

Government Engineering College, Barton Hill

TENDER SCHEDULE

No P2/1731/15/GECBH

dated 25.05.2015

| | | | |
|---|---|----------------------|------------|
| Superscription | : | Tender No. | 03/2015-16 |
| Last date and time receipt of tender | : | 17.06.2015 3 pm | |
| Date and time of opening of tender | : | 18.06.2015 11 am | |
| Last date and time of sale of tender form | : | 17.06.2015 2 pm | |
| Date upto which the rates are to be firm | : | 31.12.2015 | |
| | | Original Rs. | Rs 1575/- |
| Cost of Tender form | : | Duplicate Rs. | Rs 840/- |
| | | By Post Rs. | Rs 1650/- |

Address of the Officer from whom Tender Forms are to be obtained and to whom tenders are to be send.

Principal, Government Engineering College, Barton Hill,
Thiruvananthapuram. Pin 695035.

List of Items to be procured for setting up High Voltage Laboratory at GEC, Barton Hill

Item with specification

- 1 "Supply and installation of High Voltage test kit with control panel, grounding rod, Capacitance divider (100 KV) with transformer 230/100 KV (1 No:)

Specifications:

Input Voltage :230V, AC

Output voltage : 100kV (Max) AC

Leakage current : 50mA

Type of operation : Motorised

Type of system : Cascaded

Cooling : Oil cooled

Platform height of cascading : Not less than 275mm

Capacitance divider rating : 100kV

Ratio of the divider : 1000:1

Value of H.V arm : 100pf

Type of casing : Fibre glass painted with antitracking paint

Type of cooling : Oil cooled.

Control panel has to be provided with all necessary meters and switches.

switch has to be provided for AC measurement. 1.2 meters long grounding rod



has to be supplied with the equipment. Corona caps and rings has to be supplied, wherever necessary.

2 Accessories like HV insulator, fuses, AB switches and Lightning arrestors of different capacities (1 No:)

- i) 11kV Disc insulator
- ii) 11kV H.T. Bushing
- iii) 11kV H.T. Bushing with pin
- iv) Lightning arrestors of different capacities (Ceramic)
- v) H.T. Isolators
- vi) L.T. Isolators
- vii) Bus bar isolators of different types
- viii) Drop out fuses
- ix) L.T. Bushings
- x) Lightning Arrestors (Special Plastic)
- xi) H.T. Bushings

3 String insulator (11 KV) (6 no:s)

4 Supply and installation of 150 mm Sphere gap with water resistor and micrometer scale to measure AC/DC and Impulse and calibration of 100KV systems with the following specifications: (1 No:)

Diameter of Spheres : 150mm with M10 thread

Material of Spheres : Electrolytic copper

Type of Sphere arrangement : Horizontal.

Type of scale : Micrometer type

Accuracy of reading : 0.1mm

Current limiting resistor : Water resistor

The spheres must be smooth, dent free and free of burrs. The Sphere gap has to be mounted on a mobile M.S. Powder coated base. The entire structural frame has to be made of epoxy fibre glass tubes painted with anti tracking epoxy paint.

5 Supply and installation of 50 mm Spheres set (100 KV) with the following specifications (1 No:)

Diameter of Spheres : 50mm with M6 thread

Material of Spheres : Electrolytic copper

Type of Sphere arrangement : Horizontal.

The spheres must be smooth, dent free and free of burrs. The Sphere gap has to be mounted on a mobile M.S. Powder coated base. The entire structural frame has to be made of epoxy fibre glass tubes painted with anti tracking epoxy paint.

6 30 KVAC/40 KV DC Test kit for measurement of dielectric strength of solid with the following specifications (1 No:)

Input Voltage : 0-230V, A.C. (Variable)

Output A.C. Voltage : 0-30kV, A.C.

Output D.C. Voltage : 0-40kV D.C. (-Ve or +Ve polarity)

Leakage Current : 0-10-20mA (Selectable)

Safety interlocks : Zero-interlock

Timer : 0-5 minutes

Test Chamber : 250 mm dia x 200 mm height

7. Digital AC peak voltmeter (1 No:)



Insulation Megger unit (5KV) (1 No:)

9 - Motorised Oil Test Kit (0 to 75KV) with the following specifications: (1 No:)

- 1) Variable output voltage from 0 to 75kV.
- 2) Operating: Automatically synchronous motor driven and manual operation will be provided with knob. Circuit will trip as per the dielectric strength of the Oil.
- 3) Transformer: HV step up transformer encapsulated in epoxy resin.
- 4) Capacity of transformer: 750VA.
- 5) Oil container as per IS:335.
- 6) Setting Gauge 'GO' & 'NOGO' with key.
- 7) Input Voltage: 230V, 50HZ..
- 8) Necessary Protection has to be provided such as door interlock, Zero interlock, trip circuits.
- 9) Rate of rise of voltage 1.5 – 2.5kv/sec.
- 10) Tripping current 2-5ma.
- 11) The equipment will be manufactured as per IS:6792"

10 Clip on power meter with thermo couple probe (1 No:)

11 Current Transformer - 50/5 A, 5 VA (3 No:)

12 Current Transformer - 100/5 A, 5 VA (3 No:)

13 Potential Transformer 415/110 V, 25 VA. (3 No:)



[Handwritten signature in pink ink]

PRINCIPAL

[Handwritten mark]

