

Luxembourg-Luxembourg: Supply contract regarding the purchase of 3He-filled proportional counters (for thermal neutrons) based on recovery and purification of gas from spare 3He counter tubes

OJ S 172/2017 08/09/2017

Contract notice

Supplies

Legal Basis:

Directive 2014/24/EU

Section I: Contracting authority

I.1. Name and addresses

Official name: European Commission, Directorate-General for Energy, Directorate E — Nuclear Safeguards

Postal address: 1, rue Henri Schnadt, Zone d'activité Cloche d'Or

Town: Luxembourg

NUTS code: LU Luxembourg

Postal code: 2530

Country: Luxembourg

E-mail: ENER-E1-CFT@ec.europa.eu

Internet address(es):

Main address: <https://ec.europa.eu/energy/en>

I.3. Communication

The procurement documents are available for unrestricted and full direct access, free of charge, at: <https://etendering.ted.europa.eu/cft/cft-display.html?cftId=2828>

Additional information can be obtained from the abovementioned address

Tenders or requests to participate must be submitted to the abovementioned address

I.4. Type of the contracting authority

European institution/agency or international organisation

I.5. Main activity

General public services

Section II: Object

II.1. Scope of the procurement

II.1.1. Title

Supply contract regarding the purchase of 3He-filled proportional counters (for thermal neutrons) based on recovery and purification of gas from spare 3He counter tubes.

Reference number: ENER/E1/2017-28-11.

II.1.2. Main CPV code

09340000 Nuclear fuels

II.1.3. Type of contract

Supplies

II.1.4. Short description

The present call for tender is part of the work required to build an improved version of a neutron coincidence detector for the verification of fresh low-enriched uranium fuel assemblies. The Commission intends to place a contract to have built 61pc of ³He gas-filled proportional counters for 2 fast neutron coincidence collars — starting from recycled and purified gas from spare ³He counters, which DG Energy will provide.

II.1.5. Estimated total value

Value excluding VAT: 150 000,00 EUR

II.1.6. Information about lots

This contract is divided into lots: no

II.2. Description

II.2.3. Place of performance

NUTS code: 00 Other or Not Specified

Main site or place of performance: The tasks will be performed on the contractor's premises.

II.2.4. Description of the procurement

Neutron coincidence measurements of fresh fuel assemblies are widely used during safeguards inspections in low-enriched uranium (LEU) fuel fabrication plants in Europe. 1 instrument type of choice currently used for these measurements is the neutron coincidence collar (NCC), which was originally designed by Los Alamos National Laboratory (LANL). This instrument uses an americium lithium external neutron source to induce fission in the U-235 in the assembly. The neutrons resulting from those fissions are slowed down (thermalised) in the polyethylene detector slabs (3 sides, surrounding the fuel element under test) and then detected in He-3 gas-filled proportional counters, embedded therein.

As the design of LEU assemblies is gradually optimised by nuclear industry, the fuel elements become more complex and the need for an improved verification tool has developed.

Therefore an optimised design for a fast NCC was made in the context of a cooperation agreement between the European Commission and LANL in the United States of America.

The present tender's purpose is to award a contract for the production of (at least) 61 counter tubes, needed for 2 fast NCCs. Both NCCs are based on the same type and model of thermal neutron counter tubes (³He gas-filled at 10 bar pressure, 1 inch outer diameter). The full detailed specifications are given in the technical annex.

Due to the global scarcity and the resulting cost of ³He gas, the 61 new counter tubes will be filled with ³He gas recovered from spare neutron counter tubes. DG Energy will provide the spare tubes and after signature of the contract, transport at its own expenses to the tenderers' premises.

It is emphasised that the contract is based on the recovery and purification of ³He gas from spare counter tubes (93 pieces, with various lengths, all filled to 4 bar pressure of ³He) to produce and fill at minimum 61 new counter tubes (33 cm active length, filled to 10 bar pressure of ³He gas plus a suitable quantity of quench gas). It is expected that the recovered volume of ³He gas from the 93 old tubes (4 bar pressure) is sufficient to fill the 61 new counter tubes (10 bar pressure). The 93 spare tubes have recently undergone functional tests (with a neutron source) and the recorded results indicate that all of them are fully operational and therefore must contain the original amount of ³He gas. The test data is available upon request of the tenderer(s).

After assembly, each item of the new proportional counters will be individually tested and the results documented. From the test data, the range of thermal neutron efficiency over the batch of 61 tubes should be within 5 % — relative to the average value.

Any remaining (surplus) 3He gas — after filling of the 61 new tubes — should be used to fill additional counter tubes (of the same design and characteristics) — and those will also be purchased by DG Energy. It is expected that only a few additional tubes can result from this approach.

II.2.5. Award criteria

Price is not the only award criterion and all criteria are stated only in the procurement documents

II.2.6. Estimated value

Value excluding VAT: 150 000,00 EUR

II.2.7. Duration of the contract, framework agreement or dynamic purchasing system

Duration in months: 12

This contract is subject to renewal: no

II.2.10. Information about variants

Variants will be accepted: no

II.2.11. Information about options

Options: no

II.2.13. Information about European Union funds

The procurement is related to a project and/or programme financed by European Union funds:
no

II.2.14. Additional information

Section III: Legal, economic, financial and technical information

III.1. Conditions for participation

III.1.2. Economic and financial standing

Selection criteria as stated in the procurement documents

III.1.3. Technical and professional ability

Selection criteria as stated in the procurement documents

Section IV: Procedure

IV.1. Description

IV.1.1. Type of procedure

Open procedure

IV.1.3. Information about a framework agreement or a dynamic purchasing system

IV.1.8. Information about the Government Procurement Agreement (GPA)

The procurement is covered by the Government Procurement Agreement: yes

IV.2. Administrative information

IV.2.2. Time limit for receipt of tenders or requests to participate

Date: 11/10/2017 Local time: 23:59

IV.2.3. Estimated date of dispatch of invitations to tender or to participate to selected candidates

IV.2.4. Languages in which tenders or requests to participate may be submitted

Bulgarian, Czech, Danish, German, Greek, English, Spanish, Estonian, Finnish, French, Irish, Croatian, Hungarian, Italian, Lithuanian, Latvian, Maltese, Dutch, Polish, Portuguese, Romanian, Slovak, Slovenian, Swedish

IV.2.6. Minimum time frame during which the tenderer must maintain the tender

Duration in months: 6 (from the date stated for receipt of tender)

IV.2.7. Conditions for opening of tenders

Date: 23/10/2017 Local time: 9:45

Place:

European Commission, DG Energy, Euroforum Building, 1, rue Henri M. Schnadt, Zone d'activité Cloche d'Or, L-2530 Luxembourg, LUXEMBOURG.

Information about authorised persons and opening procedure: 1 representative per tenderer.

Section VI: Complementary information

VI.1. Information about recurrence

This is a recurrent procurement: no

VI.3. Additional information

VI.4. Procedures for review

VI.4.1. Review body

Official name: General Court of the European Union

Postal address: rue du Fort Niedergrünwald

Town: Luxembourg

Postal code: 2925

Country: Luxembourg

E-mail: generalcourt.registry@curia.europa.eu

Telephone: +352 4303-1

Fax: +352 4303-2100

Internet address: <http://curia.europa.eu/>

VI.4.4. Service from which information about the review procedure may be obtained

Official name: General Court of the European Union

Postal address: rue du Fort Niedergrünwald

Town: Luxembourg

Postal code: 2925

Country: Luxembourg

E-mail: generalcourt.registry@curia.europa.eu

Telephone: +352 4303-1

Fax: +352 4303-2100

Internet address: <http://curia.europa.eu/>

VI.5. Date of dispatch of this notice

29/08/2017