



BHARAT SANCHAR NIGAM LIMITED

(A Govt of India Enterprise)
(Electrical Wing)

**Office of Executive Engineer (E)
BSNL Electrical Division-III**

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E-TENDER DOCUMENT

NAME OF WORK: Operation and Maintenance of Electromechanical services for staff Quarters at Mambalam, Chennai. (for the year 2019-21) (Recall)

NIT No : 07 / EEE/ED-III/CH/2019-20

This tender document contains **52 (fifty two)** pages only.

For E Tender Help Desk of M/s ITI Limited.Tel.No.011 49424365;
Mail Id : twhelpdesk680@gmail.com, bsnlthelpdesk@gmail.com

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**INFORMATION AND INSTRUCTIONS FOR BIDDERS FOR E-TENDERING FORMING PART OF
NIT AND TO BE POSTED ON WEBSITE**

The Executive Engineer (Elect), BSNL, **Electrical Division-III, Chennai** on behalf of the CMD, Bharat Sanchar Nigam Limited, invites online Item rate bids from eligible bidders in Single bid system for the following work:

| | | |
|----|---|---|
| 1 | Name of work | Operation and Maintenance of Electromechanical services for staff Quarters at Mambalam, Chennai. (for the year 2019-21) (Recall) |
| 2 | Estimated cost put to tender (Rs.) | Rs.6,14,418/- |
| 3 | Earnest Money (Rs.) | Rs.12,288/- |
| 4 | Period of completion | Twenty Four Months |
| 5 | Last date & time for downloading of tender document by bidder | Up to 10:55 Hrs. on 07 -05 -2019 |
| 6 | Last date & time for online submission of tender | Up to 11:00 Hrs. on 07 -05 -2019 |
| 7 | Last date & time for submission of original Tender cost and EMD | Up to 11:00 Hrs. on 07 -05 -2019 |
| 8 | Date and time for opening of tender | 11:30 Hrs. on 07 - 05 -2019 |
| 9 | Tender cost (Non refundable) | Rs.500/- (+) GST 18% |
| 10 | E-tender Processing fee (Non refundable) | 0.05% of estimate cost subject to the minimum of Rs.500/- and Maximum of Rs. 5000/- plus GST |

Eligibility Criteria:

The Contractors satisfying the following conditions:

- 1 Average annual turnover during the last 3 years, ending 31st March of the previous financial year, should be at least 30% of the estimated cost put to tender.**

AND

BSNL enlisted contractors in Electrical category of respective class as per their tendering limits.

OR

- 2 Experience of having successfully completed similar works in BSNL comprising of Electrical Installations as part of scope of work during last 7years ending last day of month previous to the one in which applications are invited, should be either of the following :**

Three similar successfully completed works costing not less than the amount equal to 40% of the estimated cost put to tender.

OR

Two similar successfully completed works costing not less than the amount equal to 60% of the estimated cost put to tender.

OR

One similar successfully completed work costing not less than the amount equal to 80% of the estimated cost put to tender.

(NOTE: The estimated cost of one year shall be considered to evaluate the eligibility criteria. Similar work means "Operation & Maintenance of Electrical Installations")

IMPORTANT NOTE:

1. The self-attested copies of the following documents shall be scanned and uploaded to the e-tendering website within the period of tender submission. Online bid documents submitted by intending bidders shall be opened only of those bidders, who have scanned and uploaded the following documents (and whose uploaded documents are found to be in order), otherwise the bid will not be opened and shall lead to disqualification.
 - a. Tender Fee in the prescribed format
 - b. EMD in the prescribed format
 - c. Certificate of Financial Turnover from Chartered Accountant if applicable
 - d. Documents fulfilling Eligibility criteria.
 - e. Enlistment certificate issued by BSNL(For BSNL enlisted contractors)
 - f. Electrical license issued by TN Govt.
 - g. GST Registration Number Details
 - h. PAN Card
 - i. EPF and ESI Registration certificate (if applicable)
 - j. Undertaking to abide by EW-6 and EW-8 (Form 'A')
 - k. Undertaking regarding EPF and ESI provisions (Form 'B')
 - l. Certificate of work experience issued by client department (Form 'C') if applicable
 - m. Undertaking regarding No Near relative working certificate (Form 'D')

Not uploading the above documents,(even if the documents are submitted physically) shall lead to disqualification.

2. The Physical Tender Fee & EMD shall be deposited in the tender box available in the office of tender opening authority, by the bidder before 11:00 AM on the tender opening date, failing which the tender shall not be opened.

BSNL EW-6
Bharat Sanchar Nigam Limited
Electrical Wing

Electrical Division: **ED-III, Chennai**

Sub Division: **VII, Chennai**

Item rate tenders on single bid system are invited on behalf of CMD, BSNL for the work "**Operation and Maintenance of Electromechanical services for staff Quarters at Mambalam, Chennai. (for the year 2019-21)(Recall)**" from the eligible bidders as per NIT notification. The enlistment of the bidders should be valid on the opening date of tender. In case the date of opening of tender is extended, the enlistment of bidder should be valid on the original date of opening of tender.

1. Intending bidder is eligible to submit the bid provided that he has definite proof from the appropriate authority, which shall be to the satisfaction of the competent authority as per the eligibility conditions mentioned in the NIT notification page.
2. The work is estimated to cost **Rs. 6,14,418/- (Excluding GST)**. This estimate, however, is given merely as a rough guide.
3. Agreement shall be drawn with the successful bidder on prescribed form as amended up to the date of opening of tender. Bidder shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.
4. The time allowed for carrying out the work will be **Twenty four months** from the 10th day after the date of written order to commence the work.
5. The site for the work is available / or the site for the works shall be made available in parts. The successful bidder shall execute the work in coordination with other agencies working in the campus.
6. The bid documents consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website www.tenderwizard.com/BSNL at free of cost. The BSNL EW-8 document can be seen from the web site www.chennai.bsnl.co.in at free of cost.
7. After submission of the bid, the bidder can re-submit revised bid any number of times but before last time and date of submission of tender as notified. While submitting the revised bid, bidder can revise the rate of one or more item(s) any number of times (he need not re-enter rate of all the items) but before last time and date of submission of tender as notified.
8. The Tender Fee in the form of Demand Draft issued by the Nationalized / Scheduled bank authorized by the Reserve Bank of India, drawn in favour of **BSNL, CHENNAI TELPHONES** payable at **CHENNAI** shall be scanned & uploaded in the e-tendering website within the period of tender submission. The validity of the tender cost in the form of DD shall be **60 days** from the date of opening.
9. The Earnest money deposit (EMD) in the form of Demand Draft / FDR / BG (BG is only for Air Conditioning, Diesel Engine Alternator, Lifts, and Sub Station works wherever the amount of EMD is more than Rs.20,000)/ CDR of a nationalized / scheduled bank authorized by the Reserve Bank of India, drawn in favour of **BSNL, CHENNAI TELPHONES** payable at **CHENNAI** shall be scanned & uploaded in the e-tendering website within the period of tender submission. The validity of the EMD in the form of DD shall be **60 days** from the date of opening. If the EMD is in the form of CDR/FDR/BG, the validity shall be **180 days** from the date of opening. In case of L1 bidder, the validity of CDR/FDR/BG is to be extended up to the observation period as that of the Performance guarantee / Security deposit.

10. The Physical **TENDER COST** and **EMD** of which the scanned copy is uploaded shall be deposited by all the bidders before **11:00 AM** on the tender opening date, failing which the tender shall not be opened.
11. Interested bidder who wishes to participate in the bid shall pay the e-tender processing fee to M/s. ITI Limited through their e-gateway by credit / debit card / internet banking / RTGS / NEFT facility.
12. All the documents as specified in the tender document shall be scanned and uploaded to the e-Tendering website within the period of bid submission.
13. Online bid documents submitted by intending bidders shall be opened only of those bidders, who have deposited e-Tender Processing Fee with M/s ITI Limited and Earnest Money Deposit and other documents fulfilling eligibility criteria, scanned and uploaded are found in order.
14. The last date for online submission of bid is **07 - 05 -2019 up to 11:00 AM** and the bid submitted shall be opened at **11:30AM on 07 -05-2019**. If a holiday is declared on the tender opening day, the tender will be opened on the next working day.
15. The e-Tender processing fee is non-refundable.
16. **Performance Guarantee:** The bidder is required to furnish Performance guarantee for an amount equal to 5% of the contract value in the form of bank guarantee/CDR/FDR/DD (of a nationalized/ Scheduled Bank in a standard format) within two weeks from the date of issue of acceptance letter. This period can be further extended by the Engineer-in-charge up to a maximum period of two weeks on written request of Bidder. The validity period of the performance security in the form of performance bank guarantee shall be: Three Months from the date of actual completion of work, for AMC works; and One year from the date of actual completion of work for all other works. **In case the bidder fails to deposit the said performance guarantee within the stipulated period, including the extended period if any, the Earnest Money deposited by the bidder shall be forfeited automatically without any notice to the bidder and the bidder will not be allowed to participate in the re tendering for the same work.**
17. **Security Deposit:** In addition to Performance guarantee stated above, a sum @ 10% of the gross amount of the bill shall be deducted from each running bill of the contractor till the sum be deducted with the sum already deposited as earnest money, will amount to security deposit of 5% of the contract value of the work. **The security deposit shall be released after an observation period as follows: Three Months from the date of actual completion of work, for AMC works; and One year from the date of actual completion of work for all other works.**
18. In case any discrepancy is noticed in the documents as uploaded at the time of submission of the bid online, then the bid submitted shall become invalid and the BSNL shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further, the bidder shall not be allowed to participate in the retendering process of the work.
19. Intending bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders, the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidder shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a tender by a bidder implies that he has read this notice

and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the BSNL and local conditions and other factors having a bearing on the execution of the work.

20. The competent authority on behalf of the CMD does not bind itself to accept the lowest or any other tender and reserves to itself the authority to reject any or all the tenders received without the assignment of any reason. All tenders in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidder shall be summarily rejected. The competent authority on behalf of CMD reserves to himself the right of accepting the whole or any part of the tender and the bidder shall be bound to perform the same at the rate quoted.
21. Canvassing whether directly or indirectly, in connection with tenders is strictly prohibited and the tenders submitted by the bidders who resort to canvassing will be liable to rejection.
22. Agreement shall be drawn with the successful bidder on prescribed form. Bidder shall quote his rates as per various terms and conditions of the said form, which will form part of the agreement.
23. The bidder should give a certificate as per the following that none of his/her relative is employed in BSNL units as per **Form 'D'**. In case of proprietorship firm, certificate will be given by the proprietor and for partnership firm certificate will be given by all the Directors of the company.
 - a. Near relatives of all BSNL employees either directly recruited or on deputation are prohibited from participation in tenders and execution of works in the different units of BSNL. The near relatives for this purpose are defined as:
 - i. Members of a Hindu Undivided family.
 - ii. They are husband and wife.
 - iii. The one is related to the other in the manner as father, mother, son(s) & son's wife(daughter-in-law), Daughter(s) & daughter's husband(son-in-law), brother(s) & brother's wife, sister(s) & sister's husband(brother -in-law).
 - b. The company or firm or any other person is not permitted to tender for works in BSNL unit in which his near relative(s) is(are) posted. The unit is defined as SSA/Circle/Chief Engineer/Chief Archt./Corporate office for non-executive employees and all SSA in a circle including circle office/Chief Eng./Chief Archt./Corporate office for executive employees (including those called as Gazetted officers at present). The bidder should give a certificate that none of his/her such near relative is working in the units as defined above where he is going to apply for tender/work, for proprietorship, partnership firms and limited company certificate shall be given by the authorized signatory of the firm. Any breach of these conditions by the company or firm or any other person, the tender/work will be cancelled and earnest money/performance guarantee will be forfeited at any stage whenever it is so noticed. BSNL will not pay any damages to the company or firm or the concerned person. The company or firm or the person will also be debarred for further participation in the concerned unit.
 - c. No employee in BSNL/ Govt. of India is allowed to work as a contractor for a period of two years of his retirement from service without the prior permission. The contract is liable to be cancelled if either the bidder or any of his employees is found at any time to be such a person who had not obtained the permission as aforesaid before submission of tender and engagement in the bidders service.
24. The tender for the work shall remain open for acceptance for a period of ninety (90) days from the date of opening of tenders. If any bidder withdraws his tender before the said period or

issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the tender which are not acceptable to the BSNL, then the BSNL shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the tenderer shall not be allowed to participate in the retendering process of the work.

25. The agency has to comply with the provisions of EPF and miscellaneous provisions Act-1952 and employees provident fund scheme-1952 as amended up to date in respect of labours/employees engaged by them for this work. Any consequence arising due to non-complying of provisions as specified above shall be the sole responsibility of the firm only. The agency shall give an undertaking to this effect as per **Form 'B'**.
26. **Extension of Validity of tender:** In case, where the letter of award of work cannot be placed within the validity period of the tender, the BSNL can request the bidder to extend the validity of their respective tenders and the Earnest Money deposit by a reasonable period. In such cases, extension of validity of Earnest Money deposit by 30 days beyond the extended validity date of tender should also be asked for. While BSNL can make the request for extension, the tenderer is free to either extend the validity or refuse the request to extend the validity.
27. Rates quoted by the contractor shall be firm and shall be valid for the currency of contract. No cost escalation shall be permitted during the currency of contract.
28. This notice inviting tender shall form a part of the contract document. The successful bidder, on acceptance of his tender by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign the contract consisting of:-
 - a. The Notice Inviting Tender, all the documents including additional conditions, specifications and drawings, if any, forming part of the tender as uploaded at the time of invitation of tender, subsequent amendments issued and the rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
 - b. Standard BSNL EW-8 form.

GENERAL INSTRUCTIONS TO THE BIDDERS

1. The intending bidder must read the terms and conditions of BSNL-EW 6 carefully. He should only submit his bid, if he considers himself eligible and he is in possession of all the documents required.
2. Information and instructions for bidders posted on website shall form part of bid document.
3. Applicants are advised to keep visiting the above mentioned website from time to time (till the deadline for bid submission) for any updates in respect of the tender documents, if any. Failure to do so shall not absolve the applicant of his liabilities to submit the applications complete in all respect including updates thereof, if any. An incomplete application may be liable for rejection.
4. Those bidders not registered on the website mentioned above, are required to get registered themselves beforehand. The intending bidder must have valid class-III digital signature to submit the bid.
5. On opening date, the bidder can login and see the bid opening process. After opening of bids he will receive the competitor bid sheets.
6. Bidder can upload eligibility documents in the form of JPG format or / and PDF format. Documents uploaded in any other format, which could not be opened may result in non opening of the bids.
7. Bidder must ensure to quote rate of each item. The column meant for quoting rate in figures appears in yellow colour. In addition to this, while selecting any of the cells a warning appears that if any cell is left blank the same shall be treated as "0". Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as "0" (ZERO)
8. Even though any bidder may satisfy the above requirements, he would be liable to disqualification if he has:
 - a. Made misleading or false representation or deliberately suppressed the information in the forms, statements and enclosures required in the eligibility criteria document.
 - b. Record of poor performance such as abandoning work, not properly completing the contract, or financial failures / weaknesses etc.
9. If any information furnished by the bidder is found incorrect at a later stage, he shall be liable to be debarred from tendering/taking up of works in BSNL. The BSNL reserves the right to verify the particulars furnished by the applicant independently.
10. GST and any other tax applicable in respect of this contract as applicable shall be borne by the bidder himself. The bidder shall quote his rates considering all such taxes. The TDS as per the Govt. regulations will be recovered from the contractor.
11. **Tender Evaluation :**
 - (a) The evaluation and comparison of responsive bids shall be done on the basis of Net cost to BSNL on the prices offered inclusive of packing, forwarding, freight and insurance charges etc., but excluding GST. The bid with lowest net cost as elaborated above will be the L1 bidder.
 - (b) Vendors should furnish the correct GST Rate in the price schedule. If the Input Tax Credit is found to be not admissible at any stage subsequently owing to wrong furnishing of GST Rate, then the vendors will be liable to refund such non-admissible amount, if already paid, along with penalty if charged by the concerned authority.

12. However, pursuant to the constitution (Forty-sixth amendment) act, 1982, if any further tax or levy is imposed by statute, after the last date of receipt of tenders, and the contractors there upon necessarily and properly pays such taxes/ levies, the contractor shall be reimbursed the amount so paid, provided such payment, if any, is not in the opinion of Superintending engineer (whose decision shall be final and binding) be attributable to delay in execution of work within the control of contractor.
13. The Contractor shall, within a period of 30 days of imposition of any further tax or levy in pursuant to the constitution of (Forty sixth amendment) act 1982 give a written notice thereof to the Engineer-in-charge that the same is given pursuant to this condition, together with all necessary information relating thereto.

14. Bye laws Indemnity against liabilities:

- a. The bidder shall comply with all by laws and regulations of the local and statutory authorities having jurisdiction over the works and shall be responsible for payment of all fees and other charges and giving and receiving all necessary notices and keep the Engineer-in-charge informed about the notices issued and received.
- b. The bidder shall indemnify the department against all claims in respect of patent rights design, trademark or name of other protected rights in respect of any plant, machine, work or materials used for or in connection with the works or temporary works and from and against all claims demands, proceedings, costs, charges and expenses whatsoever in respect of or in relation thereto.
- c. The bidder shall defend all actions arising from such claims and shall himself pay all royalties, License fees, damages, costs and charges of all and every sort that may be legally incurred in respect hereof shall be borne by the bidder.
- d. All liabilities / penal recoveries on matters arising out of tax/levies such as incorrect deductions discrepancies in the filing of returns, revised assessments by the concerned authorities etc., shall be borne by the bidder.

15. Termination of contract on death of contractor :

Without prejudice of any of the rights or remedies under this contract, if the contractor dies, the Engineer in charge on behalf of the BSNL shall have the option of terminating the contract without compensation to the contractor.

16. Indulging of contractor in criminal /antisocial activities and cases under investigation/charge sheeted by CBI or any other government agencies etc. :

If the CBI/Independent External Monitor (IEM) /Income tax/ Sales Tax /GST/Central Excise/Custom Departments recommend such a course - Action will be taken as per the directions of CBI or concerned department.

17. As a general notion, the terms and conditions/instructions contained in various pages of this document are addressed assuming the bidder as 'Male'. However, the same shall remain and assumed to be addressed in case of 'Female' bidder also, except for the gender centric words, which shall be 'female' centric at appropriate places.

Undertaking to abide by EW 6 & EW 8

"I.....Son of
.....Resident of
hereby give an undertaking that I have read the complete bid document and I am aware of all the clauses and sub clauses of BSNL EW 6 & 8 forms and I confirm that I will abide by all the terms and conditions available in original standard BSNL EW 6 & 8 forms.

(Seal of the firm)

(Signature of Bidder)

FORM 'B'

Undertaking regarding EPF provisions

"I..... Son of
.....Resident of hereby give an undertaking that

* I/We have employed only ----- persons in our establishment and hence the EPF and Miscellaneous provisions Act, 1952 are not applicable to my / our establishment.

* I/ We have registered as per the EPF and Miscellaneous provisions Act, 1952 and our registration no is ----- . We undertake to keep it valid during the currency of contract.

In case at any stage, it is found that the information given by me is false / incorrect, BSNL shall have the absolute right to take any action as deemed fit/without any prior intimation to me".

* strike out whichever is not applicable

**Attach a self-attested photo copy of the above said EPF registration certificate.

(Seal of the firm)

(Signature of Bidder)

Undertaking regarding ESI provisions

"I..... Son of
.....Resident of hereby give an undertaking that

* I/We have employed only ----- persons in our establishment and hence the ESI and Miscellaneous provisions Act,1948 is not applicable to my / our establishment.

* I/ We have registered as per the ESI and Miscellaneous provisions Act, 1948 and our registration no is ----- . We undertake to keep it valid during the currency of contract.

In case at any stage, it is found that the information given by me is false / incorrect, BSNL shall have the absolute right to take any action as deemed fit/without any prior intimation to me".

* strike out whichever is not applicable

** Attach a self-attested photo copy of the above said ESI registration certificate.

(Seal of the firm)

(Signature of Bidder)

Performance report of works

1. Name of work
2. Agreement no.
3. Final Value of Work Done
4. Date of start
5. Actual date of completion
6. Performance: Satisfactory / Not Satisfactory

Dated:

Executive Engineer or Equivalent /above

No Near relative working certificate

I..... Son of Shri.....Resident of.....
hereby certify that none of my relative(s) as defined in the tender document is/are employed in BSNL unit as per details given in tender document. In case at any stage, it is found that the information given by me is false/incorrect, BSNL shall have the absolute right to take any action as deemed fit/without any prior intimation to me.

(Seal of the firm)

(Signature of Bidder)

ANNEXURE I
MODEL FORM OF BANK GUARANTEE
(For submitting EMD)

Whereas _____ (hereinafter called "the contractor(s)") has submitted its Tender dated _____ for the work _____

KNOW ALL MEN by these presents that WE _____ OF _____ having our registered office at _____ (hereinafter called "the Bank") are bound unto _____ (hereinafter called "the BSNL") in the sum of _____ for which payment will and truly to be made of the said BSNL, the Bank binds itself, its successors and assigns by these presents.

THE CONDITIONS of the obligation are:

1. If the Contractor(s) withdraws its Tender during the period of Tender validity specified on the Tender Form: or
2. If the Contractor(s) having been notified of the acceptance of its Tender by the BSNL during the period of Tender validity.
 - (a) Fails or refuses to execute the Contract.
 - (b) Fails or refuses to furnish security Deposit in accordance with the conditions of Tender document.

We undertake to pay to the BSNL up to the above amount upon receipt of its first written demand, without the BSNL having to substantiate its demand, provided that in its demand, the BSNL will note that the amount claimed by it is due to it owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force as specified in the Tender Document up to and including Thirty (30) days after the period of the Tender validity and any demand in respect thereof should reach the Bank not later than the specified date/dates.

Signature of the Bank

Signature of the Witness
Name of Witness
Address of Witness

ANNEXURE II
PERFORMANCE SECURITY GUARANTEE BOND

In consideration of the CMD, BSNL (hereinafter called 'BSNL') having agreed to exempt _____ (hereinafter called 'the said bidder(s)') from the demand under the terms and conditions of an agreement/Advance Purchase Order No _____ dated _____ made between _____ and _____ for the supply of _____ (hereinafter called "the said agreement"), of security deposit for the due fulfillment by the said bidder (s) of the terms and conditions contained in the said Agreement, on production of the bank guarantee for _____ we, (name of the bank) _____ (hereinafter refer to as "the bank") at the request of _____ (bidder(s)) do hereby undertake to pay to the BSNL an amount not exceeding _____ against any loss or damage caused to or suffered or would be caused to or suffered by BSNL by reason of any breach by the said Bidder(s) of any of the terms or conditions contained in the said Agreement.

2. We (name of the bank) _____ do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the BSNL by reason of breach by the said bidder(s)' of any of the terms or conditions contained in the said Agreement or by reason of the bidders(s)' failure to perform the said Agreement. Any such demand made on the bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee where the decision of BSNL in these counts shall be final and binding on the bank. However, our liability under this guarantee shall be restricted to an amount not exceeding _____.

3. We under take to pay to the BSNL any money so demanded notwithstanding any dispute or disputes raised by the bidder(s)/supplier(s) in any suit or proceeding pending before any court or tribunal relating thereto our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be valid discharge of our liability for payment there under and the bidder(s)/supplier(s) shall have no claim against us for making such payment.

4. We(name of the bank)_____ further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the BSNL under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till _____ (office/BSNL) BSNL certifies that the terms and conditions of the said Agreement have been fully or properly carried out by the said bidder(s) and accordingly discharges this guarantee. Unless a demand or claim under this guarantee is made on us in writing on or before the expiry of TWO/TWO AND HALF/THREE YEARS (as specified in P.O) from the date hereof, we shall be discharged from all liabilities under this guarantee thereafter.

5. We (name of the bank)_____ further agree with the BSNL that the BSNL shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Agreement or to extend

time of performance by the said bidder(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the BSNL against the said Bidder(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Bidder(s) or for any forbearance, act or omission on the part of the BSNL or any indulgence by the BSNL to the said Bidder(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Bidder(s)/supplier(s).

7. We (name of the bank) _____ lastly undertake not to revoke this guarantee during its currency except with the previous consent of the BSNL in writing.

Dated the _____ day of _____

for _____ (indicate the name of bank)

IMPORTANT INSTRUCTIONS TO THE TENDERERS

Please note that the offers, which do not comply the following, will not be considered and will be totally rejected. These instructions supersede the BSNL/EW 8 clauses in case of any Disparity.

1 (i) INCREASE / DECREASE OF TENDERED QUANTITY

a) BSNL will have the right to increase or decrease up to 25% of the Contract value depending upon the requirement of goods and services specified in the schedule of items without any change in the unit price or other terms and conditions at the time of award of contract.

b) In exceptional situation where the requirement is of an emergent nature and it is necessary to ensure continued supplies from the existing vendors, the purchaser reserves the right to place repeat orders up to 50% of the quantity of goods and services contained in the running tender/contract within a period of 12 months from date of award of work at the same rate or a rate negotiated (downwardly) with the existing vendors considering the reasonability of rates based on prevailing market conditions and the impact of reduction in duties and taxes etc.

1 (ii) CURTAILMENT OF QUANTITY:-

BSNL reserves the right to enforce curtailment in the assigned quantum of work for any contractor on the grounds of defaults/delay in regard to execution of the individual work assigned.

2) COMPLETION OF WORK:-

At the time of issuing NIT for a particular work, the time allowed for completion of work consistent with magnitude and urgency of work is specified. The time allowed for carrying out the work as entered in the contract is reckoned from the tenth day after the date on which the orders to commence the work are given to the Contractor. To ensure good progress of the work during the execution, the contractor is bound in all cases in which the time allowed for any work exceeds one month (except special jobs) to complete 1/8th of the whole of the work before 1/8th of the time allowed under the contract has elapsed, 3/8th of the work before half of the time has elapsed and 3/4th of the work before 3/4th of such time has elapsed. However, for special jobs, if a time schedule has been submitted by the Contractor and the same has been accepted by the Engineer-in-charge, the contractor shall comply with such time schedule. For Substation, the work is deemed to have been completed after clearance by Electrical Inspector.

3) EXTENSION OF TIME:-

If the contractor shall desire an extension of time for completion of work on the grounds of his having been unavoidably hindered in its execution or on any other grounds, he shall apply in writing to the Engineer in charge within 30 days of the hindrance on the account on which he desires such extension as aforesaid, and the Engineer in charge shall if in his opinion reasonable grounds to be shown therefore, authorize such provisional extension of time, if any as in his opinion be necessary are proper.

4) COMPENSATION FOR DELAY :

If the contractor fails to maintain the required progress or complete the work and clear the site on or before the contract or extended date of completion, he has to pay the compensation for delay which is limited to 0.5% per week of the tendered value for the first 10 weeks and 0.7% per week for next 10 weeks and thereafter subject to a maximum of 12% of the tendered value for the

location where the work is delayed and the firm is found responsible for the same. The clause 2 of BSNL - 8 forms stands modified accordingly. Flow chart of the Procurement process/ contract shall be supplied by the contractor and approved by Executive Engineer concerned.

5) TERMS OF PAYMENT:

Quarterly Payment shall be made after completion of maintenance period. With each bill, a certificate from the Contractor that maintenance has been carried out properly and testing / drills etc. required during the period have been performed in addition to the penalty explicitly indicated under penalty clauses.

6) EPF PROVISIONS:-

The agency has to comply with the provisions of EPF and miscellaneous provisions Act-1952 and employees provident fund scheme-1952 as amended up to date in respect of labours /employees engaged by them for this work. Any consequence arising due to non- complying of provisions as specified above shall be the sole responsibility of the firm only.

Agency has to observe all the labour rules & regulation in force. Agency shall be fully responsible for any violation observed at any time.

7) PROGRAMME FOR EXECUTION

The firm shall supply detailed programme to Engineer-in-Charge for execution of contract within fifteen days of award of work. The programme shall contain details about submission of drawing, supply of materials, tentative dates for installation and commissioning.

8) STORES AND SAFETY

All the stores and materials required for the satisfactory completion of the work shall be arranged at work site by the contractor from his own source. Space for storing the same materials may be provided on request from the contractor. However safe custody of the material stores at site will be responsibility of the contractor.

9) CO-ORDINATION AT SITE

At the site of work more than one agency may be working. Full cooperation shall be extended to other agencies during the progress of work. Further work shall be carried out in such a way so that it may not cause abnormal noise and hindrance to the officers of the BSNL engaged in erection as well as to normal routine work.

10) COMPLETION DRAWINGS

The firm shall supply three sets of drawings/documents after completion of the work but before the proposed date of completion of work.

- ❖ Schematic diagram of control wiring.
- ❖ Operation and maintenance manual.

11) CHANGES IN SPECIFICATIONS

The BSNL reserves the right to make changes in respect of specifications of work if in its opinion same is found necessary. However such alterations shall be made after mutual discussions and agreement between the BSNL and the contractor. Any price implications in this regard shall be

mutually discussed and agreed up on in terms of clause 12 of EW forms. The BSNL as matter of principle will not permit modifications by the contractor in design /specifications of any document /material. However the same can be agreed upon by the BSNL under exceptional circumstances where

a) The same is necessitated due to non-availability of material/components of certain specifications/make.

Or

b) Such alterations constitute an improvement in the opinion of BSNL.

Prior approval is necessary before undertaking any alteration/modification in the specifications of the equipment.

12) I.S. Standards:

The entire system shall conform to relevant BIS including safety standards as amended up to date. Where IS standards are not available the British standard(s) shall be followed. In case of conflict, the requirements of these specifications shall be given over-riding priority. The electrical and earthing work shall be carried out as per CPWD specifications for electrical works (internal) and electrical works (external) as amended up to date. A list of relevant standards, approved makes of equipment is furnished and forms part of the tender document.

SCHEDULE OF QUANTITIES

NAME OF WORK:- Operation and maintenance of electromechanical services for staff quarters at Mambalam, Chennai (for the year 2019-21)(Recall)

| S.N | Description of Items | Qty | Unit | Rate / excluding GST | CGST | | SGST | | IGST | | Rate /unit including GST | Total Amount excluding GST | Total Amount including GST | HSN/ SAC Code |
|-----|---|-----------|-------|----------------------|--------|---------------|--------|---------------|--------|---------------|--------------------------|----------------------------|----------------------------|---------------|
| | | | | | % Rate | Rate per unit | % Rate | Rate per unit | % Rate | Rate per unit | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7=6 x5 | 8 | 9=8x5 | 10 | 11=10x5 | 12=5+(7+9)or 11 | 13=3x5 | 14=3x12 | 15 |
| | <u>SH –I Operation of Services</u> | | | | | | | | | | | | | |
| 1) | Providing following manpower to perform operation / periodical checks as per maintenance schedule of the EI, Pumps and Compound light and removing & fixing of items provided in SH-III for attending repair / faults for smooth operation of electrical installations, of staff Quarters Mambalam comprising of 12Nos Type-I and 12Nos Type-II Staff quarters on all working days, including all holidays, Sundays etc as reqd. The schedule of maintenance of Electro-mechanical services to be carried out as per the specification as reqd. Man power: One Electrician (skilled labour) per day | 24 Months | Month | | | | | | | | | | | |

UNPRICED SCHEDULE

Contractor

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Executive Engineer (E)

| | SH- II Comprehensive Maintenance | | | | | | | | | | | | | |
|---|--|-----------|-------|--|--|--|--|--|--|--|--|--|--|--|
| 1 | Comprehensive maintenance of the following pump sets along with starter boxes, SFUs i/c arranging specialized manpower and materials for replacement of faulty components, attending of faults, and carrying out periodical checks as per maintenance schedule etc as required. , Lifting from existing open well/bore well, transportation, reinstallation, servicing, replacement of items such as bearings/ bushes /spares, terminal plates, glands, rewinding of motors, etc shall also be covered in this item. | | | | | | | | | | | | | |
| a | 5 HP Bore well Jet Pump - 1 Nos | 24 Months | Month | | | | | | | | | | | |
| b | 3 HP Monoblock centrifugal Pump - 2Nos | 24 months | Month | | | | | | | | | | | |
| c | 1 HP Bore Well Jet Pump - 1 No | 24 months | Month | | | | | | | | | | | |
| d | 1 HP Submersible sump Pump - 1 No | 24 months | Month | | | | | | | | | | | |
| e | 0.5 HP Submersible open well Pump - 1 No | 24 months | Month | | | | | | | | | | | |
| | SH- III MISC Items | | | | | | | | | | | | | |
| 1 | Supplying of following materials / accessories in the existing Lamp Fitting, Fan, | | | | | | | | | | | | | |

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Contractor

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Executive Engineer (E)

| | | | | | | | | | | | | | | |
|---|---|--------|------|--|--|--|--|--|--|--|--|--|--|--|
| | switch board, compound light pole, MCB DB, LT Panel, for attending the daily faults received from the various quarters occupied in the building etc on all the seven days a week including removing and fixing of these items shall be done by labours provided in SH-I etc as reqd.. | | | | | | | | | | | | | |
| | Note:1. These item shall be replaced only if the items under maintenance becomes faulty and with the consent of EE (E) /SDE(E) / JTO(E). | | | | | | | | | | | | | |
| a | 36W Fl. Tubes | 20nos. | Each | | | | | | | | | | | |
| b | Electronic Ballast suitable for 36/40 W Fl.Tube | 20nos. | Each | | | | | | | | | | | |
| c | Starters for FL. Fittings | 5nos. | Each | | | | | | | | | | | |
| d | Side holder for Fl. Fittings | 5nos. | Each | | | | | | | | | | | |
| e | 2.5 mfd capacitor for ceiling fan | 12nos. | Each | | | | | | | | | | | |
| f | Replacing of bearings including greasing in the Ceiling/ Wall mounting/ pedestal fan | 15nos. | Each | | | | | | | | | | | |
| g | Rewinding of winding coil in the Ceiling/ Wall mounting /pedestal fan etc as reqd. | 15nos. | Each | | | | | | | | | | | |
| h | 45W LED lamp | 4nos. | Each | | | | | | | | | | | |
| i | 5/6 Amps Piano type switch | 25nos. | Each | | | | | | | | | | | |
| j | 3 pin 5/6 Amps socket outlet | 15 Nos | Each | | | | | | | | | | | |
| k | 15/16 Amps Piano type switch | 5 Nos | Each | | | | | | | | | | | |

UNPRICED SCHEDULE

UNPRICED SCHEDULE

| | | | | | | | | | | | | | | |
|---|------------------------------------|--------|------|--|--|--|--|--|--|--|--|--|--|--|
| l | 6 pin 15/16 Amps socket outlet | 5 Nos | Each | | | | | | | | | | | |
| m | 5-32 A Single Pole C series MCB | 25nos. | Each | | | | | | | | | | | |
| n | Step type Electronic Fan Regulator | 10nos. | Each | | | | | | | | | | | |
| o | Single tune musical call bell | 10nos. | Each | | | | | | | | | | | |
| | Total | | | | | | | | | | | | | |

IMPORTANT NOTE: _

1. The firm shall be responsible to ensure that GST shown in the above columns are correct & Input Tax Credit for the amount shown above is admissible as per GST Act as amended up to date".
2. Tax Invoice /Bill should be pre-printed with all the details as per the requirement under the GST Act.
3. The evaluation and comparison of responsive bids shall be done on the basis of **Net cost to BSNL** on the prices offered inclusive of packing, forwarding, freight and insurance charges etc., **but excluding GST**
4. The rates for all items of work shall, unless clearly specified otherwise, include cost of all labour, materials and other inputs involved in the execution of the terms as specified in the scope of work.
5. No advance payments can be made. Stipulations like levy of interest if payment is not made in a specified time are also not acceptable and the payment is governed by the normal BSNL practice.
6. Bidder must mandatorily quote for all GST components(CGST,SGST,IGST)AS APPLICABLE.
7. Bidders must mandatorily mention correct HSN/SAC codes.

TECHNICAL SPECIFICATIONS

Part I: Scope of Operation & Maintenance of EMS in Staff Quarters

Compound:

- i. Deploying required personnel at site of work
- ii. Ensuring that the EI installation is always kept in clean, healthy working condition.
- iii. Attending day-to-day routine complaints in a prompt and satisfactory manner.
- iv. Operation of Motor pumpset, filling the overhead tanks, coordinating water supply from external agency in case of acute shortage.
- v. Ensuring that no breakdown in power supply takes place and in case it happens to take all required steps including contacting supply co. for earliest restoration.
- vi. Attending to faults in the pumpset i/c replacement of parts, winding etc promptly.
- vii. Ensuring that there is no wastage of electrical energy. Details of steps to be taken in this regard to be worked out in consultation with the maintenance incharge.
- viii. Carrying out minor additions and alterations ordered by Engineer in charge. (Materials required shall be supplied by the department)
- ix. Carrying out various maintenance routines and tests as stated in **Annexure-VII** and elsewhere in the specifications and as per site requirement.
- x. **Submission of periodical reports.**
- xi. Maintaining Registers/documents for complaints and test results.
- xii. In case of staff quarters, scope of maintenance is limited to the wiring and accessories as per the standard yard stick of the department and shall not cover the additions / alterations carried out by the occupants.
- xiii. Coordinate with Electrical wing in remittance of EB bill for common service & bill for metro water supply, including collection of cheques from Electrical Divisions, payment, return of payment receipts, maintaining relevant records etc.
- xiv. Coordination with EB authorities/assessor/EB office for recording of EB charges i/c handling of EB cards etc.
- xv. Making inventory of items handing over /taking over while allotment/vacation of staff quarters/community hall.

Part II **Tasks To be Performed within first 15 days.**

Following items should be carried out within first 15 days.

- i. Establish complaint recording system with the approval of Engineer-in-Charge so that complaints can be received and attended properly.
- ii. Measurement of the resistance of Earth Stations of EI System and checking of the continuity of earth conductor. Results to be recorded.
- iii. Preparing an inventory of materials to be kept at site for prompt maintenance in consultation with Engineer-in-Charge. Materials for all the services to be considered for preparation of inventory.

- iv. Inspection of Main board & SDBs for (a) any loose/improper connection (No strand cutting for making connection to be allowed), (b) improper rating of switches /fuse/(c) Cleanliness.
- v. General inspection of EI system to identify shortcoming. Also any other relevant aspect, which may come in the way of proper maintenance, should be recorded in Register and also brought to the notice of Engineer-in-charge.
- vi. Check of pump set for proper functioning ,efficiency and any worn-out parts
- vii. Check of compound lighting for proper functioning.

Part III DETAILED ACTIVITIES

- 1) At the start of work, firm shall prepare an inventory of service under maintenance jointly with J.T.O (E)/SDE (E), concerned.
- 2) Before start of the work complete equipments/services under scope of comprehensive maintenance shall be thoroughly examined by the agency jointly with SDE(E)/JTO(E) concerned. All Defects/discrepancies should be brought to the notice of the SDE(E)/JTO(E) in writing within first 15 days of award of work. Defects/discrepancies agreed upon by BSNL shall be got attended by the outgoing agency before handing over the site to the new agency. Where the contract of the outgoing agency, for some items or all items is of comprehensive nature, if the outgoing agency fails to correct the defects/discrepancies within 15 days, the same shall be got done by BSNL at the risk and cost of the outgoing agency.
- 3) However any defect pointed out beyond 15 days for items of comprehensive maintenance nature, the agency taking over the maintenance is responsible for attending to the defects/discrepancies. Where the maintenance is taken over, for the first time, the defects / discrepancies shall be got attended by BSNL.

4) OPERATING & MAINTENANCE PERSONNEL

i. The personnel employed for carrying out the work and their skill requirement is as follows:

| Services | Type | Skill requirements | No. of personnel | To be based at |
|--------------------------------------|---------|--|-------------------------------|-------------------|
| Operation/repair/maintenance/service | Skilled | Minimum 10th pass with Electrician/wireman certificate familiar in similar jobs. | One person per shift per day. | Site of operation |

ii. The operating staff has to be available at the specified shift as decided by SDE(E). Since the firm will be doing the maintenance of critical service requirement such as water pumping systems/Electrical mains for staff quarters, operating staff shall be able to take initial steps under emergency situation such as failure of pump set, fire, shocks etc. In case of faults beyond the capacity of the staff provided as above, contractor shall immediately provide extra-specialized work force so as to attend to the fault in minimum reasonable time without any extra cost.

- iii. In the sites where operation is carried out, the firm shall maintain attendance register which can be inspected at any time by the SDE/JTO. The operator deputed to site shall be provided with a mobile phone by the firm, to contact and monitor the work by JTO(E)/SDE(E).
- iv. Agency shall issue identity cards to the workers and a list of personnel employed together with the copies of such identity cards should be submitted to SDE (E) / JTO (E) concerned. Before being posted at site, police should be informed about the personnel and a copy of the intimation shall be submitted to SDE (E).
- v. The workers engaged by firm should maintain proper discipline and good behavior with occupants. The firm shall remove such workers from the site whose behavior is found improper or found to be negligent in doing works, fail to adhere the work instructions of JTO(E)/SDE(E). Engineer – in – Charge’s decision shall be final and binding. Failure to remove errant workers from the site within a reasonable time shall amount to treating the presence of such workers as absent and will result in levy of penalty. Presence of unauthorized personnel in the maintenance office is strictly prohibited.
- vi. The workers engaged by the firm should wear uniform of Navy blue color with detachable badge indicating the name of the person and firm’s name.
- vii. The sitting arrangement for the staff engaged by the agency, space, water *and electricity shall be made available by BSNL free of cost.*
- viii. The firm has to supply details as per Annexure- IV of all the workers likely to be engaged by it before start of the work.
- ix. Provision of Supervisor shall also be made as per standard form of contract (EW 8) which forms the part of this contract.
- x. The firm and their personnel shall also co-ordinate, operate and feed information on automatic data collection services/automation devices/SMS etc that will be introduced by BSNL at any date during the tenor of contract.
- xi. Wherever the staff are required to enter the residential premises for attending faults or for routine maintenance proper permission of the residents shall be taken. Activity shall be carried out only when the occupants are available. Proper acknowledgement shall be taken from the occupants, as and when visited for carrying out activity.

5) COMPLAINT RECORDING AND DISPOSAL MECHANISM

- i. A complaint Register as per annexure- V shall be kept up-to-date at site by the firm and the same shall be available for checking & verification. Whenever any complaint is received, it shall be recorded and complaint no. shall be given to the complainee. Disposal of complaint shall be recorded and monthly report as per **Annexure VIII** shall be submitted to the SDE (E) concerned.
- ii. **For disposal of complaints, whenever items are required to be replaced and the same is available in Sl.no. II of schedule , the firm shall make a record of the same and carryout the work. Firm shall ensure that the quantity does not exceed the schedule quantity. In such cases, the firm shall bring the same to the notice of SDE(E)/JTO(E) for sanction of such quantity deviation. If the item is not available in the Sl.no. II of schedule, then the firm shall immediately report the same to the SDE(E)/JTO(E), to give decisions. Wherever SDE(E)/JTO(E) ask to provide the items, measurable as extra/substitute item, the firm shall promptly carryout the work, to dispose off the complaint.**
- iii. Firm shall maintain logbooks as per annexure - VI.

- iv. Faults of general services such as compound lighting and common area lighting, the firm shall record the complaint through the RWA members/ allottees and the acknowledgement to be taken from the complainee.
- v. Complaints over phone shall also be recorded with details complainee, date of complaint and phone number, and action taken to redress the complaint. Acknowledge shall be obtained in the register from the complainee.
- vi. Details of person and their contact number, to whom the complaint is to be registered shall be displayed outside the maintenance office. Whenever the phone number changes the changed number shall be promptly displayed.
- vii. In addition to the above, a Complaint mail id shall be furnished by the agency and displayed outside the maintenance office. Whenever a complaint is received by mail, the agency shall furnish a reply mail acknowledging the complaint, within 24 hours with complaint number with a copy to SDE(E)/JTO(E) to the official mail id. Failure to attend/acknowledge complaint through mail, will attract penalty, without prejudice to BSNL for taking any further action.

6. MATERIALS AND TOOLS & PLANTS

(A) Material

- i. The scope of work includes operation of services along with comprehensive maintenance of pump sets as per inventory. In Comprehensive maintenance no material will be supplied by BSNL.
- ii. The minimum inventory of material, as required to redress the complaint within prescribed time shall be available with the firm at site of work. Delay caused due to non availability of materials shall attract penalty.
- iii. The inventory shall be from BSNL approved make, wherever applicable. For items not covered in the approved makes list, a list of similar superior make is as in the schedule of items.
- iv. As regards to item under comprehensive maintenance, replacement of major equipments (such as pump sets) which is required to be replaced as a whole after due scrapping shall be the responsibility of the BSNL. Till such time firm has to maintain the equipments, which are under comprehensive maintenance.**
- v. The replacement of material shall be with the same rating and make as that of the original, wherever applicable. The firm may also replace an item with energy efficient item wherever the same is available on intimation to SDE(E)/ JTO (E). However, in case of non-availability of a particular make, Engineer-in-charge will approve the alternate make.
- vi. Dismantled and unserviceable items for which a replacement is supplied, shall be removed from the site under intimation to the JTO(E).
- vii. Supplier Invoice/Bill / Purchase particulars etc shall be produced in case of all major items shall be produced as and when called for, to verify the genuineness of the items being replaced. Wherever guarantee/warranty is available the same shall be made use of in case of fault within such periods. Obsolete items not available in market can be repaired and re used.

(B) TOOLS & PLANTS:

a) The firm at its own cost shall provide a lockable tools box preferably in the pump room within 15 days of taking over of installation.

The tools box shall contain minimum tools as follows:

- i. Insulated Screw Driver
- ii. Line Tester
- iii. Insulated Cutting Plier
- iv. Torch Light
- v. Test lamp

b) The above list is general and any other requirements for smooth O&M of installation shall be contractor's responsibility and he shall not claim anything extra on this account.

c) The Firm/Contractor will provide the workers with necessary Testing and Safety Equipment.

7. GENERAL :

- i. Contractor shall have a round the clock communication landline/ Mobile telephone number at Chennai. Agency shall furnish official mail id for correspondence.
- ii. Any official communication from BSNL, through mail is deemed to be valid communication.
- iii. If during the period of contract, any of the service/services are added/ altered, the comprehensive maintenance of the same shall be done by the firm, the rates will be regularized as per Clause -12 of EW 8. Similar in case of deletion of any service/services similar recovery shall be made from the bill of the contractor. However operation of the services shall be done without any extra cost, except where the work requires continuous additional shifts of workmen to be deployed at site.
- iv. The details in the annexure III are approximate to give an idea of services to be operated/ maintained. Any variation on higher or lower side shall deem to be included at the initial take over. However the tenderers are advised to inspect the site (s) and make them acquainted before quoting.
- v. The firm shall also coordinate with the JTO (E) / SDE (E) for carrying out data collection for scrapping/ energy audit/capacity test in respect of services under maintenance. In addition to the above, the firm shall also coordinate in implementation of energy conservation measures such as collection of savings data, operation of EC equipments, circulation of pamphlets on energy conservation, etc.
- vi. Operation of pump set to be done on daily basis, at the regular intervals based on water requirements. Contractor shall continuously monitor availability of source of water and quantum and inform SDE(E)/JTO(E) for any contingent activities.
- vii. Wherever water is procured from metro water/private water supplies as standalone/ supplement basis, agency shall ensure that the water is optimally pumped as per the site requirements. Coordination with the supplier is firm's responsibility. Wherever the

- supplier of water fails to supply in time, agency in consultation with SDE(E)/JTO(E) shall initiate such action as directed, to ensure water supply to occupants.
- viii. Pumping of water shall be such that, no occupants face undue delay in cycle/ stage by stage filling of the tanks.
 - ix. General maintenance activities such as cleaning of pumpsets, tightening the terminations in starter boxes etc are to be done on periodical basis along with any other specific maintenance activity as directed by Engineer-in-charge.
 - x. ~~Whenever community hall is allotted, the initial and final meter readings of electricity are to be recorded, together with connected works such as pump set for community hall.~~
 - xi. During power failure, agency shall coordinate with TNEB for restoration of power and carryout such activities to facilitate restoration.
 - xii. Agency shall be responsible for payment of EB bill for common services and vacant quarters in time. Hence the firm shall collect the EB card, coordinate with SDE(E) /JTO(E) for processing of payment.
 - xiii. Agency shall ensure that the fuses and power supply to vacant quarters are cut off promptly to avoid misuse.
 - xiv. Agency shall take details of inventory for each of the quarters/community hall whenever vacated/occupied in a prescribed proforma as issued by SDE(E)/JTO(E).
 - xv. Any unauthorized use of electricity/ tapping shall be promptly brought to the knowledge of SDE(E)/JTO(E).
 - xvi. The contractor has to keep all the equipments under operation & maintenance and site neat and clean to avoid any accident and or fire hazards.
 - xvii. Dates of weekly, monthly, biannual / annual tests / maintenance activity, (wherever applicable), shall be displayed / recoded in relevant columns.
 - xviii. The Contractor will display on a board in Watchman shed/ pump room/operator room important telephone numbers.
 - xix. The contractor shall not sublet the work or part thereof. However, services of specialized agencies for specific work can be obtained.
 - xx. The contractor agrees that he shall at all times indemnify BSNL against all claims for compensation under the provisions of any law for the time being in force or in respect of any person employed by it in carrying out the contract. Further, such staff has no right to claim employment in BSNL.
 - xxi. The Contractor will provide the workers with necessary T & P, Testing & safety equipments.
 - xxii. Contractor has to observe all the labour rules and regulations in force & BSNL shall not be liable for any default
 - xxiii. Firm shall ensure energy conservation by avoiding continued burning of Compound lights in day time, running pumpset with water over flow etc., wherever O & M is forming the scope of contract.

8. ROUTINE MAINTENANCE ACTIVITIES:

The agency shall carryout routine maintenance activities of the Electrical Installation, to keep the installation in healthy working condition. Schedule of activities are as follows:

A. MAINTNANCE ACTIVITY IN QUARTERS

- (i) Agency shall carryout check of electrical installation in the residential quarters at least twice in a year. This is besides attending of faults, as and when reported to. The check shall be to ensure that the installation is in proper condition. Agency shall carryout all preventive measures, to avoid/minimise breakdown/faults.
- (ii) Check list for maintenance activity in residential quarter is as per Annexure-VII A
- (iii) SDE(E) shall fix up the monthly targets for this activity, which the agency shall adhere to. Wherever the activity is hindered/ could not be carried out, due reasons beyond the control of the agency, the same shall be brought to the knowledge of SDE(E).

B. COMMON SERVICES MAINTENANCE ACTIVITY:

1. Pumpsets:

- (i) Maintenance activity in all the pumpsets shall be carried out every month. Items of checks is as per Annexure VII-B. Observation shall be recorded and wherever the pumpsets are in comprehensive maintenance, prompt action shall be taken.
- (ii) Preventive Maintenance in pumpsets shall be to ensure that the pumpsets are working with good efficiency and that any minor faults are attended promptly.

2. Earthing:

- (i) All earthing shall be checked twice in a year for physical condition, connection and values. Values and date of testing of the earthsets shall be properly signwritten.
- (ii) Values shall be recorded in Annexure VII - D, Date of testing and values measured shall be conspicuously displayed near the earth pits on wall with proper sign writing.
- (iii) Agency before take over shall ensure that the earth pits are in proper condition with cover plates and shall maintain the earth sets by painting and proper locking arrangement.
- (iv) Monthly reports shall be generated indicating the no of earth sets, check completed and pending checks etc as per Annexure VIII B-III

3. Compound Lighting:

- (i) All compound light arrangements shall be checked once in six months.
- (ii) Check list is as per Annexure VII-C. Observations shall be properly recorded.
- (iii) Monthly reports shall be generated indicating the no of C.Ls check completed and pending checks etc as per Annexure VIII B-II

4. Meterboards and DBs in common area:

- (i) Inspection of the meterboards and common area DBs shall be done once in six months. It shall be ensured that no loose connections are available. Observations shall be recorded in Annexure VII - A
- (ii) Proper sign writing shall be done for easy access during exigencies.

9. COMMERCIAL.

- a. The tender must obtain himself on his own expenses, all the information necessary for the purpose of tendering, inspect the site and acquaint himself with all the local conditions, means of access to work and nature of work etc. No claim shall be entertained on this account.

- b. Payment shall be made on regular intervals (3 months or above) after completion of maintenance period and on submission of bill in printed letter head together with requisite certificate and documents as per annexure –IX & X
- c. The rates quoted must be full & final. Nothing extra is payable other than quoted rates. Clause10-CC shall not be applicable for this account.

10. DAMAGES TO BSNL INSTALLATION:

- i. Any damage to the installation(s)/building during the maintenance period due to the carelessness on the part of maintenance staff shall be the responsibility of firm/contractor & shall be replaced/rectified by the firm without any extra cost.
- ii. Any accident or damage during maintenance/operation to the staff of the firm will be the responsibility of the firm/contractor & BSNL will not entertain any claim, compensation, penalty etc. on this account or on account of non observance of any other requirement of law relevant to his work.
- iii. Any damages to the installation due to the reasons beyond the control of the agency shall be brought to the knowledge of SDE(E)/EE(E) within 15 days. Action as deemed fit shall be carried out as per the instructions. Belated claims will not be entertained. Decision of Executive Engineer (E) shall be final and binding.

11. CURRENCY OF CONTRACT:

- i. The currency of contract shall be 24 months. The Department reserves the right to terminate the contract by giving show cause notice of one-month duration at any time during the currency of the contract.
- ii. The Department reserves the right to extend the contract which is governed by clause12.3 of EW8.

12 TERMINATION OF CONTRACT:

- i. Right is reserved by BSNL for terminating the contract due to serious default. This includes major break down or accident or loss due to negligence on the part of firm, failure to attend breakdown, disobedience and abandoning the site etc. In such a case, Full Performance Guarantee shall be forfeited to BSNL. The decision of Superintending Engineer (E) in this regard shall be final and binding.
- ii. Right is reserved by BSNL for closure of the contract at any time by giving one month's notice for reasons not attributed to the Contractor. The decision of Executive Engineer shall be final and binding on the contractor for closure of contract and for which BSNL shall not entertain any claim.
- iii. Termination of contract on death of contractor: Without prejudice of any of the rights or remedies under this contract, if the contractor dies, the Engineer-in-charge on behalf of the BSNL shall have the option of terminating the contract without compensation to the contractor.

13. PENALTY FOR DEFICIENCY IN SERVICE:

| SERVICE | SERVICE CONDITIONS | PENALTY FOR DEFICIENCY IN SERVICE |
|-----------|--|---|
| Pump sets | <p>1. Faults occurring in 1st Pump is to be attended within 7 days of occurrence, failing which penalty shall be imposed.</p> <p>2. In case fault in Standby pump, during above said period the firm shall be required to act fast and get the repair done within 1 day failing which penalty shall be imposed. However the contractor has to arrange water supply through alternative means such as portable pump set etc. (pump to be arranged by firm without any extra cost)</p> <p>3. If submersible pump set is to be removed from the tube well due to any fault, its repair including hiring charges etc. as required is to be arranged by the contractor free of cost and should not take more 7 days , failing which penalty shall be imposed. However the contractor has to arrange water supply through alternative means such as portable pump set etc. (pump to be arranged by firm without any extra cost) as above</p> <p>4. In case water is not available in U/G tank due to lack of water supply from municipal authorities/private contract for more than 24 hours day, the contractor shall arrange to supply through water tanker (for which the actual charges of water tanker shall be paid to the contractor). Failure to carry out this task will result in penalty.</p> | <p>Rs. 250/- per day</p> <p>Rs. 500/- per day</p> <p>Rs.500/- per day</p> <p>Rs. 1000/- per day</p> |

Note:-

- i. *Once the above penalty is invoked, BSNL free to take action for rectification of the defects/faults at the risk and cost of the contractor. The firm will be ineligible to participate in the risk and cost works. The Penalty shall be continued till rectification of faults at risk and cost or up to a period of 21 days whichever is earlier.*

- ii. In case contractor fails to comply with routine maintenance activities in a particular period, penalty of 25% of one month's bill amount shall be imposed in the bill. Besides BSNL reserves the right to carryout the same at the risk and cost of the contractor.
- iii. In case of a major accident/loss on account of negligence on the part of the contractor, the contract shall be terminated and 10% of the estimated cost shall be recovered. Decision of Executive Engineer (E) shall be final and binding on the contractor.
- iv. Minimum inventory and T&P shall always be maintained and any loss/ worn-out inventory and/or T&P shall be recouped every month failing which penalty @ 1% of the bill amount per month shall be made for the period of lapse till the inventory is fully recouped.
- v. In case of absence of worker from the duty on any day, penalty shall be made @ Rs. 500/- per day per person per shift. (Staff employed of less than the prescribed qualifications/ non-obedient workers deployed at site, in spite of written instructions to remove such persons from site, shall be treated as absent). The Decision of the Executive Engineer shall be final & binding.
- vi. If the performance is found to be unsatisfactory (Such as non-recording of data, failure to carry out providing maintenance in time, continuous non-availability of staff at site, etc., noticed by the Officers during their site visits / test checks , penalty upto 25% of one month's bill shall be recovered. This is in addition to the penalty for specific deficiencies as per Clause 9 above.
- vii. Repair etc. of faulty equipment, other than pumpset, if not done by the firm, will be got done at the risk & cost of firm, beyond 7 days of continuing failure, without further notice. The decision of EE (E) shall be final in this regard.
- viii. Notwithstanding the compensation clause described above, BSNL reserves the right to take necessary steps for operation of the services at the risk and cost of the contractor within a day's notice or as decided by the E-in-C, depending upon the graveness of the situation attributed to the contractor. BSNL also reserves the right to carryout scheduled mtce activity, if not done the main form, at is risk & cost.

14 DOCUMENTS TO BE MAINTAINED AT SITE/MAINTENANCE OFFICE

The contractor shall maintain following documents,

- a) A complaint register as per format given in Annexure- V
- b) **Report file**:- containing all the test reports, copy energy bills, etc.
- c) **History register**: The firm shall record all major breakdown maintenance carried out by the firm like rewinding of motor, replacement
- d) Replacement register for items covered under schedule of work.(To be linked to complaint register)- Proforma shall be decided by SDE(E).
- e) **Periodical maintenance proformas**:.

15. TEST CHECK BY THE FIELD ENGINEERS:

- i. For the purpose of assessing the quality of service rendered by the firm against the above contract, the EE,SDE & JTO shall carryout inspection & test checks of the service/work under the contract periodically as follows.
 - a. JTO(E) ----- Weekly

- b. SDE(E)----- Fortnightly
 - c. EE(E)----- Quarterly
- ii. The above test check is a minimum frequency for inspection & test checks to be done. EE(E) shall increase the frequency on case to case basis depending on the needs of BSNL.
- iii. The above period is determined only to ensure continued quality of service. During these test checks they shall record any deficiency in the work. As per the principle of sampling. If service during sample test check is not found to be satisfactory, then penalty shall be imposed on the contractor as per the penalty clause no. 13.

16.. **Guarantee and Defect Liability**

- i. The guarantee for replaced components / equipments shall be valid for twelve months after successful commissioning. The contractor shall guarantee that all replaced components / equipments are free from any defects and also the equipments work with satisfactory performance and efficiency not less than the guaranteed values.
- ii. Any part found defective during Guarantee period shall be replaced free of cost by the contractor. The service of the contractor's personnel, if required during this period shall be made available free of cost to the BSNL.
- iii. In case the contractor fails to depute his representative to attend the fault within the time frame stipulated in various clauses or fails to cause remedial measure within reasonable time as decided during joint inspection, the BSNL may proceed to do so at the contractor's risk and expenses and without prejudice to any right of the BSNL to recover such expenses.

17. List of Annexures

| SL NO | Description of Annexure | Annexure |
|-------|---|---------------|
| 1 | Size of services to be maintained | III |
| 2 | Details to be supplied before starting the work & Details to be displayed at site | IV |
| 3 | Complaint Register | V |
| 4 | Daily Log book | VI |
| 5 | Maintenance activity proforma | VII A, B, C,D |
| 6 | Monthly reports | VIII |
| 7 | Format of Abstract of actual periodical maintenance carried out in the quarter ending _____ | IX |
| 8 | Certificate to be submitted along with each bill | X |

ANNEXURE III

SIZE OF VARIOUS SERVICES TO BE OPERATED AND MAINTAINED

El and fans including all light fittings, Fans, , SDB /MCBDBs, switches & sockets, Distribution arrangement, cabling, switch-gears, LT panel, Feeder pillar,Service Connection panel, Earthing etc.

| Sl.no. | Description | Quantity |
|--------|---|---------------|
| 1 | Type I Quarters | 12 Nos |
| | Type II Quarters | 12 Nos |
| 2 | Pump sets | |
| | a) 5 HP Borewell Jet pump | 1 no. |
| | b) 3 HP Monobloc pump | 2 nos. |
| | c) 1 HP Borewell Jet pump | 1 no. |
| | d) 1 HP submersible sump pump | 1 no. |
| | e) 0.5 HP submersible sump pump | 1 no. |
| 3 | Compound lighting poles / fittings/ Post top lantern / Gate fittings | |

Note:

The Details given above are approximate to give an idea of services to be operated & maintained. Operation and maintenance of all the allied components and accessories of each system of service mentioned in schedule of work will come under the scope of work Agency should visit the site before quoting. to have overall idea of scope of work.

DETAILS TO BE SUPPLIED BEFORE STARTING THE WORK WITHIN 15 DAYS

A. The following information to be pasted/displayed at conspicuous location as decided by SDE(E)/JTO(E) at site.

| | | | |
|---|--|--|--|
| 1 | NAME OF THE AGENCY | | |
| 2 | ADDRESS OF THE AGENCY | | |
| 3 | RESPONSIBLE PERSON TO CONTACT | | |
| 4 | A) TELEPHONE NO.(S) | | |
| | B) MAIL ID | | |
| 5 | NAME OF THE JTO(E) INCHARGE AND HIS CONTACT NUMBER SDE(E) CONTACT NUMBER | | |
| 6 | IN CASE OF EMERGENCY PLEASE CALL | | |
| 7 | IN CASE OF NO RESPONSE CALL JTO(E) | | |

B. Details of the Staff to be posted at site : (To be furnished to JTO(E)/SDE (E) along with qualification/experience credentials)

| | Name & Address | Qualification | Responsibility |
|----|----------------|---------------|----------------|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |
| 7. | | | |

ANNEXURE V

COMPLAINT REGISTER

| Complaint Number | Date & Time of complaint | Complaint Lodged by (preferably with contact number) | Nature of complaint | Action taken | Date & Time of redressal of complaint | Dated Signature of the firm's representative | Acknowledgement of rectification by complainant | Remarks |
|------------------|--------------------------|---|---------------------|--------------|---------------------------------------|--|---|---------|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

| COMPLAINT SUMMARY | | | | | |
|-------------------|------------------------------|----------------|--------------------------------|---|------------------------|
| DATE | NO. OF COMPLAINTS AS ON DATE | ATTENDED TODAY | NO. OF COMPLAINTS CARRIED OVER | SL. NO OF CARRIED OVER COMPLAINTS AS PER COMPLAINT REGISTER | REASONS FOR CARRY OVER |
| | | | | | |
| | | | | | |

Annexure VI

DAILY LOG BOOK

| Name of the operator | Time In | Time Out |
|----------------------|---------|----------|
| | | |

| PUMP OPERATION | | |
|----------------------------|--------------|--------------|
| TYPE OF PUMP & PUMP SL.NO. | TIME STARTED | TIME STOPPED |
| | | |
| | | |
| | | |

| COMPOUND LIGHTS | | | | |
|-----------------|------------------|-------------------|--------------------------------|-----------------------|
| DATE | TIME SWITCHED ON | TIME SWITCHED OFF | FAULTY COMPOUND LIGHTS, IF ANY | REASONS FOR THE FAULT |
| | | | | |
| | | | | |
| | | | | |

MAITENACNE ACTIVITY PROFORMA----- ANNEXURE VII

MAINTENANCE ACTIVITY IN QUARTERS ANNEXURE VII-A

| | | | |
|--|--|--|--|
| DATE | | | |
| BLOCK | | | |
| QUARTER NO | | | |
| TYPE OF QUARTER | | | |
| <u>A. Switch boards (Half yearly)</u> | | | |
| i. No. of Switch boads | | | |
| ii. Cleaning of Switchboards | | | |
| iii. Check of Wire termination, earth connection, fixing screws,switches and sockets | | | |
| <u>B. Ceiling Fan (YEARLY)</u> | | | |
| i. No. of Fans | | | |
| ii. No. of fans working | | | |
| iii. Check for abnormal Noise | | | |
| iv. Check for Functioning of Fan regulator | | | |
| v. Cleaning of fan | | | |
| vi. Check of Wiring terminations | | | |
| <u>C. Light fittings (Half Yearly)</u> | | | |
| i. No. of fittings | | | |
| ii. No. of fittings working | | | |
| iii. Cleaning of fittings | | | |
| iv. Check of proper Fixing arrangement | | | |
| v. Check of Wiring terminations | | | |
| vi. Check for Working of accessories like choke, starters | | | |
| <u>D. Meter boards/DBs/SDBs (Half Yearly)</u> | | | |
| i. Cleaning | | | |
| ii. Check of Wiring terminations | | | |
| iii. Check for proper Earthing termination | | | |
| iv. Check of Isolators/MCBs/Fuses | | | |
| v. Check for Sign writing | | | |

**Sign. Of
Contractor**

**Name & Sign. of
Occupant
Contact number.....**

JTO(E)/SDE(E)

Contractor

Internet Downloaded copy
39 of 52

Executive Engineer (E)

MAINTENANCE ACTIVITY IN PUMPSET ANNEXURE VII-B

Date :

| PUMPS | 1 | 2 | 3 |
|--|---|---|---|
| i. Location (Near which block) | | | |
| ii. Type of pump | | | |
| iv. Check for Abnormal Vibration/sound if any | | | |
| v. Check of Pump foundation | | | |
| vi. Check of Motor & Pump assembly | | | |
| vii. Check for Functioning of Valves, pipeline and accessories | | | |
| viii. check of Priming arrangement | | | |
| ix. Check of Starters, Cable connection & termination | | | |
| x. Check for Earthing termination | | | |
| xii. Lighting in pumphouse | | | |
| xiii. General cleanliness of pumphouse | | | |
| xiv. Check of Water availability | | | |

MAINTENANCE ACTIVITY IN COMPOUND LIGHTING (Half yearly) ANNEXURE VII-C

| Date : | | | |
|---|---|---|---|
| B. Compound Lighting | 1 | 2 | 3 |
| i. Location (near which block) | | | |
| ii. Type of fitting | | | |
| iii. Complete Cleaning of fitting | | | |
| iv. Check of Wiring , Earthing & Switches | | | |
| v. Check for Painting | | | |

MAINTENANCE ACTIVITY IN EARTHING (Half yearly) ANNEXURE VII-D

| Date: | | | |
|---|---|---|---|
| C. Earthing | 1 | 2 | 3 |
| i. Location (near which block) | | | |
| ii. Pit traceable or not | | | |
| iii. Check for Any Damage to pit | | | |
| iv. Check of funnel/screw/cover plate, etc. | | | |
| v. Measured Earth value in ohms. | | | |
| vi. Check of Sign writing of earth pit no., Earth value with Month & Year of last measurement recorded. | | | |

MONTHLY REPORTS ANNEXURE VIII

A. MAINTENANCE ACTIVITY IN STAFF QUARTERS

| Months | Total no. of Quarters | Monthly targets | No. of qrts in which Mtce.activities completed till last month | No of qrts in which mtce activity carried out this month | Balance Quarters | back log if any | Remarks |
|--------|-----------------------|-----------------|--|--|------------------|-----------------|---------|
| | | | | | | | |

JTO(E)/SDE(E) remarks on backlog and signature

Contractor

B. OTHER SERVICES

I. PUMPS

| Sl.No | Month | Total No of pumpset | No. of pumpset in which maintenance activity carried out in month | No of pumpsets left out for maintenance | Reasons | Action planned | Remarks |
|-------|-------|---------------------|---|---|---------|----------------|---------|
| | | | | | | | |

JTO(E)/SDE(E) remarks on backlog and signature

Contractor

II. COMPOUND LIGHTING

| Month | Total No of Compound | Monthly target | No. of C/L in which maintenance activity carried out till last month | Nos carried out this month | Balance | Backlog if any | Remarks |
|-------|----------------------|----------------|--|----------------------------|---------|----------------|---------|
| | | | | | | | |

JTO(E)/SDE(E) remarks on backlog and signature

Contractor

III. EARTHING

| Month | Total No of Earth stations | Monthly target | No. of Earth stations n which maintenance activity carried out till last month | Nos carried out this month | Balance | Backlog if any | Remarks |
|-------|----------------------------|----------------|--|----------------------------|---------|----------------|---------|
| | | | | | | | |

JTO(E)/SDE(E) remarks on backlog and signature

Contractor

EI & FANS

Part-I: Scope of Maintenance:

- Ensuring that EI installation is always kept in clean, healthy working condition.
- Attending day-to-day routine complaints in the prompt and satisfactory manner.
- Ensuring that no breakdown, in power supply takes place and in case it happens to take all required steps including contacting supply co. for earliest restoration.
- Maintaining the installation i.e. fans fittings and other components of the installation in clean condition including proper sign writing.
- Ensuring that there is no wastage of electrical energy. Details of steps to be taken in this regard to worked out in consultation with the maintenance in charge.
- Carrying out minor additions and alternations order by Engineer in charge (Materials required shall be supplied by the BSNL)
- Carrying out various maintenance routines and test as stated in part III.
- Maintaining Registers for complaints and test results.
- In case of staff quarters, scope of maintenance is limited to the wiring and accessories as per the standard yard stick of the department and shall not cover the additional / alterations carried out by the occupants.

Part II Tasks To be Performed within first 15 days.

Following items should be carried out within first 15 days.

- Establish an Enquiry office and organize a system with the approval of Engineer – in – charge so that complaints can be received and attended properly.
- Measurement of the resistance of Earth Stations of EI System and checking of the continuity of earth conductor. Results to be recorded.
- Preparing an inventory of materials to be kept at site for prompt maintenance in consultation with Engineer-in-Charge. Materials for all the services to be considered for preparation of inventory.
- Inspection of Main board & SDBs for (a) any loose./improper connection (No strand cutting for making connection to be allowed), (b) improper rating of switches /fuses/(c) Cleanliness.

- General inspection of EI system to identify shortcoming. Also any other relevant aspect, which may come in the way of proper maintenance, should be recorded in Register and also brought to the notice of Engineer-in-charge
- Insulation Test.

Part III Maintenance Schedule to be followed

- i) Testing of Earthing state for earth resistance and continuity – After every six months of initial testing.
- ii) Inspection of MB & SDB-every month after initial testing.
- iii) Insulation test of MB & SDB-every month after initial testing.
- iv) Greasing and oiling of fans, fitting etc on regular basis so that installation is always clean.
- v) Broken/incomplete louvers of fittings, switch plates etc. to be attended at the earliest.

Note: Materials required for maintenance shall be utilized from the optional items under SH –III of schedule.

PUMP

Part - I: SCOPE

In case of water supply pumps the scope covers not only the proper maintenance of the pumps but also ensuring that water supply is available in the building. The pumps have to be operated as and when required for ensuring water supply.

- Keeping the system comprising suction lines pumps discharge line & Electrical panel in healthy and clean condition.
- Desilting of bore wells not in the scope of contract.
- Following maintenance schedule as given below.

Part - II : TASKS TO BE PERFORMED WITHIN FIRST 15 DAYS

- The entire installation should be checked for efficient functioning and shortcoming if any pointed out.
- The earth system should be checked for Earth resistance and continuity.
- The agency should discuss and finalize the working schedule of the pumps for operation.
- should familiarize with the location of underground tanks overhead tanks and functioning of various valves.
- Check electrical system for proper contacts and cleanliness.
- Leakages in pumps, pipe line etc.

Part-III : MAINTENANCE / OPEARATION SCHEDULE

- To monitor on daily basis that the system is in healthy working condition, leakage & breakage and malfunctioning of safety devices to be attended.
 - Pumps to be operated for ensuring water supply in the building blocks.
 - On daily basis check for :
 - (i) Abnormal heating of the pump sets.
 - (ii) Abnormal noise
 - (iii) Gland leakages
- Check alignment of pump motor quarterly.
- Measure earth values at six month interval after last test.
 - Log book detailing pumps operation time to be maintained.
 -

Part - IV : MATERIALS

All the materials required for carrying out maintenance with the exception of following shall be arranged by contractor at his own cost.

- (i) Replacement of pumps
- (ii) Replacement of Motor
- (iii) Replacement of Suction / delivery lines.

COMPOUND LIGHTING

Part – I: Scope of Maintenance

- Ensure that the compound lighting installation is always kept clean, and in healthy condition.
- Attending day-to-day routine complaints in prompt and satisfactory manner.
- Ensure that there is no wastage of electrical energy and lights do not remain switched on when not needed.
- Carrying out various maintenance routine and test as stated below.

Part-II: Tasks to be performed within first 15 days.

- Inspecting the entire installation comprising of control switches, cable, poles fittings, lamps and earthing for any short comings. Recording the same and bringing it to the notice of Engineer-in-charge
- Checking earthing system for proper efficiency.
- Checking the connections for any loose/improper connecting (no strand cutting for making a connecting to be allowed).

Part – III: Maintenance schedule to be followed.

- Cleaning of fittings on a regular basis so that fittings are always in clean condition.
- Checking earthing system after every six months of initial check.
- Checking for proper electrical connection after every six months of initial check.

Note: Materials required for maintenance shall be utilized from the optional items under SH –III of schedule.

ANNEXURE – IX

(To be submitted by the contractor along with the quarterly bill claim)

ABSTRACT OF ACTUAL PERIODICAL MAINTENANCE CARRIED OUT IN THE QUARTER ENDING _____

Name of contractor: _____.

Agreement No. : _____.

I. Daily ACTIVITY:(Tick /fill relevant coloumn)

| | | |
|--------------------------------------|-----------------------|-------------------------|
| DAILY OPERATION OF PUMPSET/ | DONE FOR ALL THE DAYS | NOT DONE FOR _____ DAYS |
| DAILY OPERATION OF COMPOUND LIGHTING | DONE FOR ALL THE DAYS | NOT DONE FOR _____ DAYS |

II. MONTHLY ACTIVITY:(Tick /fill relevant coloumn)

| | | |
|--------------------------------|------------------------|------------------------------|
| QUARTERLY MAINTENANCE ACTIVITY | DONE AS PER THE TARGET | IF NOT REASONS FOR NOT DOING |
|--------------------------------|------------------------|------------------------------|

III. BIENNIAL ACTIVITY:(Tick /fill relevant coloumn)

| | | |
|-------------------------------|------|----------|
| BIENNIAL MAINTENANCE ACTIVITY | DONE | NOT DONE |
|-------------------------------|------|----------|

Certified that the data given above are true and is based on the periodical repair/ maintenance work done by us at _____ (bldg/site)

Certified that we have carried out maintenance properly as per schedule of work and as per terms and condition of the agreement and testing/drills etc. required during the period has been performed.

Contractor/ authorized representative

Counter signed by JTO(E)/ SDE(E)

CERTIFICATE TO BE SUBMITTED ALONG WITH EACH BILL

1. CERTIFIED THAT WE HAVE CARRIED OUT THE OPERATION & COMPREHENSIVE MAINTENANCE OF ELECTRICAL SERVICES OF STAFF QUARTERS AT _____ COVERED IN THE ABOVE CONTRACT SATISFACTORILY, EXCEPT THE FOLLOWING DUE TO THE REASONS MENTIONED AGAINST THE RESPECTIVE ITEM:

| Sl.No | ITEM/SERVICES | REASONS FOR NON OPERATION |
|-------|---------------|---------------------------|
| | | |

2. CERTIFIED THAT REQUIRED INVENTORY HAS BEEN REPLENISHED BY US.
 3. CERTIFIED THAT EPF FOR THE EMPLOYEES ARE REMITTED WHEREVER APPLICABLE.
 4. CERTIFIED THAT WE HAVE COMPLIED WITH PROVISIONS OF MINIMUM WAGES ACT 1948.

SIGNATURE OF CONTRACTOR

Counter signed by:

JTO (E)/ SDE (E)

LIST OF APPROVED MAKES - BSNL ELECTRICAL WING

(AS ON 29.02.2016)

| S. No. | Item | Makes |
|--------|--|---|
| 1 | Engine | Ashok Leyland / Cummins / Caterpillar / KOEL / Volvo Penta / Mahindra & Mahindra (up to 200 KVA) / Escorts (up to 30 KVA) / Eicher (up to 35 KVA) |
| 2 | Alternator (Brushless) | Crompton Greaves (AL. series) / KEC / Leroy Somer / Stamford / Jyoti Ltd |
| 3 | Battery (Lead Acid / Mntc. Free) | Amara Raja / AMCO / Farukawa / Hitachi / Exide / Prestolite / Standard |
| 4 | HV Switchgear (Vacuum Circuit Breaker/SF6) | Biecco Lawrie / Crompton / Kirloskar / MEI / Jyoti Ltd |
| 5 | Transformer (Oil filled / Dry type) Above 400 KVA a) | ABB / Schneider Electric / Andrew Yule / Bharat Bijlee / Crompton / EMCO / Kirloskar / Siemens |
| | b) Up to 400 KVA | In addition to above makes, Uttam / Patson / Rajasthan Transformer and Switchgear |
| 6 | Air Circuit Breaker | L&T / Schneider Electric / Siemens |
| 7 | MCCB (Ics=Icu) | L&T / Schneider Electric / Siemens |
| 8 | SDF units | L&T / Schneider Electric / Siemens / HPL / Havells |
| 9 | Power Contactors | L&T / Schneider Electric / Siemens / Lakshmi (LECS) |
| 10 | Change Over Switch | HPL / Havells / H-H Elcon |
| 11 | Intelligent APFC Relay | L&T / EPCOS (Siemens) / Schneider Electric / Neptune Ducati / Syntron / ABB |
| 12 | Bus Bar Trunking / Sandwiched Bus Duct | Moeller / L&T / Schneider Electric / ABB / Legrand / Zeta |
| 13 | Power Capacitors (MPP/APP) | L&T / EPCOS (Siemens) / ABB / Crompton / Schneider Electric / Neptune Ducati |
| 14 | Digital / KWHr meter | Schneider Electric / AE / Digitron / IMP / Meco / Rishabh / Universal / HPL / L&T / ABB / Yokins |
| 15 | Cold shrink HT/LT Cable Joint | Denson / 3M (M-Seal) / Raychem |
| 16 | Rubber Matting | ISI mark |
| 17 | MCB / Isolator / ELCB / RCCB / Distribution Board | Crompton / Havells / Indokopp / MDS Legrand / L&T / Schneider Electric / Siemens / Standard / ABB / HPL |
| 18 | MS / PVC Conduit | ISI mark |
| 19 | Cable Tray | MEM / Bharti / Ratan / Slotco / Profab |
| 20 | HT/LT Cables | ISI mark |
| 21 | PVC insulated copper conductor wire | ISI mark |
| 22 | Centrifugal Pump | Amrut / BE / Beacon / Batliboi / Crompton / Jyoti / Kirloskar / KSB / Mather & Platt / WASP / Grundfos |
| 23 | Submersible Pump | Crompton / Amrut / BE / Calama / Kirloskar / KSB |
| 24 | Motors | ABB / Bharat Bijlee / Crompton Greaves / Schneider Electric / HBB / KEC / Siemens / Jyoti Ltd |
| 25 | Fresh Air Fans | GE / Khaitan / Almonard / Crompton |
| 26 | Starter | ABB / BCH / Schneider Electric / L&T / Siemens / |
| 27 | Single Phase Preventer | L&T / Minilec / Siemens / Zerotrip |

| | | |
|----|-----------------------------------|---|
| 28 | GI/MS Pipe | ATC / ATL / BST / GSI / ITC / ITS / IIA / JST / Jindal / TTA / Tata/Zenith |
| 29 | Foot Valve | ISI mark |
| 30 | Gate Valve | Advance/Audco/Johnson Controls / Zoloto /Annapurna / Fountain /Kirloskar / Leader / Sant / Trishul |
| 31 | Compressors | Carrier/Emerson copeland/York/Danfoss (for chillers only) |
| 32 | Resin Bonded Glass wool | Fibre Glass / Pilkington / UP Twiga |
| 33 | Expanded Polystyrene | BASF(India) Ltd. |
| 34 | Gauge | Feibig / H.Guru / Pricol |
| 35 | Controls | FLICA / Honeywell / Indfoss / Penn- Danfoss / Ranco / Ranutrol / Sporland |
| 36 | Fine Filters | Anfiltra Effluent / ARW / Athlete/ Airtake / Dyna / Kirsloskar/ Puromatic/ Purafill/ Purolator / Tenacity |
| 37 | GI Sheet | HSU Jindal / National / Nippon Denro / Sail / Tata |
| 38 | Heat Detector | Appollo / Chemtron/ Edward / Fenwal/ Hochiki / Nitton /System Sensor/ Wormald/Honeywell Essar/Notifier |
| 39 | Ionization Detector | Appollo / Cerebrus / Edward/ /Fenwal / Hochiki / Nitton / System Sensor /Wormald |
| 40 | Photo Electric Smoke Detector | Appollo / Cerebrus / Edward / Fenwal/ Hochiki / Nitton / Wormald /System Sensor |
| 41 | Fire Panel (Microprocessor based) | Agni Instruments / Agni Devices/ Aruna Agencies / Carmel Sensor / Ravel Elect. / Honeywell Essar / Notifier / Navin Systems |
| 42 | Sprinkler/ Hose Reel & Hose Pipe | ISI mark |
| 43 | Fire Extinguisher | ISI mark |
| 44 | Lift | OTIS, Kone, Mitsubishi , Schindler, Johnson, Thyssenkrupp Elevator(India) |

NOTE:

1. The accessories such as CT/PT/measuring instrument/relays provided by approved make in respect of Transformer/HT Panel/DG /AC Package Units as supplied by approved manufacturer along with the equipments are also acceptable in addition.
2. Any other makes which are approved by BSNL CO up to the last date of sale of tender can also be used in this contract.

Contractor

Executive Engineer(E)

RELEVANT IS STANDARDS

| <u>STANDARDS</u> | <u>TITLE</u> |
|-------------------------|---|
| IS 732- 1989 | CODE OF PRACTICE FOR FOR ELECTRICAL WIRING INSTALLATIONS |
| IS 3043- 1987 | Code of practice for earthing |
| IS 5216- PART II 1982 | Guide for safety procedures and practices in electrical works (general) |
| IS 374-1979 | Electric ceiling type fan and regulator |
| IS 11037-1984 | Electronic type fan regulator |
| IS 4237-1982 | General requirements for switch gear and control gear not exceeding volts 1000 Volts AC |
| IS 2675-1983 | Enclosed Distribution fuse boards and cutouts for voltages not exceeding 1000 Volts AC |
| IS 8828-1996 | Electrical accessories – Circuit breakers for overcurrent protection for house hold and similar installation. |
| IS 13032-1991 | Ac miniature circuit breaker boards for voltages upto and including 1000 Volts AC |
| IS 8544-part 1-1977 | Motor starters for voltages not exceeding 1000 Volts: direct online AC starters. |
| IS 694- 1990 | PVC insulated cables for working voltages upto and including 1100 Volts |
| IS 3854-1997 | Switches for domestic and similar purposes |

Executive Engineer(E)

Contractor

| PROFORMA OF SCHEDULES (Operative Schedules to be supplied separately to each intending tenderer) | |
|--|---|
| <u>SCHEDULE 'A'</u> Schedule of quantities : | Attached |
| <u>SCHEDULE 'B'</u> Schedule of materials to be issued to the bidder: | Nil |
| <u>SCHEDULE 'C'</u> Tools and plants to be hired to the bidder: | Nil |
| <u>SCHEDULE 'D'</u> Extra schedule for specific requirements/documents for the work, if any: | Nil |
| <u>SCHEDULE 'E'</u> Schedule of components of Materials, Labour etc. for escalation: | Nil |
| <u>SCHEDULE 'F'</u> Reference to General Conditions of contract : | |
| Name of work: | As per NIT notification page No 3 |
| Estimated cost of work: | |
| Earnest money: | |
| Security Deposit and performance Guarantee | |
| General Rules & Directions: Officer inviting tender: | Executive Engineer (E) Electrical Division-III Chennai |
| Definitions: | |
| 2(v) Engineer-in-Charge | Executive Engineer (E) Electrical Division-III Chennai |
| 2(vi) Accepting Authority | Superintending Engineer (E) Electrical Circle-II Chennai |
| 2(x) Percentage on cost of materials and labour to cover all over heads and profits | 10% (TEN) |
| CLAUSE 5 | |
| Time allowed for execution | Twenty four months |
| Authority to give fair and reasonable extension of time for completion of work: | SE(E),EC-II,Chennai |
| Competent Authority for deciding reduced rates: | SE(E),EC-II,Chennai |
| Clause 25 | |
| Competent authority for conciliation: | SE (E) not in-charge of the work. |

BSNL EW-8
Bharat Sanchar Nigam Limited
Electrical Wing

Electrical Division: III, Chennai

Sub Division: VII, Chennai

1. I/we have read and examined the notice inviting tender, schedule, specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, clauses of contract, special conditions, Schedule of Rates and other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work.
2. I/We hereby tender for the execution of the work specified for BSNL within the time specified, schedule of quantities and in accordance in all respects with the specifications, designs, drawings and instructions and other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work.
3. I/We agree to keep the tender open for ninety (90) days from the due date of submission thereof and not to make any modifications in its terms and conditions.
4. If I/We, fail to commence the work specified, I/We agree that the said BSNL shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely and the same may at the option of the competent authority on behalf of BSNL be recovered without prejudice to any other right or remedy available in law out of the deposit in so far as the same may extend in terms of the said bond and in the event of deficiency out of any other money due to me/us under this contract or otherwise.
5. Should this tender be accepted, I/We agree to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to therein and to carry out such deviations as may be ordered up to maximum of percentage mentioned in clause 12.3 of the tender form and those in excess of that limit at rates to be determined in accordance with provisions contained in clause 12.2.
6. I/we agree to furnish to BSNL, Deposit at Call receipt/FDR/ Bank guarantee of a Nationalized/ Scheduled Bank for an amount equal to 5% of the of the contract value in a standard format within two weeks from the date of issue of award letter. I/We agree to keep the performance bank guarantee valid as per the BSNL terms and conditions.
7. I/We hereby declare that I/We shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate information/derived therefrom to any person other than to whom I/We am/are authorized to communicate the same or use the information in any manner prejudicial to the safety or interest of BSNL.

| | |
|--|--|
| <p>Signature of Witness (required in the case of bidder's thumb impression is given by the bidder in place of signature) Occupation of Witness :</p> | <p>(Signature of bidder) (Name & Postal address)</p> <p>Seal of Bidder</p> <p>Date:</p> |
|--|--|

Acceptance of Tender

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for and on behalf of BSNL for a sum of Rs. _____ (Rupees _____)

The letters referred to below shall form part of this contract Agreement

- a)
- b)

For & on behalf of BSNL

Dated

Signature :
Designation :