strategic significance

73.67 (g) (1) Each licensee who transports or who delivers to a carrier for transport SNM-LSS shall

5. Material transportation requirements

73.67 (g) (1) (i)	(i) Provide advance notification to the receiver specifying the mode of transport, estimated time of arrival, location of the nuclear material transfer point, name of carrier, and transport identification	<u>5.1 Advanced Notification</u> The licensees should ensure that prior to each shipment, the receiver will be notified of the impending shipment and provided the following types of information: the mode of transport (truck, train, plane, ship), estimated time of arrival,
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		location of the nuclear material transfer point, name of carrier, and transport identification (e.g., truck, train, flight number; ship name)
73.67 (g) (1) (ii)	(ii) Receive confirmation from the receiver prior to commencement of the planned shipment that the receiver will be ready to accept the shipment at the planned time and location and acknowledges the specified mode of transport	<u>5.2 Receiver Confirmation</u> Describe what procedures will be used to ensure that shipment does not take place until the receiver acknowledges the planned shipment and mode of transport and readiness to accept the shipment at the planned time and location
73.67 (g) (1) (iii)	(iii) Transport the material in a tamper indicating sealed container	<u>5.3 Container</u> Describe the types of seals that will be used to secure the material's container during transport.
73.67 (g) (1) (iv)	(iv) Check the integrity of the containers and seals prior to shipment	<u>5.4 Inspection</u> Describe the procedures to be used to ensure that the integrity of the containers or seals is checked just prior to shipment.
73.67 (g) (1) (v)	(v) Arrange for the in-transit physical protection in accordance with the requirements of 73.67(g)(3), unless the receiver is a licensee and has agreed in writing to arrange for the in-transit physical protection.	<u>5.5 Responsibility for In-Transit Physical Protection</u> In its security plan, the shipper should either acknowledge responsibility for the in-transit physical protection of SNM-LSS or ensure that a written agreement from the receiver has been received in which the receiver accepts either full responsibility or shared responsibility for the in-transit physical protection of this material in accordance with paragraph 73.67(g)(3) of 10 CFR Part 73.

73.67 (g) (2) Each licensee who receives SNM-LSS shall

73.67 (g) (2) (i)	(i) Check the integrity of the containers and seals upon receipt of the shipment	<u>6.1 Inspection</u> Describe the procedures to be used to ensure that the integrity of the containers and seals will be checked upon receipt of the material shipment.
73.67 (g) (2) (ii)	(ii) Notify the shipper of receipt of the material as required in 74.15 [NOTE: Regulation needs to be updated and should refer to § 74.15; vice § 70.54] [May need to address as an NRC-identified exemption per § 73.5]	<u>6.2 Notification</u> Ensure that a completed copy of Form DOE/NRC Form 741, "Nuclear Material Transaction Report," will be sent to the shipper, using a mutually agreeable method, within 10 days after a material shipment has been received as required in § 74.15.

		at its destination. [Intent: Notification of shipment arrival should be made by a notification other than the § 74.15 notification]
73.67 (g) (3) (iii)	(iii) Conduct immediately a trace investigation of any shipment that is lost or unaccounted for and notify the NRC Operations Center within one hour after the discovery (and recovery) in accordance with 73.71	<u>7.3 Lost Material Notification</u> Describe what procedures will be used to trace any shipment that is lost or has not arrived by the estimated arrival time. Ensure that all lost or missing material will be immediately reported to the NRC Operations Center per § 73.71, along with what actions are being taken to trace the shipment, and that the shipper or receiver, as appropriate, will also be notified.

73.67 (g) (4) Each licensee who exports SNM-LSS shall

8. Export Requirements

73.67 (g) (4)	Comply with the appropriate requirements specified in paragraphs (c) and (g) (1) and (3) of this section	Using Chapters 5, "Material Transportation Requirements [73.67(g)(1)]," and 7, "In-Transit Physical Protection Requirements [73.67(g)(3)]," of Part II of this Standard Format, describe the security procedures that will be used to protect the material up to the point where the receiver accepts physical protection responsibility for the shipment.
	Retain a copy of the records required by these sections [regarding export shipments] for 3 years after the period ends when the licensee possesses SNM under each license for which authorized the export of material.	NA
	Retain a copy of any superseded [export record] material for 3 years after each change [to an export record].	NA

73.67 (g) (5) Each licensee who imports SNM-LSS shall

9. Import Requirements

73.67 (g) (5) (i)	(i) Comply with the requirements specified in paragraphs (c) and (g) (2) and (3) of this section	<u>9.1 Security Requirements</u> Using Chapters 6, "Receiver Requirements—Transportation [73.67(g)(2)]," and 7, "In-Transit Physical Protection Requirements [73.67(g)(3)]," of Part II of this Standard Format, describe the security procedures that will be used to protect the material from the first point where the shipment is picked up.
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	Retain a copy of the records required by these sections [regarding export shipments] for 3 years after the period ends when the licensee possesses SNM under each license for which authorized the import of material.	NA
	Retain a copy of any superseded [export record] material for 3 years after each change [to an import record].	NA
73.67 (g) (5) (ii)	(ii) Notify the person who delivered the material to a carrier for transport of the arrival of such material	<u>9.2 Notification</u> Describe the procedures to be used for notifying the exporter of the material that the shipment was received.

73.71 Reporting of safeguards events

73.71 (a)(1)	Each licensee subject to the provisions of 73.67(g) shall notify the NRC Operations Center within one hour after discovery of the loss of any SNM shipment, and within one hour after recovery of or accounting for such lost shipment.	NA
73.71 (a)(2)	This notification must be made via the Emergency Notification System, if the licensee is party to that system. If the Emergency Notification System is inoperative or unavailable, the licensee shall make the notification via commercial telephonic service or other dedicated telephonic system [301-816-5100] or any other methods that will ensure that a report is received by the NRC Operations Center within one hour.	NA
73.71 (a)(3)	The licensee shall, upon request to the NRC, maintain an open and continuous communication channel with the NRC Operations Center.	NA
73.71 (a)(4)	The initial telephonic notification must be followed within a period of 60 days by a written report. In addition to the addressees specified in 73.4, the licensee shall also provide a copy addressed to the Director, NSIR/DNS.	NA
73.71 (a)(5)	Significant supplemental information which becomes available after the initial telephonic notification to the NRC Operations Center or after the submission of the written	NA

	report must be telephonically reported to the NRC Operations Center and also submitted in a revised written report (with the revisions indicated) to the Regional Office and the Document Control Desk.	
73.71 (b)(1)	Each licensee subject to the provisions of 73.67 shall notify the NRC Operations Center within 1 hour of discovery of the safeguards events described in paragraph I(a)(1) of appendix G	NA
73.71 (b)(2)	This notification must be made in accordance with the requirements of paragraphs (a)(2), (3), (4), and (5) of this section	NA

Appendix G to Part 73 – Safeguards Event Reporting

Each licensee subject to 73.67 shall report the following safeguards events within 1 hour;

I.(a)(1)	Any event in which there is reason to believe that a person has committed or caused, or attempted to commit or cause, or has made a credible threat to commit or cause a theft or unlawful diversion of SNM	NA
I.(b)	An actual entry of an unauthorized person into a transport	NA
I.(c)	Any failure, degradation, or discovered vulnerability in a safeguard system that could allow unauthorized or undetected access into a transport	NA
I.(d)	The actual or attempted introduction of contraband into a transport	NA

Each licensee subject to 73.67 shall record within 24 hours of discovery in the safeguards event log the following safeguards events:

II.(a)	Any failure, degradation, or discovered vulnerability in a safeguard system that could have allowed unauthorized or undetected access into a transport, had compensatory measures not been established	NA
II.(b)	Any other threatened, attempted, or committed act not previously defined in Appendix G with the potential for reducing the effectiveness of the safeguards system below that committed to in a licensed physical security or	NA

	contingency plan or the actual conditions of such reduction in effectiveness	
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74.11 Report of loss or theft or attempted loss or theft or unauthorized production of SNM

74.11(c) duplicate reports

74.11(c)	Reports required under § 73.71 [regarding loss or theft or attempted loss or theft during transport] need not be duplicated under the requirements of this section.	Duplicate reports are not required
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73.73 Requirement for advance notice and protection of export shipments of SNM-LSS.

73.73 (a) A licensee authorized to export SNM-LSS shall:

73.73 (a)(1)	Notify in writing the Director, Division of Nuclear Security, Office of Nuclear Security and Incident Response, using any appropriate method listed in § 73.4	NA
73.73 (a)(2)	Assure that the notification will be received at least 10 days before transport of the shipment commences at the shipper's facility	NA
73.73 (a)(3)	Include the following information in the notification: (i) The name(s), address(es), and telephone number(s) of the shipper, receiver, and carrier(s); (ii) A physical description of the shipment (the elements, isotopes, form, etc.); (iii) A listing of the mode(s) of shipment, transfer points, and routes to be used; (iv) The estimated time and date that shipment will commence and that each country along the route is scheduled to be entered; and (v) The estimated time and date of arrival of the shipment at the destination	NA
73.73 (a)(4)	Assure that during transport outside the United States, the shipment will be protected in accordance with Annex I to the Convention on the Physical Protection of Nuclear Material (see appendix E of this part)	NA

73.74 Requirement for advance notice and protection of import shipments of nuclear material from countries that are not party to the Convention on the Physical Protection of Nuclear Material

73.74 (a) A licensee authorized to import SNM-LSS from a country not a party to the Convention on the Physical Protection of Nuclear Material (i.e., not listed in appendix F of this part) shall

73.74 (a)(1)	Notify in writing the Director, Division of Nuclear Security, Office of Nuclear Security and Incident Response	NA
73.74 (a)(2)	Assure that the notification will be received at least 10 days before transport of the shipment commences at the shipper's facility	NA
73.74 (a)(3)	Include the following information in the notification (i) The name(s), address(es) and telephone number(s) of the shipper, receiver, and carrier(s); (ii) A physical description of the shipment (the isotopes, enrichment, quantity, etc.); (iii) A listing of mode(s) of shipment, transfer points, and routes to be used; (iv) The estimated time and date that shipment will commence and that each country along the route is scheduled to be entered; and (v) The estimated time and date of arrival of the shipment at the destination	NA

73.74 (c) A licensee authorized to import from a country not a party to the Convention on the Physical Protection of Nuclear Material (i.e., not listed in appendix F of this part) a formula quantity of special nuclear material, special nuclear material of moderate strategic significance, special nuclear material of low strategic significance, shall

	assure that during transport outside the United States the shipment will be protected in accordance with Annex I to the Convention on the Physical Protection of Nuclear Material (see appendix E of this part)	NA
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Appendix E to Part 73--Levels of Physical Protection to Be Applied in International Transport of Nuclear Material

(a) Levels of physical protection for nuclear material during storage incidental to international nuclear transport include:

(a)(1)	For Category III materials, storage within an area to which access is controlled	NA
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(b) Levels of physical protection for nuclear material during international transport include

(b)(1)	For Category II and III materials, transportation shall take place under special precautions including prior arrangements among sender, receiver, and carrier, and prior agreement between natural or legal persons subject to the jurisdiction and regulation of exporting and importing States, specifying time, place and procedures for transferring transport responsibility	NA
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* Regulatory Guide 5.59, as it relates to the security of transportation of SNM-LSS consists of five chapters that address the contents of 73.67(g)(1)-(5). Each chapter provides the text of the respective paragraph of the regulations, discusses the intent of the paragraph, and describes the recommended corresponding contents of the licensee's security plan.

Comparison of 10 CFR 73.67(g) and Regulatory Guide 5.59 regulatory language

Regulatory Guide 5.59's regulatory language with respect to 73.67(g) is generally in alignment with that in the current regulations. There are the following differences, however:

- sections 73.67 (g)(3)(i), (4), and (5)(i) in Regulatory Guide 5.59 do not contain the requirement (or similar requirement) to: "retain a copy of the current response procedures as a record for three years after the close of period for which the licensee possesses the special nuclear material under each license for which the procedures were established. Copies of superseded material must be retained for three years after each change."
- According to Regulatory Guide, 5.5973.67 (g)(3)(iii) contains: "Conduct immediately a trace investigation of any shipment that is lost or unaccounted for after the estimated arrival time and report to the Nuclear Regulatory Commission as specified in § 73.71 and to the shipper or receiver as appropriate. The licensee who made the physical protection arrangements shall also immediately notify the Director of the appropriate Nuclear Regulatory Commission Regional Office listed in Appendix A of the action being taken to trace the shipment."

In contrast, current regulations state: "Conduct immediately a trace investigation of any shipment that is lost or unaccounted for after the estimated arrival time and notify the NRC Operations Center within one hour after the discovery of the loss of the shipment and within one hour after recovery of or accounting for such lost shipment in accordance with the provisions of § 73.71 of this part."

The applicant's plan should indicate that all security event or emergency notifications should be made directly to the NRC Operations Center, not to the Regional Office (as indicated in the RG. Operations Center personnel will make subsequent notifications to NRC Offices, Regions, and other Federal Agencies, as required.