

SUMMARY

of the documentation for participation in the Negotiated Procedure with a Notice for awarding public procurement for

Design, supply and installation of 0.4 kV power supply cabinets replacing the three phase distribution cabinets for the safety systems at power units 5 and 6 and general plant facility cabinets DZ11,14,15,23,24,31,44,45,47,48; 5DZ74,75; 6 DZ74,75; LZ11,41,42,43,FZ14A02

1. GENERAL CONDITIONS

The scope of contracted activities covers two separated positions:

First separated position: Design, supply and installation of 0.4 kV power supply cabinets replacing the three phase distribution cabinets for the safety systems at power units 5 and 6
Design, supply and installation of 0.4 kV power supply cabinets replacing the three phase distribution cabinets for the safety systems at power units 5 and 6. The existing equipment should be replaced by new up-to-date and reliable equipment manufactured by companies specialized in manufacturing and sale of electrical equipment. A detailed description of the requirements to the equipment is attached to the Terms of Reference No. 2011.30.ECH.RTZO.T3.925

Second separated position: Design, supply and installation of power supply cabinets DZ11,14,15,23,24,31,44,45,47,48; 5DZ74,75; 6DZ74,75; LZ11,41,42,43,FZ14A02
Design, supply and installation of power supply cabinets DZ11,14,15,23,24,31,44,45,47,48; 5DZ74,75; 6DZ74,75; LZ11,41,42,43,FZ14A02. The full scope of activities is described in Terms of Reference No. 2011.30.ECH.DZ.T3.921.

The characteristics of the equipment under the two separated positions are described in details in the two ToRs attached to the documentation for participation in the procedure: The manufacturer of the equipment under the first separated position should have permission for manufacturing and supply of equipment for nuclear power. The Bidders bidding for the first separated position should submit evidence of their previous experience in design, supply, installation (electrical and mechanical) and commissioning of similar equipment at nuclear power plants supported by the relevant reference.

Each Bidder that has purchased documentation for participation in the procedure may apply for participation in the pre-selection process by the deadline specified in item IV.3.4.) of the Notice.

The Application for participation in the pre-selection process should contain the following:

List of documents; Documents for registration or unified identification code according to Article 23 of Trade Register Law if the Bidder is a legal entity or a sole trader; a copy of the credentials in case the Bidder is a physical person. When unified identification code is not submitted according to Article 23 of Trade Register Law, the Bidders who are legal entity or sole traders also attach to their applications for participation Certificate of Good Standing. The foreign legal entities attach an equal document issued by the court or administrative authorities in the country where they are established. Declarations for lacking the circumstances pursuant to Article 47, paragraph 1, 2 and 5 of Public Procurement Law, Declaration for involvement or non-involved of subcontractor while performing the contract, Declaration for approval the involvement of subcontractors (in case participation of subcontractor/s is envisaged); Bid Bond, Declaration for origin of the product, duly prepared document granting permission for sale (distribution) of the equipment (in case the Bidder is not the manufacturer); Declaration for submitting the Bid, Information Sheet.

The Contracting Authority shall reject from participation the Bidder that comply with provisions of Article 47, paragraph 1, 2 and 5 of Public Procurement Law. .

In order to verify their economic and financial capacity, the Bidders shall submit the following documents:

- Information about the total turnover and turnover of the services which are subject to the procurement for the past three years depending on the date, on which the Bidder was established or launched its activity;
- Information about the total turnover and turnover of the services which are subject to the procurement for nuclear power plants (for the first separated position) for the past three years depending on the date, on which the Bidder was established or launched its activity;
- Professional liability insurance pursuant to Article 171 of Territory Arrangement Law for engineering and civil and construction works for first class constructions.

As an evidence of their technical capacity and/or qualification the Bidders shall submit the following documents:

- A list of the main contracts for activities related to design, supply and installation (electrical and mechanical) and commissioning of similar equipment performed in the past three years including the contract price, dates and clients, accompanied by reference for good performance for the most important sites;
- A list of the main contracts for activities related to design, supply and installation (electrical and mechanical) and commissioning of similar equipment performed in the past three years in nuclear power plants including the contract price, dates and clients, accompanied by reference for good performance (for the Bidder bidding for the first separated position only);
- Certificates for professional engineering competence of the individuals who shall perform the design work;
- List of the individuals who perform construction and installation works and commissioning including these who are responsible for the quality control for the relevant qualification class according to Rules for safe and healthy operation of electrical equipment and Rules for safe and healthy operation of non-electrical equipment included in the list;
- Certificate for registration in the Central Professional Register of Construction Companies for implementation of third group construction sites of first category of the Bidder that shall perform construction and installation works;
- Certificate for accreditation of the laboratory for commissioning works according to ISO17020;
- Certificates issued by accredited institutions or agencies for quality management proving the compliance of the quality management system of the Bidder with BDS EN ISO 9001:2008 for design, supply, installation and commissioning of similar equipment.

Everyone may purchase tender documentation at the price of 12 BGN without VAT. The sum may be paid via bank transfer or in cash at the pay desk of Kozloduy NPP Plc. The documentation may be sent to the Bidder either through a courier or email after sending a copy of the payment order to the fax indicated in the advertisement, data for issuing the invoice and the delivery address for receiving the documentation.

The bank accessories are as follows:

Corporate Commercial Bank AD

IBAN for the account in BGN - BG 31 KORP 9220 1000 2240 01,

IBAN for the account in Euro - BG 13 KORP 9220 1000 2240 01

Corporate Commercial Bank, BIC: KORPBGSF

The date of payment shall be considered the date on which the sum is transferred to the account of Kozloduy NPP Plc. There is an electronic access to the documentation for participation in the procedure in the profile of the Contracting Authority indicated in item I.1. of the Notice.

2. TERMS OF REFERENCE

2.1. Separated position 1 Design, supply and installation of 0.4 kV power supply cabinets replacing the three phase distribution cabinets for the safety systems at power units 5 and 6

The 0,4kV **three phase distribution cabinets for the safety systems at power units 5 and 6 located in the premises at elevation 20.40 in Reactor Building and at elevation 0 in Diesel Generator Station are designed for power supply of the second category 0,4kV consumers.**

The activities included in the Terms of Reference are design, supply, dismantling of the existing three phase distribution cabinets and installation of the new 0.4 kV power supply cabinets for the safety systems at power units 5 and 6.

Identification of the number of cabinets and equipment energized from the cabinets is given in Appendix 1 of the Terms of Reference, which is a part from the documentation for participation in the procedure.

Requirements to the design:

- 1) Enhance safety of the operating and maintenance personnel for protection against the electrical current according to BDS EN 60204-1.
- 2) Improve the reliability of protection and commutation equipment through implementation of new modern equipment.
- 3) Improve the operating condition and provide maintainability of 0.4kV power supply cabinets.
- 4) Ensure diversity of control for stop and isolating valves of the safety systems (additional local independent control and signalization for valve position).

Safety and seismic classification of the equipment:

Safety class 2 according to Article 16 , paragraph 3 of Regulation on ensuring safety in nuclear power plants.

Seismic class - 1

Quality class – S.E.

General technical requirements to the design:

- 1) The existing equipment should be replaced by new up-to-date and reliable equipment manufactured by companies specialized in manufacturing and sale of electrical equipment.
- 2) The cabinets shall be manufactured in compliance with the Standard BDS EN 60439-1 and BDS EN 60204-1. The commutation equipment shall be selected in compliance with the standard EN 60947-1. The electrical compatibility of the offered equipment should comply with the standard BDS EN 61000.
- 3) The configuration and contents of new power supply cabinets with rated voltage of minimum 400 V AC and rated operating current of less than 100 A, AC shall comply with the existing layout.

Excel or Access data base for tagging all the internal and external cables shall be developed and submitted to the Contracting Authority. All labels and tags should be generated from the project local data base (external connections, internal intercabinet connections, software data base). The descriptive part shall be in Bulgarian.

Project parts:

- Mechanical Part
- Electrical Part
- I and C Part
- Heating, Ventilation, Air-conditioning Part
- Architectural Part
- Safety and Health Plan Part
- SAR Part

- Fire Safety Part

The project shall be developed in six separate parts:

- first safety system for power unit 5;
- second safety system for power unit 5;
- third safety system for power unit 5;
- first safety system for power unit 6;
- second safety system for power unit 6;
- third safety system for power unit 6;

In case of interference with the existing design solutions implemented in the compartments, in which the new equipment shall be installed, a design solution preventing from interference shall be provided.

For each of the project parts from 2.1.1. to 2.1.5. the Contractor should provide:

Explanatory note (Description of the design solution);

Interconnections with the existing equipment;

Requirements to the operation of the equipment;

Calculation note and calculations;

Drawings, diagrams and graphic materials;

Bill of quantities;

List of codes and standards.

Requirement to the validity and lifetime of the equipment:

The minimal design life of the equipment subject to supply shall be at least 30 years.

The equipment should be maintainable with a high level of reliability – the average failure mean time shall be higher than 100 000 hours.

Additional characteristics:

The operability of the equipment at ambient temperature: from -10°C to +40°C

Storage: -25°C до +50°C

Requirements to the manufacturing

The new cabinets shall be type tested according to the standard IEC 60439-1:1999 and shall comply with standard IEC 61641 on protection of the personnel and equipment.

Supervision by Kozloduy NPP:

Kozloduy NPP, if required, shall be entitled to perform audits of the quality systems of the contractors (audit by a second party) while adhering to the requirements of DOD.OK.IN.049 Quality Procedure. Conductance of audits at external organizations. The Bidders should verify in writing their consent to this condition.

Requirements to the installation

During the implementation of the project and commissioning works, the field supervision is provided, as well as submission of the modified updated design diagrams and drawings incorporating the design changes made during the installation, each page stamped “As –built”.

Upon completion of the work, the Contractor shall submit to the Contracting Authority the implemented local data base of the project both in electronic form .mdb (access) and a hard copy (external connection, internal inter-cabinet connections, software base).

The period of completion for the works (construction and installation works, as well as commissioning works) shall be less than 18 calendar day for a system taking into consideration the outage time schedule of the relevant unit.

Input data

The input data required for performance of the activities of this Terms of Reference shall be submitted to the Contractor in the language, shape and form available at Kozloduy NPP.

In case input data are not available, the Contractor shall be obliged to develop them at his expense with the support of the Contracting Authority.

Upon completion, the Contractor shall submit to the Contracting Authority the final implemented local data base of the project both in electronic form .mdb (access) and a hard copy (external connection, internal intercabinet connections, software base).

2.2. Separate position 2, Design, supply and installation of cabinets DZ11, 14, 15, 23, 24, 31, 44, 45, 47, 48; 5DZ74, 75; 6DZ74, 75; LZ11,41, 42,43, panel FZ 14A02

The 0,4kV three phase distribution cabinets for the general plant facilities at power units 5 and 6 located in the premises of the compressors, oil inventory, Water Treatment Plant, Individual Dosimetry Control, Heat Distribution Station, Circulation Pumping Station – 3, Circulation Pumping Station – 4 are designed for power supply of the third category 0,4kV consumers.

The activities included in the Terms of Reference are design, supply, dismantling of the existing cabinets and installation of the new 0.4 kV power supply cabinets for the general plant facilities at power units 5 and 6.

Identification of the number of cabinets and equipment energized from the cabinets is given in Appendix 1 of the Terms of Reference, which is a part from the documentation for participation in the procedure.

Requirements to the design:

- 1) Enhance safety of the operating and maintenance personnel for protection against the electrical current according to BDS EN 60204-1;
- 2) Improve the reliability of protections and commutation equipment through implementation of new modern equipment;
- 3) Improve the operating condition and provide maintainability of 0.4kV power supply cabinets.

Safety and seismic classification of the equipment:

The power supply cabinets 0.4 kV, DZ11, 14, 15, 23, 24, 31, 44, 45, 47, 48; 5DZ74, 75; 6DZ74, 75; LZ11,41, 42,43, panel FZ 14A02 are identified as:

Safety class - 4 H

Seismic resistance class - 3

General technical requirements to the design:

- 1) The cabinets shall be manufactured in compliance with the Standard BDS EN 60439-1 and BDS EN 60204-1. The commutation equipment shall be selected in compliance with the standard EN 60947-1. The electrical compatibility of the offered equipment should comply with the standard BDS EN 61000.
- 2) The configuration and content of the new power supply cabinets with rated voltage of minimum 400 V AC and rated operating current of not higher than 100 A, AC shall comply with the existing layout.
- 3) Excel or Access data base for labelling of all internal and external cables shall be developed and submitted to the Contracting Authority. All labels and marks should be generated from the local data base of the design (external connections, internal intercabinet connections, software data base). The descriptive part shall be in Bulgarian;
- 4) The project shall be developed in three separate parts – power unit 5, power unit 6, general plant facilities.

The project parts related to technology are:

- Mechanical Part
- Electrical Part
- I and C Part
- Architectural Part

- Safety and Health Plan Part
- SAR Part
- Fire Safety Part

For each of the project parts from 2.1.1. to 2.1.5. the Contractor should provide:

Explanatory note (Description of the design solution);

Interconnections with the existing equipment;

Requirements to the operation of the equipment;

Calculation note and calculations;

Drawing, diagrams and graphic materials;

Bill of quantities;

List of codes and standards;

Requirement to the validity and lifetime of the equipment:

The minimal design life of the equipment subject to supply shall be at least 30 years.

The equipment should be maintainable with a high level of reliability – the average failure mean time shall be higher than 100 000 hours.

Additional characteristics:

The operability of the equipment at ambient temperature: from -10°C to +40°C.

Storage condition of the equipment from -25°C to +50°C.

Requirements to the manufacturing:

The new cabinets shall be type testes according to the standard IEC 60439-1:1999 and shall comply with standard IEC 61641 on protection of the personnel and equipment.

Supervision by Kozloduy NPP during the performance of the activities:

Kozloduy NPP, if required, shall be entitled to perform audits of the quality systems of the contractors (audit by a second party) while adhering to the requirements of DOD.OK.IN.049 Quality Procedure. Conductance of audits of external organizations. The Bidders should verify in writing their consent to this condition.

Requirements to the installation

During the implementation of the project and commissioning works, field supervision and submission of the corrected updated design diagrams and drawings with the design changes made during the installation, each page stamped “As –build” is provided.

Upon completion of the work, the Contractor shall submit to the Contracting Authority the final implemented data base of the project in electronic form .mdb (access) and a hard copy (external connection, internal intercabinet connections, software base).

The project of power supply cabinets 5, 6 DZ 74, 75 shall be implemented during the outage at power units 5 and 6. The implementation of the project of power supply cabinets for general plant facilities shall be independent from the outage at power units 5 and 6. The detailed design should be accepted without non-conformities by the Contracting Authority six months prior to the outage.

Input data

The input data required for performance of the activities of this Terms of Reference shall be submitted to the Contractor in language, form and type available at Kozloduy NPP.

For preparation of the detailed design, the Contracting Authority shall submit detailed installation diagrams and diagrams of the terminal strips with cable connection.

In case input data are not available, the Contractor shall be obliged to develop them at his expense with the support of the Contracting Authority.

Upon completion, the Contractor shall submit to the Contracting Authority the final implemented data base of the project both in electronic form .mdb (access) and as a hard copy (external connection, internal intercabinet connections, software base).

3. CRITERIA AND METHODS FOR EVALUATION OF THE BIDS

Criteria	Relative weighting for the complex evaluation	Scores	Awarding criteria
Bid evaluation criteria for performance of the procurement:			
<p>Criteria 1 Concept and plan for management of the activities for performance of the scope of the Terms of Reference</p>	10%	Maximum scores 100	<p>1. Upon complete and detailed submission of the Work Programme in compliance with the requirements of the Terms of Reference including:</p> <ul style="list-style-type: none"> - Description of the arrangement for performance of the activities (scope, sequence, support and supervision); - Responsibilities and liabilities of the personnel of the Bidder while performing the activities; - Completion schedule of the procedural phases; - Requirements to the products which are purchased and traceability while performing the activities. Procedure for verification of the compliance of delivered product with the identified requirements; - Documents certifying the supervision of the entire process for performance of the activities; <p style="text-align: center;">The Bid shall be scored from 70 to 100.</p> <p>2. In case of omissions and incomplete description of one or more of the above components - from 31 to 69 scores.</p> <p>3. In case of omission of one or more of the components and/or omissions and incomplete description of the arrangement for performance of the activity – from 1 to 30 scores.</p>
<p>Criteria 2 Period of completion for construction and installation works:</p> <p>2.1. Period of completion for construction and installation works on the first systems and</p> <p>2.2. Period of completion for construction and installation works for every other system Cr=Cr2.1+Cr2.2</p>	30 %	Maximum scores 100	<p>Criteria 2.1 The offer of the Bidder for the period of completion for construction and installation works for the first system shall be scored as follows:</p> <ul style="list-style-type: none"> up to 10 days – 50 scores from 10 to 12 days – 40 scores from 12 to 14 days – 30 scores from 14 to 16 days – 20 scores and from 16 to 18 days – 10 scores <p>Criteria 2.2 The offer of the Bidder for the period of completion for construction and installation works for every other system shall be evaluated as follows:</p> <ul style="list-style-type: none"> up to 7 days – 50 scores from 7 to 9 days – 40 scores from 9 to 12 days – 30 scores from 12 to 15 days – 20 scores from 15 to 18 days – 10 scores

Criteria 3 Main characteristics of the offered equipment and materials including completeness of the delivery according to the requirements specified in the Terms of Reference	20 %	Maximum scores 100	1. The offer of the Bidder offering equipment with better characteristics compared to the Terms of Reference and its requirements in terms of: <ul style="list-style-type: none"> - Equipment parameters; - Compatibility to the existing equipment; - shall be awarded maximum of 100 scores; 2. The remaining Bids shall be scored for the type and characteristics of the main equipment and materials offered.
Warranty period for construction and installation works and warranty liabilities for the offered equipment Cr4=Cr4.1+Cr4.2	10%	Maximum scores 100	Criteria 4.1 – The offer of the Bidders for the warranty period for completed construction and installation works according to Regulation No. 2 dated from 31 July 2003 on commissioning of constructions in the Republic of Bulgaria and minimal warranty periods of completion for civil construction works, facilities and construction sites shall be awarded of 50 scores. <ul style="list-style-type: none"> - For every additional year this value shall be increased by 5 scores but not more than 80 scores per a Bidder. Criteria 4.2 <ul style="list-style-type: none"> - for warranty period for the offered equipment of 12 months, 10 scores are awarded; - for warranty period of the offered equipment of 12 to 24 months, 15 scores are awarded; - for periods over 24 months, 20 scores are awarded. <i>Criteria 3.2. evaluates the offered electrical equipment only (air conditioning and ventilation equipment, electrical boards and systems)</i>
Evaluation criteria of the offered price			
Coefficient 5 – Offered price	30 %	Maximum scores 100	The criteria shall be calculated using the following formula: $P_n = P_{min}/P_i * 100$, whereas P_n is the evaluation of the n^{th} total score, P_{min} is the lowest total Bid price offered by the Bidder, P_i is the offered total price by the relevant Bidder.

4. Draft Contract

The Bidder shall complete and initial the Draft Contract attached to the documentation for participation in the procedure. In case of disagreement with the its clauses, the Bidder shall also attach a proposal for changes and / or amendment to the clauses of the draft contract.

4.1. PRICE AND TERMS OF PAYMENT

The CONTRACTING AUTHORITY shall pay in stages specified in the Work Programme and Time Schedule of the CONTRACTOR as follows:

– Payment within a period of 15 /fifteen/ working days after the Shorten Conceptual Design Phase (for the second separated position) is submitted and accepted at the Technical Committee of the CONTRACTING AUTHORITY, upon submission of an original invoice for the price of

Conceptual Design and Report for acceptance without comments at the Technical Committee of the CONTRACTING PARTY.

- **Payment** within a period of 15 /fifteen/ working days after the Detailed Design is submitted and accepted at the Technical Committee of the CONTRACTING AUTHORITY upon submission of an original invoice for the price of Detailed Design and Report for acceptance without comments at the Technical Committee of the CONTRACTING AUTHORITY.
- Payment, in stages, within a period of 15 /fifteen/ working days after the equipment delivery is accepted, and upon submission of an original invoice, Taking-over Report and performed conformity incoming inspection report.
- Payment, in stages, within a period of 15 /fifteen/ working days after the submission of Certificate of Completion and payment of the basic construction and installation works, as well as submission of an original invoice for the price of installation and Report for performed functional tests.
- Payment within a period of 15 /fifteen/ working days after the submission of Report on training provided to the personnel and submission of an original invoice for the price of training.

4.2. DELIVERY PERIODS

The period of completion for the activities shall start to run on the date the CONTRACTOR is notified of the document review sheet approval by the Safety and Quality Directorate.

4.3. OBLIGATIONS OF THE PARTIES

The CONTRACTING AUTHORITY shall be obliged to:

1. Provide the CONTRACTOR with the necessary input data within a 10 day period as from the signature of the Contract.
2. Submit the requested additional input data, within a 20 /ten/ calendar day period upon written request.
3. Provide the required support to the CONTRACTOR for performance of the contracted work;
4. Appoint Technical Committee to review and accept the designs pursuant to the conditions of this Contract;
5. Notify, at least three working days earlier, the CONTRACTOR for participation in the Technical Committee;
6. Accept the Goods of the CONTRACTOR in the terms of the provisions of this Contract;
7. Incoming inspection shall be performed in the presence of the CONTRACTOR or his authorized person to verify any lack of visible defects, completeness of the Goods and all required documents. If any visible defects or lack of conformity of the Goods with certificates/declarations are found, the CONTRACTING AUTHORITY shall not accept the Goods.
8. Pay the CONTRACTOR the contracted price for the work accepted pursuant to the terms and conditions of this Contract;

The CONTRACTOR shall be obliged to:

1. Perform the contracted work to the highest professional standards within the terms indicated in the Time Schedule;
2. Submit a list of additional design input data, if required, within a 10 /ten/ working day period after the necessary input data is received.
3. Submit the developed design in 7 (seven) copies as a hard copy and 1 (one) copy in electronic form.
4. Remedy the non-compliances and deficiencies in the submitted documentation, which are found by the CONTRACTING AUTHORITY, at his expense, and replace the corrected designs in person. All corrections or revisions shall be also submitted in electronic form.
5. Attend, if required, when discussing the results at the Technical Committee of the CONTRACTING AUTHORITY.

6. Prepare final Technical Specification for supply of the equipment at the Detailed Design phase, which is inseparable part of this Contract.
7. Prepare final Bill of Materials with codes for the types of works at the Detailed Design phase.
8. After the acceptance of the Detailed Design, value the Bill of Materials and Technical Specification according to the pricing indicators in Offered price. After agreement with the CONTRACTING AUTHORITY, the Bill of Materials and Technical Specification shall become inseparable part of this Contract.
9. Complete the deliveries in stages according to the time schedule for delivery of the equipment of the CONTRACTOR after the acceptance of the Detailed Design at Technical Committee of the CONTRACTING AUTHORITY.
10. Insure its professional liability for damages caused to the other participants in the construction and /or third parties resulting from the acts of omissions and commissions during and in relation to the performance of their obligations.
11. Put the stamp of professional engineering design competence on each copy of the design;
12. Notify the CONTRACTING AUTHORITY of the procedure for performance of the separate types of works providing possibility for their supervision.
13. The Detailed Design shall comply with the requirements of Regulation No. 4, dated 21st May 2001, on the scope and contents of the investment projects.
14. The CONTRACTOR shall provide training to the personnel of the CONTRACTING AUTHORITY as follows

This Summary contains the highlights of the contents of the documentation for participation in the procedure. The main purpose of the summary is a brief and summarized presentation of the content of the initial text.. The summary is brought to the attention of all foreign parties who are interested in the participation in the procedure.