

SPACEZERO LTD

House 135, Road 4, Block A, Banani, Dhaka-1213, Phone-55035669-70,71,72

Work Order

Work Order No : 13-8304 **Create Date** : 12 November 2020

Requisition No : 13-6621

Project : Simpletree Kafil Manor

Supplier : Cross World Power Ltd.
House #NE (O) 06, Rd # 92, Gulshan-2, Dhaka-1212

Attention : Mr. Sohel Uddin Bhuiyan 01755514780

Subject : Work order against supply, installation, Testing, Commissioning of 200KVA Diesel Generator Power System

Body Title : In accordance with above subject & negotiation made with you regarding the subjected matter, we are pleased to issue the work order against supply, installation, Testing, Commissioning of 200KVA Diesel Generator power system

SL#	Item & Description	Qty.	Unit	Unit Price	Amount (Tk.)
1	Supply, Installation, Testing & Commissioning of 200 KVA Diesel Generator System (Description in Remarks, Including AIT Excluding Vat)	1.00	Nos	3,161,135.00	3,161,135.00

AIT	Discount	Tax	VAT	Carrying Charge
0.00	0.00	0.00	0.00	0.00

Grand Total : 3,161,135.00

In Words : Three Million One Hundred Sixty-One Thousand One Hundred Thirty-Five Taka Only

Start Date : 17 November 2020 , **Completion Date** : 31 March 2021

Delivery Address : Plot-31, Road-42,43, Block-CWN(A), Gulshan R/A, Dhaka. Contact Person-Mr. Mahbub-01708132302

Delay Charge : N/A

Warranty : N/A

Payment Mode : 0% payment after 0% completion. Dt: N/A. (1st Installment: (tk. 1,263,076.00) will be paid after materials delivery at site. (Other Payment issues in Remarks))

Md. Shahriar Parvez (Deputy Manager)
Approved

N.B : TDS will be deducted as per government rule.

This Work Order is electronically generated which is valid without signature.

Remarks

- : Description:
- Special Note: Cross World Power Ltd. has understood the design & drawing provided by Spacezero Ltd. Cross World Power Ltd. has visited the project and submitted offer accordingly which reconciled all the information. The complete package work of system is BDT 3,161,135.00 Locked. This amount shall not be exceeded upon any situation against all the specifications, quantity, design & drawing agreed by Cross World Power Ltd. & Spacezero Ltd. The quantity can vary up to +/- 10% except major equipment's will not having any impact on the total value.
1. Supply & Installation of 400 volt 3-phase, 50Hz Floor mounted indoor type 200KVA (Prime) diesel generating set with 8 hrs built in fuel tank local canopy, built in synchronized among 02 Nos set and suitable for tropicalised country like Bangladesh in accordance with CAPITAL/ NEMA/CTTER/VDE standards etc, all complete in all respect as per direction of the design consultant.
- a) 200 kva (prime) diesel generator (built in synchronized)-1 Set @ 2,175,000.00
- b) local body type canopy for 200KVA genset-1 set @ 182,400.00
- c) Silencer exhaust will be taken to the ground floor outside with 50mm thickness rockwool and galvanized jacketing; Engine Exhaust Pipe (40 SCH MS) with RESIDENTIAL TYPE SILENCER (Rockwool insulation & sheet jacketing); 01 set residential type silencer for each DG set. Flange joint along with the DG set. Reducer, Elbow, etc. as required. Flexible Joint at each Silencer exhaust pipe. Horizontal & vertical length for each DG sets is around 10 meter from DG set to the riser. 20 Mtr @ 116,548.00
- d) Supply and installation of common exhaust duct by 14 SWG (2.032mm) galvanized sheet with heat (maximum around temperature 400 deg. Celsius) resistance approx. coating (inside) and outside 50mm Rockwool insulation plus 24 gauge Aluminium sheet cladding. Duct Size LXW- 600 mm X 325 mm. 49 Mtr @ 570,302.00
- e) Radiator Exhaust: Each Generator radiator exhaust will be taken to GF outside, length for each DG is around 10 meter. Radiator exhaust will be made of 22 gauge galvanized sheet. Size of Radiator will be as per manufacturer standard. 300 Sft @ 66,918.00
2. Installation, testing & commissioning - 1 lot @ 49,966.00
3. The details specifications, quantity and price distribution are attached as Annexure-I.
4. Technical catalogs are attached as Annexure-II.

TERMS & CONDITION:

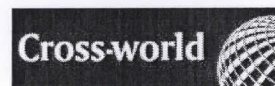
1. MATERIALS: All goods/services are to be supplied according to the description/specifications given in the work order, quotation or approved sample. No discrepancy is acceptable without our prior agreement/consent in writing.
2. PRICE: Prices agreed upon the company or in the quotation are final, no changes can be made at any cost.
3. DELIVERY: Delivery must be made within stipulated time and given delivery place.
4. INSPECTION: We reserve the right to inspect the goods to be supplied under this order but such as inspection does not relieve the suppliers of their responsibilities for defects in materials or quantity or workmanship or quality and for delivery of the goods in accordance with the specifications given. The supplier at their expenses shall remove goods rejected by the project Engineer/Incharge.
5. DEDUCTION: Any additional cost will be on supplier's accounts unless otherwise specified.
6. TRANSIT RISK: the suppliers will bear full responsibility for carrying of materials and all costs and expenses shall be on account of the suppliers. Any damage to the goods in transit will be supplier's responsibility.
7. TERMINATION: Spacezero Ltd reserves the right to reject the merchandise if the supplier failed to execute the contract within the stipulated time and as per specification. If the supplier fails to meet above terms and conditions Spacezero Ltd. has every right to impose penalty against sole discretionary power of Spacezero Ltd management.
8. Payment: 1st Instalment: (tk. 1,263,076.00) will be paid after materials delivery at site. 2nd Instalment: (Tk. 1,589,889.00) will be paid to the SECOND PARTY by the FIRST PARTY after successful installation, testing, commissioning, balancing and handover of Diesel Generator power system within 07 days. 3rd and Final Instalment : (Tk. 308,170.00) will be paid after 06 months from handover or within one month from the date of handover against submitted bank guarantee for six months.

Md. Shahriar Parvez (Deputy Manager)
Approved

N.B : TDS will be deducted as per government rule.

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To
Spacezero Limited
House # 135, Road # 04, Block # A, Banani, Dhaka
Project : Kofil Manor



Date : 20.10.20
Ref : CWPL-AM/4535/20F

SL NO	DESCRIPTION OF ITEMS	QTY	UNIT	UNIT PRICE (BDT)	TOTAL PRICE (BDT)	Remarks
1	DIESEL GENERATOR					
	Supply & installation of 400 Volt 3-phase, 50-Hz floor mounted indoor type diesel generating set with 8 hours built in fuel tank, foreign canopy, built-in synchronized among 02 nos set and suitable for tropicalised country like Bangladesh in accordance with NEMA/IEC/VDE/JIS standards etc. all complete in all respect as per direction of the Design Consultant.					
a)	200 KVA (prime) Diesel Generator (built-in synchronized)	1	set	2,175,000	2,175,000	
b)	Local body type Canopy for 200KVA Genset	1	Set	182,400	182,400	
c)	Silencer exhaust will be taken to the ground floor outside (and will through into a water tank made of MS Sheet) with 50mm thickness rockwool and galvanized jacketing; Engine Exhaust Pipe (40 SCH MS) with RESIDENTIAL TYPE SILENCER (Rockwool insulation & sheet jacketing); 01 set residential type silencer for each DG set. Flange joint along with the DG set. Reducer, Elbow, etc. as required. Flexible Joint at each Silencer exhaust pipe. Horizontal & vertical length for each DG sets is around 10 meter from DG set to the riser.	20	Meter	5,827	116,548	Without residential box. Box will consider inside canopy
d)	Supply and installation of common exhaust duct by 14 SWG (2.032mm) galvanised sheet with heat (maximum around temperature 400 deg. celsius) resistance aproxy coating (inside) and outside 50mm Rockwool insulation plus 24 gauge Aluminium sheet cladding. Duct Size LXW- 600 mm X 325 mm.	49	meter	11,639	570,302	
e)	Radiator Exhaust: Each Generator radiator exhaust will be taken to GF outside, length for each DG is around 10 meter. Radiator exhaust will be made of 22 gauge galvanized sheet. Size of Radiator will be as per manufacturer standard.	300	Sft	223	66,918	Ducting quantity revised as per site condition.
2	Installation, Testing & Commissioning	1	Lot	49,966	49,966	
Net Cost (BDT)					3,161,135	
Total Cost including AIT Excluding VAT (BDT)					3,161,135	

CROSS WORLD POWER LIMITED
BOQ OF 2X200KVA GENERATOR
CLIENT - SIMPLE TREE KAFIL MANOR

ADDRESS-

DATE- 28.01.2020

GEN MODEL-

ENGINE MODEL-

ALTERNATOR MODEL-

Tender Ref No.	SL NO	JOB DESCRIPTION	TECHNICAL DETAILS/ BRAND	SCOPE OF SUPPLY	UOM	QTY	REMARKS
1	1	Electrical System:					
	1.1		Supply & installation of Electrical System (Cables & others) Cable sizes will be as per standard and cables must be lay with standard cable tray with proper dressing; route of cables must be as per consultant's guideline; all accessories must be included for cabling or cable tray installation works. Cable Brand: BRB Power Cable (DG1+DG-2 Sets to ATS Panel) 1c x 185mm NYY FRLS		Meter	130	
	1.2	Cable Laying Charge	Cable laying & termination of 185 mm		Meter	130	
	1.3	Power Cable Lugs	185 mm Material -Copper, Surface-Electro Tinned		Pcs	32	
	1.4	Control cable For Sensing	4 X 1.2 mm (40/0.19 mm) Flexible Cable		Meter	50	
	1.5	PVC Flexible pipe	1"Ø control cable		Meter	50	
	1.6	PVC Tape	Adhesive Tape 04 color (Red/Yellow/Black/Blue)		Pcs	16	
	1.7	PIB Tape			Pcs	2	
	1.8	Royal Bolt	10 no.		Pcs	20	
	1.9	Cable Tie	L - 8"/10"		Pack	4	
	2	Communication Shield Cable	2X1.2mm for sync.		Meter	50	
2	2	Earthing System					
	2.1	Earth Inspection Pit	L X W X D- 600x600x600 mm with Brick, 100mm thick RCC slab with 400mm CI manhole		Nos.		
	2.2	Earthing Boring	Earthing of electrical installation with 38 mm (1.5") dia G.I. pipe throughly (2swg earth electrode) having 6.35 mm dia holes across dia at 305 mm interval securedly bonded with washer, nuts, bolts etc. sunk upto a depth of 100' with GIP pipe to attain earth resistance <1 ohm including blind socket for water pouring facility.	Client	Job	N/A	As per RFQ
	2.3	GI Pipe	38 mm (1.5") dia G.I. pipe		Meter		
	2.4	Earthing Copper Lead	Installation of solid cooper wire earthing lead 2 SWG in 50mm dia GI pipe & termination of connection at both end.		Meter		
	2.5	PVC flexible Pipe	20mm dia water grade flexible pipe for copper lead wearing with necessary fittings.		Meter		
	2.7	Earthing Cable	1X50 mm2 BYA(Green) from Earthing Copper bar to gen & equipment for 200kva		Meter (Appx)		
	2.6	Earthing Block / Equipotential bar	Dimension (LXWXD)mm - 300X50mmX10mm with connection facility		Pcs	3	
5	2.8	Earth cable lugs	50 mm Material -Copper, Surface-Electro Tinned		Pcs	12	
	5	Commissioning Material:					
	5.1	Radiator coolant	Havoline Premix Coolant		Liter	50	
	5.2	Lube oil	SAE 15 W 40		Liter	40	
	5.3	Battery electrolyte	Specific gravity 1.250		Liter	20	
	5.4	Diesel	For test run	Client	Liter	400	
	6	DG On site delivery:					
	6.1	Loading /Unloading/Lifting	Generator dry weight-2200Kg		CWPL	Job	1
6	6.2	DG FOUNDATION with canopy	RCC FOUNDATION, DIM- (LXWXD: 15'-0"X6'-6"X6"	CLIENT	Job	2	
	TOTAL TK FOR 2 NOS DG SET INSTALLATION & COMMISSIONING						
3	3	Exhaust System:					
	3.1	Exhaust Silencer straight Pipe	MS Pipe bore 5", thickness 3-4mm		Feet(Approx)	66	
	3.2	Exhaust Bends /Elbow	Long radius 90 deg L bow 5" bore		Pcs	2	
	3.3	Exhaust Bends / Elbow with Flange	Welding neck flange 5" dia		Pcs	6	
	3.4	Exhaust Heat Insulation	Insulation Of Pipe with Rockwool/Glasswool (25.4mm min thickness) alone with 26SWG Aluminium sheet cladine.		Job	1	
	3.5	Exhasut Fitting	All bracket , support must be made with MS angle 50X50X 4, 5 & 6 MM		Job	1	
TOTAL FOR EXHAUST SYSTEM							
4	4	Cooling System:					
	4.1	Radiator Ducting	As per layout with 22 SWG MS sheet, Angle bar, flat bar support, Canvas cloth etc. Ducting area- DXW-2'X5'; RFT-15'		Sq-ft	300	

NOTE:

-- ALL NECESSARY CIVIL WORK WILL DONE BY CLIENT AS PER CWPL ENGINEER INSTRUCTION

CROSS WORLD POWER LIMITED BOQ OF 2X200kVA GENERATOR

CLIENT - SIMPLE TREE KAFIL MANOR

ADDRESS-

DATE- 28.01.2020

GEN MODEL-

ENGINE MODEL-

ALTERNATOR MODEL-

Tender Ref No.	SL NO	JOB DESCRIPTION	TECHNICAL DETAILS/ BRAND	SCOPE OF SUPPLY	UOM	QTY	UNIT RATE	TOTAL RATE	REMARKS
	1	Electrical System:							
			4X1C -185rm NYY DG To COMMON FEEDER for DG-01		Meter		-	-	
			4X1C -185rm NYY DG To COMMON FEEDER for DG-02		Meter		-	-	
			4X1C -185rm NYY DG To COMMON FEEDER for ATS		Meter		-	-	
	1.1	Power Cable (35 °C Ambient on Air)	4X1C -185rm NYY MAINS To ATS		Meter		-	-	
			4X1C -185rm NYY ATS To LOAD		Meter		-	-	
	1.2	Power Cable Lugs	185 rm Material -Copper , Surface-Electro Tinned		Pcs	32	132.00	4,224	
	1.3	Control cable For Sensing	4 X 1.2 rm (40/0.19 mm)Flexible Cable		Meter	50	87.00	-	Rate only
	1.5	PVC Flexible pipe	1"Ø control cable		Meter	50	26.00	1,300	
	1.6	PVC Tape	Adhesive Tape 04 color (Red/Yellow/Black/Blue)		Pcs	16	29.00	464	
	1.7	PIB Tape			Pcs	2	461.00	922	
	1.8	Royal Bolt	10 no.		Pcs	20	18.00	360	
	1.9	Cable Tie	L - 8"/10"		Pack	4	158.00	632	
		Communication Shield Cable	2X1.2rm for sync.		Meter	50	230.26	-	Rate only
	1.9	Cable Laying Charge	Cable laying & termination of 185 rm		Meter	130	118.00	15,340	
	2	Earthing System							
	2.1	Earth Inspection Pit	L X W X D- 600x600x600 mm with Brick, 100mm thick RCC slab with 400mm CI manhole		Nos.		-	-	
	2.2	Earthing Boring	Earthing of electrical installation with 38 mm (1.5") dia G.I. pipe throughly (2swg earth electrode) having 6.35 mm dia holes across dia at 305 mm interval securedly bonded with washer, nuts,bolts etc. sunk upto a depth of 100' with GIP pipe to attain earth resistance <1 ohm including blind socket for water pouring facility.	Client	Job	1	-	-	As per RFQ
	2.3	GI Pipe	38 mm (1.5") dia G.I. pipe		Meter		-	-	
	2.4	Earthing Copper Lead	Installation of solid cooper wire earthing lead 2 SWG in 50mm dia GI pipe & termination of connection at both end.		Meter		-	-	
	2.5	PVC flexible Pipe	20mm dia water grade flexible pipe for copper lead wearing with necessary fittings.		Meter		-	-	
	2.7	Earthing Cable	1X50 mm2 BYA(Green) from Earthing Copper bar to gen & equipment for 200kva		Meter (Appx)	N/A	-	-	
	2.6	Earthing Block / Equipotential bar	Dimension (LXWXD)mm - 300X50mmX10mm with connection facility		Pcs	3	3,467.40	-	Considered with summary sheet
	2.8	Earth cable lugs	50 rm ,Material -Copper , Surface-Electro Tinned		Pcs	12	34.25	411	
	5	Commissioning Material:							
	5.1	Radiator coolant	Havoline Premix Coolant		Liter	50	160.00	8,000	
	5.2	Lube oil	SAE 15 W 40		Liter	40	331.25	13,250	
	5.3	Battery electrolyte	Specific gravity 1.250		Liter	20	90.00	1,800	
	5.4	Diesel	For test run	Client	Liter	400	-	-	For 2X200kVA
	6	DG On site delivery:							
	6.1	Loading /Unloading/Lifting	Generator dry weight-2200Kg	CWPL	Job	1	-	-	
	6.2	DG FOUNDATION with canopy	RCC FOUNDATION, DIM- LXWXD: 15'-0"X6'-6"X6"	CLIENT	Job	2	-	-	
		TOTAL TK FOR 2 NOS DG SET INSTALLATION & COMMISSIONING						46,703	Approved: 49,966
	3	Exhaust System:							
	3.1	Exhaust Silencer straight Pipe	MS Pipe bore 5", thickness 3-4mm		Feet(Approx)	66	1,375.00	90,200	
	3.2	Exhaust Bends /Elbow	Long radius 90 deg L bow 5" bore		Pcs	2	1,250.00	2,500	
	3.3	Exhaust Bends / Elbow with Flange	Welding neck flange 5" dia		Pcs	6	592.00	3,552	
	3.4	Exhaust Heat Insulation	Insulation Of Pipe with Rockwool/Glasswool (25.4mm min thickness) along with 26SWG Aluminium sheet cladding.		Job	1	23,896.40	23,896	
	3.5	Exhaust Fitting	All bracket , support must be made with MS angle 50X50X 4, 5 & 6 MM		Job	1	18,252.80	18,253	
		TOTAL FOR EXHAUST SYSTEM						138,401	Approved: 1,16,548 (20 RM @ 5827/-)
	4	Cooling System:							
	4.1	Radiator Ducting	As per layout with 22 SWG MS sheet,Angle bar, flat bar support,Canvas cloth etc . Ducting area- DXW-2'X5'; RFT-15'		Sq-ft	300	223.06	66,918	Considered with summary sheet
		Total Tk--							

NOTE: