

CALL FOR MARKET CONSULTATION No. 54497

Kozloduy NPP EAD hereby notifies all interested parties that in connection with the preparation for the award of a public contract and determination of the estimated value pursuant to Article 44 of the PPA, it is soliciting indicative quotes for the **‘Procurement of 6/10kV medium voltage power cables of reaction-to-fire performance class Bca or Cca’**

Quotes shall cover the following:

- Detailed description, as per the technical specification below;
- Unit and total price excluding VAT, currency;
- Information about deadline and terms of delivery, warranty period;
- Accompanying documentation upon delivery;
- Exact address and contact person, telephone number, fax, e-mail, website.

Inquiries regarding the market consultations may be made by 9 September 2024 at the following e-mail: commercial@npp.bg, and the clarifications will be published in the Buyer's profile.

Deadline for submission of indicative quotes: 16 September 2024 to e-mail: commercial@npp.bg

All information exchanged in connection with the market consultations will be published in the Buyer's profile.

By submitting an indicative quote, each participant in the market consultations agrees that the quote and any additional information provided as a result of the market consultations will be made available to the public in the Buyer's profile.

The Contracting Authority shall be entitled to use the indicative quotes received in the course of the conducted market consultations for the award of public contracts up to the value thresholds as specified in Article 20(4) of the PPA.

Further information can be obtained from Monika Paunova, Marketing Expert, Tel.: +359 973 7 26 49, e-mail: MSPaunova@npp.bg

Attachments:

1. Technical Specification
2. Terms of Reference

TERMS OF REFERENCE No. 24.EП-2.T3.1371

For procurement

SUBJECT: Procurement of 6/10kV medium voltage power cables of reaction-to-fire performance class Bca or Cca

1. Procurement details

The procurement shall ensure a minimum reserve of 6/10kV cable to be used for power line defect repairs and cable replacements (if necessary) at Units 5 and 6.

Procurement subject is 6/10kV cable of reaction-to-fire performance class Bca or Cca to be used in the Units 5 and 6 supervised and controlled areas as well as balance of plant.

As stipulated in Article 350. (Amended, SG No. 75 of 2013) of Regulation No. Із-1971 of 29 October 2009 on the construction and engineering codes and standards ensuring safety in the event of a fire, the cables installed in power plants shall be with an insulating sheath of reaction-to-fire performance class Bca or Cca.

1.1. Materials, consumables, machines and equipment (inventories) to be procured

Cable quantity and its characteristics are specified in Attachment 1.

1.2. Customised/specialised components, spare parts and tools to be procured

Not applicable.

1.3. Requirements to the Contractor

Not applicable.

2. Main characteristics of the equipment and materials**2.1. Equipment classification**

Classification of the equipment to be energised by the cable:

- Safety Class 3-O as per НП-001-15, 'Общие положения обеспечения безопасности атомных станций' (General provisions for the safety of nuclear power plants);
- Seismic Category 1 as per НП-031-01, 'Нормы проектирования сейсмостойких атомных станций' (Design Norms for Earthquake-proof Nuclear Power Plants);
- Quality Class SE.

2.2. Equipment qualification

Environmental:

- Temperature: max. 50 °C;
- Humidity: max. 60%;

Cable spreading rooms and cable vaults are equipped with automatic water fire suppression systems.

2.3. Physical and dimensional characteristics

Other characteristics are provided in Attachment 1.

2.4. Material properties

As per Attachment 1.

2.5. Chemical, mechanical, metallurgical and/or other properties**2.5.1. Fire resistance requirements**

The cable shall be of reaction-to-fire performance class B1ca, B2ca or Cca in accordance with EN50575, EN50399, EN60332, EN61034, and EN60754 or equivalent standard.

2.6. Requirements to the operation in ionizing radiation environment

Not applicable.

2.7. Codes and standards

IEC 60228:2023, ‘Токопроводими жила на кабели и изолирани проводници’ (Conductors of insulated cables) or equivalent;

VDE 0295:2005, ‘Conductors of insulated cables’ or equivalent;

IEC 60502-2, ‘Power cables with extruded insulation and their accessories for rated voltages from 1 kV ($U_m = 1.2$ kV) up to 30 kV ($U_m = 36$ kV) - Part 2: Cables for rated voltages from 6 kV ($U_m = 7.2$ kV) up to 30 kV ($U_m = 36$ kV)’ or equivalent;

DIN VDE 0276-622, ‘Power cables having rated voltages from 3.6/6 (7.2) kV up to and including 20.8/36 (42) kV with special fire performance for use in power stations’ or equivalent;

BDS EN 50575, ‘Силови, контролни и съобщителни кабели. Кабели за общо приложение при строително-монтажни дейности, които са обект на изисквания за реакция на огън’ (Power, control and communication cables - Cables for general applications in construction works subject to reaction to fire requirements);

BDS EN 50399, ‘Общи методи за изпитване на кабели на въздействие на огън. Измерване на топлоотделяне и отделяне на дим от кабели по време на изпитване на разпространение на пламък. Изпитвателна апаратура, процедури, резултати’ (Common test methods for cables under fire conditions - Heat release and smoke production measurement on cables during flame spread test - Test apparatus, procedures, results);

BDS EN 60332, ‘Изпитване на електрически и оптични кабели на въздействие на огън’ (Tests on electric and optical fibre cables under fire conditions);

BDS EN 61034-2, ‘Измерване на плътността на дима от горящи кабели при определени условия. Част 2: Процедура за изпитване и изисквания’ (Measurement of smoke density of cables burning under defined conditions - Part 2: Test procedure and requirements);

BDS EN 60754, ‘Изпитване на газове, отделени по време на горене на материали на кабели’ (Test on gases evolved during combustion of materials from cables);

Regulation No. Из-1971 of 29 October 2009 on the construction and engineering codes and standards ensuring safety in the event of a fire.

2.8. Shelf-life and life cycle requirements

Not applicable.

3. Packaging, transportation, and interim storage

3.1. Requirements to delivery and packaging

3.1.1. The cable shall be delivered packed in drums, thus preventing transport and storage damages. Each drum shall contain a cable of approximate length of 500m.

3.1.2. The outer sheath of the cable shall be marked to indicate cable length.

3.1.3. The cable shall have a marking (verified in a certificate) of the manufacturer design parameters, including reaction-to-fire performance class B1ca, B2ca or Cca as per EN50575 or equivalent.

3.1.4. Place of delivery shall be Kozloduy NPP EAD.

3.1.5. The delivery period shall not exceed 12 months from the date of contract conclusion.

3.2. Storage conditions

The Contractor shall specify the storage conditions in a document accompanying the delivery.

4. Requirements to the fabrication

4.1. Codes, standards, and regulations governing fabrication and testing

In accordance with the regulatory and technological documentation of the manufacturer.

4.2. Testing of products and materials during fabrication

Not applicable.

4.3. Manufacturing surveillance by Kozloduy NPP EAD

Not applicable.

5. Receiving inspection, installation and commissioning

The delivered cable shall be subject to general receiving inspection on the territory of Kozloduy NPP EAD as per Quality procedure for receiving inspection of raw materials, materials and accessories supplied at Kozloduy NPP EAD, 10.УД00.ИК.112.

If non-conformances are detected during the receiving inspection on the territory of Kozloduy NPP EAD, the Contracting Authority will not accept the cable.

5.1. Testing of products and materials during receiving inspection at delivery, after installation, and during operation

Not applicable.

5.2. Responsibilities during commissioning

Not applicable.

5.3. Safety measures against contamination by radioactive substances and hazardous products

Not applicable.

5.4. Health and safety requirements

Not applicable.

5.5. Conditions for disassembly, assembly, and partial assembly

Not applicable.

5.6. Surface status conditions

Not applicable.

5.7. Laying of coatings

Not applicable.

5.8. Safety provisions

Not applicable.

5.9. Documents required upon delivery, installation and commissioning

Cable delivery shall be accompanied by the following documents:

- Certificate/Declaration of Origin;
- Certificate/Declaration of Conformity;
- Manufacturer certificate of design parameters, including reaction-to-fire performance class B1ca, B2ca or Cca as per EN50575 or equivalent.
- A document specifying the storage conditions and warranty period;
- A document certifying compliance of the packaging with Section 2 of the Regulation on Packaging and Packaging Waste and compliance of the packaging marking with Article 5 of this Regulation.

The documents accompanying the delivery shall be submitted in two hard copies (in the original language as well as in Bulgarian) and on a CD containing: duly signed and stamped document files in their original format and pdf files generated by scanning – 1 copy.

Certificates, reports, and declarations shall be submitted in their original language with a Bulgarian translation. The Contractor shall be liable for the accuracy and quality of translated documents.

6. Warranty, warranty servicing and post-warranty servicing

The year of manufacture of the cable shall be no earlier than 2023. The cable warranty period shall be no less than 24 months from the date of delivery.

6.1. After-sales services

Not applicable.

6.2. Warranty servicing

Not applicable.

7. Quality assurance requirements

7.1. Contractor's management system (MS)

7.1.1. The Contractor shall apply a certified quality management system as per BDS EN ISO 9001:2015, 'Quality management systems – Requirements', covering the activities under these ToR, for which they shall provide a copy of a valid certificate, or other evidence of equivalent compliance with the requirements set out in these ToR.

7.1.2. The Contractor shall notify Kozloduy NPP EAD of any structural changes or changes to the Contractor's MS documentation related to the activities performed under the contract.

7.2. Quality assurance programme (QAP)

Not applicable.

7.3. Quality control plan (QCP) / Inspection and testing plan (ITP)

Not applicable.

7.4. Audit by Kozloduy NPP EAD (second-party auditing)

7.4.1 Kozloduy NPP EAD shall be entitled to audit the Contractor before commencement of the works under a signed contract and during the implementation of the contractual works.

7.4.2 Kozloduy NPP EAD shall audit the Contractor in accordance with 'Quality procedure for organising and conducting audits of contractors (second-party auditing), 10.ОиП.00.ИК.049.

7.5. Management of non-conformances

The Contractor shall report to and coordinate with Kozloduy NPP EAD:

- the non-conformances identified during implementation of contractual activities (the Contractor shall maintain a list of non-conformances identified during manufacturing);

- the decisions made on the disposition of non-conforming products.

7.6. Specific quality assurance requirements

7.6.1. Upon delivery, the Contractor shall provide a manufacturer certificate/declaration of conformity in accordance with Regulation (EU) No. 305/2011 of the European Parliament and of the Council of 9 March 2011.

The document shall unequivocally certify that the manufactured cable conforms to all regulations and has been designed for laying in electricity generating plants within the meaning of Article 350 (Amended, SG No. 75 of 2013) of Regulation No. Iз-1971 of 29 October 2009 on the construction and engineering codes and standards ensuring safety in the event of a fire.

7.6.2. Any reference of a type, standard, specification, technical assessment, technical approval and/or trademark in these ToR shall be understood as 'or equivalent'.

7.7. Kozloduy NPP EAD staff training and qualification

Not applicable.

7.8. Delivery acceptance

Delivery shall be considered completed upon completion of a general receiving inspection (a signed certificate for completed receiving inspection without reservation) in accordance with the established procedure at Kozloduy NPP EAD stipulated in 'Quality procedure for receiving inspection of raw materials, materials and accessories supplied at Kozloduy NPP EAD', 10.УД.00.ИК.112.

7.9. Compliance with the Kozloduy NPP EAD regulations

If required to work on the site of Kozloduy NPP EAD, the Contractor shall observe the provisions of 'Quality procedure for works performed by contractors', ДБК.КД.ИИ.028.

8. Requirements to the Contractor when using subcontractors/third parties

When using subcontractors/third parties, the main Contractor shall:

- be liable for the compliance with the ToR on behalf of the subcontractors/third parties in respect of the activities performed by them as well as the quality of their work;

- define the channels for communication and interaction with their subcontractors/third parties as well as the means of control over the subcontracted activities and the persons in charge of such control;

Attachment 1

- properly and adequately define the provisions of the ToR applicable to the subcontractors/third parties under the contract depending on the activities they perform;
- define the minimum requirements to the subcontractors'/third parties' management system (MS): need for QAP, applicable codes and standards, non-conformance management procedure, scope of the documentation, tests and inspections, etc.;
- approve the subcontractors'/third parties' QAP and submit the approved QAP to Kozloduy NPP EAD for information;
- include all aforementioned requirements in the documentation under the contract with subcontractors/third parties.

ATTACHMENTS:

Attachment 1 - Technical Specification Table

TECHNICAL SPECIFICATION TABLE

for the 'Procurement of 6/10kV medium voltage power cable'

ID	Description	Standards	Quantity	Unit
138509	Power cable N2XSEH 6/10 kv, 3x150/25, mm ² with copper (Cu) cores, inner semi-conductive layer, XLPE core insulation, outer semi-conductive layer, copper braided shield around each core, insulating filler and outer insulating coating of reaction-to-fire performance (CPR) class B1ca, B2ca or Cca, without sleeving. Or equivalent.	IEC 60228; IEC 60502-2; EN 50575; DIN VDE 0276-622; EN50399; EN60332; EN61034; EN60754-2 or equivalent	2000	m