АЕЦ Вх. № Ф-6459 / 11.11.2020 г.

CALL FOR MARKET CONSULTATION No. 45778

Kozloduy NPP EAD notifies all interested parties that in connection with the preparation for awarding a public procurement and determining an estimated value, pursuant to Art. 44 of the Public Procurement Act, invites indicative proposals for "Supply of Array Probe for Inspection of the Tube Openings in the ПГВ 1000 M Steam Generator Headers of Kozloduy NPP Units 5 and 6".

The proposal shall include:

- detailed description of the proposed equipment, as specified in the technical specification below, catalogue data;
- unit price, VAT excluded;
- information about time and terms of delivery, warranty period;
- supporting shipping documents;
- exact address and contact person, telephone, fax, e-mail, internet address.

Inquiries regarding the market consultations can be made by 17.11.2020 at the following e-mail address: commercial@npp.bg, and the clarifications will be published in the Buyer profile.

Deadline for submission of the indicative proposals - 24.11.2020 to e-mail: commercial@npp.bg

The indicative proposals and any other information exchanged during the market consultations process shall be published in the Buyer profile.

By submitting an indicative proposal, each participant in the market consultations agrees that the proposal and any other information provided as a result of the market consultations shall be made available to the public in the Buyer profile.

The Contracting Authority retains the rights to use indicative proposals received during the conduct of the market consultations for the award of public procurement contracts up to the value thresholds specified in Article 20, paragraph 4 of the PPA.

Further information can be obtained from Svetlana Marinova, Head of Marketing Section, tel. +359 973 7 3866, e-mail: scgeorgieva@npp.bg

Attachments:

1. Technical Specification;
2. Standard form for indicative proposal.

TECHNICAL SPECIFICATION

Delivery of Array probe, technology and calibration block for eddy-current testing of tube holes in the tube sheet of steam generators PGV-1000M in Units 5 and 6 at Kozloduy NPP

1. Delivery description.

1.1. **Description of the probe**

In order to ensure the eddy-current testing of the tube holes in the tube sheet of steam generators PGV-1000M in units 5 and 6, a complete qualified technology and "array" probe are is necessary to be delivered. The probe should be designed to work with the SGIS manipulators available in the NPP, MIZ-85iD eddy current instruments and Eddynet® software for data acquisition and analysis.

1.2. **Scope of delivery**

1.2.1. Delivery of one “array” probe for testing of tube holes in the tube sheet of steam generators PGV-1000M in block 5 and 6 is required.

1.2.2. Delivery of complete technology for data acquisition and data analysis.

2. Main characteristics

2.1. **Technical requirements**

2.1.1. Electrical characteristics of the probe should be calculated for material 10GN2MFA (operating frequencies: 5 ÷ 60kHz).

2.1.2. Probe diameter – 12.0÷12.5mm.

2.1.3. Minimum length of the probe (without head and connector): 4m.

2.1.4. Mechanically and electrically, the probe should be adapted to work with the MIZ-85iD eddy current instrument. The necessary calibration block, multiplexer, slip ring, and extension cables for operation have to be included in the delivery.

2.1.5. The probe must be able to operate on the SGIS manipulators available in the NPP with built-in pusher with rubber rollers 10D, 5/16.

2.1.6. The supplier shall ensure that with the SGIS manipulators, the probe will be able to inspect the entire length of the tube holes in the tube sheet (test range is 171 mm).

2.1.7. Data acquisition and analysis will be performed using the Eddynet®-V1.7.2.3 software available at the NPP: AQ / ZAC-V1.6.2.0 for data acquisition and AN-V1.2.2.0 for data analysis.

2.1.8. The probe must be optimized to detect axial defects along the entire length of the tube holes in the tube sheet.

2.1.9. The minimum sensitivity threshold is an axial channel 1 mm deep, 0.3 mm wide and 15 mm long.

2.1.10. The design of the probe and inspection frequencies must allow suppression of undesired signals e.g. tube indications, permeability variations, etc. having signal to noise ratio minimum 3:1.

2.1.11. The probe should not contain surface materials containing chlorine and fluorine ions.

2.1.12. The probe must not mechanically damage the heat exchange tubes.

2.1.13. The probe must be secured so that in the event of failure it can be removed without residue from the heat exchange tubes.

2.2. **Testing procedures**

2.2.1. Testing procedures need to cover all process elements:

2.2.2. Full configuration of Eddynet® for data acquisition, signal setup in the calibration block.

2.2.3. Full configuration of Eddynet® for data analysis, signal setup in the calibration block, process channels, etc.

3. Documentation

3.1. **Documents required for delivery, installation and commissioning**

3.1.1. The supplier must present technical documentation from the manufacturer (passports, certificates, etc.).

3.1.2. Testing procedures.

Indicative proposal regarding conducted market consultation No.45778 with subject “Supply of Array Probe for Inspection of the Tube Openings in the ПГВ 1000 М Steam Generator Header of Kozloduy NPP Units 5 and 6 ”

from

/name of the tenderer, UIC, address, telephone, e-mail, contact person, position/

Item No.	Description and technical features of the offered product	Unit	Quantity	Unit price excluding VAT	Currency
1	Array probe	pcs	1		
2	Data acquisition and analysis technology	pcs	1		
3	Calibration unit for inspection of the tube openings	pcs	1		
4	Other elements pursuant to item 2.1.4 of the technical specification /…….*list the elements…../*	set	1		
5	Other pricing factors				

Note: As per items No. 4 and 5 unit prices of each proposed element/factor shall be provided

Delivery time
Terms of delivery
Warranty period
Supporting documentation on delivery
Information on the manufacturer