



## **BID DOCUMENT FOR**

**Supply and installation of 10 KVA & 06 KVA online UPS  
System with sealed maintenance free batteries of one hour  
back-up for BGL office at Hyderabad**

**UNDER LIMITED DOMESTIC  
COMPETITIVE BIDDING**

**Bid Document No.: BGL/434/2018-19**

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## **SECTION – 8**

# **SCOPE & TECHNICAL SPECIFICATION**

1. SCOPE:

- 1.1 Design, manufacture/assembly, testing at suppliers premises in presence of BGLs' representative, packing, forwarding, installation and commissioning of industrial type 1 x10 KVA and 1 x 6kva ONLINE UPS SYSTEM with sealed maintenance free batteries of one hour back up for BGL office at Hyderabad.

**MANUFACTURERS / BRANDS:** shall be from any of the below listed.

- 1) *EMERSON / VERTIV or*
- 2) *HITACHI Hi- Rel or*
- 3) *APC*

**Technical Specifications / Requirements**

1. **General specifications:**

- i. UPS Type: DSP control based ON-LINE Double Conversion Technology
- ii. Capacity: 10 KVA., 06 KVA
- iii. Make: **EMERSON / VERTIV/Hitachi Hi-Rel /APC**
- iv. Qty: 10 KVA-01 nos. & 06 KVA-02 nos.
- v. Battery Backup: 60 min at full load
- vi. Supply: 3-Phase Input, 1-Phase Output for 10 KVA UPS  
: 1- phase input, 1-Phase output for 06 KVA UPS
- vii. Operation Mode Normal (online): Emergency, Recharge, bypass, Maintenance bypass.
- viii. Rectifier / Inverter: IGBT with PFC control technology only
- ix. Transformer : Isolation transformer only on Input side
- x. Total Efficiency AC/AC at 100% load:  $\geq 94\%$  (Online mode)
- xi. Operation with reverse phase sequence should be available
- xii.

2. **INPUT**

- i. Voltage configuration : Three-phase, 3-wire
- ii. Voltage rating : 400V, for 3- phase  
:220/230/240 V, for 1-phase
- iii. Min/ Max input voltage : 320V to 480 V
- iv. Nominal Frequency : 50 Hz
- v. Max/Min frequency : 50 Hz +/- 10%
- vi. Phase : Three Phase
- vii. Inrush Current : 700% of full load current maximum
- viii. Current Limit : 125% of nominal AC input current maximum
- ix. Surge Protection : As per IEC standard
- x. THDi :  $\leq 3\%$  and should constant from 20% to 100% load
- xi. Power factor :  $> 0.99$

3. **OUTPUT**

- i. Voltage Configuration : 1-phase, 3-wire plus ground
- ii. Voltage : 230V ac

- iii. Voltage regulation :
- $\pm 1\%$  1-phase RMS average for a balanced load for the combined variation effects of input voltage, connected load, battery voltage, ambient temperature, and load power factor.
  - $\pm 2\%$  1-phase RMS average for a 100% unbalanced load for the combined variation effects of input voltage, connected load, battery voltage, ambient temperature, and load power factor.
- iv. Voltage Distortion :  $\leq 3\%$  total harmonic distortion (THD) for linear loads and  $\leq 5\%$  THD for 100% nonlinear loads.
- v. Crest factor : 3:1
- vi. Frequency : 50 Hz and Pure sine wave
- vii. Frequency regulation : 50 Hz  $\pm 0.1\%$  8
- viii. Output power factor : 0.9 or better
- ix. Overload Capacity : 125% for ten minutes (without bypass source).  
: 150% for one minute (without bypass source).
- x. Wave form : Pure Sinusoidal
- xi. Output Voltage adjustment :  $\pm 5\%$  (Software Controlled adjustment)

#### 4. Batteries:-

- Make. : Reputed make Amaron / Exide
- Type : Sealed maintenance free (SMF-VRLA)
- Rated battery life : min 7 years
- Battery backup : 60 mins with full load
- Battery stand : Suitable battery stand with MS fabricated with powder coated
- Battery link and cabling : suitable battery link and interconnecting copper cable from UPS to battery shall be supplied by vendor

The accumulator bank must have an expected service life of seven years with a capacity of 60 minutes at 100 % load. Detailed Battery backup calculation sheet and manufacturer charging/discharging characteristic chart shall be attached along with the technical bid also Battery type should be specified in the document.

#### 5. On-Line Battery Test

The UPS shall be provided with Auto On-Line Battery Test feature. The test shall ensure the capability of the battery to supply power to the inverter while the load is supplied power in the normal mode.

#### 6. Battery Charger:

The battery charger shall recharge the battery to 90% of its fully charged condition preferably within six to eight (6-8) hours and at the same time supplying full load current to the system. The charger should have the Temperature Compensated Charging. The battery charger output voltage shall be automatically adjusted in proportion to the ambient temperature of the battery to avoid over-charging.

The system must include one or more battery chargers:

- Should be with IGBT technology;
- separate from the rectifier;
- with charging voltage independent from the DC bus voltage
- dedicated and independent for each accumulator bank;

The battery charger must be able to operate with the following types of accumulator:

Depending on the temperature, the battery charger shall be able to select the most suitable recharge method automatically, without operator intervention, alternating float mode in combination with “intermittent” charge in such a way as to limit the effects of corrosion (plate sulphation) and significantly prolong battery life. The maintenance charge voltage must be automatically regulated in relation to the temperature of the battery compartment. The battery compartment must be equipped with a temperature sensor for this purpose.

The following parameters must be adjustable and configurable:

- Maximum recharge current limit;
- Constant float mode current and voltage;
- Switching threshold from fast recharge mode to maintenance mode.

The battery charge regulation and control circuit shall also provide the following functions:

- Continuous monitoring of the battery circuit (battery interrupted) with visual alerts on the local user interface;
- Monitoring of battery efficiency, via partial discharge at settable intervals; the check consists in continuously monitoring the discharge current and comparing it with the ideal discharge curve;
- Continuous monitoring of the battery charger's output voltage to ensure it remains within the limits required to optimize battery life. Recharging voltage anomaly alerts followed by deactivation of the charger;
- Residual battery capacity display.

### **7. Built in Isolation Transformer**

In built isolation transformer shall be provided in both input and output side.

### **8. Operating Ambient Temperature**

UPS Module : (0°C to 45°C).

Battery:( 30°C ± 5°C)

### **9. Cooling**

Cooling of the UPS shall be by forced air and there should be redundant fans.

### **10. Grounding**

The AC output neutral shall be electrically isolated from the UPS chassis. The UPS chassis shall have an equipment ground terminal. Provisions for local bonding shall be provided.

### **11. Wiring**

Installation and required accessories like cables, lugs etc will be in the scope of supplier and Wiring practices, materials and coding shall be in accordance with the requirements of the National Electrical Code (NFPA 70). All bolted connections of bus bars, lugs, and cables shall be in accordance with requirements of the National Electrical Code and other applicable standards.

Conformity to standards The system must conform to the following standards:

- Safety: EN62040-1.
- EMC emissions: EN62040-2.
- EMC immunity: EN62040-2 class C2 and C3.

### **12. Display & Metering:**

- Input AC voltage line-to-line/ line-to-neutral for each phase
- Input AC current for each phase
- Input frequency

- Battery voltage and DC link voltage
- Battery charge/discharge current
- Output AC voltage line-to-neutral
- Output AC current
- Output frequency
- I/P & O/P Apparent power
- I/P & O/P Active power
- I/P & O/P kWh meter
- Battery time left during battery operation
- The total operating time of the UPS and inverter

### **13. Alarm Messages**

The interface must be able to display at least the following status or event information and UPS monitoring should be web based and user friendly.

- Input power out of tolerance
- Battery charger problem
- Battery test failed
- Low battery warning
- Low battery shutdown
- DC bus overvoltage
- Bypass frequency out of range
- Load transferred to bypass
- Excessive retransfers attempted
- Static switch failure
- UPS output not synchronized to bypass power
- Output under voltage
- Output overvoltage
- Output over current
- System output overloaded
- Load transferred to bypass due to overload
- Overload shutdown Control error
- Critical power supply failure
- Load transferred due to internal protection
- External shutdown (remote EPO activated)
- Fan failure
- Over temperature shutdown
- UPS is on battery operation
- UPS is on bypass operation
- Battery mode with mains supply / no mains supply
- battery low charge warning
- battery on fast charge
- abnormal battery recharge voltage

- minimum battery voltage
- battery fault
- battery charge circuit broken
- battery charger system fault
- overload alert
- ventilation fault alert
- out of range temperature/humidity alert
- standby power supply out of tolerance

A predictive/statistical algorithm and interpretation of logged data (number, duration and type of events) regarding:

- out of tolerance Input voltages
- overloads
- battery mode operation
- switching to standby power supply
- over- temperature

The UPS must predict potential criticalities for the UPS itself, due to ambient conditions, in advance and alert the maintenance service / monitoring system.

#### **14. Diagnostics**

The system will be equipped with a microprocessor able to run full machine diagnostics to determine:  
Self-compensation of components to ensure stable settings over time;

Acquisition of the main diagnostic and monitoring information by computer (local or remote); First installation procedure wizard;

Full test procedure at full load on UPS, with no further external loads (auto-charge mode)

- rectifier;
- inverter;
- bypass;
- power bus;
- cables, contactors and fuses;

#### **15. Uninterrupted Transfer / Retransfer**

The transfer control logic shall automatically turn on the static transfer switch, transferring the critical AC load to the bypass source, after the transfer logic senses any of the following conditions:

- Inverter overload capacity exceeded
- Critical AC load overvoltage or under voltage
- Battery protection period expired
- Out of tolerance inverter input DC voltage
- Over temperature
- Inverter fault

Retransfer of the critical AC load from the bypass source to the inverter output shall be automatically initiated unless inhibited by manual control.



### **16. Maintenance bypass**

The manual bypass switch will be provided internally and must ensure that equipment downstream of the UPS is supplied directly by the UPS upstream power source when rectifier, inverter and static switches are open. Switching to the manual bypass and back will be possible without load supply interruption (Make Before Break).

### **17. Replacement Parts Stocking**

Parts shall be available through an extensive network to ensure around-the-clock parts availability throughout the country. **Recommended spare parts shall be fully stocked by local field service personnel (in Hyderabad office) with back-up available from national parts center and the manufacturing location. The national parts center Customer Support Parts Coordinators shall be on-call 24 hours/day, 7 days/week, and 365 days/year for immediate parts availability. Tenderers may also produce Hyderabad service center address along with strength support in the form of escalation chart. The UPS systems are going to feed the power to very critical equipment's, and it is the responsibility of local service team to attend any emergency situation immediately during warranty period as well as post warranty period. Hence, service center at Hyderabad is very much essential.**

### **18. Battery Circuit Breaker**

A suitable battery circuit breaker (DC breaker) shall be provided to isolate the battery from the UPS. This breaker shall be in a separate wall mounted NEMA-1 enclosure. The battery breaker provides a manual disconnecting means, short circuit protection, and over current protection for the battery system. When opened, there shall be no battery voltage in the UPS enclosure. The UPS shall be automatically disconnected from the battery when the battery reaches the minimum discharge voltage level. During any abnormalities (over charging)/accident, UPS should be able to trip the battery breaker automatically. So necessary arrangement needs to be done.

### **19. Other Protections**

- Battery protection period expired Input Over/ under voltage, Output over/ under voltage, Output short circuit, Inverter overload, Rectifier overload, Inverter Overvoltage/under voltage, over temp, surge protection.
- It must have Generator Compatibility.
- Must have complete protection for EMI / RF as per the IEC standard.
- Units have built in surge, spike and line noise protection.
- It should have Intelligent Battery Management system
- UPS should be compact and with small footprints.
- UPS sound level should be within the limit as per the standard.

### **20. Warranty/Guaranty:**

The equipment's (complete system including battery banks) supplied shall be guaranteed against all types of defects for a period of Two years (2 years) from the date of handing over of the equipment to BGL after successful completion of acceptance testing. Any defects in the system/subassemblies found within the guarantee period shall be rectified/replaced by the supplier free of cost. During this period, servicing at bimonthly interval or earlier, as prescribed by the manufacturer and as mutually agreed to, shall be carried out free of cost. It also includes battery health checks of the all the battery banks. Supplier shall also indicate the service facility they can

offer at the place of installation and the telephone number and address of their service center. During the warranty period, breakdown call response time should be within 4 hrs in all working hours and 24hrs during after office hours and weekends. The track record of the firm in implementing and maintaining similar UPS systems, the nearest local(Hyderabad) service establishment and the promptness in attending to service/breakdown calls shall also form basis of tender evaluation.

## **20. Rating test**

8 hrs full load endurance test shall be carried out at factory premises and followed by 110% load for 1 hr period. Test to ascertain the rated and transient capacities and overall efficiency of the system will be carried out at factory and with the battery backup of 60 minutes with full load at the factory. Satisfactory performance at this stage meeting the prescribed limits will only be construed as acceptance of the UPS. The quoted UPS which falls short of our prescribed minimum overall efficiency will not be accepted. If the full load endurance test needs to be conducted at BGL, then vendor should arrange all load banks with necessary cable arrangement along with metering (Digital oscilloscope- to find out transients and I/P & O/P wave forms). The cost for energy consumption during the endurance test shall be deducted in the final bill after due certification from the Engineer-in charge.

## **21. Annual Maintenance Contract (AMC) After warranty, the offer should have separate component of AMC for Three years.**

**Note:** The Contractors shall submit all technical supporting document details of the system along with the tender and also should attach the Battery backup calculations and battery discharge characteristics catalogue along with the technical bid for evaluation purpose.

**SECTION – 9**

**SPECIAL CONDITIONS OF CONTRACT  
(SCC)**

1. **CONDITIONS:**

The special conditions of contract shall be read in conjunction with the general conditions of contract, schedule of rates, scope of work and any other document forming part of contract whether context so requires. Notwithstanding the sub-division of the documents in to three separate sections, every part of each shall be deemed to be supplementary of every other part and shall be read with and into the contract so far as it may be practicable to do so. Where any portion of the Special Conditions of the Contract (SCC) is repugnant to or at variance with any provision of the General Conditions of the Contract (GCC) then unless a different intention be deemed to override the provisions of the General Conditions of Contract (GCC) only to the extent such repugnance or variation if the SCC as are not possible of being reconciled with the provisions of the GCC. In case of any contradiction the decision of Engineer in-charge will be final and binding to the contractor.

2. **SITE INFORMATION:**

The work site will be at City Gate Station (CGS), M/s. Bhagyanagar Gas Limited which is situated at Basheerbagh. It is understood that before quoting the rates, the contractor has visited the work site and has acquainted himself fully with the nature and quantum of work to be done. Ignorance of this, after award of contract will not be considered. It is understood that the scope of work shall include, alias, the carrying out of any and / all works and providing any/ all facilities as required for completing the works as per the terms and conditions of contract documents. The contractor shall be responsible to complete the entire work in all respects and any of the work necessary to complete the job though specifically not covered in the scope of work.

3. **SCOPE OF WORK:**

The scope of work includes Design, Manufacture, Supply, Installation, Testing and Commissioning of 1X 10 KVA & 1 X 06 KVA UPS along with Battery Bank including to and fro transportation of tools, tackles, men and machine as required for completion of the job as mentioned in Schedule of Rates (SOR), Technical Specification of Work. The work shall conform to the latest applicable IS/IEC Codes and to the satisfaction of Engineer in-charge (EIC). Decision of EIC regarding acceptability of practices will be final & binding to the contractor. Mobilization and demobilization for the job will be in the scope of the contractor and no extra charge shall be payable in this regard.

4 . **R A T E S :**

- a. The unit rates quoted should be kept firm and valid for three months and no escalation shall be permissible for any reason whatsoever after award of contract.
- b. The rates quoted by contractor shall include all liabilities such as supervision, wages, overtime, leave, bonus, increment, retrenchment compensation, insurance and all other statutory payments, including providing of tools and tackles, under contractor 's scope of supply, overheads, profits etc. for which no extra payment whatsoever will be made by BGL.

c. The rates herein contained and agreed shall remain firm during the whole contract period and shall not be subjected to escalation or revision.

d. The quoted rates should be in accordance to schedule of rates (SOR) and shall be inclusive of all taxes, duties, octroi etc. except Service Tax and Education Cess thereon. Service tax and education cess thereon if applicable shall be paid extra.

#### 4.1 RECOVERY:

- a. Income tax at the prevailing rates as applicable from time to time shall be deducted from contractor's bills as per Income Tax Act, and quoted rates shall be deemed to include this.
- b. Cost of any damage/ loss of company's property by the contractor shall be recovered;
- c. BGL's decision in this regard will be final, binding & conclusive.

### 5. MODE OF PAYMENT:

For Supply portion:

- 70% payment will be released against the complete supply of all materials at site & acceptance of the materials by BGL at site within 15 days as per BGL's payment policy and remaining 30% will be released after successful installation & commissioning of 2x3 KVA UPS along with Battery Bank at City Gate Station, certification by BGL EIC and receipt of documents mentioned in Technical Specification section.
- Installation & Commissioning Charges: 100% payment will be released after successful installation & commissioning of 2x3 KVA UPS along with Battery Bank at City Gate Station, BGL, certification by BGL EIC and receipt of documents mentioned in Technical Specification section. The payments will be released after deduction of IT and other taxes as per prevailing statutory norms.

### 6. PRICE REDUCTION SCHEDULE:

The contractor shall have to carry out the specific job as per the time schedule specified in the LOI/LOA and if the contractor fails to complete the job within that specified time period, the contractor shall be liable to pay compensation to BGL @0.5% per week or part thereof delay subject of **maximum** of 5% of the contract price. However, total Price Reduction Schedule charged on account of all of the above shall not be more than 5% of the total contract value. The price reduction schedule is not a penalty but a pre-determined compensation for delay in work. The parties agree that this is a genuine pre-estimate of loss/damage which will be suffered on account of delay/breach on the part of the contractor and the said amount will be payable from the bill without there being any proof of the actual loss or damages caused by such delay/breach.

### 7. RECOVERY:

Cost of any damage/loss of the property of BGL, by the contractor shall be recovered from the bill/security deposit of the contractor and decision of BGL/Engineer In Charge in this regard shall be final, binding and conclusive. Contractor shall be responsible

for safe custody of any equipment handed over to him. In case of loss/ theft, the purchase cost of the equipment as per BGL's record plus 25% overhead charges shall be recovered from the contractor. BGL's decision in this regard shall be final, binding and conclusive. If contractor fails to provide safety gears to his personnel during installation, testing and commissioning, an amount of ` 50/day /manpower deployed will be deducted from the bills till the date of provision of safety gear for all the deployed persons.

8. **DEFECT LAIBILITY PERIOD:** The defect liability period for the contract will be 12 moths from the date of completion of the total contract. Decision of Engineer In-Charge in this regard will be final & binding to the Contractor. Any defect or damage discovered/observed in the work done/material supplied by the contractor within this period due to poor workmanship /material shall be rectified/replaced by the contractor free of cost or in case of default BGL may get the same rectified/replaced by other agency and the expenses so incurred shall be deducted from the contractor's bill / security deposit for which certificate of Engineer In Charge shall be final.
9. **RESPONSIBILITY OF CONTRATOR:** All expenses towards mobilization and demobilization equipment at site, work forces, materials, clearing the site etc, shall deemed to be included in the prices quoted and no separate payment on account of such expenses shall be entertained. All entries and exits of materials and equipments should be done with proper gate passes and records at the security gate. The contractor shall provide cotton dangri, safety shoes, helmet and other Personal Protective equipment's to the personnel's deployed for the works. All the test and measuring instruments including consumables required to execute the job are in the scope of the Contractor. Lodging & fooding of the persons deployed for the work has to be arranged by the contractor and BGL will not provide such facilities. The cost of the same is deemed to be included in the quoted price.
10. **BGL'S SCOPE OF SUPPLY:** Electrical Power will be supplied by BGL.
11. **CONTRACTOR'S SCOPE OF SUPPLY:** All the materials as per SOR, Scope of Work & Technical Specification will be in the contractor's scope of supply. General tools and tackles required should be arranged by the contractor to carry out the work as and when required by BGL. Supply of all the consumable materials such as PVC insulation tape, wires, cables & cable lugs etc. & all other special tools /tackles, required to complete the job shall be in the scope of the contractor. Hydra/Crane required for Erection of the UPS has to be arranged by the contractor. It shall be entirely the contractor's responsibility to provide, operate and maintain all the necessary tools and the rates quoted shall include the same Joint measurement book shall be maintained by contactor as per the agreed format which will be used as reference for payment to the contractor for the work done.
12. **CONTRACT PERIOD:** The duration of this contract shall be 01 (one) months to be reckoned form the date of issue of letter of intent/purchase order.
13. **SUPERVISION OF WORK:** The contractor shall have one Competent Engineer. He should be able to manage site activities while executing the job at the site and guide his personnel to carry out the work as and when required as per the instructions of the Engineer In-charge. No extra payment will be made for providing supervisor. In

- order to achieve the desired workmanship and quality, the contractor shall deploy experienced and competent personnel.
14. **TRANSPORTATION / CONVEANCE:** The contractor shall make his own arrangement for the transportation of his men and materials to the place of work on all the days and time.
  15. **RIGHT TO GET SERVICES CARRIED OUT THROUGH OTHER AGENCIES:** BGL has right to accept similar services from other agencies at its discretion if the contractor fails to carryout the job as per scope of work mentioned in the tender document.
  16. **SUBLETING OF CONTRACT:** No part of this contract nor any share or interest therein shall be in any manner or extent is transferred or assigned or sublet, directly or indirectly to any person/firm or organization whatsoever.
  17. **GATEPASS / IDENTITY CARD:** The contractor shall make / renew at his own cost gate pass/identity cards for its personnel if so required by BGL for security or any other reasons. The BGL may only endorse such passes on recommendation of the contractor.
  18. **NUISANCE:** The contractor or his representative shall not at any time cause any nuisance on the site or do anything which may cause unnecessary disturbances to the owners or tenants or occupants or their properties near the site and to the public generally.
  19. **SAFETY PRACTICES:** All the personnel of Contractor's, who would be deployed inside the City Gate Station (CNG) premises, should strictly follow all safety rules & regulations (as per OISD & other suitable guidelines) for safety of persons, labours, public and properties at work site/public places . They should be well-conversant with the safety precautions to be followed in a Natural gas despatch station/ CNG station. The Contractor shall abide by the advice and guidance of the Safety Officer in the station. In addition, the Contractor shall follow all safety codes framed from time to time. Smoking inside the station premises is strictly prohibited. No Contractor's personnel are allowed to possess match boxes, lighters, cigarettes, biddies, transistors, mobile phones or any other material which may cause fire hazards. Contractor shall also ensure that all existing and amended Fire & Safety Rules / Policies of BGL are strictly observed in the services rendered by him. Contractor has to strictly adhere to guidance, instructions issued from time to time in this regard. Any violation on this account shall be the Contractor's responsibility and BGL will be immune to all its consequences, whatsoever it may be.
  20. **INSURANCE & LIABILITIES:** The contractor agrees to and does hereby accept full and exclusive liability for the compliance with all obligations imposed and further agrees to defend, indemnify and hold owner harmless for any liability or penalty which may be imposed by the central, state or local authority also from all claims, suits or proceeding that may be brought against the owner arising under growing out of the reasons of the work provided for by this contract whether brought by employees of the contract by third parties or any central government, state government or local authority for the following Act(s) and liability

- a. Employees State Insurance Act.
- b. Workmen compensation & employees liability insurance.
- c. Any other insurance required under law or regulations or by owner.
- d. Accident or injury to workmen.
- e. Transit Insurance.
- f. Damages to property or to any third party.
- g. The contractor shall take insurance under workmen compensation act for all his workmen to be deployed for the work and submit a copy of the policy before commencement of work if awarded.

21. **AGREEMENT:** Contractor shall execute an agreement on non-judicial stamp paper of requisite value after a ward of work and acceptance of the same.

**22. PERFORMANCE BANK GUARANTEE / SECURITY DEPOSIT:**

Bidder will provide Performance Guarantee @10% of order value within 30 days of receipt of FOA/ WO from the Owner. The contract performance bank guarantee shall be valid 03(three) months beyond the expiry of Warrantee/Guarantee period. The Performance Guarantee shall be in form of either Demand Draft or Banker's Cheque or irrevocable Bank Guarantee and shall be in the currency of Contract (issued by any Indian Scheduled bank or a branch of an International Bank situated in India and registered with Reserve Bank of India as Scheduled Foreign Bank).

However, in case of Bank Guarantee from banks other than the Nationalized Indian bank, the bank must be a commercial bank having net worth in excess of Rs. 100 Crores or equivalent US Dollars and a declaration to this effect should be made by such commercial bank either in the bank guarantee itself or separately on its letterhead. Performance Guarantee for 10% of order value shall be excluding taxes & duties.

BGL shall not be liable to pay any bank charges, commission or interest on the same.

Failure of the successful bidder to comply with the requirement of this clause shall constitute a breach of contract, cause for annulment of the award, forfeiture of the bid security and any such remedy the Owner may take under the Contract pursuant to GCC-Goods.

There is no exemption to MSEs including SSI units from submission of Security Deposit/ Contract Performance Bank Guarantee (CPBG).





Bhagyanagar Gas Ltd.  
BHAGYANAGAR GAS  
LIMITED

**Supply and installation of 10 KVA & 06 KVA online  
UPS System with sealed maintenance free batteries  
of onehour back-up for BGL office at Hyderabad.**  
Bid Document No. BGL/434/2018-19

VOLUME II  
OF II

## **SECTION 10**

### **SCHEDULE OF RATES (SOR)**

S.No	Description	UOM	Qty	Unit Price Ex-works, Rs.	Per Unit packing and Forwarding charges (INR)	Per unit freight upto project site by Road including transit insurance & all other taxes, Rs.	GST @ ...% (INR)	Per unit FOT site (INR)	Total FOT project site (INR)
1	2	3	4	5	6	7	<sup>8=</sup> (5+6+7)*GST%	9=5+6+7+8	10=9 X 4
1	10 KVA online UPS with DSP control based ON-LINE Double Conversion Technology, Three phase input and Three phase output, IGBT with PFC control technology, Isolation transformer only on input side	Nos.	01						
2	Battery bank for 60 Min back up along with interconnecting cables, cable from UPS to Battery Bank with battery stand with 24 months warranty	Set	01						
3	06 KVA online UPS with DSP control based ON-LINE Double Conversion Technology, Single phase input and Single phase output, IGBT with PFC control technology, Isolation transformer only on input side	Nos.	01						

4	Battery bank for 60 Min back up along with interconnecting cables,cable from UPS to Battery Bank with battery stand with 24 months warranty	Set	01						
5	Comprehensive AMC for UPS and batteries for a period of 2 years after warranty period ( for 01 no. of 10 KVA UPS)	Months	24						
6	Comprehensive AMC for UPS and batteries for a period of 2 years after warranty period ( for 02 nos. of 6KVA UPS) i.e. (01*24=24 months)	Months	24						

**Note:** 1) If any of the columns above is left blank, the same will be considered as included in the Total amount.

2) In case freight charges up to Hyderabad site indicated as 'Extra at Actuals' or to-pay basis without any value, then evaluation of such bid shall not be done, and treated as non-responsive bid and will be rejected.