

TOWN ELECTRIFICATION INVESTMENT PROGRAM

Date: 29 August 2017
Loan No.
and Title: L3544/3545 (COL)-PNG: Town Electrification Investment Program – Tranche 2
Contract No. and Title: WHRP-ICBV1-02/17-TEIP2-W02: Warangoi Hydro Refurbishment
Deadline for Submission of Bids: 09 October 2017 at 14:00 hours (Port Moresby, PNG time)

1. **The Independent State of Papua New Guinea** has received a loan from the Asian Development Bank (ADB) toward the cost of the **Town Electrification Investment Program (TEIP) Tranche 2**. Part of this loan will be used for payments under the contract named above. Bidding is open to Bidders from eligible source countries of the ADB.

2. **The PNG Power Limited** ("the Employer") invites sealed bids from eligible Bidders for the engineering, procurement, construction, installation, testing and commissioning of refurbishment of Warangoi Hydropower Facility ("the Facilities"). The project is located 30 km from Kokopo in East New Britain Province, Papua New Guinea. It has an installed capacity of 10.5 MW, operates at 10 MW and a design discharge of 25.4 m³/s [2x12.7 m³/s Horizontal Double Discharge Francis Turbines]. The capacity of each generator is 6.25 MVA and generates at 11 kV and are horizontal, synchronous 3-phase, 50 Hz. The electricity is stepped up to 22 kV at the local switchyard for transmission.

The major work will consist of engineering, procurement, construction [new and remedial], installation, testing and commissioning of major items of the project:

- Remedial construction work at intake structures and headrace tunnel and construction of river training system
- Refurbishment of hydromechanical items – inverted radial gates, intake gates, sand trap gate and gravel trap gate, penstock.
- Supply and installation of stoplogs, flume wall and invert plates, intake screen, gravel trap gate, compressed air system, trashrack cleaning machine and related parts
- Construction of new control room
- Refurbishment and replacement of electromechanical components

3. **International Competitive Bidding (ICB)** will be conducted in accordance with the ADB's Single Stage – One Envelope procedure and is open to all eligible Bidders as described in the Bidding Document.

4. Only eligible Bidders with the following key qualifications should participate in this bidding:

Bidders should have:

- Participated in at least two (2) contracts that have been successfully or substantially completed within the last fifteen (15) years that are similar to the proposed contract, where the Bidder's participation exceeds US\$11 million and
 - i. Successful completion as the prime contractor of at least one (1) EPC/Design Build Construct of a hydropower project comprising civil, electrical and mechanical works of at least 8 MW capacity and design discharge capacity of at least 20 m³/s within the last 15 years; or
 - ii. Successful completion as the prime contractor of at least one (1) EPC/Design Build Construct of new or refurbishment of a hydropower project comprising civil, electrical and mechanical works of at least 8 MW capacity and design discharge capacity of at least 20 m³/s within the last 15 years;
 - Successfully completed design and analysis of at least one (1) hydropower project with an installed capacity of 8MW [or larger] and design flow of 20 m³/s [or higher] and design head of 35 m [or higher];
 - Electro-mechanical experience related to design, selection, testing and installation of cooling water systems and generator ventilation and cooling arrangements for a compact 8MW unit or larger;
 - A minimum average annual turnover of at least US\$17.6 million calculated as a total certified payment received for contracts in progress or completed, within the last three (3) years;
5. To obtain further information and inspect the Bidding Documents, Bidders should contact:

Mr. Francis Mamia
PNG Power Ltd National Office
Project Management Unit
Corner Wards Road and Cordia Street, Hohola
P. O. Box 1105, Boroko, NCD
Papua New Guinea

Telephone: (+675) 324 3533
Facsimile: (+675) 323 4974
Email: fmamia@pngpower.com.pg
Website: www.pngpower.com.pg

6. To purchase a complete set of Bidding Documents in English, eligible Bidders should:

- Write to the address above requesting the electronic copies of bidding documents in CD-ROM for WHRP-ICBV1-02/2017 – W02:Warangoi Hydro Refurbishment Project.
- Pay a non-refundable fee of K150 or USD 50 by cash, telegraphic transfer, bank deposit, or cashable cheque made payable to the following:

Account Name:	PPL Town Electrification Investment Program
Bank:	Bank South Pacific
Branch:	Boroko
Branch No:	008 943
Account No:	1003531124
Swift code:	BOSPPGP

The complete set of Bidding Documents will be available from **28 August 2017** during office work hours.

The Bidding Documents will be sent by airmail and courier, if required by the Bidders and after paying the additional shipping cost of USD50. No liability will be accepted for loss or late delivery.

7. Deliver your bids:
- to the above address (para 5)
 - on or before the deadline: **09 October 2017 at 14:00 hours (local time)**
 - together with a Bid Securing Declaration as described in the Bidding Document.

Electronic submission of Bids is not allowed.

Bids will be opened immediately after the deadline for bid submission in the presence of Bidders' Representatives who choose to attend.

8. Since the rehabilitation works will involve a highly specialized and technical component, interested Bidders are urged to attend both (i) pre-bid meeting to be held at PNG Power Ltd National Office in Port Moresby, PNG and a (ii) a site visit. The schedule of dates is stated in the Bidding Document.