

# **Tlou Energy Grid Connection Project**

Pre-Qualification of Bidders for the Design and Build contract for 66kV Overhead Transmission Line Works

10 Sept 2020



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Tlou Energy Botswana

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Build contract for 66kV Overhead Transmission  
Line Works

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# Issue and Revision Record

Revision	Date	Originator	Checker	Approver	Description
P1	14 July 2020	Ipeleng Mokgadinyane	Gerhard W Loots	Jimson Lekanyang	For Client review and comment
P2	20 July 2020	Ipeleng Mokgadinyane	Mike Page	Solomon Roland	Comments from Client
1	23 July 2020	Ipeleng Mokgadinyane	Jimson Lekanyang	Jimson Lekanyang	For Tenderers

**Document reference:** 419204 | 1 | 1 Overhead Transmission Line Works

**Information class:** Standard

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# 1 Introduction

Tlou Energy Botswana (the Client) invites Tenderers to participate in the Pre-Qualification process for the prospective contract entitled “**Tlou Grid Connection Project – Design, Manufacture, Supply, Installation and Commissioning of 66kV,100km, Single Circuit Wood-pole Support Structure Overhead Powerline from BPC Serowe Substation to the Step-up Substation at the Lesedi CBM plant and Associated Transmission Works**”; Tender No: “Tlou 09/2020/PQ/OHL”.

Tlou Energy’s proposed CBM generation development consists of a number of power generating units and gas supply projects based on the judicious utilisation of Coal Bed Methane (CBM) gas that is now becoming available in Botswana from extraction under Tlou’s CBM concession licences. The project’s main goal is to provide cleaner energy for both base load and peaking power to Botswana Power Corporation (BPC) thus reducing the need to import and burn high cost diesel fuel in the future.

Tlou Energy aspires to develop 10MW and even 100MW of gas power plants and connect these power plants to the BPC grid in the medium to longer term. Tlou Energy has an immediate requirement to utilize its currently flared gas to initially power a gas-based power generation plant in the 1 – 4MW range. Tlou Energy will inter-connect to the BPC grid by installing a 66/11 kV step-up transformer at the power plant site, install a 100km wood-pole 66kV power line to Serowe and newly equip an existing spare 66kV line feeder bay at BPC’s Serowe 66/11 kV Substation.

Mott MacDonald Limited through its wholly owned subsidiary Merz and McLellan Botswana has been commissioned to act as High Voltage Design Engineering Consultant for the development of the project on behalf of Tlou Energy Botswana.

Tenderers are invited to participate in a Pre-Qualification process from which a predetermined limited number of Tenderers would be selected to participate in the second procurement stage. The transmission line works are to be procured through the appointment of a Contractor utilising the FIDIC Design and Build Yellow Book Conditions of Contract 1999, which is similar to that used by the BPC for its transmission system works. Upon completion, the works shall be handed over to the BPC who shall own and operate it.

Tlou Energy is seeking to pre-qualify six (6) tenders from compliant, qualified, competent and suitably experienced local or regional engineering contractors, which will form part of Stage 1 of the procurement process for the 100 km 66kV overhead powerline portions of the works.

Bidders who pre-qualify shall note that the successful Tenderer will be required to:

- Develop a detailed design based upon a minimum functional specification which will be issued to the Tenderer as part of the Request for Proposal (RfP) in Stage 2;
- Procure all equipment and construction materials necessary;
- Fully implement the project throughout the construction phase including site management, site preparation, civil engineering works, stringing and line hardware, wood pole structures commissioning, testing and defects warranty of the works, complete;
- Provide comprehensive performance warranties relating to the construction and performance of the plant, in particular:
  - Time for contract completion
  - Environmental performance requirements
  - Full compliance with technical specifications

- Quality Assurance
- Adherence to Safety, Health, Environment and Quality procedures
- Observe and comply with local statutes and social development

Prospective Tenderers are expected to use the Pre-Qualification period to obtain their own internal authorisations to proceed with the preparation of a complete and compliant tender and to form their proposed contracting alliances, if applicable.

Pre-Qualification submissions should be made to the e-mail address below no later than 17.00hrs (GMT +2) on 2<sup>nd</sup> October 2020, as per Section 3.1 of this document. Confirmation of intention to submit Pre-Qualification documentation is required within one week of receiving this document.

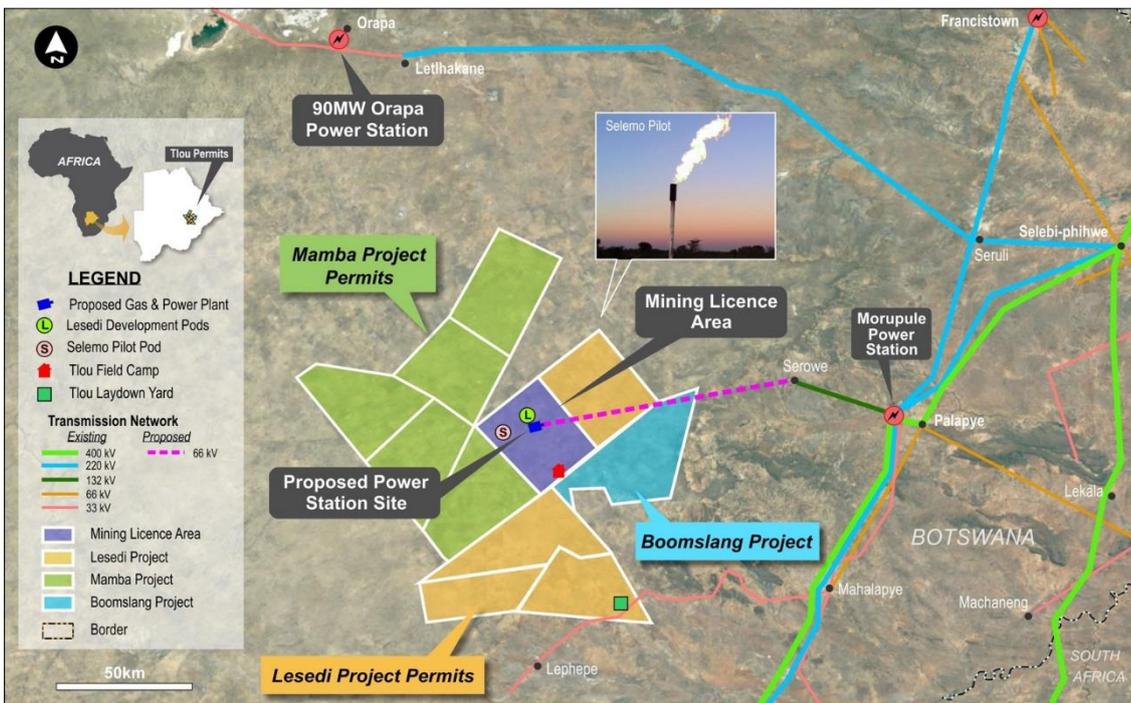
[gabaake.gabaake@tlouenergy.com](mailto:gabaake.gabaake@tlouenergy.com) and [mike.page@tlouenergy.com](mailto:mike.page@tlouenergy.com)

Any queries regarding this invitation should also be directed to the aforementioned e-mail address.

## 2 Project Description

Tlou Energy has secured the first CBM reserves in Africa, acquired environmental approval for upstream development (drilling of up to 200 dual lateral production wells and a gas processing facility) and is looking to start negotiations with the Government of Botswana for a 100MW power purchase agreement (PPA) which it has been pre-selected to deliver from gas. Overall this project, following implementation will provide a new industry and income stream to Botswana at minimal cost to the Government and has significant environmental advantages over coal generated power generation. Figure below shows the Project location in Botswana.

**Figure 1: Lesedi CBM project location**



### 2.1 The Company

Tlou Energy (Tlou) is focused on delivering Power solutions to Botswana and southern Africa to alleviate some of the chronic power shortage in the region. Tlou is currently developing projects using gas and plans to combine this with solar power to provide a cleaner base load power source.

Botswana has a significant energy shortage and generally relies on imported power and diesel generation to fulfil its power requirements. Tlou's Lesedi Power Project provides investors with access to a compelling opportunity to displace expensive, carbon intensive diesel and imported coal-fired electricity with a cleaner and more environmentally friendly alternative.

In addition to plans for cleaner energy, the Company is also committed to developing community projects in Botswana adding real value to peoples' lives in a region with sparse services and where few opportunities exist for the local population. This includes work to assist communities to become self-sustaining, develop business opportunities, improve access to education and create opportunities for self-employment and wealth creation.

Tlou is listed on the Australian Securities Exchange, London's AIM market and the Botswana Stock Exchange and is led by an experienced Board, management and advisory team.

The project is significantly de-risked. The Company produced its first gas in 2014, has a Mining (or development) Licence valid to 2042 and 10 Prospecting (or exploration) Licences. The Company's project acreage covers a vast area spanning approximately 9,300 Km<sup>2</sup> in total.

Tlou's 'Lesedi' and 'Mamba' projects already benefit from significant independently certified 2P gas Reserves of ~41 Billion Cubic Feet (BCF). In addition, 3P gas Reserves of ~427 BCF and Contingent Gas Resources of ~3,043 BCF provide significant additional potential.

Tlou is planning an initial scalable power project. Following successful implementation of this first scalable project, the Company looks forward to evaluating longer-term prospects for the delivery of additional electricity to Botswana and to neighbouring countries.

## 2.2 The Project

A technical analysis was conducted – a high-level transmission route, a high-level transmission line design and a high-level substation design which culminated into a recommended connection option involving a 100km wood-pole 66kV power line from Serowe substation to the CBM step-up substation, 1 x 5MVA 66/11kV step-up transformer at the Lesedi CBM power project step-up substation and to equip the existing spare 66kV line feeder bay at the 66/11kV BPC Serowe substation.

The project works will be implemented as two distinct contracts, one for the 66kV Overhead line contract works and the other for both the BPC Serowe substation extension and the Lesedi CBM power project step-up substation contract works.

To connect the Project to the BPC grid, the following works will be required for the Overhead Line work package:

- The 100km 66kV wooden pole support structure overhead powerline; and
- Associated OPGW works

The Overhead Line works are required to be completed within 15 calendar months from contract signing.

### 2.2.1 Overhead line works

The existing 66 kV overhead lines on the BPC system are predominantly wood-pole lines. Essentially two options have been considered for this project:

- An H-pole structure design which has been the Merz and McLellan *de facto* 66kV standard structure design adopted on the BPC power system; and
- A mono wood-pole structure equipped with stand-off insulators.

The appointed Contractor is required to design and build the 100km 66kV wooden pole powerline from the Serowe Substation to the CBM step-up 66/11kV Substation.

The high-level scope of works for the overhead line works includes:

1. ACSR Hare conductor
2. Shielding earth-wire - 1 OPGW plus one GSW or ACS
3. Associated Fibre cables to the Substation(s) Control Room

4. 100km, 66kV powerline on wooden H-poles and three phase ACSR 'Hare' single conductor
5. Associated 24-core OPGW shield wire
6. Associated structure earthing
7. Associated OPGW patch panels at each end of the lines
8. Bush clearing and access track

### **2.3 Financing of the Project**

The project shall be privately funded by The Client

### **2.4 Statutory Requirements**

In designing the line, the statutory requirements for transmission lines as reflected in the Botswana Electricity (Supply) Regulations CAP: 74:01 and any revisions thereto have to be complied with.

### **2.5 Permits and Agreements**

Tlou Energy Botswana has submitted its Environmental Impact Assessment for the project to the Department of Environmental Affairs of the Government of Botswana, and this has been approved.

The Client in consultation with Botswana Power Corporation (BPC), BPC Wayleave officer and sub-land board(s) has finalised the 66 kV line route alignment. The line route right of way / wayleave has been secured from Serowe Substation continuously all the way to the Lesedi CBM Power Project throughout the whole line route length. Tenderers should assume that the necessary statutory approvals in this regard for the proposed development to proceed so as not to delay the implementation of the (line construction) contract.

Tlou Energy Botswana shall conclude a Power Purchase Agreement and Connection Agreement, among others, with the BPC which will facilitate devolving of the Tlou Energy power supply infrastructure development to BPC and establish power supply connection terms and conditions.

## 3 Tendering Process and Schedule

### 3.1 Tendering Process

The contract for this tender is subject to a two-stage procurement process.

**Stage 1** is the Pre-Qualification process which is the subject of this document. Pre-Qualification responses will be evaluated and screened against criteria as set out in Section 5 in relation to the Project description provided in Section 2. Tenderers must satisfy the basic screening criteria to be selected for Stage 2.

**Stage 2** is where the RfP for the Design & Build contract will be issued. A two-envelope tendering process shall be employed. One sealed envelope shall comprise only the Technical submission while the other shall contain the Commercial/Financial Offer. The Technical Offer shall be assessed on compliance to technical specifications and quality as the primary factors in a process under which Tenders' (technical particulars) are evaluated without access to financial Tenders.

Submission of Pre-Qualification documentation does not guarantee inclusion on the Tenderers list (to be invited) for this contract.

Invitations to tender shall be subject to evaluation of the documentation submitted and are at the sole discretion of the Client, Tlou Energy Botswana (Pty) Ltd.

The cost of preparing and submitting the Pre-Qualification documentation shall be borne by the Tenderer.

### 3.2 Tendering Schedule

The milestones detailed in Table 3.1 provide an overview of the anticipated (provisional target) schedule of key dates leading up to contract award.

**Table 3.1: Key dates leading to Contract award**

Milestone	Date
Invitation to Submit Pre-Qualification	10 <sup>th</sup> September 2020
Confirmation of Tenderer's intention to submit a response, not later than	25 <sup>th</sup> September 2020
Return of Pre-Qualification documents for review	2 <sup>nd</sup> October 2020
Issue RfP to Pre-Qualified Tenderers and inform Tenderers that did not successfully pre-qualify, not later than	30 <sup>th</sup> November 2020

## 4 Submission Guidelines

The Pre-Qualification submission shall be evaluated against the criteria set out in Section 5 of this document. The criteria detailed in Section 5 are in no particular order and responses to all criteria are to be provided.

Tender responses should be in the form of a single, searchable PDF file.

Pre-Qualification submissions should use the same section numbering system as in Table 4.1 below and as used in Section 5.

**Table 4.1: Section numbering system to be used in Pre-Qualification documentation returns**

Section Number	Contents
1	General Information
2	Ability to Provide a Complete Design & Build Contractor Package
3	Experience
4	Financial Information
5	Available Capacity
6	Project Execution
7	Quality, Health, Safety and Environment
8	Corporate Responsibility

For any questions raised in Section 5 where the answer is not applicable this should be explicitly stated in the Pre-Qualification submission. For example, if the Tenderer has no litigation or arbitration in progress the submitted tender documentation should state 'There is no litigation or arbitration currently in progress'.

Failure to provide any of the information requested may result in the Tenderer being deemed non-responsive and therefore disqualified. If information is unavailable the Tenderer is required to substantiate.

## 5 Evaluation Criteria

The Stage 1 submissions received will be evaluated to check that all documents required by the Pre-Qualification document have been submitted and are included in the individual (prospective) Tenderers' submissions. The submissions that are not substantially responsive to the requirements of the Stage 1 Pre-Qualification Document shall not be considered further and will be disqualified.

The evaluation methodology shall require that the documents received are correctly signed, the validity period is correct, and all the required information is submitted, etc.

Interested parties are requested to provide the following information.

### 5.1 General Information

#### 5.1.1 The Tenderer's Parent Company

For the company being proposed for Pre-Qualification:

- Registered company name
- Company registration number
- Valid Tax Registration and Tax Clearance Certificate from Country of Registered Office.
- Postal address
- Contacting address/domicile if different to postal address
- Authorised contact person including
  - Telephone number
  - E-mail address
  - Job title
  - Department
  - Power of Attorney / Letter of Authorisation

In the event of joint ventures being proposed the information should be provided for all organisations individually. There should also be a clear statement regarding who is the lead organisation. It is to be understood that Joint Venture Members would be held jointly and severally liable under a possible contract

#### 5.1.2 The Tendering company: JV Members / Sub-contractors

The information below shall be provided for the Tendering company JV members and subcontractors, and those of any other parties identified in a joint venture:

- Registered company name
- Company registration number
- Valid Tax Registration and Tax Clearance Certificate from Country of Registered Office.
- Postal address
- Visiting address if different to postal address
- Authorised contact person including
  - Telephone number

- E-mail address
- Job title
- Department
- Power of Attorney / Letter of Authorisation
- Definitive Information about the ownership.

## 5.2 Ability to Provide a Complete Design and Build Package

Tenderers should confirm their ability to provide a complete turnkey Design & Build package for the Project that will be eligible without recourse to project finance. This will include all engineering design, procurement, civil work, construction, site management, commissioning and testing required to provide a completed operating overhead powerline. Information must be presented by showing relevant organisational teams' structures and human resource numbers in each Division, Unit or Section of the Organisation.

The Tenderer should confirm its willingness and ability to directly provide comprehensive performance guarantees relating to time for contract completion, Insurance of work and Contractors Equipment, Insurance for Public Liability, Injury to Persons, Damage to Property and Insurance to Contractors personnel and Third-Party Liability.

Any exceptions relating to the above requirements should be clearly and explicitly stated by the Tenderer.

## 5.3 Experience in similar contracts

The Tenderer is to provide evidence of experience in having successfully completed similar EPC or Design and Build contracts to the work described in Section 2.

Tenderer to demonstrate similar project experience in the African Continent and especially in Southern Africa Development Countries. Experience of having completed construction contracts in Botswana would be an advantage. Furthermore, experience in construction of Overhead line wooden pole transmission projects at 33kV is mandatory. Voltage levels above 33kV would constitute an advantage for evaluation purposes. Please provide details of up to five relevant projects completed within the last 10 years - credit will not be given if additional references are provided. For each project the following information is to be provided:

- Project name
- Project dates
- Project Location
- Name of end-Client
- Project duration
- Total man-months expended
- Brief description of project works (length of the overhead line, voltage level, thermal rating, power transfer capacity, phase conductor/bundle, shield wire, ruling span length, supporting structure designs)
- Brief description of Tenderer's scope of work (main items of equipment provided, services provided, guarantees provided, start and completion date of Tenderer's contract)
- Approximate value of contract with the tendering party
- Contract type, for example
  - Sub-contractor role
  - Construction only
  - Engineer, Procure and Construct

- Engineer, Procure, Construction Management
- Design and Build
- Payment basis (lump sum or measurable rates based)
- Tenderer's joint venture partners and main subcontractors
- Operational status of project
- Whether the project was financed with debt from international financing institutions.

For each of the reference projects provided, the Tenderer is to provide current client contact information that can be used to independently verify the Tenderer's performance and scope of work completed.

#### 5.4 Financial Information

The following information shall be provided for the Tenderer and for each and all joint venture partners identified for this project:

- Audited financial statements for the last 3 years for the entity which the Tenderer will use as the formal party to the contract, and for the ultimate parent company. Financial statements shall have been **audited** by an internationally reputed auditor and include:
  - profit and loss statements/Income Statement
  - assets and liabilities statements/Balance Sheet
  - Cash Flow Statement
  - Statement of Changes in Equity
  - Notes to statements
- Confirmation of the ultimate parent company's willingness to provide a parent company guarantee to the Tenderer
- Details of any litigation or arbitration in progress and was in progress over the last five years
- Details regarding the credit rating of the Tenderer and the parent company
- Contact details of a suitable reference person regarding the financial information provided by the Tenderer.

#### 5.5 Available Capacity

The Tenderer is to provide details of the total number of technical staff in its organisation and separately the total number of relevant technical staff potentially available to work on the project. An indication of the total number of projects currently being worked on should also be provided.

In addition, an indication of committed and tendered workload in 2020/21 and beyond should be provided.

The Tenderer is to also disclose which contract works they are planning to sub-contract, and the Tenderer is to nominate and disclose the proposed local sub-contractors for these works and the associated scope of works that will be considered for sub-contracting.

Tenderers to clearly disclose equipment and materials that the Tenderer is to procure or hire in Botswana and the nominated places for equipment and materials procurement.

#### 5.6 Quality, Health, Safety and Environment Documents

Evidence is to be provided of the Tenderer's ISO 9001 accreditation or approved equivalent.

- The Tenderer is to provide a valid certificate of the company's Quality Management Systems from an ISO accredited body and a Quality Policy approved by management (e.g. ISO 9001).
- The Tenderer is to provide evidence of Health and Safety policies, procedures and management systems. Regulations and procedures specifically relevant to this contract works should be highlighted. (e.g. ISO 14001).
- The Tenderer is to provide evidence of environmental accreditations, procedures and management systems. (e.g. ISO 18001).
- The Tenderer is to provide evidence of accreditation or progress on the process of the company being accredited for the following :
  - Information Security Management System (ISO 27001)
  - Occupational Health and Safety Management Standard (ISO 45001)

The Tenderer is to provide performance statistics concerning recorded fatalities, accidents, lost time injury free hours (LTI free) and medical treatments at a medical facility from the last 5 years. Information shall be provided for all participating parties identified. This information is mandatory, and failure to provide such will result in the Tenderer being deemed non-responsive.

### 5.7 Corporate Responsibility

- Tenderer is to describe the formalised programmes or initiatives the organisation has in place that are directed towards meeting social and ethical responsibilities.

