

## CALL FOR MARKET CONSULTATION No. 48348

Kozloduy NPP EAD informs all interested parties that in connection with the preparation for awarding a public procurement and determining the estimated value pursuant to Article 44 of the PPA is collecting indicative proposals for "Supply of "+Point" type rotary probes for eddy current control of ПГБ 1000M steam generators".

The proposal shall include:

- detailed description;
- unit price and total value, currency;
- information on the delivery terms and conditions, warranty period - according to the technical specification;
- accompanying documentation upon delivery - according to the technical specification;
- exact address and contact person, telephone number, fax number, e-mail, web site.

Inquiries regarding the market consultations may be made by 27.01.2022 at the following e-mail address: [commercial@npp.bg](mailto:commercial@npp.bg), as the clarifications will be published in the Buyer profile.

Deadline for the receipt of the indicative proposals: 03.02.2022 at e-mail:: [commercial@npp.bg](mailto:commercial@npp.bg)

All information exchanged for the purposes of the market consultations will be published in the Buyer's 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 will be made available in the Buyer profile.

The Contracting Authority retains the rights to use indicative proposals received in the course of market consultations for awarding public procurements up to the value thresholds of Article 20, para. 4 of the PPA.

Further information can be obtained from Manuela Krasimirova - Marketing Expert, e-mail: [MKsimeonova@npp.bg](mailto:MKsimeonova@npp.bg)

### Enclosures:

1. Technical specification.

**TECHNICAL SPECIFICATION**  
For supply of +Point type rotary probes, 1,5 m length

**1 Procurement details**

**1.1 Description of the equipment or materials manufactured and supplied**

- 1.1.1 The probe is used to perform automated eddy current non-destructive testing to determine the condition of the heat exchanger tubes of the steam generators. The probe consists of coils that record changes in the characteristics of the material being monitored.
- 1.1.2 In order to provide eddy current control of heat exchanger tubes of ПГБ-1000M steam generators type, it is necessary to supply a “+Point” rotary probe , L=1.5m or equivalent.
- 1.1.3 “+Point” rotary probe is used in additional control for characterisation of the properties of indications.

**2 Main characteristics of the equipment and materials**

**2.1 Physical and dimensional characteristics**

- 2.1.1 The electrical characteristics of the probes should be calculated for 08X18H10T material with 16 mm diameter and 1.5 mm wall thickness at operating frequencies of 50 ÷ 250 kHz, the basic is 150 kHz.
- 2.1.2 The probes shall be compatible with motors with 5/2 connectors for connection to the probes.
- 2.1.3 Probes shall operate on 10D and HSP couplers with 5/16 in - OD=10mm rubber rollers.
- 2.1.4 The probes shall be capable of controlling the transition of the unrolled portion into the FGV-1000M header at Kozloduy NPP EAD.
- 2.1.5 The probe head shall be "spring loaded", coils shall move freely, without retention.
- 2.1.6 Probes shall allow rotational speed of 300 min<sup>-1</sup> with existing motors.
- 2.1.7 Probe head rotation speed shall not vary more than 15% when operating in the heat exchanger tube.
- 2.1.8 Probes shall move at a constant speed, no retention or stretching shall exist due to probe design.
- 2.1.9 The probes shall be impedance compatible with the eddy current instruments at Kozloduy NPP - TEDDY-4, MIZ-30, MIZ-80 and MIZ-85iD-2.
- 2.1.10 The marking of the probes (serial number, diameter, etc.) shall be clearly marked.
- 2.1.11 The probes shall be secured so that in the event of failure they can be removed without residue.

**2.2 Material properties**

- 2.2.1 Probes shall be free of surface materials containing chlorine and fluorine ions.
- 2.2.2 The probes shall not mechanically damage the heat exchanger tubes.

**2.3 Normative and technical documentation**

- 2.3.1 The probe shall comply with the standards and technical requirements of the country of manufacture and shall be accompanied by documents confirming compliance with the requirements.

**2.4 Shelf life requirements**

- 2.4.1 The supplier shall guarantee an average flow rate of 20 m for the probes.
- 2.4.2 In case of a lower average flow rate, the supplier shall provide the necessary probes at his own expense. Additional probes shall be delivered by the specific eddy current testing deadline.

**3 Packaging, transportation, interim storage**

**3.1 Requirements to the delivery and packaging**

- 3.1.1 The probe to be delivered shall be shipped in a packing complying with the standards and technical conditions of the manufacturing country and providing their storage during transport.
- 3.1.2 The means providing for the above-mentioned protection (boxes, transport cases, etc.) shall be included in the delivery.
- 3.1.3 The probe shall be protected against mechanical damages during transport and storage. Supplier shall be liable for any damage to the equipment during transportation, resulting from inappropriate packing or packing made of poor quality materials.

## **3.2 Storage conditions**

- 3.2.1 Supplier shall specify storage conditions for "+Point" probe for eddy current testing of ПГБ-1000M steam generator heat exchanger tubes. Time limits for those types of storage shall also be indicated.

## **4 Documents required upon delivery**

### **4.1 Documents accompanying the delivery and documents that are required for installation, operation, and maintenance of the equipment**

- 4.1.1 Supplier shall confirm the manufacturer's implementation of a certified QMS in the production of the probes in accordance with ISO 9001:2015 or equivalent, as evidenced by a valid certificate.
- 4.1.2 Upon delivery, the supplier shall provide complete probe technical documentation (certificates). The certificate shall contain at least the serial number; type; reference document; nominal values, tolerance and measured values for:
  - geometric dimensions (diameter at the cylinder, length of the probe);
  - electrical properties (main frequency, frequency range, maximum permissible voltage);
  - the ratio of the main frequency values of the 40% AX OD channel to the free-zone noise (Vmax measurement).

## **5 Receiving inspection**

- 5.1 After delivery of the probe and the documents Kozloduy NPP carries out:
  - 5.1.1 full receiving inspection according to the requirements of Quality procedure for the conduct of receiving inspection of the delivered materials, raw materials and components at Kozloduy NPP EAD, Identification Number ДОД.КД.ИК.112.
  - 5.1.2 Specialized receiving inspection according to ЦДК.ВТК.ИН.0901-23-03 (Procedure for receiving inspection of probes), carried out by personnel from the D&C CC, ITI group and TP group and a protocol with the results drawn up.