

Ministry of electricity & renewable energy
General Electricity company of Libya (GECOL)

TERMS OF REFERENCES

FOR

Supply Portable Electrical Measuring Equipment And Other Accessories

Project

June-2012

Introduction :

General Electricity company of Libya (**GECOL**) aims to improve the customer services by studying the behavior of each customer category through making all the necessary measurement to get a real data and information about the different type of customers.

To do so, the Energy conservation studies sub-dept. has put a work plan which includes this project in order to provide the necessary measuring devices & equipment.

Project should include the following :

- Supply of the required electrical measuring equipment.
- Necessary accessories.
- Packing and shipping details & charges.
- Equipment inspection before shipment (full arrangement to be done : journey tickets , accommodation & transportation..etc) for **(3)** Libyan engineers to inspect the equipment & the other material before shipping.
- Training abroad for **(3)** Libyan Engineers .(One week training course to be conducted to explain how to operate and calibrate the measuring equipment as necessary), full arrangement for the trainees to be done as well.
- All costs of the requested equipment & materials should be C&F Tripoli.
- Validity of the offer not less than **(6)** months.

The Required Equipment :

- 1- Power Quality Analyzers.
- 2- Clamp Meter Devices.
- 3- Portable Electrical Tools.
- 4 – Personal Protective Equipment.

Specifications:

1- Power Quality Analyzer :

- Portable & LCD screen .
- high capacity.
- Measure & Displays Active Power (Kw), Apparent Power (Kva), Reactive Power (kvar) and Power Factor , kwh and kvarh Energy Measurements , Measures Current and Voltage. Adjustable CT ratio (1 to 600) and VT ratio (1 to 3000).
- It works on 220 V ac – 50Hz and battery recharge DC- AC Adaptor.
- Temperature until 55 c and humidity > 80% .
- Measure 1ph-3ph .
- High protection degree.

Note : Current transformer multi size (Flexible clamp) to be included.

2- Clamp Meter Device:

- Digital clamp meter .
- Voltage range 600.0 V ac
- Current range 0.01-2000 A.
- Measurement method AC & DC current.

Note: Flexible clamp to be included.

3 – Electrical Tools Portable Cases: (tools included)

Should be approved tools for Executing normal electrical works according to the standard.

4 – Personal Protective Equipment: (Approved PPE)

As follows :

- **Electrical safety shoes .**
- **Electrician’s face shield complete with helmet .**
- **Arc Flash Jacket .**
- **Flame – Resistant shirt.**
- **Electrician’s Insulating Gloves (600v).**
- **Silicon grain leather Over-gloves, large protection cuff protection against Electric arcs with adhesive strap (to be used as outer gloves to protect Electrician’s Gloves).**
- **Washable cotton under-gloves (to be used with Electrician’s Gloves) .**
- **Electrical safety over-shoes (600v).**

Note: Non- standard Sizes shall be decided later on.

Quantities Required:

- 1- Power Quality Analyzer : **(20)** sets (with the necessary accessories) .
- 2 - Clamp Meter Devices : **(5)** pieces (with the necessary accessories) .
- 3 - Electrical Tools Portable Cases : **(3)** in number . (as per standards where electrical works to be executed).
- 4 –Personal Protective Equipment for **(5)** persons (Approved standards & as listed above) .

Note: Required full **PPE** items for each person

For further information , please contact the following address:

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To submit your offer please send it to the following address :

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