50120



#### BANGLADESH BANK

(Central Bank of Bangladesh)
Head Office
Motijheel, Dhaka-1000
Bangladesh

Financial sector Support & Strategic Planning Department

Ref: FSSSPD/BB(G)IT-03(NDC)/36/2019- 2117

## **Letter of Acceptance**

Dated: 21 October 2019

Cross World Power Ltd Plot-1/B, Road -90 Gulshan-2, Dhaka-1212

Subject: Notification of Award for Contract No [BB(G)IT-03 (NDC)]

This is to notify that your BID dated 05/05/2019 for execution of the "Supply, Installation, Testing, Commissioning, Implementation and related services of Generator& Substation, capacity Expansion for Information System [Package No: BB(G)IT-03 (NDC)]" for the Accepted Contract Amount of BDT 8,99,61,366.00 (Bangladeshi Taka Eight Crore Ninety Nine Lac Sixty One Thousand Three Hundred sixty Six) only is here by accepted by Bangladesh Bank.

You are requested to furnish the Performance Security (Bank Guarantee) within 28 days in accordance with the conditions of the Contract, using for that purpose of the Performance Security Form included in section X, Contract Forms, of the Bidding Document.

(Md. Masud Biswas)

Executive Director & Project Director Financial Sector Support Project

Bangladesh Bank Phone: 02-9566211

Attachment: Draft Contract Agreement



BETWEEN

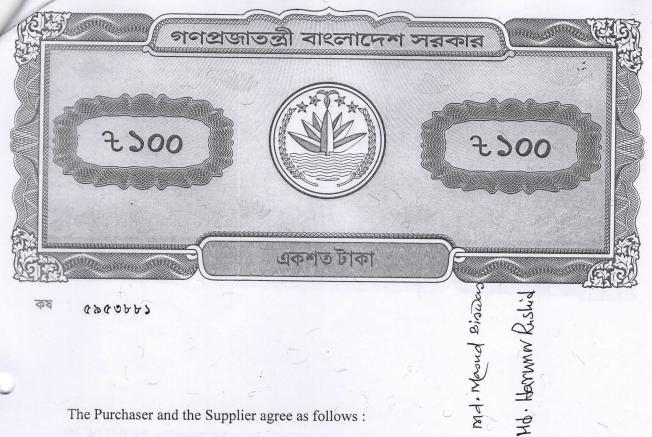
- (1) Bangladesh Bank, Head Office, Motijheel Commercial Area, Dhaka-1000. (Hereinafter called "the Purchaser") of the one part and
- (2) Cross World Power Ltd., Plot 1/B, Road 90, Gulshan-2, Dhaka-1212. (Hereinafter called "the Supplier") of the other part:

WHEREAS the Purchaser invited Bids for certain Goods and ancillary services, viz, Procurement of Supply, Installation, Testing, Commissioning, Implementation and related services of Generator & Substation Capacity Expansion for Information Systems [package no. BB(G)IT-03 (NDC)] and has accepted a Bid by the Supplier for the supply of those Goods and Services.

The Purchaser hereby agrees to pay to the Supplier the Contract Price in consideration of the performance security by the Supplier of its obligations under the Contract. The Contract Price shall be the aggregate of BDT8,99,61,366.00 (Bangladesh Taka Eight Crore Ninety Nine lac Sixty One Thousand Three Hundred Sixty Six) only as specified in the Grand Summary Price Schedule.

The Contract Price shall be understood to reflect the terms and conditions used in the specification of prices in the detailed price schedules, including the terms and conditions of the associated Incoterms, and the taxes duties and related levies if and as identified.

All applicable Income Tax and VAT will be deducted at source during payment in favor of the Supplier. Rate of such tax deduction will be determined as per existing or any future instruction issued by the National Board of Revenue, Bangladesh.



- 1. In this Agreement words and expressions shall have the same meanings as are respectively-assigned to them in the Contract Document referred to.
- 2. The following document shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other contract documents.
  - (a) the Letter of Acceptance;
  - (b) the Letter of Bid;
  - (c) Special Conditions of Contract;
  - (d) General Conditions of Contract;
  - (e) The Specification (Including Schedule of Requirements and Technical Specifications)
  - (f) The completed Schedules (Including Price Schedules)
  - (g) Any other document listed in GCC as forming part of the Contract.
- 3. In consideration of the payments to be made by The Purchaser to the Supplier as specified in this Agreement, the Supplier hereby covenants with the Purchaser to provide the Goods and Services and to remedy defects therein in conformity in all respects with the provisions of the Contract.
- 4. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the Goods and Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.



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IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of Bangladesh on the day, month and year indicated above.

#### For the Purchaser:

Signature

(Md. Masud Biswas)

Executive Director & Project Director, Financial Sector Support Project, Bangladesh Bank, Head Office, Dhaka - 1000

In the presence of:

quesary

(Saiful Islam)

General Manager
Financial Sector Support
& Strategic Planning Department
Bangladesh Bank, Head Office

Dhaka – 1000

(Md. Nazrul Islam)

Deputy General Manager Financial Sector Support & Strategic Planning Department Bangladesh Bank, Head Office Dhaka – 1000 For the Supplier:

(Md Harunar Rash

(Md. Harunor Rashid) Chief Operating Officer Cross World Power Ltd., Plot - 1/B, Road - 90, Gulshan-2, Dhaka-1212.

Ablam

(Md. Ariful Islam)

Manager, Sales Cross World Power Ltd., Plot - 1/B, Road - 90, Gulshan-2,

Dhaka-1212.

(Maruf Ahmed)

Head of Supply Chain Cross World Power Ltd., Plot - 1/B, Road - 90, Gulshan-2, Dhaka-1212.



**Ensuring Power Since 1982** 

	A: PRICE OF GOODS	Including C	are Parts if	W) AND DE	TIVERY SCHEDI	ILE		
	A: PRICE OF GOODS	including Sp	are raris, it at	y) AIND DE	LIVERT SCHEDA	Date:	05.05.2019	
					- 4		and the second second	743
						NCB No:	BB(G)IT-03[NDO	
1	2	3	4	5	Unit price (BDT	7 Total Price (BDT )	Point of Delivery	Delivery
Item No.	Description Of Item	Coutry of origin	Unit of Measurement		)	(CoL5X6)	as per Schedule of Requirement	
	Electrical Goods and Works:							
1	Providing following tubular pole fabricated with 4.76mm (3/16") thick M/S above having different sections with 152.40mm long M/S. reducing collar joint complete with M/S base plate, top cover, necessary welding & duly painted with two coats of superior quality aluminum silver paint over two prime coats of red oxide etc. as required: - Total 12192mm (40"-0") long having 152.4mm (6") dia 9144 mm (30") at the bottom, and 101.60mm (4") dia 3048mm (10") at the top with 609 mm x 609mm x 6.35mm (2"-0" x 2"-0", 0"-0, 25") size steel base plate.	Bangladesh	Each	4	30,186.00	120,744.00	BBTA ,Mirpur	09 (Ninc Months
/ <sup>2</sup>	Erection of following tubular pole up to 1828.80mm (6°) depth by placing the pole base on one layer of 1st class brick flat soling over 76.2mm (3") sand bedding and making 1:2:4 C.C. work around the pole 304.8mm (1-0") below GL & 304.8mm (11) above GL, 12.5mm (1/2") thick cement plaster with noat cement finishing over concrete surface including proper curing, execution & refilling and ramming the loose soil etc. as required.  12:192mm (40") long MS/GI /Spun P.C pole with 457nun x 457mm (1.5"x1.5") ec work	Bangladesh	Each	4	3,018.00	12,072.00	BBTA "Mirpur	09 (Nin Month
7	Providing & fixing U-channel iron cross-arm of size 38mm x 76mm x 38mm x 6.35mm. (1.5" x 3" x 1.5" x 0.25") on single pole (H-pole with the help of nocessary clamps, nuts, bolts etc. including making required on of holes on the cross-arm for fixing of drop out fuse, lightning arrester including two coats of superior quality aluminum painting over required prime coat of anti-corrosive red-oxide painting complete as required & as per instruction of the Engineer-in-charge.	Bangladesh	Each	4	2,125.00	8,500.00	BBTA ,Mirpur	09 (Nin Month
14	Supply of outdoor type 11KV, 50Hz, 100A, (10KA), 75 KV BIL Lightning Arrester complete with mounting accessories etc. manufactured by GEM Co. Ltd, Bangladesh ENERGYPAC or equivalent product of USA/EU Countries	Bangladesh	Per set	1	6,000.00	6,000.00	BBTA ,Mirpur	09 (Nin Month
5	(3 Nos. in a set). Supply of outdoor type 11KV, 50Hz, 5KA (20KA) Dropout Fuse complete with mounting accessories etc. manufactured by GEM Co. Ltd, Bangladesh /ENERGYPAC or equivalent product of USA/EU Countries (3 Nos. in a set).	Bangladesh	Per set	I	6,000.00	6,000.00	BBTA ,Mirpur	09 (Nin Month
1	Installation of HT drop out fuse/ lightning arrester/ disconnection switch on prepared U-channel cross- arm on single H-pole with necessary fixing materials complete as per instruction of the Engineer-in-charge.	Bangladosh	Per set	2	3,000.00	6,000.00	BBTA Mirpur	09 (Nin Month
7	Supply & fixing of Heat shrink termination kit outdoor/ indoor use complete with DIN lugs earth connection hardware & cable preparation kit (In-door & outdoor) at the point of cable termination for 11kV 3-core PVC insulated & PVC sheathed & armoured / non-armoured cable of the following sizes (Made in GERMANY/ USAUK/ FRANCE/ JAPAN/ ITALY/ SWEDEN/ SWITZERLAND or equivalent accepted/approved by the Engineer.						BBTA ,Mirper	09 (Niu Month
76	for indoor use 3 x 185 mm2	Germany	Per set	6	2,500.00	15,000.00	BBTA ,Mirpur	09 (Nin Month
708	for our door use 3 x 185 mm2	Germany	Per set	2	2,500.00	5,000.00	BBTA ,Mirpur	09 (Nin Month





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	11KV AUTOMATIC VOLTAGE REGULATOR:							
	Supply of Type Teated & factory assembled (must having ISO-9001:2008) 11KV Automatic Voltage Regulators according to NEMA and ANSI C57.12.31 or equivalent standards and shall meet latest requirements of BPDB/local power supply authority. Automatic Voltage Regulators shall be type tested 200A at 6.35KV Single Phase in scaled tank design with digital Control panel, Ground clamps & standard accessories and as per following technical data/ specification. (1set = 3nos).							
	IKV AVR shall be from USA/EU/Japan or equivalent with relevant authorization, technical offer, technical catalogue, warrantee & guarantee, Tost Certificate etc from manufacturer.  Rated voltage: 11KV, 3-phase/6.35KV,1-phase							
	Rated frequency: 50Hz Rated current: 200 Amps at 6.35KV Basic Insulation Level (BIL): 95KV							60 71
	Rated range of rogulation: +/-10% in 32steps of 0.625 % each Sealed tank design: Yes	USA	Per set	1	7,461,538.00	7,461,538.00	BBTA "Mirpur	09 (Nin Month
	Cooling: Self Surge Protective device: 10KA, 9KV Temperature rise: Up to 65 degree C without increase the oxidation rate of Oil. Provision for 240VAC, 50Hz test input voltage for testing of							
	the voltage regulator with external power supply: Yes Micro-processor based control panel: Yes Non-PCB oil for the voltage regulator: Yes Accuracy class of regulator control panel: Class-I Installation: Indoor/outdoor							
	The following spares shall be supplied with AVR: 6nos. Fuscs 2nos. Position Indicator Glass 2nos. Oil Sight Gauge Glass 1no. Digital control panel							
9	Installation, testing and commissioning of following							
1	6.35KV, 50ftz single phase oil immersed Automatic.  Voltage Regulator (1set-3nos single phase) on prepared platform on pole /c.c. foundation with the help of necessary tools & plants, skilled labour & technician as per direction of the Engineer-in-charge. Bidder may visit the aite before submitting bid with their own cost.	Bangladesh	Per set	1	23,076.00	23,076.00	BBTA ,Mirpur	09 (Nin Month
yr	BYPASS SWITCH Supply of off-load 11KV 1-Pole, 600 Amps single phase, self sequencing 2 position suitable for use with 11KV AVR Maximum design voltage rating: 15.5KV, Impulse withstand voltage: 110KV, Continuous current rating: 400 A complete with all standard accessories manufactured and tested as per NEMA/IEC/VDE/BS/IIS standards	Bangladesh	Each	3	205,128.00	615,384.00	BBTA ,Mispur	09 (Nir Month
y	Installation of LIKV bypass switch in Pre supplied and install on ground with required basement as per site condition in/e all assorted materials. Bidder may visit the site before submitting bid.	Bangladesh	Each	3	3,076.00	9,228.00	BBTA , Mirpur	09 (Nie Monti
12	High Tension Switchgear		-					
1	Supply of type tested & factory assembled (must having ISO- 9001:2008) confirming to IEC 298/694							
	High Voltage (11KV) 1 (0ne) Set (1 set = 3Nos; 1 incoming & 2 outgoing) Switchgear of sheet steel clad (14SWG) dust & vermin proof, free-standing, floor mounting completely with powder coated painting 11KV, 25KA, 50Hz, 3-phase indoor type high tension switchgear panel.							
	The switchgear shall be inclusive of withdrawable type VCB, CT, PT, relay, ammeter, voltmeter, energy meter, 800Amps hard-drawn electrolytic copper busbars, interlocked earth switch, internal wiring ete all equipment and accessories complete as per standard and instruction of Engineer in charge. The switchgear must comply with the requirement of BPDB and relevant local authority.	Germany	Each	1	13975689	13975689	BBTA ,Mirpor	09 (Nii Mont
	All the major components of HT switchgear shall be from reputed manufacturer of Siemens /ABB / Eaton / Schneider or its equivalent & approved quality in accordance with UL/NEMA/ IEC/ VDE/ BS/ RS standards.							

Plot - 1/8, Road - 90, Gulshan -2, Dhaka-1212, Bangladesh | Phone: (880 2) 588 1858 957 1442 | Fax: (880 2) 58815160 | E-mail: info@cross-world.com



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	IT Incoming Feeder: 1-630 Amps, 11KV, 50Hz Triple Pole, Earth Switch rated at 2.1KA at 3-sec to be interlocked with VCB. 1-630 A, 11KV, 25KA (3-Sec), rated short time current, 50Hz, electromagnetically operated/spring charged stored cacrgy mochanism totally withdrawable type VCB, manual closing/tripping device for emergency							
	operation, maximum service voltage 12KV, short circuit breaking capacity 25KA(3-sec), 24-DC power pack for shant tripping coil, ON/OFF/Trip indicator. 2-11KV, cast resin insulated double pole potential transformer having ratio 11000/110V (open delta), burden 50VA, class 0.5 for metering & protection. 1- TP MCB for PT secondary protection.							
	3-11KV, cast resin insulated dry type double core current transformer having ratio 150/5/5A, burden 10-15VA, for metering first core of class 0.5MS and second core protection of class 10P10.  1-Ammeter having scale (0-150)A with 4-way selector switch. 1-Voltmeter having scale (0-15)KV with 7-way selector switch.  1-3 phase 3 wire, two part time of the solid state micro computer operated digital KWH meter with indicating PEAK. & OFF PEAK energy with maximum demand indicator KW with indicating time of 30minutes.							
	1- Synchronous time switch for double tariff operation of KWH meter.  1-Tiple pole solid state micro-processor operated self powered IDMT relay with 2(two) over current instantaneous element & short circuit and one earth fault protection element with standard setting. Indicating Iamp ON/OFF/TRIP.3 - indicator lamps for presence of the phase (RYB) Panel heater. 2Nos.							
2	HT Outgoing (For 2Nos. 1250KVA Transformer): 1-630Amps, 11KV, 50Hz Triple Pole, Earth Switch rated at 2.1KA at 3-sec to be interlocked with VCB.1-630A, 11KV, 25KA (3-Sec), rated short time current, 50Hz, electromagnetically operated/spring charged stored energy mechanism totally withdrawable type VCB, manual closing/tripping device for emergency operation, maximum service voltage 12KV, short circuit breaking capacity 25KA(3-sec).							
	24-DC power pack for shunt tripping coil, ON/OFF/Trip indicator. 2-11kV, cast resin insulated double pole potential transformer having ratio 11000/110V (open delta), burden 50VA, class 0.5 for metering & protection.  1- TP MCB for PT secondary protection. 3-11kV, cast resin insulated dry type double core current transformer having ratio 120/5/5A, burden 10-15VA, for metering first core of class 0.5M5 and second core protection of class 10P10.							
	1-Ammeter having scale (0-120)A with 4-way selector switch.  1-Voltmeter having scale (0-15)KV with 7-way selector switch.  1-Triple pole solid state micro-processor operated self powered IDMT relay with 2(two) over current instantaneous element & short circuit and one earth fault protection element with standard setting, indicating lamp ON/OFF/TRIP.  3 -indicator lamps for presence of the phase (RYB) Panel heater.							
7	Installations, testing and commissioning of following (as describe on HT SWITCHGEAR Item) 11 KV, 50 Hz. 3-phase, indoor type HT switchgear on prepared foundation with the help of necessary tools, plants, skilled labour & technician as per direction of the Engineer-incharge. With withdrawable type Vacuum Circuit breaker Bidder may visit the site before submitting bid with their own cost.	Bangladesh	Per Job	ĭ	12,307.00	12,307.00	BBTA ,Mirpur	09 (Nine) Months



1	THREE PHASE DRY TYPE TRANSFORMER with Enclosure:	ei						
14(a)	Supply of following dry type cast resin, forced/natural air cooled, type tested, 3-phase, 50Hz, 11KV/0.415 KV & 0.24 KV indoor type distribution transformer from internationally recognized manufacturer (ISO9001 certified) conformity to IEC 60076/11 standard. Transformer of DYn11 vector group having percentage impedance 4-6%, basic impulse insulation level 75 KV, HV & LV bushings, manual 5							
	position standard tap changer, complete with two windings of high conductivity aluminum foil with insulation material in class H, carthing terminals, temperature sensor with thermometer, thermostat controlled blower fan (if required), lifting lugs, data plate etc. complete as required with maximum 100 degree C temperature rise and suitable for operation at 45 degree C ambient temperature. Transformer manufactored & tested in secondance with relevant NEMA/UL/EC/VDE	Italy	Each	2	3,844,615.00	7,689,230.00	BBTA "Mirpur	09 (Nine) Months
	/BS/IIS standards and as per approval/acceptance by the Engineer. (Country of origin: USA/ Japan/ EU Countries or equivalent) accepted/approved by the Engineer. (a) Capacity: 1250KVA (b) No load loss: 2800 watts (Maximum) (c) Full load loss: 13500 watts (Maximum)							
14(6)	Installation, testing and commissioning of following 11KV.415KV transformers on prepared platform on pole fee, foundation with the help of necessary tools & plants, skilled labour & technician as per direction of the Engineer-inscharge.  2x1250KVA 3 phase transformer on C.C. pad. Bidder may visit the site before submitting bid with their own cost.	Bangladesh	Per Job	1	30,769.00	30,769.00	BBTA ,Mirpur	09 (Nine Months
15	LT Panel: Low Tension SWITCHGEAR:							
15(a)	Supply of following type tested (according to IEC 439-1/2), 415V, 3-phase, 50Hz, indoor type Low Tension(LT) switch-gear from recognized manufacturer(ISO/901) certified) conformity to relevant IEC standard of sheet steel clad (14 SWG) dust & vermin proof, free-standing, floor mounting, epoxy resin powder coat painted cashinet (25% spare space must be available in Cabinet to install spare circuit breaker excluding following) as per accepted/approved by the Engineer.  LT Switchgear shall complete with digital voltmeter & ammeter both with multifunction selection, indicating lamps for ON, OFF & Trip, and 1.2A/sq.mn hard drawn electrolytic copper busbar. All the major components shall be manufactured from ABB / Siennens/Eaton / Schneider or equivalent according to relevant UL/NEMA/VDE/IEC/IIS/BS							
	Standards and shall have type test certificate according to relevant IEC Standard)  INCOMING: 1 Set- 415V, 2500 amp. TP & NE hard drawn electrolytic copper busbar. 1 No-415V, 2000 Amps (80KA), TP motorized ACB with microprocessor based time dependent selectively operating built-in-adjustable overload, adjustable short circuit protection & shunt releases.	Germany	Each	1	9,878,875.00	9,878,875.00	BBTA ,Mirpur	09 (Nine Months
6 S S S S S S S S S S S S S S S S S S S	ON-OFF & Trip indicating auxiliary contacts & suitable for connection as required size and no of  Cable per phase & complete in all respect as per technical specification & shall have interlocking facilities with Bus-Coupler.  3 Nos 415V, 2090/5 ratio current transformer with suitable accuracy & burden.  1-Multi-function meter with R\$485 port  1-Set Push button "ON & OFF".  3nos. Indicating lamps ON/OFF/TRIP.  3nos. Phase Indicating lamps Red/Blue/Yellow.							





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	OUTGOING:  1 No. 415V, 1250A (65KA) TP motorized ACB with microprocessor based time dependent selectively operating built-in-adjustable overload, adjustable short circuit protection & shunt releases, ON-OFF & Trip indicating auxiliary contacts & suitable for connection as required size and no of Cable per phase & complete in all respect as per technical specification.  3 Nos 415V, 1250/5 ratio current transformer with suitable accuracy & burden. 1-Multi-function meter with RS485 port 1-Set Push button "ON & OFF".  3nos. Indicating lamps ON-OFF/TRIP.  3nos. Phase Indicating lamps Red/Blue/Yellow. (For PFI control).  1 No415V, 800A (65KA) TP motorized ACB with microprocessor based time dependent selectively operating built-in-adjustable overload, adjustable short circuit protection & shunt releases, ON-OFF & Trip indicating survilary contacts & suitable for connection as required size and no of cable per phase & complete in all respect as per technical specification.  3 Nos415V, 800/5 ratio current transformer with suitable accuracy & burden.  1-Multi-function meter with RS485 port  1-Set Push button "ON & OFF".  3nos. Indicating lamps CN/OFF/TRIP.  3nos. Phase Indicating lamps Red/Blue/Yellow.  1 No -415V, 800A (35KA) TP MCCB with electronic microprocessor based, built in adjustable overload & adjustable short circuit protection, ON-OFF & Trip indicating auxiliary contacts, rotary handle with pad lock  facilities & suitable for connection as required size and no of cable & complete in all respect as per technical specification  2 Nos415V, 800A (25KA) Education as required size and no of cable & complete in all respect as per technical specification  2 Nos415V, 80A (16KA) TPMCCB with thermal overload & instantaneous electro-magnetic short circuit release.							
15(b)								
	Supply of 1X2000A, 65KA, TP motorized ACB with micro processor based selectively operating built-in-adjustable overload, adjustable short circuit protection; shunt release, ON-OFF & Trip indicating auxiliary contacts & having interlocking facilities (electrical/mechanical) with both the Main Incomers of LT panels. Normally Bus-coupler shall remain OPEN unless other-wise close for special purpose.							09 (Nine)
	The cost shall be inclusive of this item for motor operator relays and shant tripping coils & closing coil relays of both ACB (require for mechanical & electrical interlock), copper dropper links & others accessories for inter-connection with Main ACB of LT panels, Bus-coupler as per specification, Standard & layout plan & direction of the Engineer-incharge.  1-Push button "ON, OFF".  3-Phase Indicators lamps Red/Blue/Yellow	Germany	Each	1	2,350,853.00	2,350,853.00	BBTA ,Mirpur	Months
15(c)	INCOMING CLT of other side	1						
	1 Set-415V, 2500 amp. TP & NE hard drawn electrolytic copper busbar 1 No-415V, 2000 Amps (80KA), TP motorized ACB with micro processor based time dependent selectively operating built-in-adjustable overload, adjustable short circuit protection & shunt releases, ON-OF & Trip indicating auxiliary contacts & suitable for connection as required size and no of	Germany	Each	1	8,772,730.00	8,772,730.00	BBTA ,Mirpur	09 (Nine) Months





cable per phase & complete in all respect as per technical specification & shall have interlocking facilities with Bus-Coupler.

3 Nos. - 415V, 2000/5 ratio current transformer with suitable accuracy & burden; 1-Multi-function accuracy & observed, Postante Parks button "ON & OFF"; 3nos. Indicating lamps ON/OFF/TRIP. 3nos. Phase Indicating lamps Red/Blue/Yellow. OUTGOING:

1 No. 415V, 1250A (65KA) TP motorized ACB with micro processor based time dependent selectively operating built-in-adjustable overload, adjustable short circuit protection & shunt releases, ON-OFF & Trip indicating auxiliary contacts & suitable for connection as required size and no of cable per phase & complete in all respect as per technical specification. 3 Nos. - 415V, 1250/5 ratio current transformer with suitable accuracy & burden. 1-Multi-function meter with RS485 port; 1-Set Push button "ON & OFF"; 3nos. Indicating lamps ON/OFF/TRIP, 3nos. Phase Indicating lamps Red/Blue/Yellow. (For PFI control). 2 Nos - 415V, 800A (65KA) TP motorized ACB with micro processor based time dependent selectively operating built-in-adjustable overload, adjustable short circuit protection & shunt releases, ON-OFF & Trip indicating auxiliary cont connection as required size and no of cable per phase & complete in all respect as per technical 3 Nos. - 415V, 800/5 ratio current transformer with suitable accuracy & burden; 1-Multi-function
meter with RS485 port; 1-Set Push button "ON & OFF";
3nos. Indicating lamps ON/OFF/TRIP; 3nos.
Phase Indicating lamps Red/Bluc/Vellow.
1 No - 415V, 600A (35KA) TP MCCB with electronic microprocessor based, built in adjustable overload & adjustable short circuit protection, ON-OFF & Trip indicating auxiliary contacts, rotary handle with pad lock facilities & suitable for conrequired size and no of cable & complete in all respect as per technical specification 1 Na - 415V, 500A (35KA) TP MCCB with electronic 1 No. 413 V, 2014 (5384) If violate the interesting interesting and the interesting auxiliary contacts, rotary handle with pad lock facilities & suitable for connection as required size and no of cable & complete in all respect as per technical specification 1No. - 415V, 400A (35KA) adjustable type TPMCCB with thermal overload & instantaneous electro magnetic short circuit release. 2 Nos. - 415V, 300/320A (35KA) adjustable type TPMCCB with thermal overload & instantaneous electro-magnetic short circuit release 2 Nos. - 415V, 200A (25KA) adjustable type TPMCCB with thermal overload & instantaneous electro-magnetic short circuit release 1 No. - 415V, 80A (16KA) TPMCCB with thermal overload & instantaneous electro-magnetic short circuit release.
1 No. - 415V, 30/32A (16KA) TPMCCB with thermal overload & instanta





16	PFI Capacity- 750 KVAR Automatic PFI Plants:							
	Supply of following type tested(according to IEC-439-1/2), 415 V, 3-phase, 50 Hz, indoor type power factor improvement panel from recognized manufacturer(ISO9001 certified) conformity to relevant IEC standard of sheet steel clad (14 SWG) dust & vermin proof, free-standing, floor mounting, epoxy resin powder coat painted cabinot as per accepted/approved by the Engineer. PFI Panel shall complete							
	with TP busbars and earth block, micro processor controlled auto power factor correction relay with digital PF reading display, capacitor bank, contactor, fuse, ON-OFF indicators for every stage of capacitor bank (except directly connected one) etc. Major components shall be manufactured from					*		
	ABB/ Siemens / Eaton /Schneider / Moelter /Frako or equivalent according to relevant NEMA/VDE/EC/IS/BS Standards and shall have type test certificate according to relevant IEC Standards. 3 Nos415V, 1500A hard drawn electrolytic copper busbar.  1 No415V, 15KVAR (as per required for transformer specification), 50 Hz TP power capacitor bank with built in / separate discharge coil for connection directly with line through Suitable capacity TPMCCB and fuse.							
	- 1 1 1A	Germany	Each	2	3,580,274.00	7,160,548.00	BBTA ,Mirpur	09 (Nine) Months
,	No415V, 10KVAR, 50Hz TP power capacitor bank with built in/separate discharge resistor.     No415V, 15KVAR, 50Hz TP power capacitor bank with built in/separate discharge resistor.     No415V, 20KVAR, 50Hz TP power capacitor bank with built in/separate discharge resistor.							
	1 No 415V, 40KVAR, 50Hz TP power capacitor barile with built in/separate discharge resistor. 3 Nos 415V, 50KVAR, 50Hz TP power capacitor bank with built in/separate discharge resistor. 5 Nos 415V, 106KVAR, 50Hz TP power capacitor bank with built in/separate discharge resistor. 1No 415V, 32Amps, 50Hz auto TP magnetic contactor with AC3 duty. 2 Nos 415V, 40 Amps, 50Hz auto TP magnetic contactor with AC3 duty.							
	1No415V, 80Amps, S0Hz auto TP magnetic contactor with AC3 duty.  3 No415V, 100 Amps, 50Hz auto TP magnetic contactor with AC3 duty.  5 Nos415V, 180 Amps, 50Hz auto TP magnetic contactor with AC3 duty.  1 No415V, 30Amps, TPMCCB  1 No415V, 30Amps, TPMCCB  1 No415V, 80Amps, TPMCCB  3 Nos415V, 80Amps, TPMCCB  3 Nos415V, 100Amps, TPMCCB  5 Nos415V, 200Amps, TPMCCB  5 Nos415V, 200Amps, TPMCCB							
17	Installation, testing and commissioning of 415V, 3-phase, 50 Hz indoor type LT switchgear P.F.I. plant suitable for following capacity transformer on prepared c.c. foundation with the help of necessary tools & plants, skilled labour & technician as per direction of the Engineerin-charge. Bidder may visit the site before submitting bid with their own cost.	Bangladesh	Per Job	5	15,384.00	76,920.00	BBTA ,Mirpur	09 (Nine) Months
18	Generator:  Supply of 400 / 230V, 3-phase, 50Hz. air/water cooled, floor mounted, indoor type following continuous capacity (Prime Power) electric 500KVA generating set (with ATS & with sound attenuated acoustically treated canopy (maximum sound level: 75 dBA at 7m distance), suitable for tropicalized country complete with four stroke, 1500 rpm, diesel engine with all standard accessories, viz. 12/24 volt DC battery &	UK	Each	2	6631327	13262654	BBTA ,Mirpur	08 (Eight Months





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	pump, auto speed governor, air cleaner, fuel & oil tank, fuel level & oil pressure gauge, RPM & hour meter, exhaust eilencer, vibration isolator, mounting steel base frame etc including a safety & protection device viz, auto shut off with indicators for overload, over & under voltage high temperature, low oil pressure, over speed, low fuel level etc. coupled with brush less, self excited alternator having control panel with auto voltage regulator, voltmeter & ammeter with selector switch,							
	frequency meter, TPMCCB of required rating for overload & instantaneous short circuit release, auto start & auto change over to load within 10 see during normal power failure and auto stop & auto change over to normal supply within 5 minutes after restoration of normal power supply, indicator for 3 Phase ON- OFF - Trip etc. including maintenance tools, 3 sets of detailed technical catalogues & maintenance manual. Manufactured, assembled and tested in accordance with NEMA / IEC / VDE / IIS standards							
	The Bidder should free Operation and Maintenance works engaging 01 skilled technician & also supply of necessary spares and consumables such as Oil filter, Air filter, Fuel filter, coolant without Engine oil and Fuel within 12 (Twelve) months (Z4/T) warranty obligations from the date of official hand over of the brand new 500KVA(prime power) Diesel Power Generator. Ensuring after sale service with spare parts within the							
	life time of the generator sets. The generating set shall be assembled & tested in USA/Japan/EU countries. The major components like engine, alternator, ATS, canopy shall also be manufactured and tested in USA/Japan/ EU Countries & accepted/approved by the Engineer.							
19	Installation, testing & commissioning of following electric generator on prepared cc pad with the help of necessary T & P, skilled labour, technician, Engineer including 8 hrs 17 day trial run operation by skilled operator with supply of necessary fiel & lubricant as per manufacturers instruction or manual and in accordance with relevant IEC/NEMA/VDE/HS standards so that vibration transfer rate to foundation shall be almost zero.  500 KVA manual/auto/auto with soundproof acoustically treated canopy generating set. Bidder may visit the site before submitting bid.	Bangladesh	Each	2	425,013.00	850,026.90		08 (Eight Months
20	Trench cutting with following dimension through RCC floor /Road cutting of at Bengladesh Bank Training Academy premises (for laying HT/LT cable through pvc pipe) carefully using electric hammer, drill machine or MS rod cutter with protecting any damages existing floor and blinding the prepared trench with concrete (1:2-4) Placing necessary no of 12mm MS rod with welding, shuttering, centering and curing/road earpeting etcengaging expert mason/ technician all complete works as per direction of the Engineer in charge. Bidder may visit the site before submitting the tender, W - 762 mm (2.5°) x D - 864 mm (2.5°)	Bangladesh	Meter	110	6,923.00	761,530.00	BBTA ,Mirpur	09 (Nine Months
21	Provising & laying of following sizes HT (11KV) PVC modated, shouthed, screened & armoured cashe (NYSEYFGDY)FT (21KV) amouned XLPE cable in prepared trench. All electrical contacts that be of bransicroper commerced through commerce or soldering (no twisting shall be allowed) and cables shall be manufactured and tearned according to relevant IEC/BDS/BS IVE PVE standard. The work shall be carried out as per direction/approval acceptance of the Engineer. 125mm PVC type having wall thickness of 3mm or Service with necessary supports With 3C x 185 sq.mm (NYSEYPCBV) HT (11 KV) Cables through prepared franch through manufactured by Paradia-SBB or any other company(s) having wall best certifies from internationally accredited Laboratory neceptod/approved by the Engineer.	Bangladesh	Meter	240	10,831.00	2,599,440.00	BBTA ,Mirpur	09 (Nine Months
22	CABLE-RACE WAY (Ladder/tray)  Supply, fabrication, fitting, fixing of indoor/outdoor cable tray/ladder made of 165WG galvanized sheet steel/angle bar, flat bar of approved quality of following sizes complete with necessary hangers, supports, cover junction box, hangers, clamps, bends, nuts. bolts, washer & all other accessories as per drawing, specifications & direction of the Engineer-incharge. 500mm x 75mm	Bangladesh	Meter	140	3,422.00	479,080.00	BBTA ,Mirpur	09 (Nine Months
23	Providing & laying of the following additional PVC insulated & sheathed cable (NYY)/XLPE insulated & PVC sheathed cable (2XY) with PVC insulated green/white coloured ECC wire (BYA) connecting at both ends, through PVC pipe with necessary accessories in prepared a common trench in kutchas ground/pucca floor/ through the Cable tray etc. All electrical contacts	Bangladesh						

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	shall be of brass/copper connected through connector or soldering (no twisting shall be allowed) and cables shall be manufactured and tosted according to relevant IEC/BDS/ BS/ VDE standards and as per detailed specification mentioned. The work shall be carried out as per direction/approval/acceptance of the Engineer.							
23(a)	1C-4x400sq.mm (NYY) with 185sq.mm (BYA) ECC wire through PVC pipe of minimum inner dia 125mm having wall thickness of 3mm.Cables manufactured by Paradise/ BRB or any other company(s) having valid test certificate from Internationally accredited Laboratory accepted/approved	Bangladesh	Per Meter	150	4,899.00	734,850.00	BBTA "Mirpur	09 (Nine) Months
23(b)	by the Engineer.  1C-4x300sq.mm (NYY) with 150sq.mm (BYA) ECC wire through PVC pipe of minimum inner dia 125mm having wall thickness of 3mm. Cables manufactured by Paradise' BRB or any other company(s) having valid test certificate from Internationally accredited Laboratory accepted/approved by the Engineer.	Bangladesh	Per Meter	900	3,718.00	3,346,200.00	BBTA ,Mirpur	09 (Nine Months
23(c)	IC-4x249aq.nm (NYY) with 120sq.nm (BYA) ECC wire through PVC pipe of minimum inner dia 125mm having wall thickness of 3mm.Cables manufactured by Paradise/ BRB or any other company(s) having valid test certificate from Internationally accredited Laboratory accepted/approved	Bangladesh	Per Meter	20	3,093.00	61,860.00	BBTA "Mirpur	09 (Nine Months
23(d)	by the Engineer.  1C-4x185sq.mm (NYY) with 95sq.mm (BYA) ECC wire through PVC pipe of minimum inner dia 100mm having wall thickness of 3mm. Cables manufactured by Paradise BRB or any other company(s) having valid test certificate from Internationally accredited Laboratory accepted/approved by the Engineer.	Bangladesh	Per Meter	60	2,389.00	143,340.00	BBTA ,Mirpur	09 (Nine Months
23(e)	1C-4x150sq.mm (NYY) with 70sq.mm (BYA) ECC wire through PVC pipe of minimum inner dia 100mm having wall thickness of 3mm. Cables manufactured by Paradise' BRB or any other company(s) having valid test certificate from Internationally accredited Laboratory accepted/approved by the Engineer	Bangladesh	Per Meter	20	1,992.00	39,840.00	BBTA ,Mirpur	09 (Nine Months
23(1)	1C-4x70sq.nm (NYY) with 35sq.mm (BYA) ECC wire through PVC pipe of minimum inner dia 65mm having wall thickness of 2.5mm by the Engineer Cables manufactured by Paradise/ BRB or any other company(s) having valid test certificate from Internationally accredited Laboratory accepted/approved	Bangladosh	Per Meter	30	985.00	29,550.00	BBTA ,Mirpur	09 (Nine Months
23(g)	1C-4x50sq.mm (NYY) with 25sq.mm (BYA) ECC wire through PVC pipe of minimum inner dia 65mm having wall thickness of 2.5mm. Cables manufactured by Paradise/ BRB or any other company(s) having valid test certificate from Internationally accredited Laboratory accepted/approved by the Engineer.	Bangladosh	Per Meter	40	746.00	29,840.00	BBTA Mirpor	69 (Nint Months
23(h)	1C-4x10sq.mm (NYY) with 10 sq.mm (BYA) BCC wire through PVC pipe of minimum inner dia 40mm having wall thickness of L9mm.Cables manufactured by Paradise / BRB or any other company(s) having valid test certificate from Internationally accredited Laboratory accepted/approved by the Engineer	Bangladesh	Per Meter	50	222.00	11,100.00	BBTA ,Mirpur	09 (Nine Months
	Complete MDB/DB: Previding and fixing 500v 3-PHASE BUSBAR system assembled in 18 SWG M.S. board of depth 228mm (9") duly painted with gray harmer paint on outside and enamed paint in miscle surfaces having built in push type locking arrangement including metal bridges of suitable size for fixing of all							
24	electrical control devices complete with suitable anchoring arrangement in wall/column and keeping provision for cable inlets and exits as required (only front surface of the board will be considered for measurement) having the following components and specifications in/c arrangement of cable/wire connection, hinged type top cover, locking arrangement, two coats gray hammer painting over anti-corrosive coat, rail for TPMCB/SPMCB etc. on prepared board/wall.	Bangladosh	Each	3	47208	141624	BBTA Mirpur	09 (Nim Months
			100					
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						Ensuring Po	ower Sin	ce 198
	Board size 18"x14" with 1 Set - 500V, 100 Amp. TP, NE & Earth hard drawn electrolytic copper busbar with mini length of TP, NE is 10" INCOMING: 1Nos 415V, 50/60 (10KA) TPMCCB with thermal overload & instantaneous electro-magnetic short circuit release.							
	OUTGOING: 2 Nos 500V grade, 30/40A (6KA) TPMCB with thermal overload & instantaneous electro-magnetic short circuit release. 5 Nos 500V grade, 15/20/30A (6KA) SPMCB with thermal overload & instantaneous electro-magnetic short circuit release. TPMCBS of DORMAN SMTH / MEM / Siemens/Schneider/ Eaton/ or equivalent accepted/approved by the Engineer.							
25	Earthing the electrical installation with 40 mm (1.5°) dia G.1. pipe (Earth electrode) having 6.35mm, dia hole across the pipe at 305 mm, interval securely bonded by soldering with 2 nos. of No.2 SWG HIDBC earth leads with his protection by 20 mm, (3/4°) dia G.1. pipe with No.2 HIDBC wire up-to plinth level run at a depth of 609 6 mm. (2 ft.) below G.L. up-to main board to be earthed including necessary connecting copper sockets, bolts, nuits, etc. complete for maintaining earth resistance within 1 ohm. Depth of bottom of main electrode at 37338mm. (122.5 ft.) from GL. & length of electrode 36576mm. (120 ft.)	Bangladesh	per set	15	75,000.00,	1,125,000.00	BBTA ,Mirpur	09 (Nine) Months
26	Construction of Earthing inspection pit inside measurement 600mm x 600mm with 250mm thick brick in cement morter (1:4) with 100mm thick RCC top slab (1:2:4) with 1% reinforcement 450mm dia water sealed CI man-hole cover with locking arrangement including necessary earth works, site filling and one brick flat soling 75 mm thick (1:3:6) base concrete for making inlet channel & 12mm thick (1:2) cement plaster with neat finishing etc., all complete up to a depth of .75 meter.	Bangladesh	Each	15	12,500.00	187,500.00	BBTA ,Mirpur	09 (Nine) Months
27	Providing & drawing No-2 HDBC wire through 12.7mm.  (%") dia G.I. pipe including fitting, fixing the G.I. pipe in wall or column or in katcha/Pacca ground complete as required.	Bangladesh	Meter	100	743.00	74,300.00	BBTA ,Mirpur	09 (Nine) Months
28	Surface channel wiring for the following point looping at the switch board with earth terminal including circuit wiring with 1C-2x2.5sq.mm PVC insulated and sheathed stranded cable (BYM) &1.5sq.mm green/white colored PVC insulated ECC wire (BYA) through minimum. Imm thick PVC channel complete with 18 SWG GP sheet switch board (preferably concealed) with 3mm thick ebonite sheet cover, circular box, ceiling rose, fixing materials, other accessories etc.  as required and mending	Bangladesh	Each	45	5,969.00	268,605.00	BBTA ,Mirpor	09 (Nine) Months
	he damages good. All electrical contacts shall be of brass/copper connected through connector or soldering (no twisting shall be allowed) and cables shall be manufactured and tested according to relevant IEC/BIDS/BS/VDE standards. The work shall be carried out as perdirection/approval/acceptance of the Engineer		And the state of t					
29	Light/Exhaust or Wall bracket Fan Point  Surface channel wiring with the following PVC insulated and sheathed stranded cable (BYM), & green/white coloured PVC insulated ECC wire (BYM), through minimum 1 mm thick PVC channel complete with fixing materials, other acoussories etc. as required including mending the damages good. All electrical contacts shall be of briss/copper connected through connector or soldering (no revisiting shall be allowed) and cables shall be manufactured and tested according to relevant IEC/BDS/BS/VDE standards. The work shall be carried out as per direction/approval/acceptance of the Engineer.							
30(a)	IC-2x2.5sq.mm. (BYM) cable with 2.5sq.m (BYA) ECC wire. Cables manufactured by Paradiso/BRB or any other company(s) having valid test certificate from Internationally accredited Laboratory accepted/approved by the Engineer.	Bangladesh	Each	250	6,270,00	1,567,500.00	BBTA ,Mirpur	09 (Nine) Months
30(b)	IC-2x6 sq.nm. (BYM) cable with 6sq.m (BYA) ECC wire. Cables manufactured by Paradise / BRB or any other company(s) having valid test certificate from Internationally accredited Laboratory accepted/approved by the Engineer.	Bangladesh	Each	100	8,059.00	805,900.00	BBTA ,Mirpur	09 (Nine) Months



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31	GANG SWITCH/SOCKET/FAN REGULATOR Providing & fixing 250 volts. 5/6 amps. (minimum) conscaled type following switch / switch socket manufactured and tested in accordance with relevant IEC/ VDE/NEMA/BS/IIS standards mounted on required size 18 SWE/NEMA/BS/IIS standards mounted on required size 18 All electrical contacts shall be of brass/copper Dynamic /MEP/METRO /HAGER/SK/Super Star or equivalent brand accepted/approved by the							
31(a)	One gang switch	Vietnam / Malaysia	Each	3	233.00	699.00	BBTA ,Mirpur	09 (Nine) Months
31(b)	Two gang switch	Vietnam / Malaysia	Each	6	316.00	1,896.00	BBTA ,Mirpur	69 (Nine) Months
31(c)	Three gang switch	Vietnam / Malaysia	Each	7	425.00	2,975.00	BBTA ,Mirpur	09 (Nine) Months
31(d)	Four gang switch	Vietnam / Malaysia	Each	5	575.00	2,875.00	BBTA ,Mirpur	09 (Nine) Months
31(e)	One gang switch & one 5 amps. 2-pin socket combined.	Vietnam / Malaysia	Each	6	875,00	5,250.00	BBTA ,Mirpur	09 (Nine) Months
31(1)	Gang type Fan Regulator	Vietnam / Malaysia	Each	8	850.00	6,800.00	BBTA ,Mirpor	09 (Nine) Months
32	ENERGY SAVINGS LAMP (CFL) (Illuminate even at low voltage as 110 volts. Built in short circuit & over voltage protection feature & 8000 hrs (min) lifetime.) (230V/250V, 50Hz) (Osram/Philips/Energypac/CBE/Corona/Havells/GEEdiston/Eastern/Prodip/MEP/Metro/Harmonica/Superstar/Transtec/Energy or equivalent brand accepted/approved by the Engineer) 23 watt Spiral Screw Type lamp	Bangladosh	Each	22	716.00	15,752.00	BBTA ,Mirpur	09 (Nine) Months
33	Providing and fixing of following axial flow A.C capacitor type wall mounted exhaust fan complete with blade, steel frame standard wall louver shutter, PVC insulated connecting wire etc complete as required including cutting wall and mending good the damages as per direction of the Engineer. 16" Exhaust fan, 400/550W, RPM-1420, steel body& kjade, Round shape Brand & model: Supper king & DF 4G-4 or approved by engineer in charge.	Bangladesh	Each	20	10,833.00	216,660.00	BBTA ,Mirpur	09 (Nine) Months
34	Dry Chemical Powder Type Fire Extinguisher: Supply & fixing the following capacities multipurpose ABC&E dry chemical powder stored prossure type with manometer system Fire Extinguisher suitable for repeated use complete with wall bracket, CO Cartridge, easy refilling system etc. as per sample accepted/approved by the Engineer. Country of Origin: China / Malaysia or Equivalent 5 Kg. capacity.	China	Each	4	3,250.00	13,000.00	BBTA ,Mirpur	09 (Nine) Months
35	Carbon-Di-Oxide Typo Fire Extinguisher Supply & fixing the following capacities Carbon-di-Oxide typo Fire Extinguisher suitable for repeated use complete with wall bracket, discharge nozzle etc. as per sample accepted/approved by the Engineer. Country of Origin: China / Malaysia or Equivalent 5 Kg. capacity.	China	Each	4	5,916.00	23,664.00	BBTA ,Mirpur	09 (Nine) Months
36	Foam Type Fire Extinguisher Supply & fixing the following capacity Foam type Fire Extinguisher suitable for repeated use complete with wall breaket etc. as per sample accepted/approved by the Engineer. Country of Origin: China / Malaysia or Equivalent 9 Litre capacity.	China	Each	4	4,750.00	19,000.00	BBTA ,Mirpur	09 (Nine) Months
37(a)	Disconnecting and removing the existing sub-station equipment (Transformer, HT & LT, PFI, ATS), old cables and stacking them in a designated places and reconnecting the cables and circuit breaker with newly installed sub-station equipment (Specially with LT panel) and carried out 2 (two) incs.  800KVA dry type transformer from BBTA, Mirpur Dhaka to Bangladesh Bank, Rajshahi office with proper handling and performing routine test from local	Bangladesh	Per Job	1	100,000.00	100,000.00	BBTA Mirpor	09 (Nine) Months
	transformer manufacturing factory/laboratory as per approval and direction of the engineer. Bidder may visit the site before submitting tender. Bidder may visit the site before submitting bid.							





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37(b)	Awarded Bidder shall complete works mention on item No: 18 & 19 (Supply and installation of generator) as per delivery schedule(one month before than other items). Minimum 500KVA power shall supply by those generators with necessary cable connection as required as per site condition during the replacement period of 2x800KVA existing substation equipments by installing  and commissioning the proposed 2x1250KVA substation. In		Per Job	1	2,414,000.00	2,414,000.00	ВВТА ,Мігриг	09 (Nine)
	this case Awarded Bidder shall arrange generator, operator, fuel etc for maning generator (24x7) to provide minimum 500KVA power for Emergency requirement of BBTA. Bidder include all of cost in this item regarding as mentioned. Or Awarded Bidder may Provide other option to provide minimum 500KVA power round o clock with their own cost as per approval of engineer in charge.							
38	The Bidder shall be responsible for communicating with the local electric supply authority and other authority viz. Chief Inspector of electric license board, Fire service and civil defense authority (if required), firesterate of environment (if required) Govt. of Bangladesh, for their inspection/clearance and additional electric load sanction(increase).  The Bidder shall communicate for additional electric load sanction and other formalities on behalf of the employer till							
	the sub-station is commissioned and handed over. However, all the security deposit money (Govt fee) issued by above mentioned authorities for energy meter and its installation and additional electric load sanction fee for the proposed sub- stations will be directly paid to respective authority by the employer on submission of deposit slip. But the all other incidental charges for	Bangladesh	Per Job	1	1,000,000.00	1,000,000.00	BBTA ,Mirpur	09 (Nine) Months
	obtaining HT connection with RMU and Substation installation & commissioning to be included in this item to complete as per local electric supply authority requirement.							-
Line Item No	BBTA CIVII, WORKS  Description of Goods  (For detailed please see technical specification in section—  VII(3))	Coutry of Origin						
1	Stripping of existing pavement tiles as specified in the drawing and directed by engineer with the mortar beneath and removal of the derbies to a safe, dry place, cleaning to the original RCC surface etc all complete as per direction of the Engineer.	Bangladesh	Sqm	84	502.00	42,168.00	BBTA ,Mirpur	09 (Nine) Months
2	Earth work in excavation for transformer base foundation up to 1.5 m depth and maximum 10 m lead in medium stiff clayey soil including layout, providing center lines, local bench-mark pillars, leveling, ramming and preparing the base, fixing bamboo spikes and marking layout with chalk powder, providing necessary tools and plants, protecting and maintaining the trench dry etc.,	Bangladesh	Sgm	5	15,243,00	76.215.00	BBTA Mirpur	09 (Nine)
	stacking, cleaning the excavated easth at a safe distance out of the area enclosed by the layout etc. all complete and accepted by the Engineer, subject to submit method statement of carrying out excavation work to the Engineer for approval. However, Engineer's approval shall not relieve the Bidder of his responsibilities and obligations under the contract.							Months
3	One layer of brick flat soling in foundation or in floor with first class or picked jhama bricks including preparation of bed and filling the interstices with local sand, leveling etc. complete and accepted by the Engineer.	Bangladesh	Sqm	16	3,766.00	60,256.00	BBTA ,Mirpur	09 (Ninc) Mosths
•	Mass concrete (1:2:4) in basement floor with cement, sand (F.M. 1.2) and picked jluma chips including breaking chips, screening, mixing, laying, compacting to levels and curing for at least 7 days including the supply of water, electricity and other charges and costs of tools and plants etc. all complete and accepted by the Engineer (Cement: CEM-II/A-M)	Bangladesh	Sqm	7	13,450.00	94,150.00	BBTA Mirpor	09 (Nine) Months
5	Reinforced cement concrete works using wooden shutter, with minimum cement content relates to mix ratio 1:2-4 having minimum for = 24 Mpa, and satisfying a specified compressive strength Fc= 19 Mpa at 28 days on standard cylinders as per standard practice of Code ACIBNBC/ASTM & cement conforming to BDS EN-197-1- CEM 1, 52.5N (52.5MPa) / ASTM-C 150 Type - 1, best quality sand [50% quantity		cum	9	13290	119610	BBTA ,Mirpur	09 (Nine) Months
		1/55	1 POS					

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	of best local sand (F.M. 1.2) and 50% quantity of Sylhet sand					nsuring Po	MELZING	e-198
	or coarse sand of each 1.22 and 30 wow well graded picked jhama brick chips conforming ASTM C-33 including breaking chips and screening, making, placing shutter in position and maintaining true to plumb, making shutter water-tight properly, placing reinforcement in position; mixing in standard mixer machine with hoper fied by standard measuring boxes, casting in forms, compacting							
	by vibrator machine and curing at least for 28 days, removing centering-shuttering after specified time approved; including cost of water, electricity, additional testing charges of materials and cylinders required by engineer, other charges etc. all complete approved and accepted by the Engineer. (Rate is excluding the cost of reinforcement and its fabrication, placing and binding etc)							
	Supplying, fabrication and fixing to details as per design: Grade 400 (RB 400 / 400 W: complying BDS ISO 6935-2:2006) ribbed or deformed bar produced and marked according to Bangladesh Standard, with minimum yield strength, fy (ReH) = 400 MPa but fy not exceeding 418 MPa for Reinforced Cement Concrete, produced and marked in accordance with BDS ISO 6935-2: 2006 (or standard subsequently released from BSTI) including straightening and cleaning rust, if any, bending and binding	Paralidad	Vo	333	234.00	77,922.00	BBTA Mupur	09 (Nine)
6	in position with supply of G.I. wires, splices or laps what so ever ote. complete in all respects and accopted by the Engineer. (Measurement shall be recorded only on Standard Mass per Unit length of Bars, while, dia of bars exceeds its standard)	Bangladesh	Kg	888	23430	11,762,00	isota "supu	Months
1	Brick works with first class bricks in coment sand (F.M. of sand 1.2) mortar (1:6) in foundation and plinth, filling the joints/interstices fully with mortar, racking out the joints, cleaning and soaking the bricks at least for 24 hours before use and curing at least for 7 days etc. all complete including cost of water, electricity and other charges and accepted by the Engineer. (Coment: CEM-II/A-M)	Bangladesh	cum	2	8,878.00	17,756.00	BBTA ,Mirpur	09 (Ninc) Months
-	38mm thick artificial patent stone (1:2:4) flooring with coment, best quality coarse sand (50% quantity of Sylhet sand or coarse sand of equivalent F.M. 2.2 and 50% best local sand of FM 1.2) and 12 mm down well graded stone chips, laying the concrete in alternate panels, compacting and finishing the top with neat coment and curring at least 7 days in all floors including cost of water, electricity and other charges etc. all complete and accepted by the Engineer. Cement: (CEM-II/A-M) In ground floor	Bangladesh	Sqm	85	850.00	72,250.00	BBTA ,Mirpur	09 (Nine) Months
,	125mm brick works with first class bricks in coment sand (F.M. 1.2) mortar (1:4) and making bond with connected walls including necessary scaffolding, raking out joints, cleaning and soaking the bricks for at least 24 hours before use and washing of sand curing at least for 7 days in all floors including cost of water, electricity and other charges etc. all complete and accepted by the Engineer. (Cement: CEM-II/A-M) in ground floor 60.00 sqm	Bangladesh	Sqm	60	2,869.00	172,140.00	BBTA ,Mirpur	09 (Nine) Months
DR.	Minimum 12mm thick coment sand (F.M. 1.2) plaster (1:4) with fresh cement to wall both inner-and outer surface, finishing the corner and edges including washing of sand cleaning the surface, scaffolding and curing at least for 7 days, cost of water, electricity and other charges etc. all complete in all respect as per drawing and accepted by the Engineer. (Cement: CEM-B/A-M). Ground floor.	Bangladesh	Sqm	110	1,160.00	127,600.00	BBTA "Mirpur	09 (Nine) Months
11	Manufacturing, supplying, fitting and fixing M.S. grill fencing as per design with outer frames having 38 x 38 x 6 mm M.S. rod placed @ 110 mm c/c diagonally on both direction, welding each cris-cross end of rod with comers of outer frame including cutting rods and size angles to	Bangladesh	Sqm	26	4,483.00	116,558.00	BBTA ,Mirpur	09 (Nine) Months





	required shapes and size and setting the entire trace with the precessed, motalled tube (angle best) rost including therough				Er	suring Po	wer Sind	te 1982
	and fail welding the frame with the angle box posts, painting 2 coars of synthetic craimed (and over a coal of anti-correnive priming etc. all complete as per drawing and accepted by the Engineer.							
12	Supplying, fitting and fixing my grill made of 10 mm dia M.S. rads provided, 75 mm e/c in any position both ways as per design with cutside frame 23 x 25 x 6 mm M.S. angle including fabricating weldings in each point painting 2 coals of synthetic enamel paint over a coat of anti-corrosive printing including cost of electricity, fools and plants, workshop charges; carriage of the same including cutting grows in the R.C.C. or brick work, mending good the damages with C.C. (1/2/4) etc.	Bangladosh	Squ.	26	6,276.00	153,176,90	BBTA Mirpur	09 (Ninu) Months
	complete for all floors accepted by the Engineer. [Rate is excluding the cost of painting] (Total weight per sque should be min 57.68 kg, and add or deduct & Tk, 35.00 for each kg-excess or less respectively). 26.00 squ							
11	Plastic anulsion paint of approved best quality and colour dolivered from authorized local agent of the manufacturer in a scaled container, applying to wall and coiling in two coats over time party of specified hand applied on primer or sealer clapsing specified time for drying/recoating including cleaning drying, making free from drt, grease, wax, removing all chalked and scaled materials, funges, mending good the surface defects, and papering the surface and necessary scalloding-speading by brush troller-spray cle. all complete in all floors accepted by the Engineer.	Bangiadesh	Sqm	96	627.00	60,192,00	BBIA Mirpor	09 (Nine) Months
74	Painting to grills in two coats with approved best quality and colour of synthetic orannel paint delivered from authorized local agent of the manufacturer in a scaled container, having highly water resistant, high bendififty, floxible, using specific brand thinner applied by	Bangladesh	Sqm	50	538.00	26,900.00	BBTA Mirpur	09 (Ninc) Months
35	Cleaning of cristing rubbish or wastage elements of the site with generated wastage elements during the work, broken fragments, floor cleaning, plaster wastes etc in all respects and disposal to invironmentally safe places out of the Bank promise.	Hangladesh	Lump sum	1	75,000.00	75,000.00	BRIA Afirpur	09 (Nine) Months
34	Dismantling of unsurviceable/Damaged brick works(with coments or lime mortar) of thickness 75:125 mm in foundation and superstructure and removal of debris to safe distance. Biddee may visit the site before submitting bid with their own cost.	Hangladosh	Sign	10	8,070,00	80,700.00	BBTA Mirpur	09 (Nine) Months
					Grand Total	89,961,366.00		
	In Word : Taka Eight Cor	e Ninety Ni	ine Lac Sixt	y one Th	ousand Three H	lundred Sixty Si	x only	

Note 1: All unit rates and prices quoted by the Bidders against each basic item or activity shall include the Bidder's profit, overheads, VAT, all type of IT and all other charges including corresponding incidental service charges and premiums for Banking and insurances, as applicable and shall be the delivered price in final destination or at point of delivery and, thus forth the total Tender Price quoted by the Note 2. Bidders will complete these columns as appropriate following the details specified in Schedule of Requirements.

Signature:	Robert
Name	Md. Harunor Rashid National ID: 9132564510
In the capacity of	Chief Operating Officer
Duly authorized to sign the Bid fo	Cross World Power Ltd or and on behalf of the Bidder

Plot - 1/B, Road - 90, Gulshan -2, Dhaka-1212, Bangladesh | Phone: (880 2) 58811858, 9891442 | Fax: (880 2) 58815160 | E-mail: info@cross-world.com