

AGREEMENT

The agreement dated this 13th day of December 2019 between:

- Zvolenská teplárenská, a.s. with its registered seat at Lučenecká cesta 25, Zvolen 961 50, Slovak Republic, company identification number (*IČO*): 36 052 248, registered in the commercial register of the District Court Banská Bystrica, section Sa, insert No. 686/S;
Bank: Všeobecná úverová banka, bank account IBAN No.: SK47 0200 0000 0035 9641 7758

(hereinafter called "the Client") of the one part;

and

- e.mcc energy, s.r.o. of with its registered seat at Kpt. Jána Nálepku 78, 934 01 Levice, Slovakia, company identification number (*IČO*): 43 981 631, registered in the commercial register of the District Court Nitra, section Sro, insert 21566/N;
Bank: ČSOB, bank account IBAN No.: SK86 7500 0000 0040 1210 6775
on behalf of Consortium EMCC AF ZVT

(hereinafter called "the Consultant") of the other part

WHEREAS the Client desires that certain Services should be performed by the Consultant, namely

CONSTRUCTION SUPERVISION, ROLE OF FIDIC ENGINEER

and has accepted proposal by the Consultant for the performance of such services.

THE CLIENT AND THE CONSULTANT AGREE AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in Clause 1.1 of the General Conditions of the Client/Consultant Model Services Agreement.
2. The following documents shall be deemed to form and be read and construed as part of the Agreement and shall be given the order of precedence as below:

(a) This Form of Agreement;

(b) The Client/Consultant Model Services Agreement;

- i. Particular Conditions;
- ii. General Conditions;

(c) Appendices, namely:

- Appendix 1: Scope of Services
- Appendix 2: Personnel, Equipment, Facilities and Services of Others to be provided by the Client
- Appendix 3: Remuneration and Payment
- Appendix 4: Programme
- Appendix 5: Rules for Adjudication

- (d) Any letter of acceptance by the Client incorporated into the Agreement under Sub-Clause 1.1.1;
and
Any letter of offer/proposal by the Consultant incorporated into the Agreement under Sub-Clause 1.1.1.

3. In consideration of the payments to be made by the Client to the Consultant under this Agreement, the Consultant hereby agrees with the Client to perform the Services in the conformity with the provisions of the Agreement.
4. The Client hereby agrees to pay the Consultant in consideration of the performance of the Services such amounts as may become payable under the provisions of the Agreement at times and in manner prescribed by the Agreement.

AUTHORISED SIGNATURE(S) OF CLIENT

Signature 

Name: Ing. Jozef Pobiecký

Position: General Director, Chairman of the Board of Directors

Address: Lučenecká cesta 25, 961 50 Zvolen, Slovakia

AUTHORISED SIGNATURE(S) OF CONSULTANT

Signature 
e.mcc energy s.r.o.
Kpt. Nálepku 78, 934 01 Levice
ICO: 43 981 631, DIČ: 2022540905

Name: M.G. MARIAN KOTRELS

Position: _____

Address: Kpt. Jána Nálepku 78, 934 01 Levice, Slovakia

Signature 

Name: RNDr. Miroslav Duplinský

Position: Member of the Board of Directors and Director of Production and Maintenance

Address: Lučenecká cesta 25, 961 50 Zvolen, Slovakia

Zvolenská teplárenská, a.s.
Lučenecká cesta 25
961 50 ZVOLEN
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PARTICULAR CONDITIONS OF THE CONTRACT

A. References from Clauses in the General Conditions

1.1. Definitions

1.1.4. Client's Representative:

RNDr. Miroslav Duplinský
Member of the Board of Directors and
Director of Production and Maintenance
E-mail: duplinsky@zvtp.sk

1.1.5. Commencement date: 14 days after the Effective Date

1.1.9. Principal place of business: Slovak Republic

1.1.22. Project:

Zvolen District Heating Project – Construction supervision, role of FIDIC engineer

1.1.24 Completion: 24 months after the Commencement of services

1.3. Notices and Other Communication

1.3.1. Client's address:

Zvolenská teplárenská, a.s.
Lučenecká cesta 25
961 50 Zvolen
Slovakia

1.3.1. Consultant's Address:

e.mcc energy, s.r.o.
Kpt. Jána Nálepku 78
934 01 Levice, Slovakia

1.4. Language(s) of the Agreement: English

1.4.1 Law Governing Agreement: Law of Slovak Republic

1.4.2. Ruling language of Agreement: English

8.2.1. Period of Liability: 42 days

Reckoned from: Date of occurrence of the event, as a basis of claim

8.3.1. Limit of Liability: **10% of Contract Price**

10.4.1 Arbitration Rules: The President of FIDIC or a person appointed by the President

B. Additional or Amended Clauses

7.2.1. Time for Payment: 42 days

Agreed Compensation for overdue payment: 0,01% percent per day

7.3.1. Currency of Agreement: Euro

APPENDIX 1 - SCOPE OF SERVICES

The Scope of the Consultant's Services will be the Terms of Reference together with the Particular conditions of the Contract.

APPENDIX 2 - PERSONNEL, EQUIPMENT, FACILITIES AND SERVICES OF OTHERS TO BE PROVIDED BY THE CLIENT

No personnel, equipment, facility or services will be provided by the Client

APPENDIX 3: RENUMERATION AND PAYMENT

Includes payment schedule.

APPENDIX 4: PROGRAMME

APPENDIX 5: RULES FOR ADJUDICATION

Rules of Adjudication apply as stated in Client/Consultant Model Services Agreement 5th Edition, 2017, (FIDIC White Book) page h-j.

GENERAL CONDITIONS OF THE CONTRACT

Client / Consultant Model Services Agreement 5th Edition, 2017, (FIDIC White Book), prepared by the Fédération Internationale des Ingénieurs-Conseils (FIDIC) shall be those forming General Conditions of Contract.

These Conditions are subject to the variations and additions set out in "Particular Conditions of Contract" (PCC).

Copies of the FIDIC Conditions of Contract can be obtained from:

FIDIC Secretariat

P.O. Box 86 1000

Lausanne 12

Switzerland

Facsimile: 41 21 653 5432

Telephone: 41 21 653 5003

And the FIDIC official web site

WWW.FIDIC.ORG

APPENDIX 1 – SCOPE OF SERVICES

The Scope of the Consultant's Services will be the Terms of Reference together with the Particular conditions of the Contract.

TERMS OF REFERENCE

SLOVAKIA: ZVOLEN DISTRICT HEATING PROJECT - CONSTRUCTION SUPERVISION, ROLE OF FIDIC ENGINEER

1. BACKGROUND

The International Investment Bank (the "IIB" or the "Bank") is providing a loan of up to EUR 31 million to the Zvolenska teplarenska, a.s. (the "ZVTP" or "Company") in the City of Zvolen ("Zvolen" or the "City") in Slovakia.

The Bank's financing will be focused on construction of a new biomass fired district heating plant with total installed capacity of about 77.5 MW. The investment is aimed to replace existing coal-powered DH plant ceased to meet emission limits with wood biomass and will contain a new complete plant including DH plant rehabilitation works, supply and installation of biomass and gas boilers.

The rationale for the investment stems from the need to decrease the emission of SO₂, NO_x and dust in accordance with Directive 2010/75 / EU of the European Parliament and Decree of the Ministry of the Environment of the Slovak Republic No 410/2012. Continuing operations requires rebuilding the plant and installing modern technology, making it operational no later than on 30.6.2020, since the ZVTP will no longer be able to use coal in the heating plants because of regulatory constraints.

The investments will be procured in accordance with the IIB's Procurement Rules for projects financed by International Investment Bank.

The ZVTP and the Bank have now agreed that the assistance of an experienced and reputable consultancy firm or consortium of consultancy firms (the "Consultant") is required in order to provide construction supervision services as FIDIC Engineer.

The subject of this Terms of Reference is the supervision of the following contract:

- District Heating plant rehabilitation works, supply and installation of biomass and gas boilers

The contract is to be implemented using FIDIC Conditions of Contract for Plant & Design- Build (First Ed., 1999) – Yellow Book as General Contract Conditions which are amended through the respective Particular Conditions.

The Consultancy services under this Terms of Reference are sought to facilitate successful and timely implementation of the Project and appropriately support the ZVTP.

2. OBJECTIVES

The main objective of the assignment is for the Consultant to assist the Employer in the administration of the above Bank-financed contract (hereinafter referred to as “the Contract”) with due diligence, to carry out the duties of the Engineer assigned to him in the Contract and provide other services as described in this ToR. The Consultant (hereinafter also referred to as “the Engineer”) shall act as the Engineer exercising the authority and duties attributable to the Engineer, as specified in or necessarily implied from the Contract, to ensure timely, satisfactory completion of these project components in accordance with the Contract and other applicable requirements, including the Facility Agreement between the ZVTP and the Bank.

3. SCOPE OF WORK

The Consultant shall, in addition to the tasks specified in the Contract for the Engineer, perform the following:

1. Undertake an official review (Technical Control) of the designs developed by the Contractor in accordance with the relevant Slovak legislation.
2. Undertake the additional construction supervision activities to that of required in the Contract or this ToR as required by the respective Slovak Law;
3. Assist the Client with the reporting in accordance with Bank's loan requirements through preparation of progress reports, occasional incident reports, if any, and annual environmental, health and safety reports and final report.

3.1. Pre-construction stage support

During the pre-construction stage the Consultant will, in parallel with the recruitment of staff and logistics arrangements, undertake the following tasks:

- Establish procedures for proper works supervision. This shall include the preparation of a Supervision Manual to clearly include: (i) Outline procedures and forms for inspection, verification, reporting and approval of works related activities, site communication, variation orders and others; (ii) Procedures and forms for quality assurance and quality control; (iii) Transparent and reliable filing system in electronic and printed documentation, and document distribution.
- Establish the delegation of authorities for the Engineer and sub-delegation of authorities for the Consultant's supervision staff as per provisions of relevant contracts;
- Check the validity and duration period and approvals of insurance policies, guarantees, certificates, and other relevant documents provided by contractors and ensure the timely renewal of the mentioned documents by contractors;
- Formally establish the commencement dates subject to compliance of the pertinent conditions of contract;
- Verify staff qualifications and the mobilisation of contractors' staff, in accordance with contractual requirements;
- Verify detailed time and activity schedules including reporting and documents preparation;
- Review and approve contractors' Health and Safety Plan prior to the commencement of field activities;
- Check the sufficiency and suitability of available technical documentation available by the Contractor.

3.2. Supervision of the Contract

The Consultant shall perform the duties and authority of the Engineer as specified in or necessarily implied from the Contract as well as administer the Contract, dealing with situations in accordance with the contract, taking due regard of all relevant circumstances; the Consultant shall perform his duties and /or act:

- proactively, where the initiative lies with the Engineer in administering the Contracts and in addition providing all necessary warning and reminders to the Contractors and the Employer to ensure timely and smooth implementation of the project;
- reactively, in response to the Contractors' or the Employer's requests as well as the third parties requests related to the Contracts; and
- passively, in observing the requirements of the Contracts.

Wherever appropriate and not in conflict with the Contract, the Consultant shall exercise every reasonable care to protect the interests of the Employer and take into account the Employer's responsibilities under the project financing agreements, including the Facility Agreement with the IIB.

Despite more general/generous guidance regarding the response time in the Contracts, the Engineer is required to give response to the Contractors' and /or the Employer's requests within max 14 days, unless such timing can be demonstrated to be unreasonable on a case by case basis.

In case any delay in Works will be caused by slow response / initiative / determination or any other actions required and /or expected of the Engineer, the Consultant will have to then extend their services for the respective period without extra payment, unless the delay was outside his reasonable control and cannot be envisaged by the professional consultant experienced in the Services.

The Consultant shall have the following reporting obligations during supervision of the Works under the Contract.

3.2.1 Engineer's Work Programme Report

Within 14 days of issuance of the Engineer's consent to the Contractor's Work Programme, the Engineer shall submit a report to the Employer (Engineer's Work Programme Report), which shall include:

- a) copy of the Contractor's detailed cash flow estimate, in monthly periods, of all payments to which the Contractor will be entitled under the Contract;
- b) copy of the Contractor's detailed time programme showing the order in which the Contractor intends to carry out the Works with the highlighted critical path/s, including Design development, assistance with obtaining of all necessary approvals, general description of the methods which the Contractor intends to adopt, and of the major stages, in the execution and acceptance of the Works, allowing due time for the take-over procedures in line with local law, and other information as may be deemed necessary and appropriate by the Engineer, including coordination arrangements with other Employer's contractors / personnel, if any;

c) a supporting report which shall include:

- a list of critical path items and the related Contractor's estimate of delivery periods, accompanied with the Engineer's estimate of the latest delivery periods for each critical path item to warrant the completion in accordance with the Contract;
- for the manufacture of each main item of Plant and Materials, the name of the manufacturer, manufacture location and the expected dates of:
 - commencement of manufacture;
 - Contractor's and/or the Engineer's inspections and tests; and
 - shipment and arrival at the Site;
- the materials and plant selected by the Engineer for inspections and tests including an appropriate specification of the tests to be carried out and the associated arrangements;
- the names and particulars of the Contractor's representative and other superintendence personnel approved by the Engineer in accordance with the Contract;
- the names of Subcontractors consented by the Engineer in accordance with the Contract and for each Subcontractor the cost and quantity of the subcontracted Works; this section shall include a brief justification for the Engineer's consent;
- copies of all notices, consents, approvals, certificates or determinations given or issued by the Engineer within the reported period including consents of the Performance and the Advance Payment securities provided by the Contractor,
- Summary of the main actions with their estimated timing required of the Employer during the contract/s execution, summary of the issued under the contract guarantees and insurances with their key terms and matters for the client to pay specific attention to, such as expiry dates etc., and
- other information as may be reasonably required by the Employer.

Within two weeks from the presentation of this report the Engineer shall organise a meeting with the Employer's and Contractor's representatives and make a presentation regarding main Contract's provisions highlighting key responsibilities of both Parties and of the Engineer (not only technical but also contract administration matters shall be properly covered so that they are understood by all involved), establishing modus operandi and communication system and clarify the expectations regarding Contract's execution including early warning systems in case any issues arise. The focus shall be made on collaboration between the parties and amicable settlement of issues. There and going forward the Engineer shall proactively facilitate the execution and resolution of any issues before they can grow into a dispute or cause delay in the project execution or extra costs.

3.2.2 Design approval Report

The Engineer shall prepare and submit to the Employer the Design approval report within 14 days of the submission of the final Design by the contractor. The report shall demonstrate how the following tasks have been carried out by the Engineer:

- a. Assess the correctness of the input data used for the design, including the state of the existing Facilities and sites conditions;
- b. Assess the adequacy of the basic environmental data used for the design;

- c. Assess the applicability of the design basis established for the detailed design, including whether all necessary studies, investigations and calculations are conducted and all technical conditions from all necessary authorities are obtained, as required by applicable laws or the Contract;
- d. Receive the Design documents from the Contractor, return within 30 days either with "no comments" or "minor comments" which do not require resubmission, or "specific comments" where the design is not in accordance with the contract. Where the Engineer has such specific comments, ensure that the Contractor returns his revised Design documents for further comments within agreed time frames;
- e. Assess the adequacy of the Contractors detailed design based upon own calculations and evaluations;
- f. Undertake an official review of the design and thus grant approval in capacity of the technical controller in accordance with the local laws and environmental and social procedures required by the Bank (including respective EU directives) and existing local construction regulations. The Engineer shall verify if there are any issues associated with an overlap, if any, between the Engineer's authority and the authority of local agencies in relation to the approval of the Contractor's design in accordance with the Slovak legislation. In this respect, the Engineer shall be expected to make a presentation to the Employer and, if required, to the Bank in relation his duties and authority with particular reference to the General Conditions.
- g. The Consultant will also need to confirm to the Bank that the final designs fully comply with both national and EU requirements. The necessary environmental and construction permits should be obtained by the Client.
- h. Approve the Design documents prepared - in the English and Slovak, as may be applicable according to the Law, by the Contractor and the specified consents in accordance with the Contract, in particular to ensure that such Design documents are in accordance with the: Approved design; Employer's requirements, Reference Design, and Technical Specifications as may be applicable;
- i. The Design documents will comprise, but not be limited to, Drawings, Design Reports, Survey reports, Material Specifications, Test Reports, Construction Schedule, Cost estimates and General Construction Method Statements. The Design documents shall comply with the Slovak regulatory documents and where explicitly stated with the EU requirements and the IIB's Facility Agreement requirements;
- j. Report to the Employer on any non-compliance of the design likely to cause material delay or other adverse consequences in which case the proposal on necessary actions shall be provided together with a notice;
- k. At all times ensure that the Design documents are commented upon and returned to the Contractor in accordance with the Design Submission Schedule and the Contract (normally within 14 days and in no case longer than 30 days);
- l. In consultation with the Employer, review the Contractor's rates, prices and quantities in the Guidance Bills of Quantities which shall be provided by the Contractor as a supplementary information to the Schedule of Payments and shall not exceed the Contract Lump-Sum;
- m. Repeat the above process as necessary to ensure all the Design documents are approved by the Engineer and Relevant Authorities and receives the Specified Consents.

3.2.3 Monthly Progress Reports

The Engineer shall prepare and submit to the Employer monthly progress reports. It shall be noted that the contractor will be obliged to submit their monthly progress reports and therefore the Consultant is expected to add value to those rather than repeating the same information. The first report shall cover the period up to the end of the first full month following the Engineer's Work Programme Report. Each monthly progress, setting out photographs documenting the progress of the works development and shall confirm following:

- a. whether the latest relevant Progress Report (if any) is still complete, correct and up to date (as of the date on which it was prepared), informing the Bank in particular of any change in the relevant Supply Documents, Permits and Specifications (including any partial or full cancellation or revocation thereof) and of any applicable legal regulations relating to the Plant Development, which could cause the relevant Projected Costs to exceed the relevant Budgeted Costs or could cause delay to Practical Completion as set against the relevant Specifications or beyond the Required Completion Date;
- b. the actual total in percentage terms of the degree of completeness of the Plant Development and of the progress of each item of costs and expenses set out in the relevant Budgeted Costs;
- c. compliance of the Plant Development with the relevant Permits, Specifications and Supply Documents (including compliance with the timetable and identifying any delays and shifts in the approved timetable);
- d. the itemised Projected Costs, comparing each item against the corresponding item of the relevant Budgeted Costs and identifying any potential or incurred Cost Overruns;
- e. that costs and expenses to be financed from any Loan within the relevant period are included in the relevant Budgeted Costs together with an approval of the relevant Invoices;
- f. that the materials, works, services and other items set out in the Invoices delivered to the Bank (may be an attachment to the Progress Report), other than in any Invoices delivered to the Bank in connection with any previous Progress Report, have been procured and performed and have not been paid for;
- g. that the Invoices delivered to the Bank in connection with any previous Utilisation Request have been fully paid;
- h. whether any risks have emerged or are expected to emerge in the course of the Plant Development and, if so, the steps taken or to be taken to mitigate those risks;
- i. whether any damage has occurred to any part of the Plant and, if so, the steps taken or to be taken to remedy it;
- j. overview of Supplier(s)' payment instructions based on the Invoice(s) delivered to the Bank which are to be financed from a Loan (at least with the following scope: identification of a Supplier, Invoice no., issue date, Supplier's bank account no., due amount, due date, variable symbol);
- k. confirming that the current stage of the Plant Development is in compliance with the Supply Documents, Specifications and the Budgeted Costs or all their relevant parts (and, if there are any discrepancies, providing justification and comments on these discrepancies); and
- l. any other matter required by the Bank (acting reasonably) to be included in that report, which matters have not been reasonably foreseeable as of the date of this Agreement, upon having given reasonable notice to the ZVTP.

Apart from these confirmations the Monthly Progress reports shall also include:

- a. comparison in the form of a chart showing the Contractor's original cumulative cash flow estimate, in monthly periods, of all payments to which the Contractor will be entitled under the Contract and the actual payments certified by the Engineer up to the end of the reporting period. In the event of the cumulative amount of the actual monthly payment certificates being lower than the Contractor's estimate, the Engineer shall accompany the chart with a supporting report and provide:
 - details of any events or circumstances that have caused the discrepancy;
 - an assessment of the significance of such events or circumstances, including the Engineer's opinion, on whether these may jeopardise the completion in accordance with the Contract;
 - a report on the measures being (or to be) adopted to overcome delays in respect of each event or circumstances and the contractual basis therefore
- b. comparison of the actual percentage completion of delivery compared with the planned for each critical path item identified in the Engineer's Work Programme Report; where any delivery is behind the programme, the Engineer shall give comments on the likely consequences and state the remedial action being (or to be) taken;
- c. comparison of the actual percentage completion of delivery compared with the planned for each main item of Plant and Materials, if not included in the list of critical path items;
- d. information about the use of provisional sums and an appropriate justification therefore;
- e. photographs showing the status of manufacture and of progress on the Site;
- f. copies of quality assurance documents, test results and certificates of materials;
- g. safety statistics., including details of any hazardous incidents and activities relating to environmental aspects and public relations;
- h. copies of all notices, consents, approvals, certificates or determinations given or issued by the Engineer within the reported period; and
- i. other information, as may be required by the Employer.

The reports have to be concise and contain only critical information. The Consultant's report should not exceed 10 pages, except for photos which should only be submitted electronically and the above requested copies of the project documents. Only critical correspondence can be attached as the annexes.

3.2.4 Variations and amendments

The Engineer shall note that the Employer is under obligation to seek the Bank's consent before agreeing to or implementing any material modification or waiver to the terms and conditions of the Contract including granting an extension of the stipulated time for completion, granting compensation as a result of a claim determination and instructing / accepting variations. The Engineer shall ensure that the Employer complies with the procedures agreed with the Bank.

If, in exceptional circumstances, the Engineer finds that issuance of a variations would be essential and / or unavoidable, unless, in the opinion of the Engineer, an emergency occurs affecting the safety of life or of the Works or of adjoining property, or any delay with the variation shall give rise to a substantial cost or time overrun, the Engineer shall provide a preliminary report to the Employer on any prospective variation which shall outline the basis for the Engineer's valuation of the variation including but not limited to the following:

- The Engineer's justification for the Variation with the indication of the circumstances led to variation and confirmation whether or not varied works are required for completion of Permanent Works and whether the experienced contractor could have foreseen such works especially taking into account the Contractors' single responsibility for the Design and Build under the Contract. If not required for completion of Permanent works, then that change would likely constitute an amendment and not a variation. The consideration shall be made for a separate tender vs amendment and the Bank shall be timely consulted to make sure the recommendation is in line with the Bank's Procurement Policies.
- The Engineer's opinion on the extent, if any, of applicability to the varied Works of the rates and prices set out in the Contract/ Guidance Bill of Quantities;
 - when expressing his opinion, the Engineer shall take into account the actual or expected currencies of cost (and the proportions thereof) of the inputs of the varied work without regard to the proportions of various currencies set out in the Contract/ Guidance Bill of Quantities;
- The quantity and the Engineer's estimate of the value of the varied Works, which can be determined using the rates and prices set out in the contract/ Guidance Bill of Quantities as the basis for valuation:
 - the Engineer shall provide a detailed breakdown of the rates and prices set out in the contract and identify the price components that the Engineer used or intends to use for the valuation of the varied works;
- The quantity and the Engineer's estimate of the value of the varied Works, which can only be determined using the rates and prices to be agreed upon between the Engineer and the Contractor:
 - The Engineer shall provide to the Employer an appropriate justification of the basis for the agreement with the evidence of at least three quotes from the market to confirm the reasonableness of the suggested rates.
- The time implications of a variation on the contract completion period and the associated subsequent costs for the Employer, such as impact on OPEX and / or maintenance costs.

In case a variation is approved and instructed, the Engineer following the execution of the variation by the contractor, has to provide the final report based on his preliminary report to demonstrate the facts in comparison to his above assessments explaining any deviations with the analysis whether they are material.

3.2.5 Claims from Contractor

In the event of receipt of a notice of claim from the contractor, immediately thereafter, the Engineer shall notify and provide copy the notice to the Employer.

Promptly after the Engineer's inspection, the Engineer shall provide the Employer with an assessment of the Contractor's contemporary records, which shall be supported with the Engineer's preliminary conclusions with regard to the potential outcome of the claim. The Engineer shall also consult with the Employer any instruction, which have been (or to be issued) to the Contractor with regard to any further contemporary records.

The Engineer shall require the Contractor to copy to the Employer all accounts sent to the Engineer with regard to the Contractor's claim.

Prior to certification of any payment to the Contractor in relation to the Contractor's claim, the Engineer will have consulted with the Employer the grounds on which the Engineer intends to certify the payment. The Engineer shall provide the Employer with any particulars to enable the Employer to establish his position with regard to the Engineer's certificate.

3.2.6 Defects Notification Period

(a) No outstanding construction works shall be left for Defect Notification Period (DNP) and the Engineer shall take this into account before issuing the Take-Over Certificate as well as that the As-Built Drawings and manuals will have to be completed also in advance. It may be acceptable if the comments to the As-Built drawings are finalised by the Contractor during first months of DNP but prior agreement of the Employer shall be obtained for allowing such delay. Finally, the local law requirements on the works acceptance shall be taken into account by the Engineer as the compliance with these procedures is a precondition to the Take-Over certificate and thus advance notice will need to be given to the Employer, so that the required commission can be timely formed;

(b) The Engineer will provide on-site supervision of the Contractor's operations for the first month of the Defects Notification Period, if any, corresponding to the last section of the Project accepted as completed;

(c) During the remaining 12 months of the Defects Notification Period corresponding to the last section of the Project accepted as completed, the Engineer will be responsible for monitoring the Contractor's operations and for issuing any required certificates.

The period of supervision is 24 months including 12 months of Defect Notification period.

After the completion of the works the Engineer shall carry out temporary inspection of the works and to support the ZVTP during the Defect Notification Period of 12 months. The Engineer is expected to assign a Team Leader for this assignment that will be split into 4 missions, one every 3 months with a duration of 5 days per mission.

In case of defects being detected during the Defects Notification Period, the Engineer is required to respond at the request of the ZVTP with a competent team of experts, at his own expense, within 5 days of the receipt of the request from the ZVTP.

The activities of the Engineer during the Defects Notification Period include but are not limited to the following:

- Preparation of the Work Plan and Programme for the works inspection of the quality and defects of the constructed works during the Defects Notification Period on a bi-monthly basis (every 2 months). The Work Plan must include the items that will be inspected including the time frame for each activity and submitted to the ZVTP.
- After each mission including incidental missions, the Engineer must prepare the Report on findings and submit it to the ZVTP within seven days after completion of the mission.
- Checking that the DH plant emissions are in compliance with the defined limits in the Contract. Regular emissions analysis will be based on data and reports provided by the ZVTP and by the Contractor in accordance with the approved programme.
- Verify the compliance of the guaranteed operation & maintenance costs of the DH plant (tests after completion), based on operational data and reports provided by the ZVTP and by the Contractor, in accordance with the approved programme;

- If defects are detected, within seven days after identification of the defects, the Engineer must prepare the Work Plan with recommendations on the remediation of the defects including a list of the activities that will be done and the time frame for each activity and submit it to the ZVTP.
- In case of incidental damages during the Defects Notification Period, the Engineer must notify the ZVTP within 5 days by letter with information on the incidental damages. In this case, the Engineer must inspect the construction and start with the preparation of the Work Plan for organizing an incidental mission and submit it to the ZVTP within 15 days from receiving the letter of information on the incidental damages. After the Work Plan is approved by the ZVTP, the Engineer is responsible for the organisation and performance of the incidental mission;
- After all missions including the incidental missions, the Engineer must prepare a Final Report of all activities during the Defects Notification Period accompanied with all supporting documents and Final Payment Invoice included and submit to the ZVTP.
- The Engineer must regularly participate at the meetings with appropriate representation, initiated by the ZVTP and other responsible authorities.

3.2.7 Final Completion of Works

Performance Certificate:

(a) Immediately prior to the expiration of the Defects Liability Period for any section of the works for which a Certificate of Completion of the Works has been issued, the Engineer shall in the company of the Employer, and the Contractor inspect the said section and provide written affirmation that the works have been completed and maintained in accordance with the contract, and issue a Performance Certificate for the section.

Final Statement:

(b) Upon receipt from the Contractor within 28 days of the issue of the Performance Certificate for the last section for which the defects liability period has expired, the Engineer shall prepare in co-operation with the Contractor the Final Payment for the contract.

Final Report:

(c) Upon completion of the Contracts, the Engineer shall prepare a final report which shall highlight all major points of interest that arose during the contract. The report will include:

- a confirmation that the Plant (including all Buildings and Technology) was completed in compliance with the Specifications and the Supply Documents, and, except as mentioned under paragraph below, without any defects preventing standard commercial operation of the Plant in accordance with the Specifications;
- a list of defects (*vady*) and incompletions (*nedorobky*), if any, which prevent standard commercial operation of the Plant in compliance with the Specifications, together with a confirmation of:
 - the estimated time within which these defects and incompletions can be removed or rectified; and
 - amount of costs, which will have to be expended for the removal or rectification of these defects and incompletions and specifying how much of these costs will have to be borne by the ZVTP;

- a confirmation that all occupancy and use Permits (*kolaudačné rozhodnutia*) and all other Permits required for the permanent (*trvalá*) standard commercial operation of all parts of the Plant (which, under applicable laws, may be used and operated only subject to an occupancy, use or other Permits) without any reservations or exceptions that would prevent permanent (*trvalá*) standard commercial operation of the Plant have been issued, including specification of any remarks submitted by any affected public authorities and received by the ZVTP, which remarks are not listed in the Permits;
- a confirmation that Practical Completion has occurred, and all Permits required for Practical Completion to occur have been issued and are final and conclusive (*právoplatné*);
- a confirmation of the final status of the Budgeted Costs, the final amount of the actual costs of the Plant Development and the total amount of Cost Overruns, if any, with evidence that all Cost Overruns have been duly paid and a breakdown of the sources from which such Cost Overruns were paid;
- any other matters reasonably required by the Bank to be included in that report, which matters have not been reasonably foreseeable as of the date of the Agreement, upon having given a reasonable notice to the Engineer with a copy to the ZVTP.
- Confirmation that all procedures are carried out in accordance with the local law.

4. IMPLEMENTATION ARRANGEMENTS AND DELIVERABLES

4.1 Implementation Arrangements

The Consultant will report to the ZVTP on all aspects of the Assignment. The Consultant will sign the contract with the ZVTP. The Assignment is expected to start in the fourth quarter of 2019 and have duration of twenty-four months.

The Consultant will be responsible for arranging accommodation and local and international transportation. The Consultant will be responsible for all salaries, fees, allowances, insurance, leave pay and taxes.

The ZVTP will provide suitable office accommodation with telecommunication, but the Consultant will be responsible for the cost of the calls, faxes at the prevailing tariffs of the telephone utility. The Consultant is obligated to provide necessary IT equipment for their work on their own cost. The ZVTP will also provide access to all relevant information, maps, studies, models, legal documents etc. at no cost to the Consultant. The ZVTP will deliver the materials in the original version (i.e. not necessarily in English).

After completion of the service contract all equipment, if any was paid out of this consultancy contract, (vehicle, computer, printer etc.) will be transferred to the ZVTP. This doesn't cover IT equipment provided by the ZVTP at their own cost.

Communication takes place in Slovak and English. All reports are done bilingual. All necessary translation regarding the project is the obligation of the Consultant. All relevant documents necessary for implementation of the tasks will be made available for the Consultant by the ZVTP.

4.2 Deliverables

The Consultant shall submit a draft Inception Report within one month of the commencement of the assignment. This Inception Report shall provide a detailed methodology and staffing plan for carrying out the assignment to ensure that the objectives are satisfied.

A draft Final Report shall be submitted one month before the completion of the assignment that shall summarise the duties carried out and the inputs provided by the Consultant, comment on the achievement of the assignment's objectives.

It is anticipated that comments on the aforesaid reports would be provided within one week of its submission. The final versions shall be provided by the Consultant within one week of receipt of these comments.

Requirements for other deliverables will be agreed with the ZVTP and these deliverables would include monthly monitoring reports in forms required by the IIB;

The Inception, Monthly and Final Reports shall be submitted in both English and the local language. The number of copies of each report that shall be submitted shall be agreed with the ZVTP.

4.3 Consultant's Personnel

The Consultant shall employ suitably qualified engineers and other professionals who shall be competent to carry out any/or all of the duties in accordance with responsibilities and/or authorities that may be specified in or necessarily implied from the Contract and from their specific roles.

The Consultant shall arrange for an appropriate head office back-stopping support for the Engineer's supervision team.

All experts who have a crucial role in implementing the contract are referred to as key experts. No home-based work is possible for key experts unless in the extraordinary circumstances and prior approval from the Client and this will be assessed on a case-by-case basis. Key experts are expected to be at the Project site as will be required by the Contractors' Working programmes and will optimise their inputs during the low-activities periods. Where staff does not speak the local language, interpretation and translation will be the responsibility of the Consultant.

All experts must be independent and free from conflicts of interest in the responsibilities they take on.

Within the Consultant's team the following Key Experts are envisaged.

It is anticipated that the Consultant's team shall include the following expertise with short-term support as required in other disciplines:

No.	Position	Number	Minimum inputs
1.	Key Expert 1: Project Manager / FIDIC contracts management expert	1	15 man-months
2.	Key Expert 2: Civil Engineer	1	14 man-months
3.	Key Expert 3: Mechanical Engineer	1	14 man-months
4.	Key Expert 4: Electrical Engineer	1	14 man-months
5.	Key Expert 5: International District Heating Engineer	1	14 man-months
6.	Key Expert 6: Local District Heating Engineer	1	14 man-months

Non-key experts

- Civil Engineer (minimum inputs 2-months)
- Mechanical Engineer (minimum inputs 2-months)
- Electrical Engineer (minimum inputs 2-months)
- Architectural Engineer (minimum inputs 2-months)
- Geologist (minimum inputs 2-months)
- Environmental, Health and Safety Expert (minimum inputs 2-months)
- Pool of Additional Experts consisting of local support staff (translator, office manager, secretary)

Key Expert 1: Project Manager / FIDIC contracts management expert

General professional experience

- At least 15 years of professional experience in the design and supervision of civil works, out of which 5 years in district heating field.

Specific professional experience

- Experience in successfully leading, managing and mobilising diverse sector team of experts, delivering tasks on time/under budget (minimum 1 contract completed during the past 5 years);
- At least 2 (two) contracts completed in design and/or supervision of District Heating, out of which minimum 1 contract following FIDIC Yellow Book;
- At least 2 (two) contracts as a Project Manager/Engineer/Resident Engineer/Supervisor/ in supervision of District Heating projects;
- B.Sc. degree in civil, mechanical or electrical engineering or similar relevant qualifications;
- Fluent in English and Slovak.

Key Expert 2: Civil Engineer

General professional experience

- At least 10 years of professional experience in the design and supervision of civil works.

Specific professional experience

- B.Sc. degree in civil engineering or similar relevant qualifications,
- At least 5 years of professional experience in supervision of DH sector projects;
- Fluent in English and Slovak.

Key Expert 3: Mechanical Engineer

General professional experience

- At least 10 years of professional experience in the design and supervision of civil works.

Specific professional experience

- B.Sc. degree in mechanical engineering or similar relevant qualifications,
- At least 5 years of professional experience in supervision of DH sector projects;
- Fluent in English and Slovak.

Key Expert 4: Electrical Engineer

General professional experience

- At least 10 years of professional experience in the design and supervision of civil works.

Specific professional experience

- B.Sc. degree in electrical engineering or similar relevant qualifications,
- At least 5 years of professional experience in supervision of DH sector projects;
- Fluent in English and Slovak.

Key Expert 5: International District Heating Engineer

General professional experience

- At least 10 years of professional experience in the design and supervision of civil works.

Specific professional experience

- B.Sc. degree in engineering or similar relevant qualifications,
- At least 8 years of professional experience in supervision of DH sector projects;
- Fluent in English
- Fluency in Slovak would be an advantage

Key Expert 6: Local District Heating Engineer

General professional experience

- At least 10 years of professional experience in the design and supervision of civil works.

Specific professional experience

- B.Sc. degree in engineering or similar relevant qualifications,
- At least 8 years of professional experience in supervision of DH sector projects;
- Fluent in English and Slovak

All experts shall have experience of the activity for which they are being proposed and in a similar position and shall have:

- Experience of construction supervision and/or project management in countries with climatic conditions similar to the project site;
- Good knowledge of FIDIC contractual arrangements and experience of working with IFIs will be considered an asset;
- Experience in Slovakia and neighbouring countries would be an asset;
- Knowledge of the requirements of local legislation concerning construction (including health and safety), financial, accounting and disbursement issues will be considered as asset unless it is strictly required for the position.

The Consultant's minimum Key Experts' time-input is 85 person-months. The precise time input of the experts is to the discretion of the Consultant, as part of their technical proposal in which they have to demonstrate the rationale for their resources with the objectives and the duration of

the contract. As part of the technical proposal the Consultant also shall outline the suggested working methodology and approach.

For all key experts, the Consultant must submit CVs and signed Statements of Availability. For non-key experts, who will be engaged when Project requires it, Consultant must submit CVs which proves experience in similar assignments and appropriate University background for the assignment.

The Consultant may suggest other non-key and / or short-term experts as they consider necessary. The Consultant's experts should have all necessary licenses in accordance with Slovak legislation before start of the design and works.

Annex 1

Supervision of the Works Contracts – Detailed Description of Tasks

a) Contract Supervision

The ZVTP will require the Consultant to perform the duties and authority of the Engineer as specified in or necessarily implied in the Contract. The applicable conditions of contract are the FIDIC Conditions of Contract for Plant & Design - Build (First Ed., 1999) – Yellow Book.

The Engineer shall perform its duties or act:

- Proactively, where the initiative lies with the Engineer in administering the Contract;
- Reactively, in response to the Contractor's or the Employer's requests; and,
- Passively, in observing the requirements of the Contract.

Wherever appropriate and not in conflict with the Contract the Engineer shall exercise every reasonable care to protect the interests of the Employer.

b) Commencement of Work on Site

For all contracts the Consultant will have the following obligations:

- Upon Commencement of the Works, in accordance with the terms of the contracts, execute and deliver Commencement Certificates and obtain the countersignatures of the Contractors.
- If the Contractors do not receive possession of the site from time to time in accordance with the contracts, or if a Contractor does not receive a Commencement Certificate within any period stipulated in a contract, assess whether the Contractor is likely to suffer delay and/or incur extra cost and notify the Client accordingly.

c) Statutory Requirements

The Consultant will have the following obligations:

- Obtain a copy and keep a file of any applicable standards, rules or regulations of all the relevant authorities and public bodies and companies, whose property or rights are affected or may be affected in any way by the Project. Monitor and report to the Client on obtaining compliance with the specified consents by the Contractors.
- If required by the Contractors and permitted by the ZVTP, assist the Contractors in applications for detailed town planning consents, building by-law, building act, building and fire regulation approvals, EIA approvals and other environmental permits and all other statutory approvals and consents required.
- Assist in any negotiation with any owners, lessors, adjoining owners, public authorities, licensing authorities and others for the purchase by the ZVTP of the additional land under the Contract.
- Liaise as necessary with utility companies and other bodies, as appropriate, and assist in and co-ordinate such liaison as necessary.
- Draw up and maintain a schedule of all necessary statutory licences, permits and approvals necessary for the design, implementation and operation of the Project (the Schedule should identify the dates for submissions and approvals, and the person or persons responsible for making application for such licences, permits and approvals either on their own account or on behalf of the ZVTP or the Contractors). Check that such applications are made on time and assist in negotiations with other parties, as necessary from time to time.
- Coordinate with and assist the Client to ensure that all permits required are obtained on time.

d) Design Check

The Consultant will have the following obligations:

- Assess the adequacy of the basic environmental data used for the design;
- Assess the applicability of the design basis established for the detailed design;
- Establish an independent computer model of the structures checks (if needed);
- Check adequacy of the Contractors detailed design based upon own calculations and evaluations;
- Obtain approval of the design from the technical controllers.

e) Approval of Design

For the design & build contracts, the Consultant will have the following obligations:

- Review and approve the Design Documents prepared - in the English and local language
 - by the Contractor and the specified consents in accordance with the Contract, in particular to ensure that such Design Documents are in accordance with the:
 - Approved design;
 - Requirements of the contract and in particular the warranties given in the contract;
 - Employer's requirements, Reference Design, and Technical Specifications.
- Assist the Client in obtaining the local design approvals by responsible bodies, if this is foreseen by local regulations and legislation.
- The Design Documents will comprise, but not be limited to, Drawings, Design Reports, Material Specifications, Test Reports, Construction Schedule and General Construction Method Statements.
- Receive the Design Documents from the Contractor, return within 30 days either with "no comments" or "minor comments" which do not require resubmission, or "specific comments" where the design is not in accordance with the contract. Where the Engineer has such specific comments, ensure that the Contractor returns his revised Design Documents for further comments within agreed time frames.
- Report to the Client on any non-compliance of the design likely to cause material delay or other adverse consequences.
- Receive copies in English and local language from the Contractors of such Design Documents submitted to the relevant authorities for their approval and of specified consents which have been obtained in accordance with the Contract.
- Receive copies in English and local language of the Final Design Documents incorporating comments arising from the design approval procedure and approve the Design in accordance with the Contract.
- At all times ensure that the Design Documents are commented upon and returned to the Contractor in accordance with the Design Submission Schedule and the Contract (normally within 30 days).
- Repeat the above process as necessary to ensure all the Design Documents are approved by the Engineer and Relevant Authorities and receives the Specified Consents.

f) Construction Risk Assessment

The Consultant will have the following obligations:

- Identification of hazards for the design and construction stages. This must comprise procedural risks, environmental and social risks, technical and quality risks, risk of cost overrun, risk of delays, risk to third parties, etc.;
- Assess the likelihood of these risks and the potential consequences;
- Identify possible mitigation measures; and
- Proactively and continuously seek to manage and reduce/eliminate hazards/risks.

g) As-Built Drawings and Documentation

For all contracts the Consultant will have the following obligations:

- Upon completion, receive from the Contractors for approval copies of all As-Built Drawings - in the English and local language - of the Permanent Works as completed, and such other technical and design information and completion records relating to the said permanent works as specified in the Contract and as the Engineer or the Client may reasonably require.

h) Environmental and Social Matters

The Consultant will ensure that all applicable environmental and social requirements of the Bank are being adhered to and that the ZVTP is duly informed about the requirements. The construction supervisor shall cooperate with consultant responsible for Environmental and Social regulatory compliance.

i) Archaeological Remains

For all contracts, the Consultant will have the following obligations:

- Receive notice from the Contractors in the event of the discovery of any fossils, coins, articles of value or antiquity or other similar remains, dangerous dumpsites, hazardous contamination or munitions within the Site and advise the Client in relation to the steps to be taken in consequence thereof and the time and cost implications of such steps.
- Decide any extension of time and any additional payment to which the Contractor is entitled in accordance with the terms of the Contract as a result of discovery of any archaeological remains or dangerous dumpsites.

j) Health and Safety

The Consultant will ensure the Contractor prepares and implements a Construction Health and Safety Plan and where necessary, require the Contractors to provide and maintain at their own cost all lights, guards, fencing, warning signs and watching, for the protection of the Works or for the safety and convenience of the public or others.

k) Programming and Monitoring Progress

For all contracts, the Consultant will have the following obligations:

- Advise the Client on compliance by the Contractors with respect to sub-contracting, as specified in the Contracts.
- Upon receipt of the contractors' Programme, and within the time stipulated in the FIDIC Conditions of Contract, notify the contractors, with a copy to the Client, whether the Programme complies with the Contract, and if not, in what respect does it not comply.
- Request the contractors to provide an expected monthly cash flow requirement.
- Verify that the progress of the Works is in compliance with the Programme and milestone schedule approved under the Contracts on behalf of the Client. Notify the Client as far as possible in advance of any possible failure to attain a milestone by the applicable date or non-compliance with the Programme.
- Report on the Contractors' control of the progress of the Works to ensure completion of the Works within the time established in accordance with the Contracts.
- If for any cause other than those listed in the Contracts, the rate of progress of the Works or any Section is at any time, in the Consultant's opinion, too slow to ensure the completion of the Works or any Section by the Completion Date, instruct the Contractors in accordance with the FIDIC Conditions of Contract in writing with a copy to the Client.
- Authorise any reasonable request by the Contractors to work outside agreed time windows (e.g. at night or on locally recognised holidays) to expedite progress so as to comply with

- the Completion Date for the Works or any Section.
- Receive from the Contractors due copies of formal quarterly and monthly Progress Reports, in accordance with the FIDIC Conditions of Contract, checking the same to ensure that they cover all relevant aspects of the Works and highlights actual or potential departures from the Programme or the milestone, Payment or Design Submission Schedules and stating the proposed or necessary measures to be taken by the Contractors to overcome such departures; commenting on and supplementing as necessary such Progress Reports before forwarding them to the Client, and advising them of any necessary measures to be taken to achieve completion of each Section within the applicable Time for Completion.
 - Convene formal monthly meetings (“Project Team Meetings”) with Project participants and other relevant parties. These meetings must have a formal agenda and minutes.
 - Check the provision of all necessary insurance, performance securities and warranties and other relevant contract documentation.

l) Engineer’s Work Programme Report

In view of the above, within 28 days of issuance of the Engineer’s consent to the Contractors’ Work Programme, the Engineer will submit a report to the Client and the Employer (Engineer’s Work Programme Report), which will include:

- a) Copy of the Contractors’ detailed cash-flow estimates, in monthly periods or in accordance with milestone based payment schedules, of all payments to which the Contractors will be entitled under the Contract;
- b) Copy of the Contractors’ detailed Time Programme, showing the order in which the Contractors intends to carry out the Works, including general description of the methods which the Contractors intends to adopt, and of the major stages, in the execution of the Works and other information as may be deemed necessary and appropriate by the Engineer;
- c) A supporting report which will include:
 - A list of critical path items and the related Contractors’ estimates of delivery periods, accompanied by the Engineer’s estimate of the latest delivery periods for each critical path item to warrant the completion in accordance with the Contract;
 - For the manufacture of each main item of Plant and Materials, the name of the manufacturer, manufacture location and the expected dates of:
 - Commencement of manufacture;
 - Contractors’ and/or the Engineer’s inspections and tests; and
 - Shipment and arrival at the Site;
 - Materials and plant selected by the Engineer for inspections and tests, including an appropriate specification of the tests to be carried out and the associated arrangements;
 - Names and particulars, including gender, of the Contractors’ representative and other superintendence personnel approved by the Engineer in accordance with the Contract;
 - Names of subcontractors consented by the Engineer in accordance with the Contract and, for each subcontractor, the cost and quantity of the subcontracted Works; this section will include a brief justification for the Engineer’s consent;
 - Copies of all notices, consents, approvals, certificates or determinations given or issued by the Engineer within the reported period; and
 - Other information as may be required by the Client.

m) Contracts Monthly Progress Reports

The Engineer will prepare and submit to the Client monthly Progress Reports. The first Report will cover the period up to the end of the first calendar month following the Engineer's Work Programme Report. Each monthly progress report will include:

- a) Brief summary information about any events or circumstances which, in the Engineer's opinion, may create sufficient grounds for any time, claim and/or cost overrun under a Contract and the Engineer's recommendation of the measures being (or to be) adopted to overcome such events or circumstances and the contractual basis thereof;
- b) Comparison in the form of a chart showing the Contractors' original cumulative cash-flow estimate, in monthly periods, of all payments to which the Contractors will be entitled under the Contracts and the actual payments certified by the Engineer up to the end of the reporting period. In the event of the cumulative amount of the actual monthly payment certificates being lower than the Contractors' estimates, the Engineer will accompany the chart with a supporting report and provide:
 - Details of any events or circumstances that have caused the discrepancy;
 - Assessment of the significance of such events or circumstances, including the Engineer's opinion on whether these may jeopardise the completion in accordance with the Contracts;
 - Report on the measures being (or to be) adopted to overcome delays in respect of each event or circumstances and the contractual basis thereof;
- c) Comparison of the actual percentage completion of delivery compared with the planned for each critical path item identified in the Engineer's Work Programme Report; where any delivery is behind the Programme, the Engineer will comment on the likely consequences and state the remedial action being (or to be) taken;
- d) Comparison of the actual percentage completion of delivery compared with the planned for each main item of Plant and Materials, if not included in the list of critical path items;
- e) Information about the use of provisional sums and an appropriate justification thereof;
- f) Photographs showing the status of manufacture and of progress on the site;
- g) List of new quality assurance documents, reports on test results and certificates of materials;
- h) Safety statistics, as provided by the contractors, including details of any major incidents and activities (e.g., strikes, riots, demonstrations, media attention, etc) relating to workers, public, and environment;
- i) List of all notices, consents, approvals, certificates or determinations given or issued by the Engineer within the reported period; and
- j) Other information, as may be required by the Client.

n) Quality Control

The Consultant shall:

- Develop a Quality Management Plan (QMP) for all aspects of the Project.
- Require the contractors (and design consultants) to develop and adhere to a Project specific Quality Assurance Manual.
- Receive from the Contractors (and design consultants) the full particularised version of their Quality Assurance Manual in English and local language; as soon as possible check and comment upon the same and, if necessary, request the Contractors to amend the same.
- Audit the Contractors' and Sub-Consultants' QA implementation.
- Inform the Client if there are any difficulties in obtaining such a fully particularized Quality Assurance Manual in the form required by the Engineer. Carry out necessary oversight to ensure that the Contractors maintain an effective and sufficient quality assurance procedure for the Works and monitor its operation.
- Ensure that the contractors retain independent inspection companies acceptable to the Client, to undertake their own Quality Control (QC).

- Notify the Client if there is any failure of tests or inspection and if such failure is anticipated to cause delay to any Completion Date or other material adverse consequence; advice on further tests required and arrange that the Contractors carry out necessary rectification.
- Carry out oversight inspection of the work being executed by the Contractors to provide assurance as to the quality and standards of the materials and workmanship, and compliance with the specifications and drawings as included in the contracts, the Approved Design, the Detailed Drawings, the Method Statements, the Quality Assurance Manual and any agreed amendment thereto.
- At all reasonable times have access to the site and to workshops and places where materials or plant are being manufactured, fabricated or prepared for the Works.
- Verify that independent testing of the materials or plant to be supplied under the contracts as is required by the contracts has been or is to be carried out in accordance with such requirements at the expense of the Contractors.
- Agree with the Contractors procedures and times for inspecting, witnessing or testing any materials or plant as provided in the Quality Assurance Manual or the Contracts. Where notice of testing is required, give the Contractors not less than 72 hours' notice of intention to carry out an inspection or attend tests.
- Agree practical procedures with the Contractors for giving notice for any examination by the Engineer, which may be required before the Contractors can cover up or put out of view any part of the Works. In accordance with such procedures, and the approved Quality Assurance Manual, examine where appropriate and check any part of the Works which is about to be covered or put out of view; notify and advise the Client if any material defects are discovered and monitor the remedying of same.
- Request the Contractors to make available for review copies of all test results within a reasonable time of the test being carried out.
- Through oversight of the contractors operations, or through on-site inspection, determine if any materials or plant are or are, likely to be, defective or otherwise not in accordance with the Contracts, and reject such materials or plant.
- Take into consideration any reasonable requirement by the ZVTP of inspection, testing of plant, goods or materials found to be defective pursuant to the contracts or where he has reasonable ground for suspecting the existence of a defect or defects. Carry out any such inspection and arrange such testing on behalf of the ZVTP in accordance with the contracts.
- Afford full opportunity for the ZVTP to ask for and to be present when examining and measuring any part of the Works which is about to be covered up or put out of view, and examining foundations before any part of the Works is placed thereon. Give reasonable prior notice to the ZVTP whenever such part of the works or foundations is ready for such examination.
- Carry out, when requested by the Client, such other inspections, supervision of testing on-site or procure the carrying out by the Contractors of such tests and supervise the same and carry out such other acceptance procedures or arrangements with the Relevant Authorities.
- Supervise factory inspections, all installation work at the sites and commissioning/ testing of Project components, if required.

o) Site Management

The Consultant shall:

- Attend site meetings and endeavor to ensure that at all times outstanding problems are settled in order to avoid any delay or extra expenditure (having regarded, however, to the terms of the Contracts and the limitations on the authority of the Engineer referred to under these ToR).
- Keep track on all interfaces, attend interface co-ordination meetings and assure that all interfaces are properly managed and that interface problems are addressed and solved.

- Keep full and proper records of all meetings and discussions attended or conducted by the Engineer and make the same available for inspection by the Client forthwith on request.
- On request of the ZVTP, attend meetings to resolve differences of opinion on general or technical matters.
- Ensure that the Client receives timely notice of and is permitted to attend all site meetings and other meetings with the Contractors.
- Notify the Contractors if the Engineer objects to any person who has conducted himself as incompetent or negligent; notify and advise the Client if this is the case and agree on any action to be taken.
- Advise the Client on the general organisation of the Contractors' resources at the Site, including management and programming systems, manpower, plant and equipment.

p) Payments and Accounts

The Consultant should carry out the duties of the Engineer in relation to payment of the Contractors' Works in accordance with the Contracts:

- Receive from the Contractors on a monthly basis invoices pursuant to the Contracts.
- Upon receipt of the Contractors' invoices, copy to the Client each such invoice and give due consideration to any comments of the Client;
- Check in accordance with the relevant provisions of the Contracts the Contractors' invoices and resolve with the Contractors, where possible, any mistakes and queries which may arise in conjunction therewith; advise the Client of any adjustments considered necessary.
- Ascertain the amount to be certified in respect of the Contractors' invoices pursuant to the Contracts. Within the times stipulated in the FIDIC Conditions of Contract, issue a certificate addressed to the Contractor and the Client specifying the aggregate amount payable by the Client to the Contractor.
- Certify any additional amounts due to a Contractor in respect of valid claims notified in accordance with the procedure set out in a Contract.
- Consider any invoices submitted by the Contractors pursuant to the Contracts and certify any additional sums which the Engineer is empowered to certify as due, provided always that the Contractors has supplied sufficient particulars to enable the Engineer to determine the amount due.
- Collate and prepare quarterly budgets showing sums anticipated to fall due from the ZVTP to the Contractors, dates and amounts of invoices and certificates under the Contract and milestones values expected to be achieved in the quarter and deliver the same to the Client forthwith.
- Fully comply with the procedure for disputed certificates set out in the Contracts. In particular, complete within two weeks any adjudication under the Contracts, which may be required. Forthwith carry out any correction or modification of any certificate or other action authorised by the Contracts whenever the Engineer considers it appropriate to do so.
- As required by the FIDIC Conditions of Contract, no later than fifty six (56) days after the date of issue of the last Performance Certificate, receive from the Contractors draft Final Payment Certificates pursuant to the Contracts. Within the times stipulated in the FIDIC Conditions of Contract after receipt of this draft Final Payment Certificate, work with the contractors to agree a Final Statement.
- Maintain project accounts and prepare final project accounts.

q) Delays and Claims

The Consultant shall:

- Check that the Contractors continue to give the details and notices that are required under the Contracts relating to any delay and forward such details and notices to the Client.
- Notify the Client immediately if a Contractor fails to complete any Section within the

- applicable Completion Date or appears likely so to fail.
- Advise the Client on any difficulties that may arise generally in connection with the execution of the Works.
 - Receive notice of the intention of a Contractor to claim any additional payment within the times stipulated in the FIDIC Conditions of Contract and adopt the stipulated process for claim resolution and notify the Client thereof.
 - Upon the request of the Contractor, discuss the delay, the reasons therefore, determine and notify the Contractor of any extension of time and any amendments to any of the milestone, payment and design submission schedules. Where the delay has been caused by any of the causes referred to in the Contracts or where an extension of time has been granted, consult with the Contractor on behalf of the Client, and send to the Client for its review, such revisions to the Programme, milestone, Payment and Design Submission Schedules which the Contractor considers necessary in consequence of any such delay or extension of time.
 - Work with the Client and the Contractor to set up the Dispute Adjudication Board, as required under the FIDIC Conditions of Contract, and follow up all requisite processes in addressing the Contractors or Clients claims.
 - If necessary prepare a case for the application of Delay damages or a claim against the Performance Guarantee where a Contractor has failed to perform.

In addition to the above, in the event of receipt of a notice of claim from a Contractor, immediately thereafter, the Consultant will notify and copy the notice to the Client.

Promptly after receipt of any contractor's claim, the Consultant will provide the Client with an assessment of the Consultant's preliminary conclusions with regard to the potential outcome of the claim. The Consultant will require the Contractor to copy to the Client all accounts sent to the Consultant with regard to the Contractor's claim.

Prior to certification of any payment to a Contractor in relation to a Contractor's claim, the Consultant will have consulted with the Client on the grounds on which the Consultant intends to certify the payment. The Consultant will provide the Client with any particulars to enable the Client to establish its position with regard to the Engineer's certificate.

r) Completion and Defects Notification Period

The Consultant shall:

- Within the terms and conditions stipulated within the FIDIC Conditions of Contract receive a request from a Contractor to issue a Taking-Over Certificate in respect of the Works.
- Within 21 days of receipt of such a request, inspect the Works with a representative of the ZVTP.
- Provided that the Client has confirmed that they have no objection to the Engineer so doing, issue immediately to the Contractor, with a copy to the said parties, a Taking-Over Certificate stating the date on which the Works were substantially completed in accordance with the Contract.
- Taking into account any comments of the said parties, give instruction in writing to a Contractor specifying all the work required to be done by the Contractor before the issuance of a Taking-Over Certificate; notify the Contractor of any defects in the Works affecting Completion that may appear after giving such instructions and before completion of the Works specified therein; provided that the Contractor has completed the Works so specified and remedied any defects so notified to the satisfaction of the Engineer and the Client, issue a Taking-Over Certificate within the period as prescribed in the FIDIC Conditions.
- Instruct a Contractor to search for defects and the cause thereof and to execute all such

- work of amendment, reconstruction, and remedying defects, shrinkage or other faults during the Defects Notification Period as prescribed within the FIDIC Conditions.
- Monitor generally the Contractors in performing their obligations during the Defects Notification Period. Prepare and issue a Performance Certificate, within the times and using procedures prescribed within the FIDIC Conditions.
 - In the event that a Contractor refuses to carry out any rectification work, assist the Client in the employment of an alternative Contractor and in the recovery from the Contractor of the costs of employing the same where applicable.
 - Advise the Client of the value of any completed Section and of any further information as may be necessary for calculating any adjustment in the amount of the Performance Security and any other bonds or securities procured by the Contractor to secure its obligations.
 - Arrange for the return of any outstanding guarantees provided by Contractors, such as performance securities.

s) Variations

The Consultant shall note that before agreeing to any modification or waiver of the terms and conditions of a contract or granting an extension of the time for performance (except in cases of extreme urgency brought about by unforeseeable events not attributable to the procuring entity), the Client shall obtain the Bank's no objection to the proposed modification, waiver or extension. All change or variation orders made in accordance with the terms and conditions of the Contract are subject to the Bank's review before a no-objection can be given for disbursement.

The Consultant will assist the Client to comply with the procedures agreed with the Bank.

Unless, in the opinion of the Consultant, an emergency occurs affecting the safety of life or of the Works or of adjoining property, the Consultant will provide a preliminary report to the Client on any prospective variation, outlining the basis for the Consultant's valuation of the variation, including but not limited to the following:

- The Consultant's opinion on the extent, if any, of applicability to the varied Works of the rates and prices set out in the Contract; when expressing an opinion, the Consultant will take into account the actual or expected currencies of cost (and the proportions thereof) of the inputs of the varied work without regard to the proportions of various currencies set out in the Contract;
- The quantity and the value of the varied Works that can be determined using the rates and prices set out in the Contracts;
- The quantity and the Consultant's estimate of the value of the varied Works, which can be determined using the rates and prices set out in the contract as the basis for valuation: the Consultant will provide a detailed breakdown of the rates and prices set out in the Contract and identify the price components that the Consultant used or intends to use for the valuation of the varied works;
- The quantity and the Consultant's estimate of the value of the varied Works, which can only be determined using the rates and prices agreed to be agreed upon between the Consultant and the Contractors. The Consultant will provide to the Client with an appropriate justification of the basis for the agreement.

In case of a variation, the Consultant will follow the procedures and conditions stipulated within the FIDIC Conditions:

- However, in the event that the Client orders changes to the Approved Design, and if the compliance with such order has, in the opinion of the Engineer, materially delayed or is potentially likely to delay the Completion Date for the Works or any Section, determine the extension of time and the additional payment to which the Contractor will be entitled in accordance with the terms of the Contract.

t) Suspension

If in the Consultant's opinion, a suspension is required, the Consultant will initially consult with and seek the approval of the Client. After receiving their approval to issue a suspension, the Consultant will follow the procedures and conditions established in the FIDIC Conditions.

u) Default and Disputes

The Consultant shall:

- Notify the Client immediately if a Contractor is failing to comply with its obligations under a Contract. Discuss with the Client possible remedies, and advise on the rights and obligations of the parties under the Contract.
- As soon as may be practicable after any entry and termination by the Client in accordance with a Contract, adopt the procedures and conditions stipulated in the FIDIC Conditions.
- If any urgent remedial work is necessary, act in accordance with the Contract, and otherwise advise the Client on carrying out the same by the Contractor or, if impossible to do so, discuss such failure with the Client.
- If any dispute or difference is referred to arbitration, assist the Client generally in respect of such arbitration provided always that the Engineer will not be required to act improperly or contrary to his obligations as the Engineer under the Contract.
- In the event of termination, provide advice and assistance in connection with the departure of a Contractor from the site and the assignment of the benefit of any agreement for the supply of goods, materials, services and/or execution of any works.
- Advise the Client of their rights upon the occurrence of any Force Majeure event.

APPENDIX 2 – PERSONNEL, EQUIPMENT, FACILITIES AND SERVICES OF OTHERS TO BE PROVIDED BY THE CLIENT

No personnel, equipment, facility or services will be provided by the Client.

APPENDIX 3 – RENUMERATION AND PAYMENT

Invoicing is expected to be done on monthly basis based on submitted timesheets for the experts involved in providing services, while using the expert rates indicated in the tables below.

Invoices must be prepared according to the attached **Rules for the Preparation of Invoices** and according to the applicable law. ZVT shall not be responsible for delays in paying invoices if the Consultant's invoices do not comply with the attached Rules. Unless otherwise stated, any equipment included in this Contract and purchased by the Consultant shall be disposed of at the end of this Contract in accordance with ZVT's directions.

Payments shall be made to Consultant's bank account.

Item	Cost
	(EUR)
Cost of the Financial Proposal	
Including:	
(1) Remuneration	1,101,076
(2) [Reimbursables]	216,370
Total Cost of the Financial Proposal: {Should match the amount in Form FIN-1}	1,317,446
Indirect Local Tax Estimates – to be discussed and finalized at the negotiations if the Contract is awarded	
(i) {insert type of tax: e.g., VAT or sales tax}	263,489
(ii) {e.g., income tax on non-resident experts}	0
(iii) {Insert type of tax}	0
Total Estimate for Indirect Local Tax:	263,489

1. Fees:

[EUR]

No.	Name of Expert Jmeno Experta	Job Title Pops pozice	Working period Pracovni obdobi	In the field Na stavbe	In Home office Kancelar konzultanta	Total Period Celkova Doba	Expert rate Sazba	Total Celkem
K-1	Hryciów Michal	Project Manager	Months / Mesice	16	3,25	19,25	8 538	164 348
K-2	Peter Antal	Civil Engineer	Months / Mesice	15	0,5	15,5	7 900	122 450
K-3	Chittussi Vladimir	Mechanical Engineer	Months / Mesice	14	4,5	18,5	7 900	146 150
K-4	Karol Redli	Electrical Engineer	Months / Mesice	13	2	15	7 900	118 500
K-5	Michlik Frantisek	International DH Engineer	Months / Mesice	8,7	6	14,7	7 900	116 130
K-6	Dominik Adam	Local DH Engineer	Months / Mesice	13,5	1	14,5	7 900	114 550
N-1	Nohej Jaroslav	Civil Engineer	Months / Mesice	1	1,5	2,5	7 900	19 750
N-2	Břinda Karel	Mechanical Engineer	Months / Mesice	0,7	2	2,7	7 900	21 330
N-3	Cellar Pavel	Electrical Engineer	Months / Mesice	1	1,2	2,2	7 900	17 380
N-4	Povolný Jaroslav	Architectural Engineer	Months / Mesice	0,4	1,7	2,1	9 100	19 110
N-5	Piskač Jan	Geologist	Months / Mesice	1,2	1	2,2	8 538	18 783
N-6	Tbd	Environmental, HSE	Months / Mesice	1,75	0,25	2	7 900	15 800
No.	Name of Expert Jmeno Experta	Job Title Pops pozice	Working period Pracovni obdobi	In the field Na stavbe	In Home office Kancelar konzultanta	Total Period Celkova Doba	Expert rate Sazba	Total Celkem
N-7	Šlemr Petr	Project Director	Months / Mesice	2	2	4	12 095	48 379
N-8	Němcová Michaela	Fire Safety Engineer	Months / Mesice	2	2	4	7 900	31 600
N-9	Jendrejčík Tomas	QA/QC Manager	Months / Mesice	2,5	1,5	4	7 900	31 600
N-10	Kovařík Jan	Documentation Manager	Months / Mesice	1,6	1,1	2,7	7 900	21 330
N-11	Staník Jiří	Cost and Budget Control Expert	Months / Mesice	0,5	3	3,5	10 680	37 380
N-12	Pavlík Miroslav	Permitting Expert	Months / Mesice	1,75	1,25	3	7 900	23 700
N-13	Tbd	Administration Engineer	Months / Mesice	1,75	0,5	2,25	5 692	12 806
Total fees / Celkem inženýrský čas								1,101,076

2. Per Diem Allowance:

Place / Místo	Number / Počet	Rate Period	Per Diem / Diety	Total / Celkem
Zvolen, Slovakia	1 967	Days	110	216 370
Total Per Diem / Celkem diety				216,370

3. Reimbursable Expenses

Not used

4. Contingencies

Not used

TOTAL MAXIMUM CONTRACT AMOUNT (Contract Ceiling Amount)	1.317.446
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INDICATIVE PAYMENT SCHEDULE

in Euros	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10
Payment	77 846	77 846	77 846	67 067	56 288	56 288	56 288	56 288	67 067	77 848
Cumulative payment	77 846	155692	233 538	300 605	356 893	413 181	469 469	525757	592 824	670 672

in Euros	Month 11	Month 12	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20
Payment	75 451	64 672	64 672	64 672	64 672	53 893	43 115	43 115	43 114	32 336
Cumulative payment	746 123	810 795	875 467	940 139	1 004 811	1 058 704	1 101 819	1 144 934	1 188 048	1 220 384

in Euros	Month 21	Month 22	Month 23	Month 24
Payment	32 336	21 558	21 557	21 558
Cumulative payment	1 252 720	1 274 278	1 295 835	1 317 393

RULES FOR THE PREPARATION OF INVOICES

The following points shall be observed when submitting invoices for payment.

- **All invoices shall be addressed and sent to:**
 - Zvolenská teplárenská, a.s.**
 - Lučenecká cesta 25, Zvolen 961 50,**
 - Slovak Republic**
- This Contract number and RNDr. Miroslav Duplinský shall be quoted on the invoice.
- Invoices shall be marked to show the Consultant's business address, identification number, registration with the respective Commercial Register, invoice number and date. The name and telephone number of a person who may be contacted in case of need to raise queries shall be quoted on the invoice.
- ZVT will only make payments after the original signed copy of this Contract has been returned to ZVT and only on submission of original invoices and original supporting receipts (no faxes or copies shall be acceptable).
- Invoice payments will be made by direct transfer to the bank account referred to in Appendix 3 of this Contract, unless agreed otherwise.
- Full details of the bank account, where payment shall be made, as set out in this Contract must be supplied on the invoices, including currency of the account.
- Period during which Services were provided must be stated.
- Invoices shall be itemized in the order set out in Appendix 3 – Remuneration and Payment.
- Reimbursable expenses, including Air Travel, Local Travel and Miscellaneous costs must be invoiced in the currency of this Contract, according to Appendix 3.
- Exchange rates for reimbursable expenses should be stated in the invoice. Conversions shall be made at the rates published by the European Central Bank on the first Monday of the relevant month (the month that the invoice was prepared) if it is convertible or against submission of evidence of the exchange rate applied when purchasing local currency for the corresponding reimbursable expenses.
- Any change to this Contract necessitating an amendment to this Contract should be completed prior to submission of an invoice.
- The last of the invoices (or, as the case may be, the only invoice) issued by the Consultant for the Services shall be called the "**Final Invoice**" and shall be indicated as such. The Final Invoice shall not be issued and paid by ZVT until all the Consultant's obligations for performing the Services have been satisfactorily fulfilled. The Final Invoice must be submitted within three months of the earlier of the completion of the Services and the End date of this Contract.
- For reimbursement of air travel costs, original ticket stubs must be submitted, together with boarding cards and travel agency receipts.
- A numbered list detailing each reimbursable item shall be submitted, with correspondingly numbered original receipts for each item attached.
- Prior to issuing the first invoice the Consultant should confirm with ZVT whether VAT can be charged or whether the invoice(s) should be zero rated for VAT purposes due to ZVT's tax status.
- Any applicable VAT charged by the Consultant shall be separately itemized on the invoices.
- Any questions regarding these Rules should be addressed to RNDr. Miroslav Duplinský.

APPENDIX 5 – RULES FOR ADJUDICATION

Rules of Adjudication apply as stated in Client/Consultant Model Services Agreement 5th Edition, 2017, (FIDIC White Book) page h-j.

LETTER OF ACCEPTANCE BY THE CLIENT

LETTER OF ACCEPTANCE

02.12.2019

TO: e.mcc energy, s.r.o. (representing Consortium EMCC AF ZVT)
of
Kpt. Jána Nálepku 78, 934 01 Levice, Slovakia and Magistrů 1275/13, Michle (Prague 4),
140 00 Praha, Czech Republic

We hereby announce that the offer of your consortium e.mcc energy s.r.o. - AF Consult Czech Republic in the procurement of Zvolenská teplárenská for the project "Construction supervision, role of FIDIC engineer" was evaluated the highest on the basis of evaluation of technical and financial offer in the selection process. The evaluation details are in the table below.

Company (lead partner)	Technical score (St)	Weight of TP (T)	TP Score (St x T)	Price of the Offer (€)	Financial Score (Sf)	Weight of FP (F)	FP Score (Sf x F)	Total Combined Score $S = (St \times T) + (Sf \times F)$	Ranking
E.mcc energy, s.r.o. Slovakia	83.85	90%	75.47	1,317,446.00	100.0%	10%	10.00	85.5	1
DESIGN, a.s. Czech Republic	76.31	90%	68.68	1,355,720.00	97.2%	10%	9.72	78.4	2

We hereby invite you to negotiate the contract, as well as the contractual terms and conditions, before concluding and signing the contract.

Signature

For and on behalf of **Zvolenská teplárenská a.s.**

Name: Ing. Jozef Pobiecký

Position: General Director, Chairman of the Board of Directors

Signature

For and on behalf of **Zvolenská teplárenská a.s.**

Name: RNDr. Miroslav Duplinský

Position: Director of Production and Maintenance, Member of the Board of Directors

Zvolenská teplárenská, a.s.
Lučenecká cesta 25
961 50 ZVOLEN

LETTER OF OFFER BY THE CONSULTANT



Zvolen District Heating Project
FORM FIN -1
FINANCIAL PROPOSAL SUBMISSION FORM



**FORM FIN-1
FINANCIAL PROPOSAL SUBMISSION FORM**

Levice, 2nd October 2019

To: Zvolenská teplárenská, a.s
Lučenecká cesta 25
961 50 Zvolen
Slovak Republic

Dear Sirs:

We (the consortium EMCC AF ZVT), the undersigned, offer to provide the consulting services for Zvolen District Heating Project – Construction supervision, role of FIDIC engineer in accordance with your Request for Proposal dated 3rd of September 2019 and our Technical Proposal.

Our attached Financial Proposal is for the amount of

1,317,446 EUR

(one-million-three-hundred-seventeen-thousand-four-hundred-forty-six-Eur)

excluding of all indirect local taxes in accordance with the requirements of the RFP. The estimated amount of local indirect taxes is

EUR 263,489

(two-hundred-sixty-three-thousand-four-hundred-eighty-nine-Eur)

which shall be confirmed or adjusted, if needed, during negotiations. {Please note that all amounts shall be the same as in Form FIN-2}.

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal.

Commissions, gratuities, or fees paid or to be paid by us to an agent or any other party relating to preparation or submission of this Proposal and Contract execution, paid if we are awarded the Contract, are listed below:

Name and Address of Agent(s) / Other Party	Amount and Currency	Purpose
n/a		
n/a		

No commissions, gratuities or fees have been or are to be paid by us to agents or any other party relating to this Proposal and, in the case of award, Contract execution.

We understand you are not bound to accept any Proposal you receive.

We remain,

Yours sincerely,

Authorized Signature: _____

Name and Title of Signatory: Marian Kotrus, Managing Director

Name of Consultant (company's name or JVCA's name): **EMCC AF ZVT**

In the capacity of: e.mcc energy s.r.o.

Address: Kpt. Nalepku 78, 934 01 Levice

Contact information (phone and e-mail): +421 905 541 464, marian.kotrus@emcc.sk