

Power Grid Company of Bangladesh Limited

Bidding Document for Procurement of Supply of Different Types Tools and Safety Equipment for PGCB Maintenance Upgradation (Package-7, Lot-2) [Contract No.: PGCB/WB/ESPNERP/Safety-tools/Lot-2]

ADDENDUM NO. 01

(Date: 28.05.24)

Following revisions/changes are made in the Bidding Document will from part of the Bidding Document:

Volume 1 of 2

1. Section VII- Schedule of Requirements, Clause 1.List of Goods and Delivery Schedule

Line item no. 11- "HANDHELD DYNAMIC MICRO OHM METER" shall be replaced with "HANDHELD MICRO OHM METER"

2. Section VII- Schedule of Requirements, Clause 1.List of Goods and Delivery Schedule

The Required Quantity of Line item no. 25- "PULLEY FOR MULTIPLE CONDUCTOR" shall be- Mod 1 : total 18 Nos. and Mod 2 : total 17 Nos.

3. Section VII- Schedule of Requirements, Clause 1.List of Goods and Delivery Schedule

The Required Quantity of Line item no. 26- "PULLEY FOR SINGLE CONDUCTOR" shall be- Mod 1 : total 18 Nos. and Mod 2 : total 17 Nos.

4. Section VII- Schedule of Requirements, Clause 1.List of Goods and Delivery Schedule

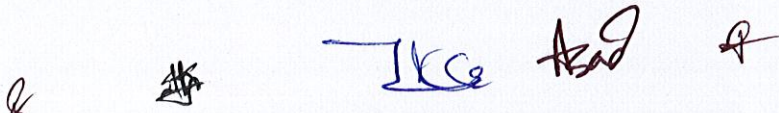
The Required Quantity of Line item no. 40- "SUSPENSION LADDER FOR WORK ON LATTICE TOWERS" shall be- Mod 1 : total 12 Nos. and Mod 2 : total 13 Nos.

5. Section VII- Schedule of Requirements, Clause 1.List of Goods and Delivery Schedule

The Required Quantity of Line item no. 42- "TACKLE BLOCKS" shall be- TYPE 1 : total 5 Nos. and TYPE 2 : total 10 Nos.

6. Section VII- Schedule of Requirements, Clause 1.List of Goods and Delivery Schedule

The Required Quantity of Line item no. 41- "MOORING LADDER FOR WORK ON LATTICE TOWERS" shall be- TYPE 1 : total 8 Nos. and TYPE 2 : total 7 Nos.



7. Section VII- Schedule of Requirements, Clause 1.List of Goods and Delivery Schedule

The Required Quantity of Line item no. 44- "CROSSBAR FOR MOORING(WORKING PLATFORM)" shall be-

TYPE 1 : total 6 Nos.; TYPE 2 : total 5 Nos and TYPE 3 : total 4 Nos

8. Section VII- Schedule of Requirements, Clause 1.List of Goods and Delivery Schedule

The Required Quantity of Line item no. 57- "THREE PHASE AUTOMATED TRANSFORMER TEST SET" shall be Five (05) Nos. only.

9. Section VII- Schedule of Requirements, Clause 1.List of Goods and Delivery Schedule, Page 105

The content in page no. 105 in volume 1 of 2 shall be replaced be the following text:

" Note:

*** insert place of Delivery: Specified in the BDS: refer to ITB 14.8**

****insert the number of days following the date of effectiveness of the Contract:**

The effective date upon which the period until the time for completion of the facilities shall be counted from is the date when all of the the following conditions have been fulfilled

a. This contract of agreement has been duly executed for and on behalf of the Purchaser and the Contractor.

b. The contractor has submitted to the Purchaser the performance security.

Each party shall use its the best efforts to fulfill the above conditions for which it is responsible as soon as practicable. "

10. Section VII- Schedule of Requirements, Clause 5.1 Training/Workshop, Page-109-110

"Clause 5.1 Training/Workshop" is replaced with the following:

Training/Workshop: Training/Workshop would be divided into two groups (Group A and Group B). Each group shall include 20 Engineers for 5 days. Each Group shall receive training on the following equipments:

Group	Description of Equipments	
Group A	Sl. No. as per annex 1	Name of Equipment
	5	PORTABLE PARTIAL DISCHARGE (PD) DIAGNOSTIC SYSTEM FOR HIGH VOLTAGE EQUIPMENTS.
	6	SWEEP FREQUENCY RESPONSE ANALYZER (SFRA)

	13	SF6 GAS ANALYZER TEST SET
	50	INSULATION OIL MOISTURE ANALYZER TEST SET
	51	OIL INTERFACIAL TENSION TEST SET
	52	OIL ACIDITY TEST SET
	54	INSULATING OIL TAN DELTA TEST SET
	55	DGA TEST KIT (GAS CHROMATOGRAPHY)
	56	Online DGA Test Kit
	57	THREE PHASE AUTOMATED TRANSFORMER TEST SET
Group B	46	Battery Load Test Set
	61	MULTI-FUNCTIONAL PRIMARY TEST SYSTEM FOR SUBSTATION COMMISSIONING AND MAINTENANCE
	62	VOLTAGE TRANSFORMER TESTING, CALIBRATION AND ASSESSMENT
	63	PORTABLE REFERENCE STANDARD METER CLASS 0.05 & POWER QUALITY ANALYZER
	1	HIGH VACUUM TRANSFORMER OIL PURIFIER
	2	VACUUM PUMP SYSTEM FOR TRANSFORMERS.
	8	HARMONIC & POWER QUALITY ANALYZER
	10	CIRCUIT BREAKER AND COIL ANALYZER TEST SET
	11	HANDHELD MICRO OHM METER
	14	HIGH-PERFORMANCE DAYLIGHT CORONA IMAGING CAMERA

11. Section IX- Special Condition of Contract, GCC 16.1, Page- 143-144

The following text shall be added:

Payment for Training/Workshop

Payment shall be made in local currency for Training/Workshop in the following manner:

- Ten percent (10%) of total quoted price against Training/Workshop as Advance Payment
- Ninety percent (90%) of total quoted price against Training/Workshop upon completion of Training/Workshop

Volume 2 of 2

1. Guaranteed Technical Particulars for High Vacuum Transformer Oil Purifier

- (a) GTP point no. 6 **Capacities** Required Specification will be replaced by the following text:

Capacity of oil flow rate is **10,000 to 12,000 L/H** (Liter per hour), Vacuum Pump L/m 3500 or more, Mechanical Booster m3/h 1250/1500 or more.

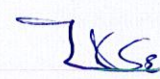
- (b) GTP point no. 5 **Power Supply** Required Specification will be replaced by the following text:

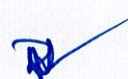
3 Phase 4 wire 400V $\pm$ 10 % 50Hz + 10%

- (c) GTP point no. 13 **Inlet Strainer** Required Specification will be replaced by the following text:

60 mesh/ 250 μ m Replaceable /Cleanable strainer







- (d) GTP point no. 30 **Hoses 6 Each for oil circulation. 3 each for vacuum** Required Specification will be replaced by the following text:

For transformer oil and vacuum extraction, non-clasp. **2"x10 m** with camlock male fitting on both ends, Anti- Static with built in static wire assists in dissipating static electricity. High operating temperature (-10 to +90 °C), operating pressure (Full vacuum to 150 PSI). A set of 6x10 m hoses for oil circulation and a set of 3x10 m hoses for vacuum.

2. Guaranteed Technical Particulars for Oil Acidity Test Set

- (a) GTP point no. 11 **Temperature Range** will be replaced by the following text:

+5 C to +50 C

3. Guaranteed Technical Particulars for Vacuum Pump System for Transformers

- (a) GTP point no. 5 **Power Supply** Required Specification will be replaced by the following text:

3 Phase 4 wire 400V $\pm$ 10 % 50Hz + 10%

- (b) GTP point no. 13 **Hoses 3 Each for vacuum** Required Specification will be replaced by the following text:

For transformer vacuum extraction, non-clasp. 2"x10 m with flange fitting on both ends, Anti-Static with built in static wire assists in dissipating static electricity. High operating temperature (-10 to +90 °C), operating pressure (Full vacuum). A set 3x10 m hoses is required.

4. Guaranteed Technical Particulars for Portable Partial Discharge (PD) Diagnostic System for High Voltage Equipment

- (a) GTP point no. 9 **Detection Frequency Range** Required Specification will be replaced by the following text:

UHF	300 MHz-1000 MHz
HFCT	1.2-30MHz or higher
TEV	2 MHz to 80 MHz or higher
Acoustic	100kHz to 300kHz or higher

5. Guaranteed Technical Particulars for Sweep Frequency Response Analyzer (SFRA)

- (a) GTP point no. 31 **Accuracy** Required Specification will be replaced by the following text:

± 0.1 dB from +10dB down to -40dB, ± 0.5 dB down to -100dB Minimum

- (b) GTP point no. 14 **Transport Case** Required Specification will be replaced by the following text: Yes

6. Guaranteed Technical Particulars for Current and Voltage Transformer Test Equipment



- (a) GTP point no. 10 **Environmental Conditions** Required Specification will be replaced by the following text:

-10 to 50°C, indoor/outdoor in fair weather, Humidity <95% non-condensing, Altitude<3300 ft (1000m)

7. Guaranteed Technical Particulars for Harmonic & Power Quality Analyzer

- (b) GTP point no. 6 **Range** Required Specification will be replaced by the following text:

Voltage range : 1000.0 V rms or DC, Transient measurement 2.200 kV peak
Current range: 50.000 mA AC to 5.0000 kA AC, 10.000 A DC to 2.0000 kA DC

- (c) GTP point no. 5 **Power Supply** Required Specification will be replaced by the following text:

Single Phase 230V +/- 10% 50Hz +/- 10%

- (d) GTP point no. 8 **Features (Display, Voltage source measurement, Current Inputs)** Required Specification will be replaced by the following text:

Display : TFT digital display.
Power range: 50.000 W to 6.0000 MW

- (e) The Following point shall be added to GTP-

Sl no	Description	Required Specification	Bidder's Particulars	Guaranteed
11	Transportation Case	Yes		

8. Guaranteed Technical Particulars for Transformer Turns Ratio Tester

- (a) GTP point no. 13 **Accuracy (Turn Ratio)** Required Specification will be replaced by the following text:

Turn Ratio: $\leq \pm 0.2\%$ (up to 2 kV)

- (b) GTP point no. 9 (f) **Magnetic Balance Test** is deleted.

- (c) GTP point no. 18 **Relative Humidity** Required Specification will be replaced by the following text:

90% or better

- (d) The Following point shall be added to GTP-

Sl no	Description	Required Specification	Bidder's Particulars	Guaranteed
24	Transportation Case	Yes		

9. Guaranteed Technical Particulars for Circuit Breaker and Coil Analyzer Test Set

- (a) GTP point no. 14 **Static & Dynamic Resistance Measurement (Resolution)** Required Specification will be replaced by the following text:

Resolution : 1 $\mu\Omega$

2

- (a) The Following point shall be added to GTP-

Sl no	Description	Required Specification	Bidder's Particulars	Guaranteed
19	Transportation Case	Yes		

10. Guaranteed Technical Particulars for Sf6 Gas Analyzer Test Set

- (a) GTP point no. 14 **Measuring parameters (Inlet pressure)** Required Specification will be replaced by the following text:

Inlet pressure: 0,2 - 35 bar or higher

11. Guaranteed Technical Particulars for Online DGA Test Kit

- (a) GTP point no. 16 **DGA Interpretation Methods** Required Specification will be replaced by the following text:

IEC, IEEE, CIGRE, Key Gas Method, Rogers Ratio, Duval Triangle Method, and Duval Pentagon Method

- (b) GTP point no. 5 **Power Supply** Required Specification will be replaced by the following text:

Single Phase 230V +/- 10% 50Hz +/- 10%

- (c) The Following point shall be added to GTP-

Sl no	Description	Required Specification	Bidder's Particulars	Guaranteed
21	Transportation Case	Yes		

12. Guaranteed Technical Particulars for MULTI-RANGE VOLTAGE INDICATOR/Transmission line voltages (600V through 765 kV) tester

- (a) GTP point no. 7 **Range** Required Specification will be replaced by the following text:

600V through 400kV live line tester.

13. Guaranteed Technical Particulars for TEMPORARY GROUND ROD AT TRANSMISSION LINE SITE

- (a) Document to be supplied during supply:

"Valid Calibration Certificate" shall be replaced with "Valid Test certificate".

14. Guaranteed Technical Particulars for HYDRAULIC PULLER-TENSIONER (STRETCHING WINCH)

- (a) GTP point no 2.1.1 Indicative Dimension is Deleted.
 (b) GTP point no 2.8.3 Adherence wheels with interchangeable Nylon Liner is Deleted.
 (c) GTP point no. 3.2 **Welding** Required Specification will be replaced by the following text:

TIG/MIG Welding process

15. Guaranteed Technical Particulars for SERVICE WINCH

- (a) GTP point no 2.1.1 Indicative Dimension is Deleted.
- (b) GTP point no. 3.2 **Welding** Required Specification will be replaced by the following text:

TIG/MIG system

- (c) Certificates to be supplied with the tender document: **Manufacturer's EMC Certificate of Conformity** is deleted.

16. Guaranteed Technical Particulars for Coil

- (a) GTP point no. 2.2.2 **Maximum Weight (mod 1)** Required Specification will be replaced by the following text:

Max. Weight- 65 kg

- (b) GTP point no. 2.2.2 **Maximum Weight (mod 2)** Required Specification will be replaced by the following text:

Max. Weight- 85 kg

- (c) GTP point no. 3.2 **Welding** Required Specification will be replaced by the following text:

TIG/MIG system

- (d) Certificates to be supplied with the tender document: **Manufacturer's EMC Certificate of Conformity** is deleted.
- (e) Document to be supplied during supply: "Valid Calibration Certificate" is deleted.

17. Guaranteed Technical Particulars for CONDUCTOR CAR FOR SINGLE CONDUCTOR INSPECTION

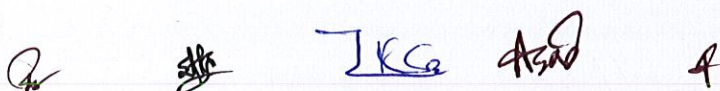
- (a) GTP point no. 2.2.2 **Wheels** Required Specification will be replaced by the following text:

The required wheels shall be made of nylon

- (b) Certificates to be supplied with the tender document: **Manufacturer's EMC Certificate of Conformity** is deleted.
- (c) Document to be supplied during supply: "Valid Calibration Certificate" is deleted.

18. Guaranteed Technical Particulars for CONDUCTOR CAR FOR MULTIPLE CONDUCTOR INSPECTION

- (a) Certificates to be supplied with the tender document: **Manufacturer's EMC Certificate of Conformity** is deleted.
- (b) Document to be supplied during supply: "Valid Calibration Certificate" is deleted.

 Several handwritten signatures and initials are present at the bottom of the page, including what appears to be 'JKA' and 'ASD'.

- (c) GTP point no. 3.2 **Welding** Required Specification will be replaced by the following text:

TIG/MIG system

- (d) Certificates to be supplied with the tender document: **Manufacturer's EMC Certificate of Conformity** is deleted.

- (e) Document to be supplied during supply: "Valid Calibration Certificate" is deleted.

19. Guaranteed Technical Particulars for PULLEY FOR SINGLE CONDUCTOR

- (a) GTP point no. 3.2 **Welding** Required Specification will be replaced by the following text:

TIG/MIG system

- (b) Certificates to be supplied with the tender document: **Manufacturer's EMC Certificate of Conformity** is deleted.

- (c) Document to be supplied during supply: "Valid Calibration Certificate" is deleted.

- (d) The following changes are made in GTP point no 2 Characteristics:

MOD-1	
2.1.1	Dimension (A): 770±30
2.1.7	Dimension (G): 270±30
2.1.5	Dimension (H): 175±30
MOD-2	
2.1.2	Dimension (B): 770±30
2.1.7	Dimension (G): 340±30

20. Guaranteed Technical Particulars for PULLEY FOR GROUNDING WIRE

- (a) GTP point no. 3.2 **Welding** Required Specification will be replaced by the following text:

TIG/MIG system

- (b) Certificates to be supplied with the tender document: **Manufacturer's EMC Certificate of Conformity** is deleted.

- (c) Document to be supplied during supply: "Valid Calibration Certificate" is deleted

21. Guaranteed Technical Particulars for MOORING CHAIN

- (a) GTP point no. 3.2 **Welding** Required Specification will be replaced by the following text:

2

JKSR

ASD

P

TIG/MIG system

- (b) Certificates to be supplied with the tender document: **Manufacturer's EMC Certificate of Conformity** is deleted.

- (c) Document to be supplied during supply: "Valid Calibration Certificate" is deleted

22. Guaranteed Technical Particulars for HYDRAULIC REEL STAND

- (a) GTP point no. 3.2 **Welding** Required Specification will be replaced by the following text:

TIG/MIG system

- (b) Certificates to be supplied with the tender document: **Manufacturer's EMC Certificate of Conformity** is deleted.

- (c) Document to be supplied during supply: "Valid Calibration Certificate" is deleted

23. Guaranteed Technical Particulars for ELECTRIC SHEAR

- (a) GTP point no. 3.2 **Welding** Required Specification will be replaced by the following text:

TIG/MIG system

- (b) Certificates to be supplied with the tender document: **Manufacturer's EMC Certificate of Conformity** is deleted.

- (c) Document to be supplied during supply: "Valid Calibration Certificate" is deleted

- (d) GTP point no 3.1 Coefficient of rupture is deleted.

24. Guaranteed Technical Particulars for RETRACTOR FOR TRINATE CONDUCTOR

- (a) GTP point no 2.2.1 **Material** Required Specification will be replaced by the following text:

Stainless Steel/Galvanized Steel

- (b) GTP point no. 2.4 **Maximum Weight** Required Specification will be replaced by the following text:

Max. Weight- 15 kg

- (c) Certificates to be supplied with the tender document: **Manufacturer's EMC Certificate of Conformity** is deleted.

- (d) Document to be supplied during supply: "Valid Calibration Certificate" is deleted

25. Guaranteed Technical Particulars for HANDLING RUNG

- (a) GTP point no 2.2.1 **Material** Required Specification will be replaced by the following text:

Stainless Steel/ Aluminum

- (b) GTP point no. 3.2 **Welding** Required Specification will be replaced by the following text:

TIG/MIG system

- (c) Certificates to be supplied with the tender document: **Manufacturer's EMC Certificate of Conformity** is deleted.



- (d) Document to be supplied during supply: "Valid Calibration Certificate" is deleted

26. Guaranteed Technical Particulars for LADDER FOR TUBES POLE

- (a) Certificates to be supplied with the tender document: **Manufacturer's EMC Certificate of Conformity** is deleted.
- (b) Document to be supplied during supply: "Valid Calibration Certificate" is deleted

27. Guaranteed Technical Particulars for SUSPENSION LADDER FOR WORK ON LATTICE TOWERS

- (a) GTP point no 2.1.3 **Minimum Hook opening dimensions (A)** Required Specification will be replaced by the following text: **220±15**
- (b) Certificates to be supplied with the tender document: **Manufacturer's EMC Certificate of Conformity** is deleted.
- (c) Document to be supplied during supply: "Valid Calibration Certificate" is deleted

28. Guaranteed Technical Particulars for TACKLE BLOCKS

- (a) GTP point no. 2.1.13 **Maximum Weight** Required Specification will be replaced by the following text:
Max. Weight- **25 kg**
- (b) Certificates to be supplied with the tender document: **Manufacturer's EMC Certificate of Conformity** is deleted.
- (c) Document to be supplied during supply: "Valid Calibration Certificate" is deleted
- (d) The following GTP point shall be added-

Sl no	Description	Required Specification	Bidder's Particulars	Guaranteed
2.1.15	Length of steel wire	250 m		

- (e) GTP point no. 3.2 **Welding** Required Specification will be replaced by the following text:
TIG/MIG system

29. Guaranteed Technical Particulars for CROSSBAR FOR MOORING (WORKING PLATFORM)

- (a) Certificates to be supplied with the tender document: **Manufacturer's EMC Certificate of Conformity** is deleted.
- (b) Document to be supplied during supply: "Valid Calibration Certificate" is deleted

30. Guaranteed Technical Particulars for Tower Harness with Absorbing Lanyards

- (a) Certificates to be supplied with the tender document: **Manufacturer's EMC Certificate of Conformity** is deleted.



31. Guaranteed Technical Particulars for Quad Box Ratcheting Wrench

- (a) Certificates to be supplied with the tender document: **Manufacturer's EMC Certificate of Conformity** is deleted.

32. Guaranteed Technical Particulars for Insulating Oil Dielectric Breakdown Test set

- (a) GTP point no. 29 **Weight** Required Specification will be replaced by the following text:
Weight: **Insert**

33. Guaranteed Technical Particulars for Insulating Oil Tan Delta Test set

- (a) GTP point no. 11 **Best Resolution** Required Specification will be replaced by the following text:
Best Resolution: **0.1 pF**

34. Guaranteed Technical Particulars for Vacuum Interrupter Test Set

- (a) The Following point shall be added to GTP-

Sl no	Description	Required Specification	Bidder's Particulars	Guaranteed
13	Transportation Case	Yes		

35. Guaranteed Technical Particulars for MULTI-FUNCTIONAL PRIMARY TEST SYSTEM FOR SUBSTATION COMMISSIONING AND MAINTENANCE

- (a) GTP point no 4.1.3 is replaced by the following text-

Sl no	Requirement	Fulfilled	Bidder's Particulars	Guaranteed
4.1.3	Transport case with wheels for shipment and transportation within substations	Yes		

36. Guaranteed Technical Particulars for VOLTAGE TRANSFORMER TESTING, CALIBRATION AND ASSESSMENT

- (a) GTP point no 4.1.3 is replaced by the following text-

Sl no	Requirement	Fulfilled	Bidder's Particulars	Guaranteed
4.1.3	Transport case for shipment and transportation within substations	Yes		

2
SJS
JKS
AKA
✓

37. Guaranteed Technical Particulars for Earth Ground Test Set/ Tower Footing Resistance Meter

The entire GTP shall be replaced by the following GTP-

Sl. no.	Description	PGCB Requirement	Manufacturer's Guaranteed Particulars
1.	Description of the Item	Earth Ground/Tower Footing Resistance Test Set	
2.	Name of the Manufacturer	To be mentioned	
3.	Address of the manufacturer	To be mentioned	
4.	Type	To be mentioned	
5.	Model number	To be mentioned	
6.	Country of origin	USA/UK/EU/Canada /Switzerland/ Australia/Brazil/Japan	
7.	Country of made	USA/UK/EU/Canada /Switzerland/ Australia/Brazil/Japan	
8.	Country of Shipment	To be mentioned	
9.	Standards	IEC/IEEE/CIGRE/ANSI or equivalent	
10.	Power Supply	Battery Operated	
11.	Measurement:		
	Measuring Range	2 to 100 Ω or more	
	Measuring Accuracy	+/- 3% of rdg +/- 1 digit or better	
	Test Frequency	$\geq 20\text{KHz}$	
	Test Current	$\geq 20\text{mA}$	
	Earth Resistance of Auxiliary Rods	2 k Ω (For both voltage & current rod) <i>Hasⁿ. ✓</i>	
	Inductive Component Compensation	Yes	
12	Features & Others		
	Display	Alphanumerical LCD display. Clear and visible display in daylight.	
	Storage Data/Internal Memory	~~Min. 1000 test readings~~ <i>To be mentioned.</i> ✓	
	Operating temperature	0 °C to 50 °C Min.	

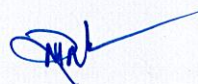
	Storage temperature	0 °C to 50 °C Min.	
	Humidity	20-90% RH	
	Dimension	To be mentioned	
	Over Voltage Protection	Yes	
	Safety	IEC 61010-1	
	Standard followed EMC conformity	To be mentioned	
	Communication	USB & OTHERS	
	IP Rating	IP 65	
	Accessories to be supplied	AC adapter, battery, rods, shielded cables, USB cable, Case to carry accessories & all other standard accessories incl.	

13	Documents requirement:		
	Certificates to be supplied with the tender document	1. Manufacturer's EMC Certificate of Conformity	
		2. Manufacturer's valid ISO Certificate.	
		3. Manufacturer's Safety Certificate of Conformity	
		4. Manufacturer's Certificate of test Conformity	
		5. Printed Catalogue and Brochures	
	Document to be supplied during supply	1. Country of origin Certificate	
		2. Copy of Shipping documents	
		3. Valid Calibration Certificate	

Seal & Signature of the Bidder



Seal & Signature of the Manufacturer



38. Guaranteed Technical Particulars for HANDHELD MICRO OHM METER

- (a) GTP point no. 24 **Test Modes** Required Specification will be replaced by the following text:
Manual, Auto

39. Guaranteed Technical Particulars for AC/DC Power Supply for Testing Circuit Breakers

- (a) GTP point no. 8 **Features** Required Specification will be replaced by the following text:

- Main power circuit breaker switch (with indicator)
- Manual control of output voltages
- Zero Start interlock
- Digital, LCD showing voltage and current

40. Guaranteed Technical Particulars for SAFETY GROUND FOR TRANSMISSION LINE AND SUBSTATION EQUIPMENT

- (a) The following texts are added to GTP point no. 8 **Features**:

43KA 15 Seconds rating with Extra flexible Copper Cable Size : 4/0, Four-way copper terminal block, four bronze ground C clamps and three 6-ft. lengths for phases and one 10-ft for ground cable length 4/0 copper clear-jacket transparent ground cable for 3 phase grounding.

ASTM Designation: Type I Class A Grade 5 (with clear-jacket transparent cable and Aluminum body, Smooth jaws, C-Type Grounding Clamps adjustable from 0.5 to 3 inches conductor/bus bar outer dia.

41. Guaranteed Technical Particulars for Vacuum/Pressure Gauge for Transformer Drying

- (a) GTP point no. 9 **Measuring Range** Required Specification will be replaced by the following text:
1200 mbar to 0.01 mbar

42. Guaranteed Technical Particulars for PORTABLE REFERENCE STANDARD METER CLASS 0.05 & POWER QUALITY ANALYZER

- (a) GTP point no. **Inputs** Required Specification will be replaced by the following text:

3 x voltage
3 x current (direct)
1 x Clamp-on CT current input IN/IE
2 x Clamp-on CT current input I1, I2, I3 for connection of:
3 x 100A Clamp-on CT
3 x 1000A Clamp-on CT
3 x 3000A FLEX 3000 current sensor input
1 input for 3 current sensors in high voltage networks
1 input for 3 high voltage sensors
2 Frequency / Scanning head input (one configurable as pulse output) 1 USB input 1 ETHERNET
1 Analogue/Digital modem
1 GSM modem (Option)



43. Guaranteed Technical Particulars for PULLEY FOR MULTIPLE CONDUCTOR

- (a) GTP point no. 3.2 **Welding** Required Specification will be replaced by the following text:

TIG/MIG system

- (b) Certificates to be supplied with the tender document: **Manufacturer's EMC Certificate of Conformity** is deleted.
- (c) Document to be supplied during supply: "Valid Calibration Certificate" is deleted.
- (d) The following changes are made in GTP point no 2 Characteristics:

Mod-1	
2.1.1	Dimension (A): ~~700±30~~ 770 ± 30 <i>2</i>
2.1.2	Dimension (A): 630±30
2.1.5	Dimension (H): 175±30
2.1.6	Dimension (F): 1450±30
2.1.7	Dimension (G): 630±30
Mod-2	
2.1.6	Dimension (F): 1620± ~~30~~ 30 <i>2</i>
2.1.9	Dimension (L): 570±30

44. Guaranteed Technical Particulars for BATTERY LOAD TEST SET

- (a) GTP point no. 9.5 **Battery Cell Voltage Monitoring** Required Specification will be replaced by the following text:

Must be included for maximum 120 nos. cells

2 *SK* *IKSe* *RA* *✓*