



TPP MARITSA EAST 2 EAD

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DOCUMENTATION

for public procurement,
direct agreement procedure reg. No. 17104 and subject:

„Cost analysis relating to the achievement of the emission levels specified in
BATC”

CONTENTS OF THE DOCUMENTATION

No.	Name
1.	Invitation to tender
2.	Sample of initial offer
3.	Draft contract

I N V I T A T I O N

to tender in a direct agreement procedure

Dear Ladies and Gentlemen,

We hereby send an invitation to tender in a direct agreement procedure **reg. No. 17104** under the following terms and conditions:

1. Subject of procurement: Cost analysis relating to the achievement of the emission levels specified in Best Available Techniques Conclusions (BATC), as per Terms of Reference – Appendix 1.

CPV code: 90711400 – Services for assessment of the environmental impact for purposes different from those in construction.

2. Term of completion of the procurement: 45 (forty-five) days as of the date of signing a contract.

3. Criterion for awarding the procurement: The most economically advantageous offer determined on the basis of the awarding criterion „lowest price“

4. Place and date for conducting negotiations:

4.1. Negotiations shall be held in the Meeting room of TPP Maritsa East 2 EAD.

4.2. Negotiations will be held at 13.00 hours on 27 Sep 2017.

5. Other requirements:

The bidder shall submit an „Offer“ according to sample provided by the contracting authority, comprising:

- European Single Procurement Document (ESPD). Based on Art. 42, para 1 of the Public Procurement Act Implementing Regulations, the Contracting Authority allows for the option the information regarding conformity with the selection criteria to be submitted by filling in ESPD just part IV "Selection criteria", section "General instructions on all selection criteria".

Note: In Section III(D) ESPD applicants or bidders shall fill in the relevant information certifying the lack of reasons for removal from the procedure pursuant to Art. 3, item 8 and Art. 4 of the Act on the Economic and Financial Relations with Companies Registered in Preferential Tax Regime Jurisdictions, the Persons Related to Them and Their Beneficial Owners

- Documents proving the adopted reliability measures, if applicable.

- An authorisation document when the person submitting the bid is not the bidder's legal representative

- Technical offer (free text format), containing a proposal for completion of the procurement in compliance with the contracting authority's terms of reference – Appendix 1

- Price offer (free text format)

The offer shall be submitted at Public Procurements Registration desk at TPP Maritsa East 2 EAD, village of Kovachevo, postal code 6265 in a sealed non-transparent package, stating:

1. the bidder's name;
2. address for correspondence, telephone and if possible – fax and email address;
3. name of procurement and if applicable – the lots for which the documents are submitted.

Offers can be submitted in Bulgarian and/or English. A leading language in conducting the negotiations and organizing the procedure shall be the Bulgarian language.

Deadline for submitting the offer until 11.00 hours on 27 Sep 2017.

6. Contact person:

Dpl.eng. Petya Sabcheva – Commercial specialist at the Commercial Department, contact tel.: +359 42 662544

Appendix 1 - Terms of Reference

Terms of Reference

**Cost analysis for achievement of the emission levels
specified in the BAT Conclusions**

Table of Contents

- A. Terms and Acronyms
- B. Subject
- C. General information
- D. Scope

A. Terms and Acronyms

Contractor – the company awarded with the contract subject to this procedure.

Sub-contractor – the companies which provide services for the Contractor

EC – European Commission

ELV – Emission limit level

LCP – Large combustion plant

FGD – Flue Gas Desulphurization installation

ESP – Electrostatic precipitator

APH – Air preheater

GID – Gas-intake duct

BREF – Best Available Techniques Reference Document

BAT – Best Available Techniques

EU – European Union

Primary measures – measures to control and reduce emissions in the combustion process

Secondary measures –reduction of emissions after the outlet of a combustion chamber by affecting the already formed oxides

B. Subject

Cost analysis for achievement of the emission levels specified in the BAT Conclusion

C. General information

Commission Implementing Decision (EU) 2017/1442 of 31 July 2017 establishing best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for large combustion plants (notified under document C(2017) 5225) was published on 17 August 2017 in the Official Journal of the European Union, which is the effective date of this Document. With the adoption of the Document, new higher emission limit values are introduced, inclusive of sulfur dioxide, mercury, nitrogen oxides, carbon monoxide and dust, which the operators are required to achieve or benefit from an opportunity to apply for a derogation as provided for in Article 123a, paragraph 3 of the Environmental Protection Act (EPA).

The main raw material used by TPP Maritsa East 2 EAD in the production of electricity is lignite extracted from the East Maritsa Basin, characterized by high sulfur content and mercury content insufficiently studied at the present.

As of 17 August 2017, the date of publication of the Implementing Decision in the Official Journal of the European Union, a 6-month deadline for submission of the documents required for revision of the IPPC complex permits issued to companies in accordance with Article 16, paragraph 3, point 4, indent a) of the Ordinance on issuing procedures for IPPC complex permits adopted by Letter of the Council of Ministers under ref. No. 238 dated 2.10.2009. IPPC complex permits contain appropriate requirements for bringing the installations in compliance with the adopted provisions within 4 years in accordance with Article 124, paragraph 6 of the

Environmental Protection Act, from the publication of the Implementing Decision, and such requirements in the event of a derogation granted.

The company intends to apply for a derogation. To this end, it should award a public procurement contract with the following forecast subject: **Cost analysis for achievement of the emission levels specified in the BAT Conclusion.**

By Implementing Decision (EU) 2017/1442 of 31 July 2017 (published on 17.08.2017), under Directive 2010/75/EU of the European Parliament, the European Commission adopted the established conclusions for the best available techniques (BATC) for the large combustion plants (LCP).

Emission limit values to be achieved by applying BAT for air emissions shown in the current conclusions are expressed in mass of emitted substance per volume of flue gas under the following standard conditions:

- Dry gas at temperature 273.15 K and pressure 101.3 kPa, expressed in mg/Nm³, µg/Nm³ or ng I-TEQ/Nm³.
- Reference oxygen level O^{ref} = 6 % by volume.

Yearly average and daily average values of emission limit levels for TPP Maritsa East 2 EAD applying BAT are shown in Table 1 under the following conditions:

- Lignite combustion;
- Total rated thermal input exceeding 300 MW_{th};
- Commissioned not later than 7 January 2014.

Table 1 Emission limit values of TPP Maritsa East 2 EAD in accordance with the BAT conclusions published in 2017.

Pollutant	Value	
	Yearly average	Daily average
Nitrogen oxides - NO _x	175 mg/Nm ³	220 mg/Nm ³
Sulphur oxides - SO _x	≥97% efficiency of FGD plant, but not more than 320 mg/Nm ³	nil
Carbon monoxide - CO	100 mg/Nm ³	100 mg/Nm ³
Dust	8 mg/Nm ³	14 mg/Nm ³
Mercury - Hg	7 µg/Nm ³	nil

I. Activities and measures to achieve emission limit levels applying BAT for nitrogen oxides – NO_x. (BAT 20):

1. Assessment of the emissions of nitrogen oxides generated by the power boilers of TPP Maritsa East 2 EAD based on real data from the continuous monitoring system and own measurements.

2. Analysis of the possibility of achieving emission limit levels in accordance with Table 1, only and solely by applying of “primary measures”. These emission limits have to be fulfilled in all normal operating conditions of the power boilers of the plant.
3. Assessment of the possibility of further reduction of NO_x emissions by applying secondary measures to reduce them. (selective non-catalytic reduction).
4. Assessment of capital and operating expenses necessary to be made by TPP Maritsa East 2 EAD according to the activities proposed under item 2 and item 3 above.
5. All proposed measures to reduce nitrogen oxides (under item 2 and item 3 above) shall be in compliance with the following restraining factors:
 - i. The carbon monoxide (CO) emission values shall meet the emission limit levels according to Table 1;
 - ii. The efficiency of the power boilers shall be maintained at their current levels;
 - iii. Do not allow slagging of:
 - a. Transfer surface of combustion chamber;
 - b. Gas-intake ducts of boilers;
 - c. Convection heated primary superheaters.
 - iv. Metal corrosion in power boilers shall not be allowed.

II. Activities and measures to achieve emission limit levels applying BAT for sulphur oxides – SO_x. (BAT 21);

1. Analysis of SO_x emissions downstream FGD plants of TPP Maritsa East 2 EAD based on real data from the continuous monitoring system.
2. Assessment of the level of cleaning of flue gas from sulphur oxides by FGD plants operated at TPP Maritsa East 2 EAD.
3. Identification of implementing measures by TPP Maritsa East 2 EAD for each FGD plant to achieve a level of cleaning of flue gas from SO_x ≥ 97 %;
 - i. Assessment of capital expenses to achieve a level of cleaning of flue gas from SO_x of 97 % for each FGD plant;
 - ii. Assessment of operating expenses to achieve a level of cleaning of flue gas from SO_x of 97 % for each FGD plant;
4. Identification of implementing measures by TPP Maritsa East 2 EAD for each FGD plant to achieve emissions of not more than 320 mg/Nm³ at O₂^{ref}=6 %. When choosing the necessary measures under this item, the following assessments shall also be made:
 - i. Assessment of the estimated content of sulphur (S) in lignite supplied by Mini Maritsa East EAD in the next 10 years;
 - ii. Assessment of capital expenses to achieve SO_x emissions ≤ 320 mg/Nm³ at O₂^{ref}=6 % for each FGD plant;
 - iii. Assessment of operating expenses to achieve SO_x emissions ≤ 320 mg/Nm³ at O₂^{ref}=6 % for each FGD plant;
5. All identified measures for SO_x emission reduction, defined in item 3 and item 4 above, shall not lead to deterioration of the values of other pollutants which are subject to continuous monitoring.

III. Activities and measures to achieve emission limit levels applying BAT for dust (BAT 22):

1. Analysis of the dust emissions generated by the power boilers at TPP Maritsa East 2 EAD based on real data from the continuous monitoring system.
2. Identification of measures to be implemented by TPP Maritza East 2 EAD in order to meet the new emission limit values in accordance with BREF as shown in Table 1.
3. Assessment of expenses (capital and operating expenses) necessary to be made by TPP Maritsa East 2 EAD according to the values proposed under item 2.
4. All identified measures for dust emission reduction, defined in item 2 above, shall not lead to deterioration of the values of other pollutants which are subject to continuous monitoring.

IV. Activities and measures to achieve emission limit levels applying BAT for mercury - Hg (BAT 23):

1. Preparation of material balance analysis for mercury (Hg) for TPP Maritsa East 2 EAD. For its preparation, the content of Hg shall be analyzed in:
 - i. Lignite;
 - ii. Ash from:
 - a. Wet hopper;
 - b. Outdoor air preheater;
 - c. Electrostatic precipitator (ESP);
 - iii. Flue gases downstream FGD;
 - iv. Limestone;
 - v. FGD gypsum;
 - a. Water;
 - b. Soil;
 - c. Fuel oil;
 - d. and others.
2. Assessment of the estimated content of mercury (Hg) in lignite supplied by Mini Maritsa East EAD in the next 10 years.
3. Identification of measures to be implemented by TPP Maritsa East 2 EAD in order to meet the emission limit values for mercury in accordance with BREF as shown in Table 1. According to the data obtained for the material balance for mercury under item 1 and estimated values of mercury content in coal to be supplied for firing at TPP Maritza East 2 EAD, the following alternatives shall be developed:
 - i. Realistic scenario – involves maintaining the mercury content in coal as it is now;
 - ii. Pessimistic scenario – involves increasing the mercury content in coal supplied.
4. Assessment of capital and operating expenses necessary to be made by TPP Maritza East 2 EAD according to the values proposed under item 3.

5. All identified measures for mercury emission reduction, defined in item 3 above, shall not lead to deterioration of the values of other pollutants which are subject to continuous monitoring.

V. Assessment of the increase in the cost of electricity produced as a result of the application of each of the measures for implementation of the BAT conclusions published in 2017.

In execution of the task, a final report shall be prepared in 2 (two) copies, which shall be submitted to the Employer by a Handover Certificate. If the report is in English, it should be accompanied by an official translation.

OFFER
for bidding in a procedure for public procurement

Bidder:.....
Head office and address of management:.....
.....
tel., fax:.....
UIC Bulstat:
Disbursement account:
IBAN:.....;
BIC:.....
bank:
city/branch/office:.....
represented by
position:.....

Deal Sirs,

We hereby submit our bid for participation in the public procurement procedure announced by you **reg. No. 17104** subject: „**Cost analysis relating to achievement of the emission levels stated in BATC**”, as per Terms of Reference – Appendix 1.

We hereby declare that we have received bidding documentation and are familiar with the instructions and terms and conditions for bidding in the procedure announced by You and the requirements of the Public Procurement Act. We agree with the conditions set by You and we accept them unconditionally.

Pursuant to Art. 39, para 3, item 1(c) of the Public Procurement Act Implementing Regulations, we hereby declare that we are acquainted with and accept the terms and conditions in the draft contract, enclosed to the bidding documentation in the public procurement procedure.

Pursuant to Art. 39, para 3, item 1(d) of the Public Procurement Act Implementing Regulations, we hereby declare that we agree to stay with that offer for a period of 60 (sixty) days following the date set as deadline for submitting the offer and it will remain binding for us as it may be accepted at any time prior to expiry of that term.

In case our bid is accepted and we are nominated a contractor, we shall submit the following documents upon signing the contract:

1. Conviction status certificate relating to the circumstances as per Art. 54, para 1, item 1 of the Public Procurement Act;

2. Certificates relating to the circumstance as per Art. 54, para 1, item 3 of the Public Procurement Act:

2.1. Certificate from the revenue authorities relating to available or missing payables to the state;

2.2. Certificate for missing payables to the municipality of the Bidder's tax registration;

2.3. Certificate for missing payables to the municipality of the Contracting Authority's tax registration;

3. Certificate by the authorities of „Chief Labour Inspection” Executive Agency for missing circumstances as per Art. 54, para 1, item 6 of the Public Procurement Act;

4. Declaration for the circumstances as per Art. 54, para 1, items 4, 5 and 7 in relation to Art. 67, para 6 of the Public Procurement Act – a sample provided by the Contracting Authority;

5. Declaration as per Art. 4, para 7 and Art. 6, para 5, item 3 of the Measures Against Money Laundering Act – a sample provided by the Contracting Authority;

6. Declaration as per Art. 6, para 2 of the Measures Against Money Laundering Act – a sample provided by the Contracting Authority;

We hereby enclose to the present bid:

- European Single Procurement Document (ESPD) for the bidder
- documents proving the adopted reliability measures, if applicable.
- an authorisation document when the person submitting the bid is not the bidder’s legal representative
- **Technical offer**, containing a proposal for completion of the procurement in compliance with the contracting authority’s terms of reference
- **Price offer**

Other documents at the bidder’s discretion:

.....

Signature.....

Date:

Name:

City:

Position:

CONTRACT
FOR PROCUREMENT OF Services

On this day of 2017, this contract, between:

1., hereinafter referred to as CONTRACTING AUTHORITY, and
- 2....., hereinafter referred to as CONTRACTOR, this contract is concluded as a result of conducted public procurement procedure through, reg. No. ...for the following:

DEFINITIONS

In this contract unless the context otherwise requires, the following words and phrases shall have the following meanings:

“Contract” – this document with all the attachments and appendices.

1. SUBJECT OF THE CONTRACT

The CONTRACTING AUTHORITY assigns and the CONTRACTOR accepts to complete “Cost analysis relating to the achievement of the emission levels specified in BATC”, as per Terms of Reference – Appendix 1, Offer – Appendix 2 and Minutes from the negotiation – Appendix No. 3.

2. PRICE AND METHOD OF PAYMENT

2.1. The total price of the contract amounts to...../...../, VAT excluded (“CONTRACT PRICE”)

2.2. The contract prices is fixed for the term of the present contract and is not subject to change.

2.3. The payment for the completed works shall be made as follows:

2.3.1. (SUBJECT TO NEGOTIATIONS)

Payment shall be made within 30 days after submitting an invoice and a Handover Certificate for the completed works for the final report.

2.4. Payment shall be made through bank transfer in currency according to the Contractor’s Offer. The bank fees at the Contractor’s bank are at the Contractor’s expense, the bank fees at the Contracting Authority’s bank are at the expense of the Contracting Authority. The bank accounts of the Parties are:

CONTRACTING AUTHORITY:

.....

CONTRACTOR:

.....

3. TERM OF THE CONTRACT

3.1. The time for completion shall be 45 (forty-five) days after signing the contract.

4. RIGHTS AND OBLIGATIONS OF THE PARTIES

The listing of specific rights and obligations of the Parties in this section of the Contract is non-exhaustive and does not affect the effect of other clauses in the Contract or the applicable law providing for rights and/or obligations of either Party.

General rights and obligations of the CONTRACTOR

4.1. The CONTRACTOR shall be entitled to:

1. receive remuneration in the amount, terms and conditions hereof;
2. seek and obtain from the CONTRACTING AUTHORITY the relevant assistance for the fulfillment of the obligations hereunder, as well as all relevant documents, information and data directly related or necessary for the completion of the Contract;

4.2. The CONTRACTOR undertakes to:

1. provide the Service and fulfill his obligations under this Contract within the agreed deadlines and in compliance with the Contract and the Appendices;
2. submit to the CONTRACTING AUTHORITY a final report

General rights and obligations of the CONTRACTING AUTHORITY

4.3. The CONTRACTING AUTHORITY shall be entitled to:

1. receive the Service as agreed herein;
2. request from the CONTRACTOR to revise or elaborate on any document prepared under this contract, as agreed in it;

4.4. The CONTRACTING AUTHORITY undertakes to:

1. pay to the CONTRACTOR the Price in the amount, according to the procedure and under the conditions stipulated herein;
2. provide and secure access of the CONTRACTOR to the information necessary for the performance of the Services, subject to the Contract;

5. PENALTIES AND LIMIT OF LIABILITY

5.1. In case the CONTRACTOR fails to fulfill at his own fault any of the obligations resulting from this contract and/or delays the completion of fulfillment within the agreed time, except in the case of Force Majeure, penalty amounting to 0,10 % shall be due by the CONTRACTOR for each day of delay, but not more than 5 % of the total contract price.

5.2. The aggregate liability, save for willful misconduct or gross negligence, of the Contractor is limited to the Contract price. The Contractor shall not be liable for indirect or consequential damages.

6. CONTRACT TERMINATION

This contract is terminated in case of:

- 6.1. Terms expiration of the contract;

6.2. Mutual agreement by both parties, expressed in writing.

7. CONFIDENTIALITY

7.1. Confidential information comprises, but is not limited to: any financial, commercial, technical or other information, analyses, compiled materials, research, documents or other material relating to the business, management or business of the other Party, of any nature or in any form, including financial and operational results, markets, current or potential clients, property, working methods, personnel, contracts, engagements, legal issues or strategies, products, documentation processes, drawings, specifications, diagrams, plans, notifications, data, samples, models, samples, software, software applications, computer devices or other materials or records or other information, whether in written or oral or on a computer disk or other device.

7.2. Except for the cases specified in 7.3. hereof, Confidential Information may be revealed only following prior written consent by the other Party, this consent shall not be denied groundlessly.

7.3. The obligations for non-disclosure of confidential information shall not be deemed in violation when:

7.3.1. the information has become or becomes publicly available without any breach of this Contract by any of the Parties;

7.3.2. the information is required by a law applicable to any of the Parties; or

7.3.3. the provision of the information is required by a regulatory or other competent authority and the respective Party is required to fulfill such a requirement;

In the cases referred to in 7.3.2 or 7.3.3, the Party which is to provide the information shall immediately notify the other Party of the Contract.

7.4. The obligations under this clause refer to the CONTRACTOR, all its subsidiaries, companies and organisations controlled by him, all his employees and natural or legal persons hired by him, and the CONTRACTOR is responsible for the fulfillment of these obligations by such persons.

Obligations relating to the non-disclosure of Confidential Information remain in force after termination of the Contract on any ground.

8. ASSIGNMENT OF RIGHTS AND OBLIGATIONS

Neither Party may assign any of the rights and obligations arising from this Contract without the consent of the other Party. Cash receivables under the Contract may be transferred or billed under the applicable law.

9. SEVERABILITY

If any of the clauses of this contract is or becomes invalid, this does not affect the remaining part of the contract. In that case the invalid clause shall be considered replaced with a legally valid one in a way compatible with the applicable legislation.

10. GOVERNING LAW

10.1. This Contract, incl. the Appendices thereto, as well as all agreements resulting from or related to it, and all rights and obligations related to it shall be governed by and construed in accordance with the laws of Bulgaria.

10.2. Any dispute between the parties arising out of or in connection with this Contract which cannot be amicably resolved shall be finally settled by the competent Bulgarian court.

The present agreement was signed in two identical originals in Bulgarian (and English) language. In the event of conflict between the English and Bulgarian text, the Bulgarian version shall prevail.

An integral part of the present contract are:

- Appendix 1 – Contracting Authority’s Terms of Reference
- Appendix 2 – Contractor’s Offer (technical and price offer)
- Appendix 3 – Minutes from the negotiation

CONTRACTING AUTHORITY:

CONTRACTOR: