

RAS 10969

**Louisiana Energy Services, L.P.**  
**Exhibits for February 2006 Hearing**

<b>Exhibit #</b>	<b>Issue</b>	<b>Description</b>
118	Cylinder/Cost of Capital	Letter from R. M. Krich to Director, NMSS, "Clarifying Information Related to Cost Estimate for Deconversion of Depleted UF <sub>6</sub> ," NEF#05-033 (Nov. 23, 2005).
119	Cost of Capital	"Financial Assurance for Materials Licensees: Final Rule," 68 Fed. Reg. 57327 (Oct. 3, 2003).
120	Cost of Capital	"General Requirements for Decommissioning Nuclear Facilities: Final Rule," 53 Fed. Reg. 24108 (June 27, 1988).
121	Cost of Capital	NUREG-1827, "Safety Evaluation Report for the National Enrichment Facility in Lea County, New Mexico," Chapter 1 (2005).
122	Cost of Capital	Letter from R. M. Krich to Director, NMSS, "Request for Exemption to Certain Provisions of 10 CFR 40.36 and 10 CFR 70.25, Financial Assurance and Recordkeeping for Decommissioning," NEF#05-023 (May 11, 2005).

DOCKETED  
USNRC

January 5, 2006 (3:00pm)

OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

Docket No. 70-3103-ML

DC:448467.1

Template=SECY-028

SECY-02

May 11, 2005

NEF#05-023

ATTN: Document Control Desk  
Director  
Office of Nuclear Material Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Louisiana Energy Services, L. P.  
National Enrichment Facility  
NRC Docket No. 70-3103

Subject: Request for Exemption to Certain Provisions of 10 CFR 40.36 and 10 CFR 70.25,  
"Financial assurance and recordkeeping for decommissioning"

- References:
1. Letter NEF#03-003 dated December 12, 2003, from E. J. Ferland (Louisiana Energy Services, L. P.) to Directors, Office of Nuclear Material Safety and Safeguards and the Division of Facilities and Security (NRC) regarding "Applications for a Material License Under 10 CFR 70, Domestic licensing of special nuclear material, 10 CFR 40, Domestic licensing of source material, and 10 CFR 30, Rules of general applicability to domestic licensing of byproduct material, and for a Facility Clearance Under 10 CFR 95, Facility security clearance and safeguarding of national security information and restricted data"
  2. Letter NEF#04-002 dated February 27, 2004, from R. M. Krich (Louisiana Energy Services, L. P.) to Director, Office of Nuclear Material Safety and Safeguards (NRC) regarding "Revision 1 to Applications for a Material License Under 10 CFR 70, "Domestic licensing of special nuclear material," 10 CFR 40, "Domestic licensing of source material," and 10 CFR 30, "Rules of general applicability to domestic licensing of byproduct material"
  3. Letter NEF#04-029 dated July 30, 2004, from R. M. Krich (Louisiana Energy Services, L. P.) to Director, Office of Nuclear Material Safety and Safeguards (NRC) regarding "Revision to Applications for a Material License Under 10 CFR 70, "Domestic licensing of special nuclear material," 10 CFR 40, "Domestic licensing of source material," and 10 CFR 30, "Rules of general applicability to domestic licensing of byproduct material"

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4. Letter NEF#04-037 dated September 30, 2004, from R. M. Krich (Louisiana Energy Services, L. P.) to Director, Office of Nuclear Material Safety and Safeguards (NRC) regarding "Revision to Applications for a Material License Under 10 CFR 70, "Domestic licensing of special nuclear material," 10 CFR 40, "Domestic licensing of source material," and 10 CFR 30, "Rules of general applicability to domestic licensing of byproduct material"
5. Letter NEF#05-021 dated April 22, 2005, from R. M. Krich (Louisiana Energy Services, L. P.) to Director, Office of Nuclear Material Safety and Safeguards (NRC) regarding "Revision to Applications for a Material License Under 10 CFR 70, "Domestic licensing of special nuclear material," 10 CFR 40, "Domestic licensing of source material," and 10 CFR 30, "Rules of general applicability to domestic licensing of byproduct material"
6. Letter NEF#05-022 dated April 29, 2005, from R. M. Krich (Louisiana Energy Services, L. P.) to Director, Office of Nuclear Material Safety and Safeguards (NRC) regarding "Revision to Applications for a Material License Under 10 CFR 70, "Domestic licensing of special nuclear material," 10 CFR 40, "Domestic licensing of source material," and 10 CFR 30, "Rules of general applicability to domestic licensing of byproduct material"

By letter dated December 12, 2003 (Reference 1), E. J. Ferland of Louisiana Energy Services (LES), L. P., submitted to the NRC applications for the licenses necessary to authorize construction and operation of a gas centrifuge uranium enrichment facility. Revision 1 to these applications was submitted to the NRC by letter dated February 27, 2004 (Reference 2). Subsequent revisions (i.e., revision 2, revision 3 and revision 4) to these applications were submitted to the NRC by letters dated July 30, 2004 (Reference 3), September 30, 2004 (Reference 4), April 22, 2005 (Reference 5), and April 29, 2005 (Reference 6), respectively.

As stated in Safety Analysis Report (SAR) Section 10.2.1, "Decommissioning Funding Mechanism," in the initial submittal of the license application on December 13, 2003, since it has been LES's intent to sequentially install and operate modules of the enrichment equipment (i.e., Separations Building Modules) over time, financial assurance for decommissioning would be provided during the operating life of the National Enrichment Facility (NEF) at a rate that is in proportion to the decommissioning liability for these facilities as they are phased in. Similarly, it has been LES's intent to provide decommissioning funding assurance for the disposition of depleted uranium byproduct at a rate in proportion to the amount of accumulated depleted uranium byproduct onsite up to the maximum amount of depleted uranium byproduct produced by the NEF. Providing decommissioning funding assurance on a forward-looking incremental basis satisfies the applicable decommissioning funding assurance requirements without imposing the significant financial burden on LES of obtaining at one time the entire financial coverage for all facilities and all projected depleted uranium byproduct that are not yet in existence.

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While LES's intention regarding decommissioning funding assurance was delineated in the original application, the NRC has notified us that the procedural step of obtaining an exemption will be necessary in order for LES to avail itself of this option. Accordingly, Enclosure 1 to this letter provides the request for exemptions in accordance with 10 CFR 40.14 and 10 CFR 70.17, "Specific exemptions," to certain provisions of 10 CFR 40.36(d) and 10 CFR 70.25(e) as a revision to Section 1.2.5, "Special Exemptions or Special Authorizations," of the SAR. The conforming change to SAR Section 10.2.1 is also included in Enclosure 1, and all of these changes will be included in a future revision of the license application.

Enclosure 2 contains a license application page reflecting clarifications and updates that are unrelated to the exemption request. These changes will also be reflected in a future revision of the license application.

If you have any questions, please contact me at 630-657-2813.

Respectfully,



R. M. Krich  
Vice President – Licensing, Safety, and Nuclear Engineering

Enclosures 1 and 2

1. Exemption Request
2. Changed License Application Page

cc: T. C. Johnson, NRC Project Manager

**ENCLOSURE 1**

**Exemption Request**

### **1.2.3 Type, Quantity, and Form of Licensed Material**

LES proposes to acquire, deliver, receive, possess, produce, use, transfer, and/or store special nuclear material (SNM) meeting the criteria of *special nuclear material of low strategic significance* as described in 10 CFR 70.4 (CFR, 2003e). Details of the SNM are provided in Table 1.2-1, Type, Quantity, and Form of Licensed Material. It is expected that other source materials and by-product materials will also be used for instrument calibration purposes. These materials will be identified during the design phase and the SAR will be revised, accordingly.

### **1.2.4 Requested Licenses and Authorized Uses**

LES is engaged in the production and selling of uranium enrichment services to electric utilities for the purpose of manufacturing fuel to be used to produce electricity in commercial nuclear power plants.

This application is for the necessary licenses issued under 10 CFR 70 (CFR, 2003f), 10 CFR 30 (CFR, 2003g) and 10 CFR 40 (CFR, 2003h) to construct, own, use and operate the facilities described herein as an integral part of the uranium enrichment facility. This includes licenses for source, special nuclear material and byproduct material. The period of time for which the license is requested is 30 years.

See Section 1.1, Facility and Process Description for a summary, non-technical narrative description of the enrichment activities utilized in NEF.

### **1.2.5 Special Exemptions or Special Authorizations**

In accordance with 10 CFR 40.14 (CFR, 2005a), "Specific exemptions," and 10 CFR 70.17 (CFR, 2005b), "Specific exemptions," LES requests exemptions from certain provisions of 10 CFR 40.36 (CFR, 2005c), "Financial assurance and recordkeeping for decommissioning," paragraph (d), and 10 CFR 70.25 (CFR, 2005d), "Financial assurance and recordkeeping for decommissioning," paragraph (e). Specifically, 10 CFR 40.36(d) (CFR, 2005c) and 10 CFR 70.25(e) (CFR, 2005d) both state in part that "...the decommissioning funding plan must also contain a certification by the licensee that financial assurance for decommissioning has been provided in the amount of the cost estimate for decommissioning...." As stated in Section 10.2.1, "Decommissioning Funding Mechanism," of the SAR since LES intends to sequentially install and operate modules of the enrichment equipment over time, providing financial assurance for decommissioning during the operating life of the NEF at a rate that is in proportion to the decommissioning liability for these facilities as they are phased in satisfies the requirements of this regulation without imposing the financial burden of maintaining the entire financial coverage for facilities and material that are not yet in existence. The same basis applies to decommissioning funding assurance for depleted uranium byproduct. As also stated in Section 10.2.1 of the SAR, LES proposes to provide financial assurance for the disposition of depleted uranium byproduct at a rate in proportion to the amount of accumulated depleted uranium byproduct onsite up to the maximum amount of the depleted uranium byproduct produced by the NEF.

The justification for this proposal to provide decommissioning funding assurance on a forward-looking incremental basis is LES's commitment to update the decommissioning cost estimates

and to provide to the NRC a revised funding instrument for facility decommissioning at a minimum prior to the operation of each facility module. With respect to the depleted uranium byproduct, LES commits to updating the decommissioning cost estimates on an annual forward-looking incremental basis and to providing the NRC revised funding instruments that reflect these projections of depleted uranium byproduct production. The long-term nature of enrichment contracts allows LES to accurately predict the production of depleted uranium byproduct. If any adjustments to the funding assurance were determined to be needed during the annual period due to production variations, they would be made promptly and a revised funding instrument would be provided to the NRC.

LES requests that exemptions from the provisions of 10 CFR 40.36(d) (CFR, 2005c) and 10 CFR 70.25(e) (CFR, 2005d) described above be granted. In support of this request, LES provides the following information relative to the criteria in 10 CFR 40.14 (CFR, 2005a) and 10 CFR 70.17 (CFR, 2005b).

Granting the exemption is authorized by law

There is no statutory prohibition to providing decommissioning funding assurance on an incremental basis. In fact, the NRC has previously accepted an incremental approach to decommissioning funding assurance for the United States Enrichment Corporation's operation of its gaseous diffusion plants.

Granting the exemptions will not endanger life or property or the common defense and security

Allowing the decommissioning funding assurance for the NEF to be provided on a forward-looking incremental basis continues to ensure that adequate funds are available at any point in time after licensed material is introduced onto the NEF site to decommission the facility and disposition any depleted uranium byproduct possessed by LES. Accordingly, life, property, or the common defense and security will not be endangered by the NEF once it is permanently shutdown.

Granting the exemptions is otherwise in the public interest

Providing an alternative, diverse, and secure domestic source of enrichment services in support of the nuclear power industry that supplies 20% of the nation's electricity is clearly in the public benefit. Providing decommissioning funding assurance on an incremental basis will ensure that adequate financial assurance is available when required. Imposing the requirement to provide decommissioning funding assurance for the entire facility and all depleted uranium byproduct that would be produced over the NEF licensed operating period results in a significant unnecessary financial hardship. Accordingly, the granting of these exemptions is in the public interest.

Since the granting of this exemption does not satisfy any of the criteria for categorical exclusion delineated in 10 CFR 51.22 (CFR, 2005e), "Criteria for categorical exclusion; identification of licensing and regulatory actions eligible for categorical exclusion or otherwise not requiring environmental review," nor the criteria requiring an environmental impact statement in 10 CFR 51.20 (CFR, 2005f), "Criteria for and identification of licensing and regulatory actions requiring environmental impact statements," an environmental assessment is required in accordance with 10 CFR 51.21 (CFR, 2005g), "Criteria for and identification of licensing and regulatory actions requiring environmental assessments." Accordingly, LES proposes that the NRC make a finding of no significant impact based on the following information addressing the provisions of 10 CFR 50.30 (CFR, 2005h), "Environmental assessment."

Need for the proposed action

Granting of the requested exemption will allow LES to satisfy the applicable decommissioning funding assurance requirements for the NEF without imposing an unnecessary financial burden on LES.

Alternatives as required by Section 102(2)(E) of the National Environmental Policy Act (NEPA)

The only alternative to granting the requested exemption is to not grant it. The significant financial burden that would be imposed on LES by not granting the requested exemption is unnecessary.

The environmental impacts of the proposed action and alternatives as appropriate

Granting the requested exemption will not result in environmental impacts in addition to those delineated in the ER for the NEF since adequate funds will continue to be available to decommission the NEF and disposition any depleted uranium byproduct possessed by LES at any point in time after licensed material is introduced onto the NEF site. The environmental impact of not granting the requested exemption could potentially be the loss of an alternate, diverse, and secure domestic source of enrichment services for the nuclear power industry that supplies 20% of the nation's electricity.

A list of agencies and persons consulted and identification of sources used

The NRC Project Manager for the NEF was contacted. The NEF license application was used as a source.

Based on the above information, LES proposes that, if this exemption request is granted, the NRC reach a finding of no significant impact in accordance with 10 CFR 51.32 (CFR, 2005i), "Finding of no significant impact."

**1.2.6 Security of Classified Information**

Access to restricted data or national security information shall be controlled in accordance with 10 CFR 10 (CFR, 2003i), 25 (CFR, 2003j), and 95 (CFR, 2003k). This application does contain classified information that has been submitted under separate correspondence.



## **1.4 REFERENCES**

- AMS, 1996. Glossary of Weather and Climate, With Related Oceanic and Hydrologic Terms, American Meteorological Society, 1996.**
- ANSI, applicable version. Uranium Hexafluoride – Packing for Transport, ANSI N14.1, American National Standards Institute, version in effect at time of cylinder manufacture.**
- CFR, 2003a. Title 10, Code of Federal Regulations, Part 61, Licensing Requirements for Land Disposal of Radioactive Waste, 2003.**
- CFR, 2003b. Title 10, Code of Federal Regulations, Section 70.22, Contents of applications, 2003.**
- CFR, 2003c. Title 10, Code of Federal Regulations, Section 70.25, Financial assurance and recordkeeping for decommissioning, 2003.**
- CFR, 2003d. Title 10, Code of Federal Regulations, Section 40.36, Financial assurance and recordkeeping for decommissioning, 2003.**
- CFR, 2003e. Title 10, Code of Federal Regulations, Section 70.4, Definitions, 2003.**
- CFR, 2003f. Title 10, Code of Federal Regulations, Part 70, Domestic Licensing of Special Nuclear Material, 2003.**
- CFR, 2003g. Title 10, Code of Federal Regulations, Part 30, Rules of General Applicability to Domestic Licensing of Byproduct Material, 2003.**
- CFR, 2003h. Title 10, Code of Federal Regulations, Part 40, Domestic Licensing of Source Material, 2003.**
- CFR, 2003i. Title 10, Code of Federal Regulations, Part 10, Criteria and Procedures for Determining Eligibility for Access to Restricted Data or National Security Information or an Employment Clearance, 2003.**
- CFR, 2003j. Title 10, Code of Federal Regulations, Part 25, Access Authorization for Licensed Personnel, 2003.**
- CFR, 2003k. Title 10, Code of Federal Regulations, Part 95, Security Facility Approval and Safeguarding of National Security Information and Restricted Data, 2003.**
- CFR, 2003l. Title 10, Code of Federal Regulations, Section 140.13b, Amount of liability insurance required for uranium enrichment facilities, 2003.**
- CFR, 2005a. Title 10, Code of Federal Regulations, Section 40.14, Specific exemptions, 2005.**
- CFR, 2005b. Title 10, Code of Federal Regulations, Section 70.17, Specific exemptions, 2005.**
- CFR, 2005c. Title 10, Code of Federal Regulations, Section 40.36(d), Financial assurance and recordkeeping for decommissioning, 2005.**
- CFR, 2005d. Title 10, Code of Federal Regulations, Section 70.25(e), Financial assurance and recordkeeping for decommissioning, 2005.**
- CFR, 2005e. Title 10, Code of Federal Regulations, Section 51.22, Criteria for categorical exclusion; identification of licensing and regulatory actions eligible for categorical exclusion or otherwise not requiring environmental review, 2005.**

CFR, 2005f. Title 10, Code of Federal Regulations, Section 51.20, Criteria for and identification of licensing and regulatory actions requiring environmental impact statements, 2005.

CFR, 2005g. Title 10, Code of Federal Regulations, Section 51.21, Criteria for and identification of licensing and regulatory actions requiring environmental assessments, 2005.

CFR, 2005h. Title 10, Code of Federal Regulations, Section 50.30, Environmental assessment, 2005.

CFR, 2005i. Title 10, Code of Federal Regulations, Section 51.32, Finding of no significant impact, 2005.

DOE, 2003. WIPP Contact-Handled (CH) Waste Safety Analysis Report (SAR), DOE/WIPP-95-2065 Rev. 7, June 2003.

Grazulis, 1993. Significant Tornadoes, 1680-1991, Environmental Films, Thomas P. Grazulis, July 1993.

LES, 1991. Safety Analysis Report for the Claiborne Enrichment Center, Louisiana Energy Services, 1991.

LES, 2002. Letter to U.S. Nuclear Regulatory Commission, Document Control Desk, from Peter L. Lenny, Louisiana Energy Services, April 24, 2002.

Marshall, 1973. *Lightning Protection*, J. L. Marshall, 1973.

NOAA, 2002a. Local Climatological Data Annual Summary with Comparative Data for Midland-Odessa, Texas, National Oceanic and Atmospheric Administration, ISSN 0198-5124, 2002.

NOAA, 2002b. Local Climatological Data Annual Summary with Comparative Data for Roswell, New Mexico, National Oceanic and Atmospheric Administration, ISSN 0198-3512, 2002.

NRC, 1975. Site Analysis Branch Position-Winter Precipitation Loads, U.S. Nuclear Regulatory Commission, March 1975.

NRC, 1993. Safety Evaluation Report for the Claiborne Enrichment Center, Homer, Louisiana, U.S. Nuclear Regulatory Commission, December 1993.

NRC, 2002. Standard Review Plan For The Review Of A License Application For A Fuel Cycle Facility, NUREG-1520, U.S. Nuclear Regulatory Commission, March 2002.

NRC, 2003. Letter from R. C. Pierson, Director, Division of Fuel Cycle Safety and Safeguards, NRC to R. M. Krich, Director of Licensing, LES, March, 2003.

NWS, 2003. Colorado Lightning Resource Center, National Weather Service, 2003.

USDA, 1974. Soil Survey, Lea County, New Mexico, U. S. Department of Agriculture, January, 1974.

USGS, 1979. Topographic Quadrangle Map for Eunice NE, Texas-New Mexico, 1:24,000 scale, U. S. Geological Survey, Photorevised 1979.

WRCC, 2003. Hobbs, New Mexico, NCDC 1971-2000 Monthly Normals, Western Regional Climate Center, Desert Research Institute, 2003.

## **10.2 FINANCIAL ASSURANCE MECHANISM**

### **10.2.1 Decommissioning Funding Mechanism**

LES intends to utilize a surety method to provide reasonable assurance of decommissioning funding as required by 10 CFR 40.36(e)(2) (CFR, 2003h) and 70.25(f)(2) (CFR, 2003i). Finalization of the specific financial instruments to be utilized will be completed, and signed originals of those instruments will be provided to the NRC, prior to LES receipt of licensed material. LES intends to provide continuous financial assurance from the time of receipt of licensed material to the completion of decommissioning and termination of the license. Since LES intends to sequentially install and operate the Separations Building Modules over time, financial assurance for decommissioning will be provided during the operating life of the NEF at a rate that is in proportion to the decommissioning liability for these facilities as they are phased in. Similarly, LES will provide decommissioning funding assurance for disposition of depleted tails at a rate in proportion to the amount of accumulated tails onsite up to the maximum amount of the tails as described in Section 10.3, Tails Disposition. An exemption request to permit this incremental financial assurance is provided in Section 1.2.5, "Special Exemptions or Special Authorizations."

The surety method adopted by LES will provide an ultimate guarantee that decommissioning costs will be paid in the event LES is unable to meet its decommissioning obligations at the time of decommissioning. The surety method will also be structured and adopted consistent with applicable NRC regulatory requirements and in accordance with NRC regulatory guidance contained in NUREG-1757 (NRC, 2003). Accordingly, LES intends that its surety method will contain, but not be limited to, the following attributes:

- The surety method will be open-ended or, if written for a specified term, such as five years, will be renewed automatically unless 90 days or more prior to the renewal date, the issuer notifies the NRC, the trust to which the surety is payable, and LES of its intention not to renew. The surety method will also provide that the full face amount be paid to the beneficiary automatically prior to the expiration without proof of forfeiture if LES fails to provide a replacement acceptable to the NRC within 30 days after receipt of notification of cancellation.
- The surety method will be payable to a trust established for decommissioning costs. The trustee and trust will be ones acceptable to the NRC. For instance, the trustee may be an appropriate State or Federal government agency or an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency.
- The surety method will remain in effect until the NRC has terminated the license.
- Unexecuted copies of the surety method documentation are provided in Appendices 10A through 10F. Prior to LES receipt of licensed material, the applicable unexecuted copies of the surety method documentation will be replaced with the finalized, signed, and executed surety method documentation, including a copy of the broker/agent's power of attorney authorizing the broker/agent to issue bonds.

**ENCLOSURE 2**

**Changed License Application Page**

The remaining 3% of the decommissioning costs are for the remaining systems and components in other buildings. Since these costs are small in relation to the overall cost estimate, the cost data for these systems has also been summarized at the same level of detail as that for the Separations Building Modules.

The decommissioning project schedule is presented in Figure 10.1-1, National Enrichment Facility – Conceptual Decommissioning Schedule. Dismantling and decontamination of the equipment in the three Separations Building Modules will be conducted sequentially (in three phases) over a nine year time frame. Separations Building Module 1 will be decommissioned during the first three-year period, followed by Separations Building Module 2, and then Separations Building Module 3. Termination of Separations Module 3 operations will mark the end of uranium enrichment operations at the NEF. Decommissioning of the remaining plant systems and buildings will begin after Separations Building Module 3 operations have been permanently terminated.

#### 10.1.3.2 Major Assumptions

Key assumptions underlying the decommissioning cost estimate are listed below:

- Inventories of materials and wastes at the time of decommissioning will be in amounts that are consistent with routine plant operating conditions over time.
- Costs are not included for the removal or disposal of non-radioactive structures and materials beyond that necessary to terminate the NRC license.
- Credit is not taken for any salvage value that might be realized from the sale of potential assets (e.g., recovered materials or decontaminated equipment) during or after decommissioning.
- Decommissioning activities will be performed in accordance with current day regulatory requirements.
- LES will be the Decommissioning Operations Contractor (DOC) for all decommissioning operations. However, in the event that LES is not able to fulfill this role, an adjustment to account for use of a third party for performing decommissioning operations is provided in Table 10.1-14, Total Decommissioning Costs.
- Decommissioning costs, with the exception of tails disposition costs, are presented in January 2002 dollars. In Table 10.1-14, tails disposition costs are presented in January 2004 dollars. In addition, the costs of decommissioning presented in Table 10.1-14 are escalated from January 2002 dollars to January 2004 dollars to provide the total decommissioning costs in January 2004 dollars.

#### 10.1.4 Decommissioning Strategy

The plan for decommissioning is to promptly decontaminate or remove all materials from the site which prevent release of the facility for unrestricted use. This approach, referred to in the industry as DECON (i.e., immediate dismantlement), avoids long-term storage and monitoring of wastes on site. The type and volume of wastes produced at the NEF do not warrant delays in waste removal normally associated with the SAFSTOR (i.e., deferred dismantlement) option.