



भारत हेवी इलेक्ट्रिकल्स लिमिटेड
BHARAT HEAVY ELECTRICALS LIMITED

RAMACHANDRAPURAM :: HYDERABAD – 502 032

M & S, F & P, HSE DIVISION
10-REPAIR SHOP, AIR-CONDITIONING

Telephone No. 040 2318 2580 FAX NO. 040 23186009 email id: gsgdgupta@bhelhyd.co.in

TENDER NOTICE NO: M&S/10RS/AC/12-13/BMS/1129/01

DATE:29.11.2012

Tender in Two part Bid, Techno Commercial(PartA) and Price Bid(PartB) will be received by the undersigned in sealed cover from the contractors satisfying the prequalification requirements. Cover should be legibly appeared "Tender notice number & tender date, name of the work and due date of tender opening. Also indicate techno commercial bid or price bid on top of cover. Tenders will be opened after 13.00 hrs on the due date in the presence of tenderer's or their authorized representatives in BHEL, Ramachandrapuram, Hyderabad. Tender documents may be downloaded from BHEL website www.bhel.com.

1. Name of work : **Installation of Building Management System(BMS)** with Selective features in below areas in BHEL, RC Puram, as per scope of work.

- 1) CMM (4th Floor, Admn Bldg)
- 2) Contracts Management (3rd Floor, Admn Bldg)
- 3) Finance (Admn Bldg, 1st Floor).
- 4) Wages (Admn Bldg, 1st Floor).

2. Earnest Money Deposit : Rs.20, 000/-

3. Contract Period : Eight weeks

4. Estimated Cost : Rs 9,80,000/-

5. Last date for Sale of tender document/ download : 12.12.2012 upto 10.00 Hrs.

6. Last date for receipt of tenders : 12.12.2012 upto 11.00 Hrs.

7. Date and time of opening of tenders: 12.12.2012 after 13.30 Hrs

8. Cost of tender documents : Rs. 100/-

Name & Address:

(GSD Gupta)
Sr. Manager / M&S/AC



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RAMACHANDRAPURAM :: HYDERABAD – 502 032

M & S, F & P & CW DIVISION
10-REPAIR SHOP, AIR-CONDITIONING

TECHNO- COMMERCIAL BID

TENDER NOTICE NO: M&S/10RS/AC/12-13/BMS/1129/01

DATE:29.11.12

Name of the Work : **Installation of Building Management System(BMS)** with Selective features in below areas in BHEL, RC Puram, as per scope of work.

- 1) CMM (4th Floor, Admn Bldg)
- 2) Contracts Management (3rd Floor, Admn Bldg)
- 3) Finance (Admn Bldg, 1st Floor).
- 4) Wages (Admn Bldg, 1st Floor).

This tender schedule must be submitted along with the General Conditions, Special conditions etc. enclosed herewith duly signed and stamped on each page with your covering letter. **Quotations should be filled in our tender schedules only.** Any deviations / deletions etc. should be brought out separately in your letter pad and enclosed to the tender documents. The contractor shall **fill remarks** (Accepted/ Not Accepted) column against all items.

To be filled up by the Bidder

TECHNICAL CUM COMMERCIAL BID (Part-A)

Name of the Contractor :

Full Address:

Contact person:

Phone / Mobile / Fax: no:

Email id:

Sl.No	Description	Contractor's Acceptance/ Remarks
1	Experience as per prequalification: Installation and satisfactory performance of BMS at least at one location controlling of ACs or any other field devices. Performance Certificate, PO copy to be enclosed. Name of the work undertaken: Value of work: Worked in which company/ organization: Year of work completion: (enclose a separate sheet if necessary) 50% of tender value One work of Rs.4,90,000/-	

	OR 40% of tender value Two works of each Rs.3,92,000/- OR 30% of tender value Three works of each Rs.2,94,000/-	
2	LABOUR LICENCE NO. under section 12 (1) of R&A 1970 & Validity :	
3	Security Deposit clause: acceptance (Details see Tender Notice)	
4	EMD Details:	
5	PAN No.:	
6	Service Tax Regn No.	
7	PRICE: price quoted should be firm during contract period. Contractor's labor should get wages as per minimum wages act.	
8	Supply and installation of the entire Work should be carried out as per the "Building Management System–Scope of Work " attached below.	
9	SERVICE TAX: The tenderer should bring out in the opposite box whether service tax is <u>included</u> or <u>not included</u> in the offer If service tax is applicable - Tax credits will be availed by BHEL	
10	PAYMENT TERMS: Payment After completion of work.	
11	PENALTY: 0.5% of the item wise contract value per week or part thereof upto a maximum of 10% of that value shall be levied if the contract is not completed within the item wise specified time.	
12	General conditions and acceptance for undertaking work in totality as per price bid	
13	Acceptance of payments through EFT mode	
	SPECIAL TERMS & CONDITIONS	
14	Period of completion: Eight weeks from the date of award of work	
15	All the Material Tools and equipments are in contractor scope.	
16	PAYMENT : Payment after successful completion of the work certified by the Sr.Manager (M&S)/FP&D, A.C	
17	SERVICE TAX: Service tax <u>included</u> or <u>not included</u> in the offer should be mentioned.	



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RAMACHANDRAPURAM :: HYDERABAD – 502 032

M & S, F & P & CW DIVISION
10-REPAIR SHOP, AIR-CONDITIONING

TENDER NOTICE NO: M&S/10RS/AC/12-13/BMS/1129/01

Building Management System – Scope of Work

// Tenderers to fill up the following sheet compulsorily //

1. Scope of Work

Bids required for the supply and commissioning of “Energy Management System” for Admin Building (4 areas) as per the following requirements:	BHEL requirement	Vendor to specify (agreed/Not agreed)	Remarks (Deviation if any)
1. Energy Management for 3 rd floor Commercial, 4 th floor Purchase, Wages and Finance sections. See section 2.x for equipment details at each section.	Vendor to confirm		
2. Monitor electricity consumption remotely, through 3-phase energy meters, from web portals, with communication capability. See section 3 for detailed monitoring requirements.	Vendor to confirm		
3. Secure remote online control of existing Package split AC units at each of the sections mentioned in 1 through suitable BMS controller or equivalent electronic hardware.	Vendor to confirm		
4. Energy Management Software to efficiently manage AC units based on working hour schedules, weather conditions, Predictive controls and custom policies. See section 4 for detailed requirements of Energy Management Software.	Vendor to confirm		
5. Browser based secure access with energy information and controls customized for each of the sections mentioned in 1 See section 5 for detailed requirements of energy dashboards.	Vendor to confirm		
6. Auto generation of daily, weekly & monthly reports on energy usage. See section 6 for detailed requirements of reports and analytics.	Vendor to confirm		
7. Scalability to add more sections and devices in future, to the configuration. Availability and Security requirements are detailed in section 7	Vendor to confirm		
8. Scalability to add Lighting controls and Fire alarm controls in future.	Vendor to confirm		

1.1 Hardware and Software

a) Supply of necessary hardware for BMS controller or equivalent equipment	Vendor to confirm		
b) Supply of suitable 3-phase energy meters with communication capability for continuous monitoring of electricity consumption at each of the sections under energy management.	Vendor to confirm		
c) Supply of necessary remote device controllers with communication capability for each indoor & outdoor ducted split AC unit	Vendor to confirm		
d) Supply of suitable environment sensors for measuring indoor temperature for each AC zone and one for outdoor temperature.	Vendor to confirm		
e) Supply of necessary application software for secure remote monitoring, management and automated control of all AC units and other functions specified in section.	Vendor to confirm		
f) Any application level customization and reporting, as specified by BHEL.	Vendor to confirm		
g) Installation & Commissioning of whole system with AMC after 1 st year of operation.	Vendor to confirm		
h) Remote Application Software Administration for one year after successfully commissioning the system.	Vendor to confirm		
i) Ability to scale to handle additional sections and devices in future, to this existing configuration.	Vendor to confirm		
j) Ability to customize based on changes in the loads (within the same sections) or policies, through configuration by the Customer	Vendor to confirm		
k) Technical architecture requirements such as Scalability, Availability and Security are critical to be described in detail, to ensure a robust and secure system for the Customer.	Vendor to confirm		

2. Equipment to be controlled Details

Admin building - 3rd floor commercial

Dimensions: 90 mtr x 15 mtr

Make, Model and no of AC units

Make : Carrier, Outdoor 8.5 TR Scroll X 2 = 17 TR x 5 units

Indoor unit. Model: 38LH-100SS, Cooling Cap.: 25500 K cal.. Amps – 16 each

Energy meter: 2 to be installed (as power supply is at two places)

Air Quantity – 6800 Cfm

Pdf copy of layout – Refer attachment.

No of employees working: 200 (approx.)

Admin building - 4th floor Purchase

Dimensions: 90 mtr x 15 mtr

Make, Model and no of AC units

Make : Carrier, Outdoor 8.5 TR Scroll X 2 = 17 TR x 5 units

Indoor unit. Model: 38LH-100SS, Cooling Cap.: 25500 K cal.. Amps – 16 each

Energy meter: 2 to be installed (as power supply is at two places)

Air Quantity – 6800 Cfm

Pdf copy of layout - Refer attachment.

No of employees working: 200 (approx.)

Admin building – Wages

Dimensions: 51 mtr x 15 mtr

Make and Model and no of AC units

Make : Carrier, Outdoor 8.5 TR Scroll X 2 = 17 TR x 4 units

Indoor unit. Model: 38LH-100SS, Cooling Cap.: 25500 K cal.. Amps – 16 each

Energy meter: 1 to be installed

Air Quantity – 6800 Cfm

Pdf copy of layout - Refer attachment.

No of employees working: 75 (approx.)

Admin building – Finance

Dimensions: 69 mtr x 25 mtr

Make and Model and no of AC units

Make : Carrier Outdoor 8.5 TR X 2 = 17 TR x 6 units

Indoor unit. Model: 38LH-100SS, Cooling Cap.: 25500 K cal.. Amps – 16 each

Energy meter: 1 to be installed

Air Quantity – 6800 Cfm

Pdf copy of layout - Refer attachment.

No of employees working: 170 (approx.)

3. Energy Monitoring Requirements

Remote monitoring of electricity consumption at each section is required as per the following specifications:

a) Separate 3-phase energy meter with LCD display and RS-485 communication capability - accuracy class 1.0 or better.	Vendor to confirm		
b) Remote monitoring of Active Energy (KWh), Active Power (KW) and total Power Factor at – in near real time – about one minute interval.	Vendor to confirm		

4. Energy Management Software Requirements

Energy Management Software should provide the following functionality for each section:

a) Client Server architecture with 'local control' part running on the BMS controller hardware or equivalent at each section, for both disconnected and connected modes of management.	Vendor to confirm		
b) Server software to run on suitable hardware (PC, ..etc) to be specified by bidder.	Vendor to confirm		
c) Suitable database to record energy consumption data from each section. Bidder to specify the type and amount data to be stored.	Vendor to confirm		
d) Data shall be stored for a period not less than 5 years.	Vendor to confirm		
e) Software should continuously monitor energy consumption, indoor & outdoor temperatures.	Vendor to confirm		
f) Software should evaluate the effectiveness of each management plan and adjust for maximum conservation, through configuration capabilities used by the customer.	Vendor to confirm		

5. Energy Display/UI Requirements

Energy display/UI to be provided with the following requirements

a) Secure browser based access within BHEL intranet with login/password	Vendor to confirm		
b) Separate User and Admin dashboards with office section selectable	Vendor to confirm		
c) Graphical display of office or section layout with AC units clearly marked	Vendor to confirm		
d) Display of energy consumption, AC running status, zone and outdoor temperatures, updated - every 5 minutes .	Vendor to confirm		
e) Display of historical data through graphs and tables	Vendor to confirm		
f) Suitable interface for manual settings of AC set points and equipment on/off by authorized personnel.	Vendor to confirm		
g) Suitable interface to set operating schedules and	Vendor to		

plans for various equipment	confirm		
h) Any customization to be specified by BHEL during commissioning	Vendor to confirm		

6. Reports and Analytics Requirements

Following reports and analytics to be provided together or separately for each office/section by the system

a) All reports to be exportable in Excel/PDF format	Vendor to confirm		
b) Daily reports showing energy consumption and AC equipment running status at 5 minute intervals.	Vendor to confirm		
c) Weekly & Monthly reports showing day total for energy consumption and device running status.	Vendor to confirm		
d) Alarms and SMS based alerts when consumption exceeds thresholds and on equipment failures.	Vendor to confirm		
e) Historical Performance Comparison	Vendor to confirm		

7. Technical Architecture Requirements

Core tenet of Technical Architecture of the “Energy Management System” are to described in detail, to ensure a “robust and secure system” preferably with schematic diagram.

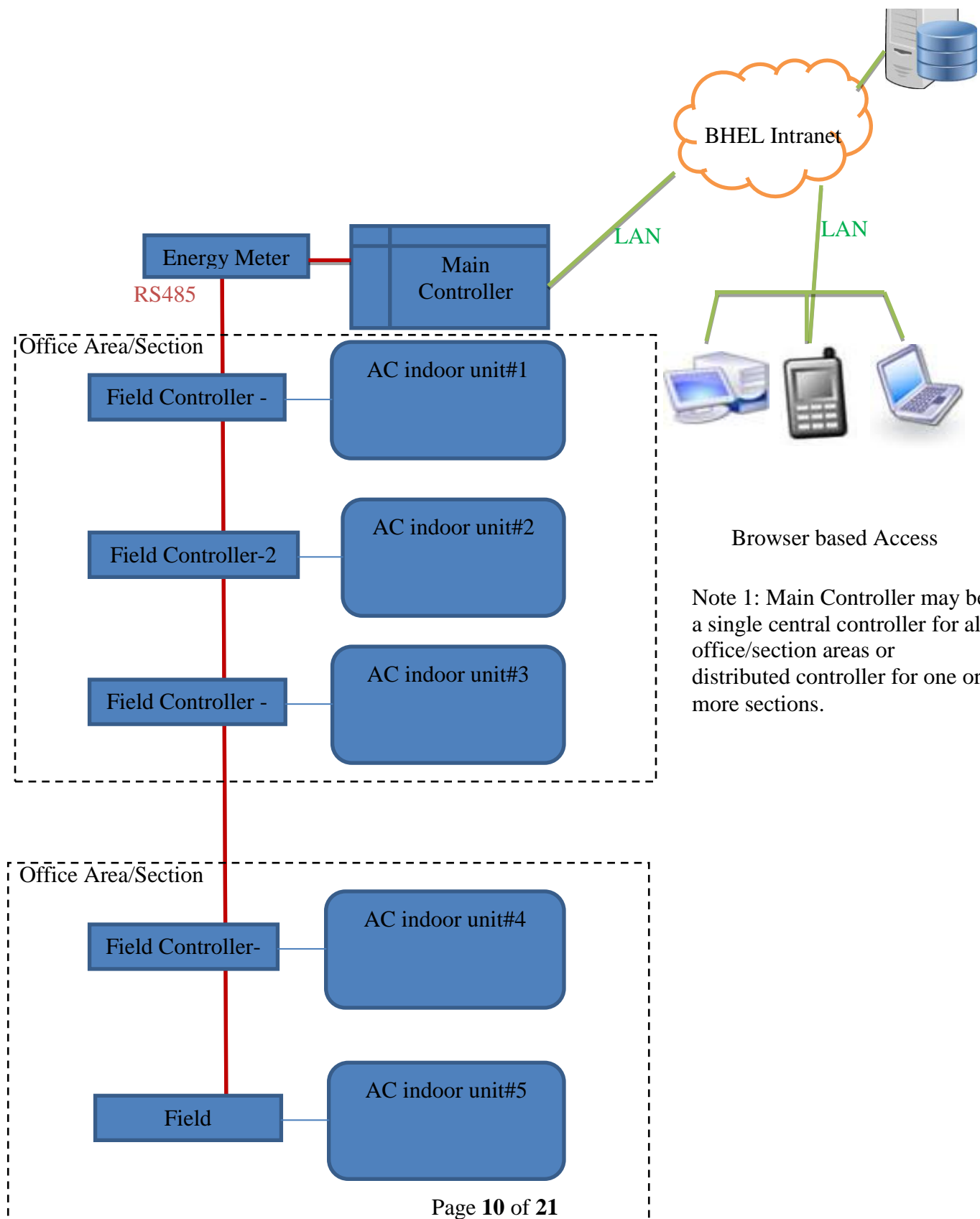
a) Scalability: ability to scale to handle additional devices, sections and plans in future, to this existing configuration.	Vendor to confirm		
b) Availability: the system should be available during the working hours and not cause any inconvenience to the working staff	Vendor to confirm		
c) Security: the system should be accessible to only authorized personnel, and also an end-to-end transmission and control policy and robustness of the server and controller platform need to be described	Vendor to confirm		
d) Performance: The server platform and BMS controller in the field should have adequate performance to ensure best comfort to the working staff in the areas covered while maximizing energy savings and user response.	Vendor to confirm		
e) Schematic diagram - Schematic layout of diagram of BMS system with technical write up (on how the system works) . Sample as shown in ‘Schematic Layout -BMS’ below.	Vendor to provide		

8. Control features required (Hardware, Software)

a) Schedule controls (Eg. Do not switch on until 8am, Lunch time switch off from 11.30 to 12.00 hrs, Switch off after 4.30 p.m.)	Vendor to confirm		
b) Predictive Controls – Based on weather outside and compare with inside temp.	Vendor to confirm		
c) Adhoc controls – based on special requirements to switch on /off.	Vendor to confirm		
d) Report and analytics as per section 6	Vendor to confirm		
e) Control of equipment (PAC) – should show status on screen and be able to operate.	Vendor to confirm		
1. Blower (Fan) On/Off	Vendor to confirm		
2. Blower (Fan) On/Off, Compressor On/Off	Vendor to confirm		
3. Blower (Fan) On /Off, 2 nd Compressor On/Off	Vendor to confirm		
4. Unit On/Off	Vendor to confirm		
f) Power Off condition – should retain settings on Field controllers and upon power restoration they should work normally.	Vendor to confirm		
g) Necessary connecting cables – is in the scope of supplier. (Data cable for RS-485 communication - 2 core, twisted pair, shielded OR CAT5 - 150 meters per floor (estimated), CAT5 cable - for networking (From Main controller to nearest network point) - 10 meters per each floor(estimated) and any other cables)	Vendor to confirm		
h) Device controller – one per each AC unit.	Vendor to confirm		
i) Main controller (BMS controller) – one per each floor.	Vendor to confirm		
j) Number of Energy meters as per section 2	Vendor to confirm		
k) During emergency situation, manual over ride is required on field controllers which are connected to indoor unit of ACs.	Vendor to confirm		

Schematic Layout - BMS

Server with long
term storage



NOTE:-

1. The above documents should be given along with the tender, otherwise, the offers will be rejected.
2. Techno commercial bids and Price bids will be opened on the same day of due date. After scrutiny in case the agency has not fulfilled all the above conditions with documentary proof, the bid is liable to be rejected.
3. In case of a firm, the tender shall be in the name of the firm, and for individual these can be in the name of individual. In case of sole proprietorship of a firm he should submit a notarized affidavit to that effect. For partnership firms, the deed of partnership and power of attorney are to be submitted.
4. Though some of the above documents are available with BHEL for those agencies who are presently working with BHEL, they also should submit one copy of the same.
5. All the columns shall be filled with proper information.
6. a) BHEL will have the right to reject tender even after tenderer qualifies in techno commercial bid, in case the tenderer under quotes or does not meet the minimum daily wage payment of labour which changes from time to time.
b) BHEL reserves the right to reject or cancel the tender at any stage of the tender process without assigning any reasons there of.
7. A tender may be rejected while scrutiny of technical bids in case there is unsatisfactory past performance in the execution of an earlier contract.

PRE QUALIFICATION:

- I. The following conditions are to be satisfied by the tenderers, with documentary proof to be enclosed with technical bid. In case the agency fails to do so it is liable for rejection.
 1. Reputed contractors are eligible to tender for this work.
 2. Experience having successful Installation of BMS at one location controlling of ACs or any other field devices with satisfactory performance- during last 2 years, ending 31.09.2012 should be either of the following.
 - a. Three similar completed works costing not less than the amount to 30% of the estimated cost.
OR
 - b. Two similar completed works costing not less than the amount to 40% of the estimated cost.
OR
 - c. One similar completed work costing not less than the amount to 50% of the estimated cost.
 3. Average annual financial turnover during the last 3 years, ending 31st March 2012, should be at least 50% of the estimated cost.
 4. PAN number with proof of allotment.
 5. Labour License if engaged 10 persons or above.
 6. If the contractor has not quoted the rate for any item(s), it is considered as incomplete tender and tender can not be accepted.
 7. The contractor shall affix his signature at the end of each page of these tender documents. (Technical and Price bids).
 8. The rates quoted for all the items of work shall be inclusive / excluded of all Taxes and Duties levied by State / Central Government organization as well as Local authorities as applicable including works contract Vat / Service Tax etc. The agency shall submit proper document evidencing the payment of applicable Tax / Duty based on which BHEL can avail credit. Otherwise the payment to the contractor will be reduced to that extent.
- II.(1) Tenders must be submitted in sealed covers addressed to Sr. Manager / M&S/AC,FP&D. BHEL, Ramachandrapuram, Hyderabad 502 032. Tenderer shall write Tender Notice

No, and name of work and address of the tenderer on each sealed cover. In case the agency fails to comply any of the above, the tender will be liable for rejection.

- (2) The agency is responsible for all the statutory requirements & documentations for as per prevailing Government Rules / Labour Rules. Any amount payable by BHEL on account of these requirements shall be recovered from contractor's bills / deposits.

III. NOTES:

1. Period of contract shall be as mentioned above.
2. **Tenders are on Two – part bid (techno commercial bid and price bid).**
3. Tender documents can be had through BHEL web-site <http://www.bhel.com/> tender notifications. Cost of document shall be paid in the shape of Demand Draft or Bankers Cheque or Pay Order and separately enclosed to the technical bid.
4. The requisitions for tender documents shall be addressed to **GSD Gupta, Sr.Manager/M&S/AC,FP&D BHEL, Ramachandrapuram, Hyderabad 502 032** along with Demand Draft/Banker's Cheque drawn in favour of 'BHARAT HEAVY ELECTRICALS LIMITED, HYDERABAD' or payment of cash in BHEL Cash Office (No other Mode of payment will be accepted). Tender documents shall be collected in Person by the contractor or his authorized representative.
5. The agencies are advised to visit the work site to understand better the nature of work / quantum or work in its true perspective to avoid any mis – under standing.
6. The tender documents may also be submitted through speed post or by post to reach within the stipulated date and time.
7. BHEL reserves the right to reject any or all tenders in part or in full without assigning any reasons.
10. The conclusion of contract will be in the form prescribed by BHEL for the purpose. A copy of the general conditions of contract applicable to the above works is available for perusal at the office of the Sr. MANAGER / M&S (AC),FP&D If a copy of the same is required for record, the same will be issued separately at Rs.100/- per set.
11. Penalty of 0.5% of the gross value of work will be levied for every weeks delay in work subject to a maximum penalty of 10% of the gross value of work.
12. Those who are down-loading the tender documents from web-site must also pay cost of tender documents before last date of receipt. The DD's against Tender Cost / EMD are to be enclosed in technical bid cover.
13. Separate Covers (i.e.)
 - Cover-A - for Technical Bid (sealed cover)
 - Cover-B - for Price Bid (sealed cover)
 - Cover-C - common cover for technical and price bid are to be submitted, super scribing the name of work and NIT number on each over.
14. Tender will be finalized on lowest cost to BHEL based upon the lowest rate of total value, thus arriving to total value of the tender along with applicable taxes and duties.
15. A tender may be rejected while scrutiny of technical bids in case there is unsatisfactory past performance in the execution of an earlier work, not meeting the pre-qualification criteria and if not as per the scope of work attached.
16. The rates quoted by the contractor shall indicate clearly yearly rate and taxes separately as applicable from time to time.
17. All the bills of the contractors will be cleared subject to the satisfactory completion of work as per scope of work certified by department executive.



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M & S, F & P, CW & HSE DIVISION
10-REPAIR SHOP, AIR-CONDITIONING

TENDER NOTICE

TENDER NOTICE NO: M&S/10RS/AC/12-13/BMS/1129/01

DATE:29.11.12

1. Sealed Tenders will be received by the Sr.Manager/M&S/AC, Bharat Heavy Electricals Limited, Ramachandrapuram, Hyderabad-32 at his office up to 11.00 hours on **12.12.2012** for the above work "Ramachandrapuram, Hyderabad-502 032.A.P.. Tenders (Technical & price bid) will be opened, Bharat Heavy Electricals Limited, Ramachandrapuram, Hyderabad-32. On the same day at 13.30 hours in purchase co-ordination , Tendering department near Administrative building gate. The tenderers or their agents are expected to be present at the time of opening of the tenders. The tender receiving officer will, on opening such tender, attest over writings or corrections, if any, therein in the presence of the tenderer's who may be present at the time. Tender forms and other particulars regarding the proposed work can be obtained on any working day from 09.00 to 14.00 hours.
2. Tenders must be submitted in sealed covers and should be addressed to the Sr. Manager/M&S/AC,FP&D. Bharat Heavy Electricals Limited, Ramachandrapuram, Hyderabad – 32, the name of the tenderer and the name of the work being displayed on the cover.
3. Each tenderer must pay as Earnest Money Deposit, a sum of **Rs. 20,000/- (Twenty Thousands)** and enclose with his tender the receipt endorsed accordingly. The Earnest Money prescribed for this work may be offered in any of the following forms duly pledged to the Accounts Officer (CASH), B.H.E.L., Ramachandrapuram, Hyderabad-32.
 - a) Bankers cheque / Demand Draft.
 - b) One time deposit available in BHEL, R.C.PURAM – should be within validity date.

The Earnest Money will be refunded to the unsuccessful tenderer after the intimation of rejection of the tender is sent. The Earnest Money will be retained in the case of the successful tenderer and get converted as a part of security Deposit for the due performance of the contract and in either case will not carry any interest. It will be dealt with as provided in the conditions attached to the tender. When a tender is to be accepted, the tenderer whose tender is under consideration, shall attend the Office of Manager / M&S (P&C) upon written information to him. He shall forth with upon intimation being given to him by the Manager / M&S (P&C) of acceptance of his tender, complete the execution of the agreement by signing all documents connected there with, Failure to do so shall entail forfeiture of the Earnest Money Deposit.

4. EMD by the Tenderer will be forfeited as per Tender Document if.
 - i. After opening the tender, the bidder revokes his tender within the validity period or increases his quoted rates.
 - ii. The tenderer does not commence the work within the period as per LOI / Contract. EMD shall not carry any interest.

If only a part of the work as shown in the tender is awarded, the amount of Earnest money will be forfeited with regard to the estimated cost of the work so awarded.

5. Tenderers shall pursue carefully the instructions laid in General Conditions of the contract and all other relevant documents before tendering for the work. The approximate quantity of work to be executed under each class is given in Schedule – “Scope of Work-BMS”. The quantities are given with a view to enable the tenderer to quote his over all rate to each clause of work in the tender form and for a uniform comparison of tenders. It shall be definitely understood that the Bharat Heavy Electricals Limited, does not accept any responsibility for correctness or completeness by commissions, deductions or additions at the discretion of accepting authority.
6. BHEL reserves the right to reject any tender or part thereof or all the tenders with out assigning any reasons thereof.
7. Tenders not submitted in proper form or in due time will be rejected.
8. The offer shall be valid for a period of eight weeks from the date of awarding of contract.

- 9.. a. **Security deposit:** (W.P.8.2) Security Deposit should be collected from the successful tenderer. The rate of Security Deposit will be as below:

Upto Rs. 10 lakhs : 10%

Above Rs. 10 lakhs Upto Rs. 50 lakhs : 1 lakh + 7.5% of the amount exceeding Rs.10 lakhs. The security Deposit should be collected before start of the work by the contractor.

- b. **Security Deposit may be furnished in any one of the following forms(W.P.8.2.2)**

- i) Cash (as permissible under the Income Tax Act)
- ii) Pay Order, Demand Draft in favour of **BHEL**.
- iii) Local cheques of scheduled banks, subject to realization.
- iv) Securities available from Post Offices such as National Savings Certificates, Kisan Vikas Patras etc.(Certificates should be held in the name of Contractor furnishing the security and duly pledged in favour of **BHEL** and discharged on the back).
- v) Bank Guarantee from Scheduled Banks / Public Financial Institutions as defined in the Companies Act. The Bank Guarantee format should have the approval of **BHEL**.
- vi) Fixed Deposit Receipt issued by Scheduled Banks / Public Financial Institutions as defined in the Companies Act. The FDR should be in the name of the contractor, A/C **BHEL**, duly discharged on the back.
- vii) Security deposit can also be recovered at the rate of 10% from the running bills. However in such cases at least 50% of the Security Deposit should be collected before start of the work and the balance 50% may be recovered from the running bills.
- viii) EMD of the successful tenderer shall be converted and adjusted against the security deposit.
- ix) The security deposit shall not carry any interest.

TENDERER'S AND CONTRACTOR'S CERTIFICATE

1. I hereby declare that I have perused in detail and examined closely the Andhra Pradesh Standard Specifications and it's addenda volume and also BHEL General Conditions of contract. I agree to be bound by and comply with all specifications contained in Andhra Pradesh Standard Specification and General Conditions of contract, for the various items of works specified in the Schedule "A" and the work as a whole.
2. I hereby declare that I shall pay the statutory minimum wages to my workers as applicable from time to time. I shall also adhere to all the statutory obligations under Contract Labour (Regulation and Abolition) Act 1971 and Rules framed there under with subsequent revisions if any.
3. **Guidelines for statutory payments when labour engaged :**
Consumer price index numbers published as per BHEL HR circular No: HR/IR/CL/UR/2011 Dt.: 17.05.2011 is the basis for arriving minimum wages for contract labour and the same is mentioned below:

<u>Category</u>	<u>Wage Rate (in Rs.)</u>
Unskilled worker	- 461.49
Semiskilled worker	- 500.85
Skilled worker	- 538.17

- i) PF & ESI at the rate of 12% and 1.75% respectively on the daily wages are to be deducted as Employee's contribution. Further, Contractor shall pay 12% PF and 1.61% Administrative charges towards PF and 4.75% towards ESI as Employer's contributions. The contractor shall remit the above contributions along with Employee's contribution to PF & ESI departments and file monthly returns by 20th of every following month.
 - ii) The contract labour is entitled for holiday wages, and 1 day leave of every 20 days of working.
 - iii) Contractor shall provide uniform, shoes and other Personal Protective Equipments wherever applicable to their workforce.
 - iv) Any increase in rate of DA/ Wages hike shall not be reimbursed by BHEL to the contractor. Contractor shall anticipate such hike and quote accordingly.
 - v) Payment of Bonus under the payment of Bonus Act, 1965.
4. The Contract / Job Executing Officers are required to ensure that Contractor pays the 'Daily Wages' as shown above to their workforce w.e.f 01.04.2009. In case, the workforce is engaged on over time by the contractor, they have to be paid double the wages. The workforce is also entitled for Holidays which are applicable to BHEL.
 5. Any increase in rate of DA/Wages hike shall not be reimbursed to the contractor. Contractor shall anticipate such hike, and quote in the tenders. Contract Executing Officers are requested to include requisite clause in the tender documents to enable Contractor to quote accordingly. It shall be categorically stated in the tender document that 'any increase in DA/WAGES shall be absorbed by the contractor himself and BHEL will not reimburse the increase in DA/Wages

ANNEXURE- A

I. General Instructions/ Obligations of the Contractors :

1. If the tender is made by an individual, it shall be signed with his full name and his address shall be furnished. If it is made by firm, it shall be signed with the co-partnership name by a member of the firm, who shall also sign his own name, also furnish the name and address of each member of the firm. If the tender is made by a corporation, it shall be signed by a duly authorized Officer who shall produce with the tender, satisfactory evidence of his authorization. Such tendering corporation/firm is required to furnish evidence of its existence along with bid.
2. Whenever a tender is to be accepted, the tenderer, whose tender is under consideration, shall attend the Office of " Officer Inviting the Tender " on the date fixed by written intimation to him. He shall forthwith, upon intimation being given to him by the "Officer Inviting the Tender "for acceptance of his tender, complete the execution of the agreement by signing all documents connected therewith. Failure to do so and not to commence the work within one month from the date of intimation shall entail forfeiture of the earnest money.
3. Tenderer shall pursue carefully the instructions and directions to the parties given in the tender document and the conditions there of and all other relevant documents before quoting the rates for the work. The approximate quantity of work to be executed under each class is given in the schedule. The quantities are given with a view to enable tenderer to quote his overall rate in the tender form. It shall be definitely understood that the schedule is liable to alterations at the discretion of accepting authority.
4. Tenderer shall keep the offer valid for a period of 90 days from the date of opening of tender. After submitting the tender, he will not recall his offer or modify the terms and conditions thereof. Should the tenderer fail to observe or comply with the foregoing stipulations, the EMD shall be forfeited.
5. Tenderer have to quote their rates in the tender schedule legibly written in figures and words and those not submitted in proper form are liable for rejection.
6. The submission of tender shall be strictly in accordance with the terms and conditions stipulated in this tender notice. No counter conditions will be acceptable or valid.
7. Contractor shall be deemed to have included in his tender price of all the plant, machinery and appliances required for the purpose of all operations connected with the work embraced under the contract to secure a satisfactory quality of work and rate of progress which in the opinion of the " Contract Signing Officer" will ensure the completion of the work within the time specified.
8. BHEL is having every right to split the schedule and to award the work to single or many parties on the lowest offered rates basis.
9. This is a time bound contract for period mentioned, and does not envisage any extension of time / period.
10. The rates quoted by the contractor should be firm for the contract period. There shall be no revision in contract rates during the period of the contract. Any increase of statutory levies during the period of the contract will be reimbursed on production of relevant proof of incurring expenditure for the same.
11. BHEL reserves the right to negotiate for price reduction with L1 party and negotiated price will be considered as contract amount for all practical purposes.
12. BHEL reserves the right to terminate the contract at any stage without assigning any reason.
13. Tender should be submitted in sealed cover addressed to the Sr.Manager/ M&S(AC) and duly super scribed with the tender number, tender date, name of the work and due date of tender opening on the envelope. The tenders will be opened on tender due date at 13.00 Hrs in presence of those tenders who choose to be present at TENDER opening in purchase co-ordination department, BHEL, Ramachandrapuram, Hyderabad.
14. The contractor must have phone facility at his office/ residence or cellular phone for proper communication.

15. On receipt of the job work order, party has to follow certain things regarding labour payments like a) payment to contract labour as per the minimum wages act 1971 (latest) by 7th during that paid month. B) PF compliance: as per Section 36B of Employee provident fund schemes 1952, by 7th of every month are to submit a wage register for the previous month duly signed by the contract executing officer by showing workers engaged, no of days worked, basic wage and Dearness allowance proportionate to days worked, PF & ESI amount deducted from each worker, Contract executing officer signature. By 15th of every month contributions made through bank challan, if delayed the contractor has to pay penalty of 17% of PF amount and 12% simple interest on the PF Amount for the delayed days. If not fulfill by contractor permission will not be renewed.
16. Contractor is wholly responsible for injuries/ death of the person employed by him arising due to accident during the contractual period. At any point of time BHEL will not be responsible for any loss/ damage to the person arising out of accident for performing the contractual obligations.
17. Withdrawal from contract during contract period in BHEL will entail forfeiture of security deposit.
18. Soon after acceptance of tender the contractor shall enter into a contract with BHEL, Ramachandrapuram, and Hyderabad.
19. The contract agreement shall be entered with BHEL, Ramachandrapuram, Hyderabad on valid non judicial stamp paper of the value of Rs100/- to be purchased by the contractor at his own cost.
20. Labour engaged by the contractor should be disciplined & exhibit good behavior in dealing with employees of BHEL. Any misbehavior or conduct of any Peron engaged by the contractor is not good, contractor shall change that person immediately or else it may even lead to termination of the contract & security deposit will be forfeited as penalty.
21. Any dispute arising out of this contract should be referred to the sole arbitration of General Manager/ M&S of BHEL, Ramachandrapuram, Hyderabad-502 032 or his authorized representative whose decision shall be final and binding on both the parties.
22. In case of any suit or other legal proceeding arising out of and relating to the contract to be entered into the courts at Hyderabad/ Secundrabad and Sangareddy (Medak Dist.) A.P only shall have the jurisdiction.
23. The contractor should abide by the company's CISF Security/ safety rules and provide such safety requirements as per statutory rules and requirements of the factories act.
24. In case of breach of any of the terms and conditions of the contractor, BHEL reserves the right to cancel the contract either in part or full.
25. The contractor has to produce the bank guarantee, in the prescribed proforma valid for the contract period for a value calculated at the rates mentioned, towards security deposit. The claim period under the guarantee shall be valid for six months after expiry of the contract.
26. In the agreement no mention shall be made regarding the number or the sex of the laborers to be employed by the contractor. The agreement shall not contain provision to hire labour like number of men, category of men, and number of maydays from the contractor for any type of work. All types of job work agreements shall be based on clearly quantified volume of work only.
27. The Executing Officer shall ensure the execution of work on quantifiable basis taking into account rather than availability of labour.
28. Disputes, grievances between the contractor and his labour, will have to be settled by the contractor only.
29. The labour employed by the contractor, if found in abetting any of fellow labour or contractors or any BHEL employee, the same shall be considered as an act of indiscipline. Such labourers shall be removed from the services of the contractor, on the advice of BHEL. Further the contractor shall initiate every necessary action in accordance with the relevant Laws, Rules & Regulations and enactments of state and Central Governments.
30. **Safety:** The Contractor shall provide the required safety protective personnel equipment like uniform to the contract labourers engaged by him. All sorts of safety measures to be taken shall be deemed to form an integral part of the agreement and non-compliance with safety requirement amounts to breach of the contract.

ANNEXURE-B

MEASUREMENT OF WORK AND PAYMENT THEREOF

1. Measurement Book should be maintained by the contractor in the BHEL. The Contractor wherein he or his authorized representative will submit bill, based on quantities completed by the contractor entries will be made in the measurement book
 2. The designated employee of the Unit will inspect the work executed by the contractor and authenticate the entries made in the measurement book.
 3. Short comings, if any, in the work executed will be pointed out by the designated employee to the Contractor or his authorized representative and the same will be rectified by him (other than watering) within three days to the satisfaction of the designated employee.
 4. Payment towards work satisfactorily executed will be made to the Contractor. Measurement of work will be done as per scope attached and it will be on actuals only (work schedule/ price schedule for the work of "**Installation of Building Management System(BMS)**" with Selective features in below areas in BHEL, RC Puram, as per scope of work."
 - 1) CMM (4th Floor, Admn Bldg)
 - 2) Contracts Management (3rd Floor, Admn Bldg)
 - 3) Finance (Admn Bldg, 1st Floor).
 - 4) Wages (Admn Bldg, 1st Floor).
- i) Payments will be made to the contractor after satisfactory completion of work on the basis of work carried out by him.
- ii) All payments will be subject to deduction of income tax at source as per Income Tax Rules.

ANNEXURE-C

CONTRACTOR'S OBLIGATIONS

I) CONTRACTUAL

- a) Contractor shall decide the number of employees to be deployed for execution of the work awarded to him and he or his authorized representative will be solely entitled to dictate such workers about the manner of carrying out the work as per the prescribed specifications and quality plan.
- b) Contractor shall supervise the work allotted to him and to be carried out by his employees.
- c) Contractor to ensure that the employees deployed in the premises of BHEL are physically and mentally fit and do not have any criminal record. Such employees should possess requisite skill, proficiency, qualification, experience etc.
- d) Contractor to maintain appropriate records of his employees deployed to carry out the job(s).
- e) Contractor should issue appropriate appointment letters to his employees.
- f) Contractor to provide employment card/identity card with photograph duly verified and attested by the Contractor to his employees. Contractor to indicate the name of the proprietary/partnership firm/company, place of work, contract number and duration of validity of card.
- g) Contractor will be responsible for the good conduct of his employees. In case of any misconduct/misbehavior by any employee, the contractor will replace such employee(s) immediately.
- h) Contractor will ensure that the job is executed through his employees on his rolls and under no circumstances the contractor will deploy any casual employee to carry out the job nor shall sub-contract the job without prior written permission.
- i) Contractor will keep watch on his employees and he will be liable for any pilferage / loss to BHEL due to acts of omission and commission by his employees. Similarly, liability for any compensation to outsiders on account of any act of omission and commission by the employees deployed by the contractor shall lie exclusively with him.
- j) Contractor to provide safety appliances and safety shoes to his employees. The contractor shall be responsible for enforcing all safety regulations as applicable.
- k) The contractor has to provide a distinct uniform different from BHEL employees. The Uniform should have logo of the Contractors firm / company. The uniform shall be kept in neat, tidy and wearable condition. Wherever necessary, the Cap shall be integral part of the uniform.
- l) Contractor to ensure that all precautions are taken for safety of his employees and equipments.
- m) In the event of termination of contract for any reason whatsoever, the contractor shall withdraw all his employees from the establishment of BHEL. In case contractor decides to terminate services of his employees, he should settle all terminal dues including retrenchment compensation.
- n) Contractor shall provide to his employees all tools, tackles and equipments and maintain the same to carry out the job under the contract at his cost and if necessary contractor may take insurance policy of his men, material, equipments and tools and tackles.
- o) Contractor shall provide safety appliances and maintain the same at his own cost which may be required under the statute or otherwise.
- p) Contractor shall provide material at his cost as mentioned in the contract to his employees for carrying out the job.

STATUTORY : TOWARDS STATUTORY LIABILITY

- a) All statutory requirements under Minimum Wages Act, 1948, Payment of Wages Act, 1936, Workmen Compensation Act. 1923, EPF & MP Act, 1952, Payment of Gratuity Act, 1972. ESI Act, 1948. The Contract Labour (R&A) Act, 1970, Payment of Bonus Act, 1965, Income Tax Act, Service Tax Act and all other applicable Acts shall be complied with by the contractor.
- b) Contractor shall comply with all statutory requirements, rules, regulations, notifications in relation to employment of his employees issued from time by the concerned authorities.
- c) Contractor shall ensure payment of statutory prescribed minimum wages as applicable from time to time in the presence of authorized representative of BHEL and maintain proper records of their timely disbursement. These records need to be preserved for a period of at least 3 years and should be made available even after the contract is over for any verification by the statutory authorities / BHEL authorities.
- d) Contractor to provide PF pass book to his employees and ensure payment of PF, EDLI, pension dues under EPF & MP Act, 1952 to the PRFC.
- e) Contractor shall ensure payment of ESI contribution under ESI Act, 1948 and provide ESI membership No. / card of each employee.
- f) Contractor shall produce proof of deductions as well as remittances of PF, EDLI, Pension, ESI contribution, administrative charges etc. wherever applicable and shall maintain proper records. Contractor to issue wage slips to his employees.
- g) Contractor shall furnish proper returns to the concerned statutory authorities and provide a copy of the same to BHEL.
- h) Contractor shall be solely responsible for non payment / delayed payment of wages / DA, contributions under EPF & MP Act, ESI Act etc.
- i) In case the contractor fails to make payment of wages to his employees or remittance of contribution to the concerned authorities, the security deposit / other dues / running bills under the contract can be utilized by BHEL to discharge the liability of the contractor.
- j) Contractor shall indemnify BHEL against all claims and losses under various Labour Laws, statutes or any civil or criminal law in connection with employees deployed by him.
- k) The liability for any compensation on account of injury sustained by an employee of the contractor will be exclusively that of the contractor.
- l) Contractor to obtain insurance cover for his employees / equipment / tools and tackles etc. and take third party risk insurance coverage at his own cost. BHEL shall not be responsible for any loss, damage, and pilferage of property and / or his employees.
- m) Contractor should have independent code numbers / exemptions under EPF & MP Act, 1952 and ESI Act, 1948 and shall cover his employees under the said codes.
- n) Payment of bonus under the payment of Bonus Act, Payment of gratuity under the Gratuity Act, and retrenchment compensation under Act will be the sole responsibility of the contractor.
- o) Over and above the daily wage rate, payment shall be made for leave with wages.
- p) Contractor shall observe Provisions of the Factories Act in respect of working hours, holidays, rest intervals, leave and overtime to his employee. No work shall be done on second/third shift, overtime, Sundays or on other declared holidays without written permission.
- q) In case a contractor employs women as employee he will discharge his obligation under law in respect of such women workers such prohibition of engaging them during night-hours, prohibition of employing them for more than 9 hours per day, provision of crèche facility, grant of maternity leave as per rules etc.
- r) Contractor shall be responsible for making payment of wages before expiry of 7days from the last day of wage period and to ensure disbursement of wages in the presence of the authority's representative of contract operating division who shall record under his signature at the end of entries in the Register of wages.
- s) Contract



भारत हेवी इलेक्ट्रिकल्स लिमिटेड
BHARAT HEAVY ELECTRICALS LIMITED

RAMACHANDRAPURAM :: HYDERABAD – 502 032

M & S, F & P & CW DIVISION
10-REPAIR SHOP, AIR-CONDITIONING

PRICE BID (Part – B)

(This should be submitted in separate cover in sealed condition)

TENDER NOTICE NO: M&S/10RS/AC/12-13/BMS/1129/01

Scope of Work: *Installation of Building Management System(BMS)* with Selective features in below areas in BHEL, RC Puram, as per scope of work.

- 1) CMM (4th Floor, Admn Bldg)
- 2) Contracts Management (3rd Floor, Admn Bldg)
- 3) Finance (Admn Bldg, 1st Floor).
- 4) Wages (Admn Bldg, 1st Floor).

S. No.	Description	Qty	Total amount in Rs
		Lumpsum as per scope	

Total Amount in Rupees : _____ (in Figures)

Total Amount in Rupees : _____ (in Words)

Service Tax Extra as Applicable

Signature of Tenderer (with seal)