

KOZLODUY NPP EAD Kozloduy

Bulgaria, tel. 0973 7 35 30, fax 0973 7 60 27

CALL FOR MARKET CONSULTATION No. 52943

on: Inspecting the Structural Technical Condition of Oil Supply to the Axial Pair of Rolling Bearings of QHP800-230-2 Pumps

Kozloduy NPP EAD informs all interested parties that in preparation for awarding a public procurement contract and determining its estimated value, pursuant to Article 44 of the Public Procurement Act (PPA), the company is collecting indicative proposals for: **Inspecting the Structural Health of the Oil Supply to the Axial Pair of Rolling Bearings of QHP800-230-2 Pumps**

The proposals shall include:

- total service delivery price in accordance with the attached technical requirements for service delivery;
- service delivery deadline;
- exact address and contact person, telephone, fax, e-mail, Internet address.

Inquiries regarding the market consultations will be accepted until 29 January 2024 at the following e-mail address: commercial@npp.bg. Clarifications will be published in the Buyer's Profile section - Commercial Activities/Public Procurement/Market Consultations.

Deadline for submission of indicative proposals 02 February 2024 at the following e-mail address: commercial@npp.bg.

The indicative proposals and any other information exchanged during the market consultations shall be published in the Buyer's Profile section - Commercial Activity/Public Procurement/Market Consultations.

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's Profile.

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

For further information contact Violetka Dimitrova, Head of Contracts Department, Commercial Division, telephone: +359 973 7 3977.

Enclosures:

1. Technical Requirements for Service Delivery

TECHNICAL REQUIREMENTS

S U B J E C T:

Inspecting the Structural Technical Condition of Oil Supply to the Axial Pair of Rolling Bearings of
IQHP800-230-2 Pumps

1. Subject matter of the service

Inspecting the Structural Technical Condition of Oil Supply to the Axial Pair of Rolling Bearings of IQHP800-230-2 Pumps to analyse options to further minimise the probability of poor bearing unit lubrication.

2. Scope of the service to be delivered

IQHP800-230-2 pumps are used for emergency and planned core cooling of WWER1000 reactors. They are horizontal, centrifugal single-stage pumps with double-sided suction impeller. The radial loads on the shaft are supported by radial plain bearings Ø85 with hydrodynamic lubrication by means of an oil ring. The axial loads are supported by a pair of 7314 angle bearings mounted in an O arrangement. Lubrication of the pair of axial bearings is by means of pouring TII32 oil to the bearing through a tube via the oil ring of one of the plain bearings.

The scope of the service to be performed shall include familiarizing the Contractor with the existing problems, gathering sufficient technical information regarding the structural condition and specific operating conditions of the bearing unit. The required information shall serve to prepare an analysis that would provide for the correct design selection and performance of the oil booster unit.

Parameters characterising the operating conditions are shown in the table.

Parameter	Value
Flow rate (m ³ /h)	800
Head (m/H ₂ O)	230
Power (Kw)	800
Rotational speed (rmp)	2976

3. Work arrangement for the service delivery

3.1. Service activities implementation plan

Not applicable.

3.2. Service completion conditions

The service shall be deemed completed upon acceptance of the comparative analysis without any remarks by the Contracting Authority's Expert Technical Council/Specialised Technical Council.

3.3 Regulatory and technical documentation

Enclosure 1

According to “List of Units 5 and 6 structures, systems and components classified according to safety, seismicity and quality”, 30.ПП.00.СПН.02:

Safety class **2-3**

Seismic category **-1**

Quality class **- B**

The equipment is designed to safely shut down and maintain the reactor in a safe condition during and after an accident in compliance with “List of the Qualified Equipment”, 30.ПП.00.СПН.008/*.

4. Documentation

4.1 Documents submitted by Kozloduy NPP EAD

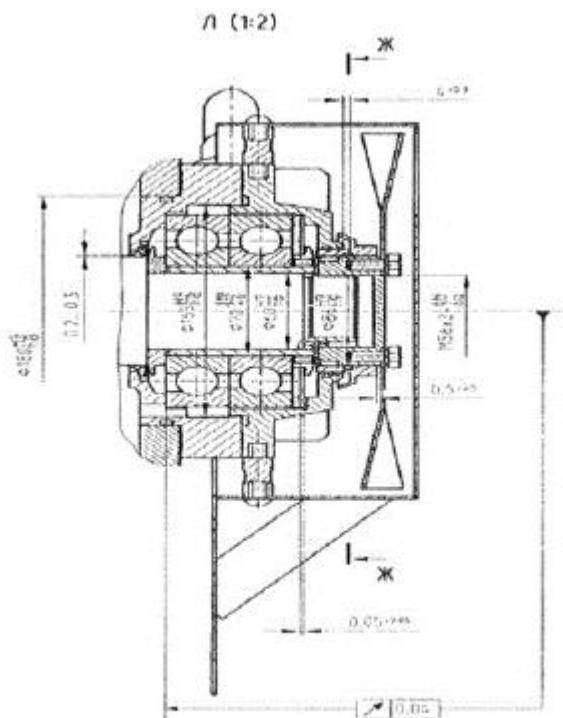
The documents necessary for the implementation of the activity will be submitted to the Contractor in the form and format available at Kozloduy NPP EAD in compliance with “Quality Procedure. Submitting Input Data to Contractors”, ДОД.ОК.ИК.1194.

4.2. Deliverables

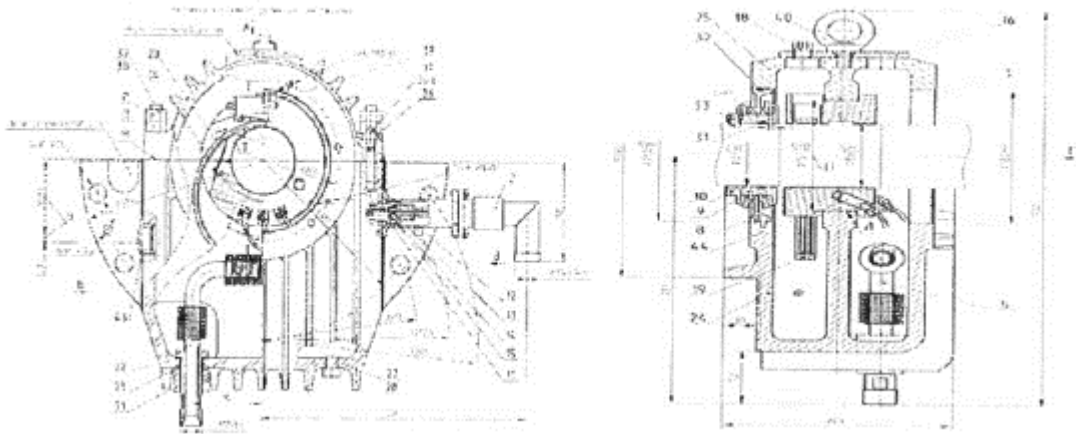
The Contractor shall submit an analysis of the structural condition of oil supply to the axial pair of rolling bearings of ЦНП800-230-2 pumps.

5. Drawings of the bearing unit structure

5.1 Axial bearing



5.2 Radial bearing



5.3. Oil supply unit

