

## SPACEZERO LTD

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

### Work Order

**Work Order No** : 13-8311 **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 200 KVA 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 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, Excluding Vat & AIT)	1.00	Nos	3,002,297.00	3,002,297.00

AIT	Discount	Tax	VAT	Carrying Charge
0.00	0.00	0.00	0.00	0.00

**Grand Total :** 3,002,297.00

**In Words** : Three Million Two Thousand Two Hundred Ninety-Seven 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. 18,00,000) will be paid as advance. 2nd & Final Installment: (Tk. 1,202,297.00) will be paid after materials delivery at site. NOTE: 100% Cash Payment )

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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. 30,02,297.00 Locked. This amount shall not be exceed 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 200 KVA(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 NEMA/LEC/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 @ 2,175,000.00  
b) Local body type canopy for 200KVA genset-1 set @ 182,400.00

2) Auto transfer panel(ATS) with combination power unit-1set @ 280,100.00  
supply & installation of 630A ATS panel with all other necessary accessories including voltmeter, selector switch, indicating lamp etc.  
1c x 185mm NYY FRLS -130 mtr @265,394.00 (As per site required 130 mtr (DG-1 & DG-2 to ATS)  
a) Communication/control cable - 1 lot @ 15854.00  
b) Earthing bar (CU)  
L 250 mm x W 50 mm - 10 mm thickness  
installed at wall with rubber bush, rowel bolt, nut, washer, cable connection with bard using cable lux-3 set @ 10,402.00  
c) Cable tray : construction material-proper painted galvanized sheet (with capsule hole, 4mm thick, threaded stick MS/GI for support with nut bolt. (Sheet SWG 11, 3mm)  
w x d -600 mm x 50 mm-10 mtr @28,049.00  
w x d -250 mm x 50mm-20 mtr @ 34,146.00  
3. supply & installation of mechanical system(pipe ,duct & others)  
a) Exhaust louver: aluminium z Louvver @retaining wall flash-2 Nos @ 10,953.00  
4.The details specifications, quantity and price distribution are attached as Annexure-I.  
5. 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.18,00,000) will be paid as advance. 2nd & Final Instalment: (Tk. 1,202,297.00 ) will be paid after materials delivery at site.  
NOTE: 100% Cash Payment

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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.

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	<b>DIESEL GENERATOR</b>					
	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); <b>01 set residential type silencer for each DG set.</b> 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	
<b>Net Cost (BDT)</b>					<b>3,161,135</b>	
<b>Total Cost including AIT Excluding VAT (BDT)</b>					<b>3,161,135</b>	

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
	6.2	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	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

DE-02

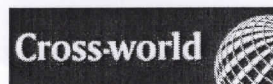
GEN MODEL-		ENGINE MODEL-		ALTERNATOR MODEL-							
Tender Ref No.	SI. NO	JOB DESCRIPTION	TECHNICAL DETAILS/ BRAND	SCOPE OF SUPPLY	UOM	QTY	UNIT RATE	TOTAL RATE	REMARKS		
1	Electrical System:										
	1.1	Power Cable (35 °C Ambient on Air )	4XIC -185mm NYY DG To COMMON FEEDER for DG-01	Meter			-	-	Considered with summary sheet		
			4XIC -185mm NYY DG To COMMON FEEDER for DG-02	Meter			-	-			
			4XIC -185mm NYY DG To COMMON FEEDER for ATS	Meter	TBA		-	-			
			4XIC -185mm NYY MAINS To ATS	Meter			-	-			
			4XIC -185mm NYY ATS To LOAD	Meter			-	-			
	1.2	Power Cable Lugs	185 mm Material, Copper, Surface-Electro Tinned	Pcs	32		132.00	4,224			
	1.3	Control cable For Sensing	4 X 1.2 mm (40/0.19 mm)Flexible Cable	Meter	50		87.00	4,350	Rate only		
	1.5	PVC Flexible pipe	1"Ø control cable	Meter	50		26.00	1,300	Inbuilt in DE-01		
	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			
	1.9	Communication Shield Cable		Meter	50		230.26	11,513	Rate only		
			2X1.2mm for sync.	Meter	130		118.00	15,340	Inbuilt in DE-01		
	1.9	Cable Laying Charge	Cable laying & termination of 185 mm	Meter	130		118.00	15,340			
	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 (25wg 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.	Job	1			-	-	As per RFQ	
						Meter			-	-	
						Meter			-	-	
						Meter			-	-	
						Meter			-	-	
2.7	Earthing Cable	1X50 mm2 BVA(Green) from Earthing Copper bar to gen & equipment for 200kva	Meter	N/A			-	-			
2.6	Earthing Block / Equipotential bar	Dimension (LXWXD)mm - 300X50mmX10mm with connection facility	Pcs	3		3,467.40	10,402	Considered with summary sheet			
2.8	Earth cable lugs	50 mm Material, Copper, Surface-Electro Tinned	Pcs	12		34.25	411				
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	Liter	400		-	-	For 2X200KVA			
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'-6"	CLIENT	Job	2		-	-			
TOTAL TK FOR 2 NOS DG SET INSTALLATION & COMMISSIONING									46,703 Approved: 49,966		
Exhaust System:											
3.1	Exhaust Silencer straight Pipe	M5 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 M5 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/-)		
Cooling System:											
4.1	Radiator Ducting	As per layout with 22 SWG M5 sheet, Angle bar, flat bar support, Canvas cloth etc. Ducting area- DWX-2'X5'; RFT-15'	Sq-ft	300		223.06	66,918	Considered with summary sheet			
NOTE:									Total TK-		

Subst in DE-01

CROSS WORLD POWER LIMITED						
CLIENT -Simple Tree Kafil Manor			ADDRESS-		DATE: 28-01-2020	
GEN MODEL-		ENGINE MODEL-		ALTERNATOR MODEL-		
SL NO	JOB DESCRIPTION	TECHNICAL DETAILS/ BRAND	SCOPE OF SUPPLY	UOM	QTY	REMARKS
1	ATS	Powder Coated Metal Box <b>Wall Mounted Type</b> made with 16 SWG Sheet as consisting of provision for following items. WXHDX - 600X1200X450 mm and consisting of provision for following items.	CWPL	No	1	
		630 Amps TP AC-3 Duty Magnetic Contactor	CWPL	No	2	
		Brand : SCHNEIDER				
		AC Timer 220V 50 Hz	CWPL	No	2	
		AC Relay 220V 50 Hz	CWPL	No	1	
		6A TP MCB, Hyundai	CWPL	No	1	
		Indicating Lamp ( Red)	CWPL	No	2	
		630 Amps Copper Busbar with Connection Facility	CWPL	Meter	3	
		Connection Accessories	CWPL	Set	1	



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
<b>1</b>	<b>DIESEL GENERATOR</b>					
	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 synchrnized)	1	set	2,175,000	2,175,000	
b)	Local body type Canopy for 200KVA Genset	1	Set	182,400	182,400	
<b>2</b>	<b>Auto Transfer Panel (ATS) with Combination Power Unit</b>	<b>1</b>	<b>set</b>	<b>280,100</b>	<b>280,100</b>	
	Supply & installation of 630A ATS Panel with all other necessary accessories including voltmeter, selector switch, indicating lamp etc.					
	1c x 185rm NYY FRLS	130	Meter	2,041	265,394	As per site required 130 m (DG-1 & DG-2 TO ATS)
a)	Communication/Control Cable (50+50=100 m)	1	Lot	15,854	15,854	Shield & Control Cable
b)	Earthing Bar (CU) L 250mm x W 50mm- 10mm thickness; Installed at wall with rubber bush, Rowl Bolt, Nut, Washer; Cable connection with bar using Cable lux	3	set	3,467	10,402	
c)	Cable Tray: Construction Material- proper painted Galvanized sheet (with capsule hole, 4mm thick ; Threaded Stick MS/GI for Support with nut bolt.					Sheet SWG=11SWG (3MM)
	Size: W x D - 600 mm x 50mm;	10	Meter	2,805	28,049	
	Size: W x D - 250 mm x 50mm;	20	Meter	1,707	34,146	
<b>3</b>	<b>Supply &amp; installation of Mechanical System (Pipe, Duct &amp; others)</b>					
a)	Exhaust Louver (for 2 x 200 KVA) Aluminium Z-louver @ retaining wall flash	2	Nos	5,477	10,953	Considering Galvanized sheet (3.5'x3.5')
Net Cost (BDT)					3,002,297	
Total Cost Excluding VAT & AIT (BDT)					3,002,297	