



এসএমসি এন্টারপ্রাইজ লিঃ  
SMC ENTERPRISE LTD  
(A SUBSIDIARY OF SOCIAL MARKETING COMPANY)

SMC TOWER  
33 Banani C/A, Dhaka-1213, Bangladesh  
G. P. O. Box No. 2983, Tel: 9821074-80  
Fax: 880-2-9821581, 9821957  
E-mail: smc.corp@smc-bd.org  
Web: www.smc-bd.org

December 19, 2016

Managing Director  
Cross World Power Ltd,  
House# NE (0) 06, Road# 92,  
Gulshan-2, Dkaka-1212

Ref.: Your sealed Tender dated **September 26, 2016** for subject work and your revised offer dated **December 7, 2016**

**Sub: Letter of acceptance for Supply , Installation , Testing and Commissioning of one 500 KVA (Prime ) Diesel Generator and one 1250 Amp synchronizing panel with ATS for the project of expansion of 8<sup>th</sup>, 9<sup>th</sup> & 10<sup>th</sup> lines of ORS production facility at SMC-EL's premises in Bhaluka , Mymensingh in one package .**

Dear Sir:

Reference to the above, we are glad to inform you that the SMC and SMC Enterprise Limited (SMC-EL) Management have accepted your bid for subject work, provided that you will fulfil all terms and conditions of tender document provided by SMC Enterprise Limited (SMC EL), and the terms and conditions of your technical offer accepted by SMC EL, your priced financial offer, and revised offer, which were signed, sealed and submitted by you to SMC Enterprise Limited and you will supply, install, test and commission of one 600 KVA (prime) diesel generator at **GBP 41,000.00** as per Negotiation Dated November 27, 2016.

**The name of the subject work in contract has been revised as Supply, Installation, Testing and Commissioning of one 600 KVA ( Prime ) Diesel Generator and one 1250 Amp synchronizing panel with ATS for the project of expansion of 8<sup>th</sup> to 12<sup>th</sup> lines of ORS production facility at SMC-EL's premises in Bhaluka , Mymensingh in one package.**

**Capacity of bus bar of synchronizing & ATS panel will be in compliance with 1250 KVA Substation at own cost of you.**

The contract price is **BDT 9,272,459.00 (Taka ninety two lac seventy two thousand four hundred fifty nine only)** considering 1.00 GBP= BDT 96.30. **GBP 41,000.00** will be paid by SMC Enterprise Limited through letter of credit for foreign currency part Chittagong basis for 600 KVA (prime) diesel generator and **BDT 5,324,159.00** for local currency part. Given time is four calendar months reckoned from the date of issuance of this letter of acceptance.

Insurance (if required), Custom Duty, ATV (Advance Trade VAT, if any), Clearing & Forwarding expenses, Chittagong port related all expenses and all government bodies related expenses, expenses of transporting to site at Bhaluka shall be borne by SMC Enterprise Limited and it will open letter of credit in favor of Allam Marine Ltd., England, UK (principal of you) for **GBP 41,000.00** on C&F Chittagong basis.

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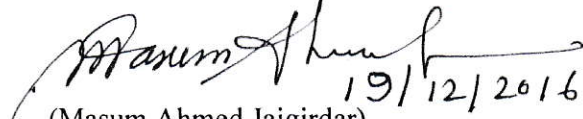
We invite you to sign the Contract within one week of issuing this letter of acceptance and submit Proforma Invoice of 600 KVA diesel generator.

You are requested to submit performance bank guarantee of 10% of contract price (with initial validity fifteen months extendable up to one year after successful completion and handover of the subject work) before signing the contract agreement as early as possible.

Unless and until a formal agreement is prepared and executed, this Bid together with this letter of acceptance thereof shall constitute a binding contract between SMC EL and you as per clause # 6 of Tender Form of Tender Document.

Thank you.

For SMC Enterprise Limited (SMC EL)

  
19/12/2016  
(Masum Ahmed Jaigirdar)  
GM-Engineering  
SMC



## SCHEDULE OF ITEMS OF WORK AND BILL OF QUANTITIES

### FOR

### SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF ONE 500 KVA (PRIME) DIESEL GENERATOR AND ONE 1250 A SYNCHRONIZING PANEL FOR THE PROJECT OF EXPANSION OF 8TH, 9TH & 10TH LINES OF ORS PRODUCTION FACILITY AT SMC- EL'S PREMISES IN BHALUKA, MYMENSINGH IN ONE PACKAGE

#### The contractor must fulfill the followings:

1A. The bidder shall quote rates in BDT both in figures and words. These rates shall include all cost of materials, plants, equipment, labours, fuel, transportation etc. for all temporary and permanent works, overhead and profit and training as laid down in the tender document and shall be inclusive of all duties, taxes, charges, VAT etc. as imposed by the Government.

1.B The 500 KVA (PRIME) DIESEL GENERATOR set shall be inspected for Factory Acceptance Test (FAT) by the personnel of the Owner. Factory Acceptance Test (FAT)/ Performance test shall be conducted at the assembler's Factory abroad and all arrangements for FAT shall be made by the Contractor. No additional payment shall be made to the Contractor on account of FAT. The cost of Air Tickets both ways, Hotel Accommodation, local transport, and food for the personnel of the Owner who will be witnessing the FAT shall be borne by the Owner. The Contractor shall provide necessary support and assistance for invitation and processing of Visas etc for the SMC EL personnel for FAT. The cost related to only performance test, if any, shall be borne by the Contractor and shall be include in rates of SCHEDULE OF ITEMS OF WORK AND BILL OF QUANTITIES. An invitation letter or equivalent by the Contractor, within short time of opening irrevocable letter of credit by the owner or 2 months ahead of date of performance test/ FAT, whichever is earlier, in writing, must be sent to the owner so that owner can do hotel booking, apply for Visa and do other formalities. During the Factory Acceptance Test (FAT) if any deviation found from the accepted specification of the 500 KVA (PRIME) DIESEL GENERATORS, the assembler shall rectify the identified deviation(s) found during FAT. After final clearance from the Owner, shipment will be made.

1C. 1250 ampere synchronization part: Subject to successful commissioning, testing and synchronizing existing one 200 KVA (prime) diesel generator and with other offered 500 KVA (prime) diesel generators outputs.

1D. Auto Transfer Switch (ATS) part: 1250 Ampere capacity TP with 2x1 No 1250A, 65KA, TP motorized ACB with fixed type housing/ chassis (one ACB will deliver output of synchronization; the other will deliver output of Transformer. If one ACB is ON the other must be OFF through electrical and mechanical interlock i.e. double layer of safety), with delay timer necessary accessories whatsoever shall be required for successful commissioning.





1F. Internet view / monitoring with free software for lifetime must be available from Deep Sea, UK and Broiltech, India.

2. All Circuit Breaker (ACB/MCCB/MCB): ABB only from sole agent/ authorized distributor with papers of authentication (if asked for by the Owner) and as per accepted and approved by the Owner.

3. All Volt meter and Ampere meter must be digital and of high quality.

4. The contractor shall take prior measurement before bringing cable to site and the owner shall not pay for wastage cable.

5. Contractor must submit Single line Diagram (SLD), shop drawings of all type of distribution boards and panels, substation equipment layout, substation floor layout with floor drain etc whatever asked for by the Owner and must take approval from Owner.

6. BOQ quantity may increase or decrease or omitted.

7. Before procuring cable, the contractor must take accurate field measurement. Cable connecting must not have joint and contractor will bear cost of wastage cable. Wastage cost should be distributed in to all rates.

8. All ACB are (TP motorized) shall have Fixed Type chassis/ housing and adjustable Thermal overload and adjustable magnetic short-circuit. All ACB must have repairable motor, shunt opening, shunt closing, under voltage release, aux contact, gear motor, electronic time delay, mechanical interlock, handle with store -energy spring operating gear motor mechanically manually. ON/OFF ACB and solid state microprocessor controlled Under Voltage Release, auxiliaries, accessories etc including whatsoever may be required to complete the subject job in all respect. Brand: ABB from sole agent/ authorized distributor.

Cable Lug, PIB Tape, cable tape, cable glands, flexible pipes etc shall be done by the contractor's cost.

Cable between Synchronization Panel and ATS:

3x4x1C-120mm XLPE + 1x2x1C-120mm XLPE

50A ATS inputs cables:

From AVR by-pass: 3x4x1C-120mm XLPE + 1x2x1C-120mm XLPE

50A ATS output cables:

LT Panel: 3x4x1C-120mm XLPE + 1x2x1C-120mm XLPE

500 KVA Generator output cable: 3x4x1C-120mm XLPE + 1x2x1C-120mm XLPE

200 KVA Generator output cable: 3x2x1C-50mm XLPE + 1C-50mm XLPE

**bidder MUST ensure the followings layers of safety:**

Synchronization part: The synchronization enabled controllers (each with a PLC and a relay) must communicate within themselves and will supply output taking connected authorized ACB/ MCCB in ON position to TP + N Busbar common to synchronized outputs of



all generators. The synchronization enabled controllers (with PLC with a display) must not taking connected motorized ACB/MCCB in ON position if voltages and currents are identical i.e. synchronized.

Thus synchronization enabled controllers (with PLC with a display) are electrically bound to invoke respective connected motorized ACB/MCCB in ON position only when outputs are synchronized. Under no circumstances, non-synchronized outputs shall be delivered to common TP + N Busbar.

2. ATS Part: Three sets of TP + N Busbar (where one set may be the above common TP + N Busbar that collects synchronized outputs) shall exist in auto transfer switch part. One pair of motorized ACB shall be in auto transfer switch part. One ACB will take power (output) connected to TP+N Busbar from Main power supply. The other ACB will be connected to the TP+ N busbars that receives synchronized outputs of generators. This one pair of ACB in auto transfer switch part must be electrically interlocked by necessary accessories and mechanically interlocked by necessary accessories confirming that if one ACB is in ON position the other ACB must be in OFF position. One of this pair of motorized ACB shall supply power to output TP+ N busbars of ATS Part.

3. All cables bearing AC signal must have mini primary and secondary coils with laminated iron core (mini isolation transformer or surge protector) so that in case of over voltage primary coil will be burned saving synchronization enabled controllers (each with a PLC and a display) from damage at the contractor's cost.

4. At all DC sources must have about 4 to 6A DP MCB (ABB or approved equivalent) to protect synchronization enabled controllers (each with a PLC and a display) from damage at the contractor's cost.

**The bidder MUST quote rates in following tables:**

**Option-1-Group-A, B, C:**

**Group-A: Supply, installation, testing and commissioning 500 KVA (prime) diesels generator preferably from ready stock or pipeline**

Description of Item of Work	Unit	Quantity	Currency	Rate	Amount
Supply, installation, testing and commissioning 500 KVA (prime) diesel Generator set with control panel with built-in PLC and display (without canopy and without ATS) with adequate rating one MCCB for each genset. Sufficient number of vibration	Set	1	BDT	TK 4,518,243	TK 4,518,243

TK 4,518,243  
Taka Fourty Five  
Lacs Eighteen  
Thousand  
Two Hundred



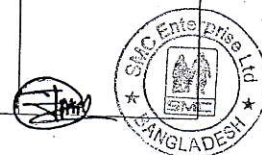
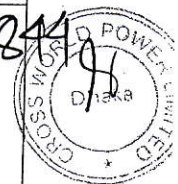
Description of Item of Work	Unit	Quantity	Currency	Rate	Amount
isolators of suitable capacity is to be provided.					
<b>LT (415V) CABLE:</b> Supply, installation & termination of following PVC insulated and PVC sheathed cables of BRB/ Paradise brand over cable tray/ ladder, as per direction of SMC authority to connect generator with synchronization panel as well as connection between synchronization panel and ATS. The rate shall include the cost of all cable lugs (including of existing cable, wherever applicable), tie wire, PVC tape, PIB Tape, flexible pipes etc dressing up to the satisfaction of engineer-in-charge.  All Unit rates of cables should be prepared prevailing market rates, AIT, VAT (VAT shall be waived if already paid by cable manufacturer on submission of relevant document), expenses, overheads, certain percent of standard wastages, if any, and Profit.					
a) 1-C185rm XLPE	Meter	30	BDT	TK 1,769	TK 53,070
b) 1-C150rm XLPE	Meter	30	BDT	TK 1,451	TK 43,530
c) 1-C120rm XLPE	Meter	100	BDT	TK 1,172	TK 117,200
d) 1-C 95rm XLPE	Meter	10	BDT	TK 934	TK 9,340
e) 1-C50rm XLPE	Meter	10	BDT	TK 515	TK 5,150
<b>Earthing:</b> Supply, installation & termination of following PVC insulated and PVC sheathed cables (1-C50rm XLPE type) of BRB/ Paradise brand over cable tray/ ladder (if required), connecting generator to substation earthing block	Meter	150	BDT	TK 596	TK 89,400



*[Signature]*



Description of Item of Work	Unit	Quantity	Currency	Rate	Amount
as per direction of SMC authority. The rate shall include the cost of all cable lugs, tie wire, PVC tape, PIB Tape etc dressing up to the satisfaction engineer-in-charge.					
Supply, installation & termination of Control cable 4x40/76 (4-core) of BRB/ Paradise brand over cable tray/ ladder. All work to be done as per direction of engineer-in-charge.	Meter	300	BDT	TK 81 Taka Eighty one only	TK 24,300
Supply, installation Aluminium wire mesh shielded cable 2C-1.2mm flexible imported cable	Meter	150	BDT	TK 200 Taka Two Hundred only	TK 30,000
Supply, installation 2 feet wide cable tray/ ladder hanging from ceiling/ wall with anchor bolt of Hilti brand, MS bar/ wire, cable tie, clamp etc all work to be done as per direction of engineer-in-charge.	Meter	20	BDT	TK 3887	TK 77,740
Supply, installation Exhaust pipe of suitable dia with necessary bend, heat proof painting, winding muffler wherever required etc all work to be done as per direction of engineer-in-charge.	Meter	40	BDT	TK 6492	TK 259,680
Supply, installation of GP duct for collecting hot air from radiator fan and disposing to outside air. All work to be done as per direction of engineer-in-charge.	Sqm	40	BDT	TK 3042	TK 121,680
Supply, installation Unloading offered generators at site, lifting and placing at suitable locations as per drawing as instruction of engineer-in-charge.	Lot	1	BDT	TK 12879	TK 12,879
Supply and installing TP Phase failure relay of ABB/ Schneider or approved equivalent brand only from sole agent/ authorized distributor. The Phase failure relay shall be capable tripping motorized TP ACB auto ON/OFF (so 400 above A TP MCCB manual ON/OFF) to OFF position	Set	6	BDT	TK 10,474	TK 62,844





Description of Item of Work	Unit	Quantity	Currency	Rate	Amount
on the event of phase failure and Phase sequence reversal.					
Supply and installing Fuel Consumption Monitoring flow meter BT-DOPS-012, Broiltech, India, Internet view with free software must be available.	Job	1	BDT	TK 108,841	TK 108,841

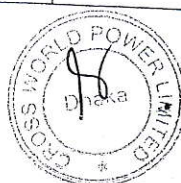
Total amount in Group-A in BDT:

TK 5,533,897

Taka fifty five Lac Thirty three Thousand Eight Hundred Ninety seven only

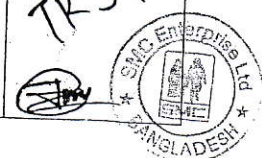
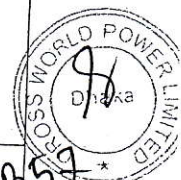
Group-B: Supply, installation, testing and commissioning of 1250 A Auto Transfer Switch (ATS) and 1250 ampere synchronization panel

Description of Item of Work	Unit	Quantity	Currency	Rate	Amount
Supply and installing 1250 ampere synchronization panel: sheet steel clad powder coated 4/168WC), 415V, 50 Hz dust and vermin proof, free standing, for mounting. Indoor type generator Synchronizing Panel with Dimension/Size: As minimum as possible of suitable size.	Lot	1	BDT	TK 216,686	TK 216,686
Supply and installing Relays of preferably Schneider brand, timer, Nos. Phase Indicating Lamp (Red, Yellow & Blue), three emergency Push Buttons, Voltmeter and Ampere meter must be reliable and of high quality including all other accessories (however may be required to complete the job in all respect etc whatever necessary for successful synchronizing.				Taka Two Lac Sixteen Thousand Six Hundred Eighty six Hundred Sixty only	Taka Two Lac Sixteen Thousand Six Hundred Eighty six only.
Supply and installing synchronization enabled controller with PLC with a capacity of adequate capacity for 500 KVA generators and controller shall Display Load	Set	2	BDT	TK 154,074	TK 308,148





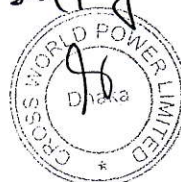
Description of Item of Work	Unit	Quantity	Currency	Rate	Amount
Share, current, voltages etc in synchronization panel. DSE8610, Deep Sea, UK Control Module With connection accessories like relay, timer, MCB, Surge protector for completing the control panel.					
Supply and installing 630A, 42KA, TP ACB Fixed Type chassis/ housing (Receiving existing 200KVA generator output) in synchronization panel	Set	1	BDT	TK 366,810	TK 366,810
Supply and installing 800A, 50KA, TP ACB Fixed Type chassis/ housing. (Receiving offered 500 KVA generator output) in synchronization panel	Set	2	BDT	TK 366,810	TK 733,620
Supply and installing ATS Panel: Sheet steel clad powder coated (14/16SWG), 415V, 50 Hz dust and vermin proof, free standing, floor mounting, Indoor type ATS Panel with Dimension/Size: As minimum as possible of suitable size with Volt meter and Ampere meter must be digital and of high quality including all other accessories whatsoever may be required to complete the job in all respect etc whatever necessary for successful auto transfer.	Lot	1	BDT	TK 165,163	TK 165,163
Supply and installing 1250A, 6KA, TP ACB Fixed Type chassis/ housing in ATS Panel	Set	2	BDT	TK 385,214	TK 770,428
Supply and installing Each 2000A air drawn copper TP + N busbar adequate length. one set for collecting power 50 A ACB of synchronization panel, one set for collecting power in power supply and another supplying ATS output).	Set	4	BDT	TK 69,333	TK 277,332
Supply and installing Bus Tie breaker control with synchronization: for DSE8680 Bus Tie control	Job	1	BDT	TK 348,359	TK 348,359



Description of Item of Work	Unit	Quantity	Currency	Rate	Amount
Module, Deep Sea, UK Connects to two DSI Multi Set Communications links (Bus 1 & Bus 2) including Configurable event log (250), Data logging (USB Memory Stick). Synchronize and Connecting two busbar electrically synchronized. Say in case one of existing 500 KVA, 509 KVA, or new 500 KVA goes out of order, power efficiency will be replenished from the substations resulting in loss of production)					
Supply and Installing Remote Communications & Overview displays: DSE890 (3G Gateway), Deep Sea, UK including GSM Antenna & GPS Antenna with internet view	Job	1	BDT	TK 94,650	TK 94,650
Supply and Installing, The bidder after issuance of PO/ after signing formal Agreement) will plan and submit certificate/ opinion from Bureau of Research, Planning and Consultation (BRTC), Bangladesh University of Engineering and Technology (BUT) confirming that synchronization is possible between existing 200 KVA (old) diesel generator and with offered 500 KVA (prime) diesel generator outputs.	Job	1	BDT	TK 64,394	TK 64,394 Taka Sixty Four Thousand Three Hundred Ninety Four only

Amount in Group-B in BDT: TK 3,345,588

Taka Thirty Three Lac Forty Five Thousand Five Hundred Eighty Eight only

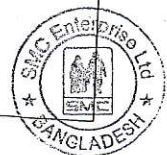




## Group-C

Cable rearrangement for: (AVR by-pass to ATS).

Description of Item of Work	Unit	Quantity	Rate	Amount
<b>LT (415V) CABLE:</b> Supply, installation & termination of following PVC insulated and PVC sheathed cables of IRIN/ Paradise brand over cable tray/ ladder, as per direction of SMC authority. The rate shall include the cost of all cable lugs (including existing cable without lugs, wherever applicable), tie wire, PVC tape, PIB Tape etc dressing up to the satisfaction of engineer-in-charge.	NA	Please do not quote	Please do not quote	Please do not quote
a) 1-C400mm XLPE	Meter	10	TK 3,711	TK 37,110
b) 1-C300 mm XLPE	Meter	10	TK 2,808	TK 28,080
c) 1-C 185 mm XLPE	Meter	30	TK 1,772	TK 53,160
d) 1-C 150 mm XLPE	Meter	30	TK 1,462	TK 43,860
e) 1-C 120 mm XLPE	Meter	100	TK 1,192	TK 119,200
f) 1-C 95 mm XLPE	Meter	10	TK 969	TK 9,690
g) 1-C 70 mm XLPE	Meter	10	TK 752	TK 7,520
h) 1-C 50 mm XLPE	Meter	20	TK 574	TK 11,480
Supply and installing, Protection of system for 7 generators while conditional synchronizing: Uninterrupted Power Transfer when main supply resumes. * DSE8660, Deep Sea, UK Auto Transfer Switch & Mains Control Module with connection accessories like a reverse power protection, kW overload protection, relay, MCB, Surge protector for the generator control panel. Multiple generator output modification (Synchronization) identically with transformer/ AVR. Remote view of Mains failure detection, mains power monitoring (kW, kVAr, kVA & pf)	Job	1	TK 652,817	TK 652,817





Description of Item of Work	Unit	Quantity	Rate	Amount
monitoring, mains decouple protection for generator from abrupt change in phase angle, vector shift, rate of change of frequency. Mains KW export (toward source of main power) protection. This will include Configurable event log (250), Data logging (USB Memory Stick), Power monitoring (kW h, kVAr, kv Ah, kV Ar h).				

Total amount in Group-C in BDT: TK 962,917  
Taka Nine Lac sixty two Thousand Nine Hundred  
Seventeen only

Grand Total amount in Option-1 in BDT: TK 2,842,402  
Taka Ninety Eight Lac forty  
Two Thousand four Hundred  
Two only

MC EL desires to open letter of credit (L/C) for item # 1 of Group-D where rate must be on C&F Chittagong basis. A draft PI (Proforma invoice) has to be attached with initial offer.

Quoting is mandatory for supply, installation, testing and commissioning 500 KVA (prime) diesel Generator where SMC-EL will open L/C.

Description of Item of Work	Unit	Quantity	Currency	Rate	Amount
Supply, installation, testing and commissioning 500 KVA (prime) diesel Generator set with control panel with built-in PLC and panel (without canopy and without ATS) with adequate cooling one MCCB for each genset. Sufficient number of vibration absorbers of suitable capacity is to be provided.	Set	1	GBP	GBP 31,000 GBP Thirty one Thousand only	GBP 31,000 GBP Thirty one Thousand only

Amount in Option-2-Group-D: GBP 31,000 CFR Chittagong  
GBP Thirty one Thousand only





The bidder must fulfil the following:

- b) Financial Offer duly filled up, signed and sealed by the Tenderer/ bidder.
- c) Applicable VAT/TAX shall be deducted from source as per govt. rules from from local currency part.
- d) Requisite earnest money in the form Bank Guarantee/ Bank Draft/Pay Order in favor of "SMC Enterprise Limited" from any schedule Bank of Bangladesh.
- e) Operation and maintenance manual must be submitted while commissioning. Shop drawing for ATS and Synchronization Panel must be approved by owner. Locally fabricated with imported components 1250 A synchronization panel And Auto Transfer Switch (ATS) must be assembled by the Tenderer/ bidder. A single line diagram (SLD) and shop drawings for synchronization and Auto Transfer Switch (ATS) must be submitted for approval of SMC within 15 calendar days by successful bidder from issuance of PO/ letter of acceptance.

Above quantities may increase or decrease, bill will paid as per joint field measurement. For stage cable no bill shall be paid.

