



University of Calcutta
Dept. of Applied Physics
92 APC Road, Kolkata 70009

Tender Notice

Enq No.: AP/UGC-SAP-DRS-II/JNB/ENQ/18-19/08

Date: 08/01/2019

To

The All Interested Parties

Dear M/s.

Please submit sealed quotation within **16/01/2019 (4 PM)** at the Office of the Department of Applied Physics for the following item.

Please enclose the copy of the following papers along with the quotation.

1. Trade License, 2. PAN Card, 3. VAT & Service Tax Registration wherever necessary

1. Introduction

Department of Applied Physics, University of Calcutta (CU) invites sealed bids from GST compliant bidders for a turnkey contract based jobs

2. Background

Department of Applied Physics, University of Calcutta (CU) wants to make a smart power system lab, which is a part of smart grid test bed system, will facilitate hardware based simulation of power systems phenomena including major features of smart grid, testing and analysis for experiments and research purpose. The requirement envisages supplies to be made as modular components and future expansion of the modules to be integrated with the present scope to further introduce additional components for necessary analysis and testing.

3. Requirement for this Tender

Supply of **load modules** for customised power flow control through manual and remote selector switches along with installation and commissioning services for the entire system.

4. Scope of Work.

Module: Load modules with digital communication facility

- I. The scope of work will cover design, engineering, supply, transportation to site, handling, erection, testing, trial run and commissioning of offered system to be interfaced with the smart grid test bed to act as smart grid load (remotely and locally

controllable) and all associated equipment including interconnection to the test bed system on turnkey basis. The basic scope of work includes the following:

- II. The load modules will be comprised of:

Individual R type with 5 kW capacity with remote or local selector switch, individual L type with 5 kW capacity with remote or local selector switch, and individual C type with 5 kW capacity with remote or local selector switch, or in combination of RL or RC or RLC with total capacity upto 5 kW with remote or local selector switch. The remote control will be done by compatible digital communication system.
- III. Site survey for understanding the technical requirements.
- IV. Existing equipment to be relocated, if required.
- V. The modules should be portable, with provision for laying cable suitably (Tenderer to visit site for offering suitable solution). Necessary power terminals to be provided for external interfacing.
- VI. GI, conduits pipes, tools and tackles, cable trays racks, junction box, foundation bolts, inserts and anchor etc. and all the required materials fittings, and accessories to be provided as necessary.
- VII. Spares and consumables for commissioning of the total system.
- VIII. Any small civil work if necessary during erection.
- IX. Drawing documents to be furnished.
- X. Tenderer should supply required power cables for interconnection between R, L and C modules as well as with smart grid supply. Communication cable will not be part of this supply. For cable length estimations the tenderer is required to make prior site survey.

5. General terms of supply.

- XI. Power tapping source will be within 10 metres from the location of modules
- XII. Power supply will be 3 phase, 415 VAC, 50 Hz.
- XIII. Experts to be provided by the bidder for installation and commissioning till handover.

For
Professor Jitendranath Bera, Coordinator,
UGC SAP DRS-II Program
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