**Respond to the clarification requests**

28 February 2018 11:00 am

Reference no.: 2018/PROC/UNDP-MMR/PN/007 – Invitation to Bid for Supply, delivery, installation, testing, commissioning and training to manager/operator of hydro and electro-mechanical equipment’s for micro hydropower plant including power transmission/distribution works of Muizawal Micro Hydropower Project (15 kW) and Donlui Micro Hydropower Project (30 kW) UN-HABITAT, Myanmar

Question (Q) & Answer (A):

Q1. Logistics arrangement for the delivery of material.

A: The Contractor must deliver the materials to respective village of LOT1 and LOT2, and the community will support transportation (manpower/on foot) to the project site.

Q2. Road Transport information approach from Main Road to project site and type of vehicle could manage to reach

A: **Muizawl MHP (LOT1)**

1. Distance from Yangon to Tedim: distance is about 750 miles
2. Distance from Tedim town to village: distance is about 12 miles
3. Road condition from Tedim town to Village: the road is accessible by jeep to transport materials to the village. The materials need to be carried by man-power (on foot) from village to construction site, which is about 1,500 ft. far.

During rainy season accessibility should become difficult

**Donlui MHP (LOT2)**

1. Distance from Yangon to Tedim: distance is about 750 mile
2. Distance from Tedim town to Donlui: distance is about 18 miles
3. Road Condition from Tedim town to Village: the road is accessible by medium truck to transport materials to the village. The materials need to be carried by man-power (on foot) from village to construction site, which is about 1,500 ft. far.

During rainy season accessibility should become difficult

Q3. Question on Lot 1, item B4 specification (No. or meter?)

A: Correct unit is “meter”

Q4. Question on Lot 1, item B6, B7 specification and drawing for B8 and detail

A: **Bhel** is the brand of an Indian Generator which is widely used in Micro Hydropower Plants. Its full form is Bharat Heavy Electricals Limited (**BHEL**) owned and founded by the Government of India. It is India's largest power generation equipment manufacturer.

 Drawing is attached (specifications)

Q5. Question on Lot 2, item B27 quantity

A: Corect unit is “No” and “1”

Q6. Lot 1 item 27 vs Lot 2 item 22 (please check quantity)

A: For both, LOT1 and LOT2, correct number is “90”

Q7. Question on Lot 2, item B32 quantity

A: For LOT2, correct number is “6”

Q8. Technical Specification can replace the other type instead of the pattern type

A: No, it cannot be replaced

Q9. Delivery Schedule

A: It is 45 days, according to ITB

Q10. Tax Exemption Information

A: Tax exemption will facilitate according to the United Nations and Myanmar Government rules and regulation

Q11. According to the Price Schedule and BoQ of Hydro & Electromechanical Equipment of Muizawal MHP LOT1 and Donlui LOT2, we found that the 15kW and 30 kW generators are NOT included in the price schedules, the generators are not requested to be supplied for the Bidding?

A: The generators are mentioned for both, LOT1 and LOT2 (Item B20 and B21 respectively). It is mentioned Bhel Generator 30 KVA 3 phase 50 HZ (LOT1 - 15 kW), and Bhel Generator 60 KVA 3 phase 50 HZ (LOT2 - Donlui (30 kW).

The sizing of generator depends on Power Factor, ELC Factor, Temperature Factor and Altitude Factor.

Q12. Are the installation works of penstock, trash racks, and sluice gates requested to be supplied by the contractor?

The labour costs for the electro-mechanical equipment (turbine, penstock pipe, transmission line trash-rack, sluice gates, etc.) erection and installation works have been included in community contribution, which is stated in section **IV (of PART-ONE) SUPERVISION & COMMUNITY CONTRIBUTION FOR EM** (Electro-mechanical). This amount is not in cash to be paid but it is in form of labour contribution by the villagers.

The supervision is to be undertaken by the Contractor for the electro-mechanical works; this is included in **PART-TWO/IV OTHERS (Over-head & Contractor's Profit for Electro-mechanical Items)**

The Contractor will provide Engineer / Technician(s) for this supervision work.

Q13. On transmission/distribution works, cable for transmission/distribution line and its wiring, establishment of steel poles shall be done by the contractor?

A: Yes, this has to be undertaken by the contractor

Q14. The civil works of 2 projects including forbay, powerhouse etc. shall be done by the contractor?

A: No, these will be done by UN-Habitat/community

Q15: What does "Bhel" means for the generators?

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