

# **Bharat Sanchar Nigam Limited**

(Electrical Wing)

# O/o The Executive Engineer (E) BSNL Electrical Division-I

No.22, Kellys Road, Chennai - 600010. Office: 044-26448484 E-mail: ee1chennai@gmail.com

#### **TENDER DOCUMENT**

Name of Work: Providing Comprehensive maintenance of Split AC units in RSU's / Telephone exchanges in DGM KAL & DGM NE, Chennai Telephones 2021-23 (SH: Initial Repair of Split AC units)

NIT No: 16/EEE/ED-I/CH/2022-23 dated 11-05-2022

Date of opening: 20-05-2022 15: 30 hrs

This tender document contains 34 pages only.

(To be filled in by the Contractor)

Name of the Agency

Address

Telephone No. of agency:

E-mail ID:

Contractor Page 1 of 34 Executive Engineer

### **INDEX**

SL.No	Description	Page no.
1	Front cover and Index	2
2	Information and Instruction to bidders	3
3	Eligibility criteria	3
4	Important instructions to bidders down loading the tender document from web site	4
5	Notice Inviting Tender form - BSNL EW6	6
6	General Instructions to the Bidders	10
7	Undertaking to abide by EW 6 & EW 8 (Form 'A')	12
8	Undertaking regarding EPF& ESI provisions (Form 'B')	13
9	Performance report of works (Form 'C')	14
10	No Near relative working certificate (Form 'D')	15
11	Model form of Bank Guarantee for EMD (Annexure-I)	16
12	Model form of Performance security Guarantee bond (Annexure-II)	17
13	IMPORTANT INSTRUCTIONS TO THE TENDERERS	19
14	Schedule of Quantities	21
15	General Specification	26
16	List of Approved Makes	29
17	Proforma Schedules	32
18	BSNL EW – 8 form	33-34

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

The Executive Engineer (Elect), BSNL, **Electrical Division-I, 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	Name of Work: Providing Comprehensive maintenance of Split AC units in RSU's / Telephone exchanges in DGM KAL & DGM NE, Chennai Telephones 2021-23 (SH: Initial Repair of Split AC units)
2	Estimated cost put to tender (Rs.)	Rs.162165/- (Excluding GST)
3	Earnest Money (Rs.)	Rs.3243/-
4	Period of completion	ONE MONTH
5	Last date & time for downloading of tender document by bidder	Up to 14:55 Hrs. on20-05-2022
6	Last date submission of tender	Up to 15:00 Hrs. on 20-05-2022
7	Last date & time for submission of original Tender cost and EMD	Up to 15:00 Hrs. on 20-05-2022
8	Date and time for opening of tender	15:30 Hrs. on 20-05-2022
9	Tender cost (Non refundable)	Rs 590/-i/c GST

#### **ELIGIBILITY CRITERIA**

The Contractors satisfying the following conditions:

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

**AND** 

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

OR

3 Experience of having successfully completed similar works in BSNL comprising 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.

Similar works means: AMC of AC units/ SITC of AC units

Contractor Page 3 of 34 Executive Engineer

# IMPORTANT INSTRUCTIONS TO BIDDERS DOWN LOADING THE TENDER DOCUMENT FROM WEB SITE

The bidders, who have down loaded the tenders from the web site, shall read the following important instructions carefully before quoting the rates and submitting the tender documents.

- The tenderer should see carefully and ensure that the tender document containing all the pages as per the index has been down loaded for making required entries. The balance pages of Standard BSNL EW8 form will be attached with the agreement after the award of work.
- 2. A clear print out of tender document shall be taken on good quality A4 size paper and the printer settings, etc., shall be such that the document is printed as appearing in the web and without any change in format, number of pages, etc., and shall also ensure that no page is missing. Only original computer printout of the document shall be used. Photocopy shall not be accepted.
- 3. In case of any doubt in the downloaded tender, the same shall be got clarified from the Engineer in charge calling the NIT before submission.
- 4. The name of the bidder shall be filled on the relevant pages of tender document and all the pages shall be invariably signed. (With stamp)
- 5. The tenderer shall ensure that the downloaded tender document is properly stitched before submitting the document.
- 6. There shall be no correction / addition / alteration / omission made in the text of the downloaded tender document. If found otherwise, the same shall be treated as non-responsive and rejected.
- 7. The tenderer shall sign the declaration enclosed before submitting the tender.
- 8. The tenderer shall submit the tenders in 2 covers marked as No.1 and No.2. The tenderer shall submit the credentials for meeting the eligibility conditions along with the cost of the tender fee and EMD in the prescribed format as detailed in NIT, along with a covering letter on his printed letter head stating the details of enclosures in the **first cover**. The credentials shall be self-attested. The **second cover** shall contain the price bid. The rates and amounts should be filled in the schedule of work attached thereto.
- 9. The **cover-1** shall contain the following.
  - a. Tender Fee in the prescribed format
  - b. EMD in the prescribed format
  - c. Certificate of Financial Turnover from Chartered Accountant if applicable
  - Documents fulfilling Eligibility criteria (Please note that in case the bidder is authorised by the manufacturer, the original authorisation letter is to be scanned and uploaded)
  - e. Enlistment certificate issued by BSNL if applicable
  - f. Electrical license issued by TN Govt. if applicable
  - g. GST Registration Number details
  - h. PAN Card
  - i. EPF and ESI Registration certificate if applicable
  - j. Certificate of work experience issued by client department (Form 'C') if applicable

Name of Work: Providing Comprehensive maintenance of Split AC units in RSU's / Telephone exchanges in	DGM KAL &
DGM NE, Chennai Telephones 2021-23 (SH: Initial Repair of Split AC units)	

### Not submitting the above documents in Cover-1, the Cover-2 will not opened

2. The **Cover-1 and 2**shall be deposited in the tender box available in the office of tender opening authority, by all the bidders before **3:00 PM** 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-I,Chennai** Sub Division: **ESD-** IV,**Chennai** 

NIT No: 16/EEE/ED-I/CH/2022-23 dated 11-05-2022

Item rate tenders on single bid system are invited on behalf of CMD,BSNL for the work Name of Work: Providing Comprehensive maintenance of Split AC units in RSU's / Telephone exchanges in DGM KAL & DGM NE, Chennai Telephones 2021-23 (SH: Initial Repair of Split AC units) 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.

- Tenders which should always be placed in sealed covers with the name of the work written on the envelope will be received and opened by the tender opening authority as per the date and time mentioned in INFORMATION AND INSTRUCTIONS FOR BIDDERS. Unsealed tenders will be summarily rejected.
- 2. 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.
- 3. The work is estimated to cost Rs **162165/-** This estimate, however, is given merely as a rough guide.
- 4. 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.
- 5. The time allowed for carrying out the work will be one month from the day after the date of written order to commence the work.
- 6. 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.
- 7. 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 <a href="Chennai.bsnl.co.in">Chennai.bsnl.co.in</a> at free of cost. The BSNL EW-8 document can be seen from the web site <a href="Chennai.bsnl.co.in">Chennai.bsnl.co.in</a> at free of cost.
- 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 Telephones** payable at **Chennai**. 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 Telephones payable at Chennai. 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

Contractor Page 6 of 34 Executive Engineer

to be extended up to the observation period as that of the Performance guarantee / Security deposit. Exemption from payment of Tender Fee, Earnest Money and Security Deposit by any other unit/ department shall not hold good for BSNL.

- 10. The last date for submission of bid is 20/05/2022 up to 3:00 PM and the bid submitted hall be opened at 03:30 PM on the day. If a holiday is declared on the tender opening day, the tender will be opened on the next working day.
- 11. 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.
- 12. 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.
- 13. If it is found at any stage of tender scrutiny after submission of tender that the bidder has made any correction/addition/alteration/omission intender documents vis-à-vis tender documents available on the website /original Draft NIT in office, the bid shall be treated as non-responsive and shall be summarily rejected 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.
- 14. The Tender documents shall not be sent through the Courier/Post. Tender documents received through Courier/post shall not be opened/ considered at all. All communication with the bidders shall be in writing. Fax / E-mail shall be covered under this category and considered as adequate means of communication.
- 15. 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.

Contractor Page 7 of 34 Executive Engineer

- 16. The competent authority on behalf of the CMD does not bind himself to accept the lowest or any other tender and reserves to himself 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.
- 17. 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.
- 18. 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.
- 19. 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.

Contractor Page 8 of 34 Executive Engineer

- 20. 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.
- 21. The bidder 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'**.
- 22. 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.
- 23. 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.
- 24. 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 at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
  - b. Standard BSNL EW-8 form

Contractor Page 9 of 34 Executive Engineer

#### c. 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. 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.
- 5. 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.
  - 6. GST and any other tax applicable in respect of this contract 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.

#### 7. 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.
- 8. 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.
- 9. The Contractor shall, within a period of 30 days of imposition of any further tax or levyin 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.

Contractor Page 10 of 34 Executive Engineer

#### 10. Bye laws Indemnity against liabilities:

- a. The bidder shall comply with all bylaws 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.

#### 11. 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.

- 12. 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.
- 13. 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.

### FORM 'A'

### Undertaking to abide by EW 6 & EW 8

	Son/Daughter of
	Resident of  hereby give an undertaking that I have read the complete big all the clauses and sub clauses of BSNL EW 6 & 8 forms and
	e terms and conditions available in BSNL EW 6 & 8 forms.
(Seal of the firm)	(Signature of Bidder)

### FORM 'B'

Undertaking regarding EPF provisions
"I
* I/We have employed only persons in our establishment and hence the EPF and Miscellaneous provisions Act, 1952 is 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)
<u>Undertaking regarding ESI provisions</u>
"I
* 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.

Contractor Page 13 of 34 Executive Engineer

(Signature of Bidder)

(Seal of the firm)

FORM 'C'

### **Performance report of works**

Name of Agency
 Name of work

3. Agreement no.

- 4. Final Value of Work Done
- 5. Date of start of work
- 6. Actual date of completion
- 7. Performance: Satisfactory / Not Satisfactory

Dated: Executive Engineer or Equivalent

FORM 'D'

No Near rel	elative working certificate
I Son /Dau	ughter of ShriResident
of hereby certify that	nat none of my relative(s) as defined in the tender
document is/are employed in BSNL ur	nit as per details given in tender document. In case at
any stage, it is found that the information	on given by me is false/incorrect, BSNL shall have the
absolute right to take any action as deeme	ned fit/without any prior intimation to me.
(Seal of the firm)	(Signature of Bidder)

## Annexure I MODEL FORM OF BANK GUARANTEE FOR EMD

(For submitting EMD for Air Conditioning, Diesel Engine Alternator, Lifts, and Sub Station Works wherever the amount of EMD is more than Rs.20,000/-)

Whereas	(hereinafter	called	"the	bidder(s)")	has
submitted its Tender datedfor the wo	rk				
	•			KNO\	Ν
ALL MEN by these presents that WE					OF
having our regist	ered office	at			
(hereinafter called "the Bank") are bound unto	0			(herein	after
called "the BSNL") in the sum of	for whi	ch payn	nent w	vill and truly t	o be
made of the said BSNL, the Bank binds its presents.	elf, its succe	essors a	and a	ssigns by t	hese

#### THE CONDITIONS of the obligation are:

- 1. If the Bidder(s) withdraws its Tender during the period of Tender validity specified on the Tender Form: or
- 2. If the Bidder(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:** 

Contractor Page 16 of 34 Executive Engineer

# 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 fulfilment 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
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 undertake 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 \_\_\_\_\_ (indicate the name of bank)

Name of Work: Providing Comprehensive maintenance of Split AC units in RSU's / Telephone exchanges in DGM KAL &

DGM NE, Chennai Telephones 2021-23 (SH: Initial Repair of Split AC units)

#### 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.

#### 2) 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.

#### 3) **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.

#### 4) 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.

#### 5) 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.

#### **6) 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

Contractor Page 19 of 34 Executive Engineer

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.

#### 7) 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.

\*\*\*\*\*\*

Contractor Page 20 of 34 Executive Engineer

SI.n o	Description of Item	Qty	Unit	Rate per Unit excluding GST	Total Amount Excluding GST (Net cost)	CGS T		SGST		IGST		Total Amount including GST	HSN/SAC code
						%	Amo unt in Rs	%	Amoun t in Rs	%	Amount in Rs		
							Rs.		Rs.		Rs.	Rs.	
1	2	3	4	5	6	7	8=C ol. (6 x 7)	9	10=col .(6x 9)	11	12=col.( 6*11)	13=col. (6+8+10+12 )	14
		3		4	5	6=4x 5	7	8=7x4	9	10=9x4	11=4+(6 +8)or 10	12=3x4	13=3x1 1
1	ITC of 1.5 TR split type A/C unit with the existing copper refrigerant piping , 3 core 2.5 sqmm pvc insulated copper conductor cable, Insulation etc as reqd.	11 Nos	Each								5)52.10		-
2	Suppling and laying of additional copper refrigerant pipe (5/8 " & 1/4") suitable for 1.5 TR split type A/C units covered with foam insulation i/c providing 3 core 2.5 sq mm flexible copper cable etc as required	33 m	mtr										

Contractor Page 21 of 34 Executive Engineer

of Split AC units)			1	1	1		1	1	i	I	1	1
pressure for disposal of												
condensate water along with												
		1										
requirea.	m	mtr										
	1											
accessories etc as required	Nos	Each										
·												
Supply and filling R22 refrigerant												
in the existing AC units etc as	45											
reqd.	Kgs	kg										
Supply and fixing of Indoor unit												
	1											
AC units etc as requ.	Nos	Each										
	1	Fach										
710 diffic die de requ.	1100	Luon										
Owner, and fisher of annual to the												
	1											
		Each										
1												
Supply and fixing of control card												
		<b></b>										
etc as requ.	INOS	⊨acn			+							
Supply and fixing of retary type												
	1											
(Hitachi/LG)	•	Each										
	Providing and fixing of 32 mm dia (OD) PVC pipe of 10Kg/Sq cm pressure for disposal of condensate water along with accessories, fixing etc. as required.  Supplying and fixing MS powder coated readymade stand for fixing the outdoor units i/c all accessories etc as required  Supply and filling R22 refrigerant in the existing AC units etc as reqd.  Supply and fixing of Indoor unit blower fan motor in the existing AC units etc as reqd.  Supply and fixing of outdoor unit blower fan motor in the existing AC units etc as reqd.  Supply and fixing of capacitor for fan motors in the existing AC units etc as reqd.  Supply and fixing of control card for conventional type split ac units etc as reqd.  Supply and fixing of rotary type compressor for split type AC unit	Providing and fixing of 32 mm dia (OD) PVC pipe of 10Kg/Sq cm pressure for disposal of condensate water along with accessories, fixing etc. as required.  Supplying and fixing MS powder coated readymade stand for fixing the outdoor units i/c all accessories etc as required  Supply and filling R22 refrigerant in the existing AC units etc as reqd.  Supply and fixing of Indoor unit blower fan motor in the existing AC units etc as reqd.  Supply and fixing of outdoor unit blower fan motor in the existing AC units etc as reqd.  Supply and fixing of capacitor for fan motors in the existing AC units etc as reqd.  Supply and fixing of capacitor for fan motors in the existing AC units etc as reqd.  Supply and fixing of control card for conventional type split ac units etc as reqd.  Supply and fixing of rotary type compressor for split type AC unit 1	Providing and fixing of 32 mm dia (OD) PVC pipe of 10Kg/Sq cm pressure for disposal of condensate water along with accessories, fixing etc. as required.  Supplying and fixing MS powder coated readymade stand for fixing the outdoor units i/c all accessories etc as required  Nos Each  Supply and filling R22 refrigerant in the existing AC units etc as reqd.  Kgs kg  Supply and fixing of Indoor unit blower fan motor in the existing AC units etc as reqd.  Supply and fixing of outdoor unit blower fan motor in the existing AC units etc as reqd.  Supply and fixing of capacitor for fan motors in the existing AC units etc as reqd.  Supply and fixing of capacitor for fan motors in the existing AC units etc as reqd.  Supply and fixing of control card for conventional type split ac units the existing acceptable acce	Providing and fixing of 32 mm dia (OD) PVC pipe of 10Kg/Sq cm pressure for disposal of condensate water along with accessories, fixing etc. as required.  Supplying and fixing MS powder coated readymade stand for fixing the outdoor units i/c all accessories etc as required  Supply and filling R22 refrigerant in the existing AC units etc as reqd.  Supply and fixing of Indoor unit blower fan motor in the existing AC units etc as reqd.  Supply and fixing of outdoor unit blower fan motor in the existing AC units etc as reqd.  Supply and fixing of capacitor for fan motors in the existing AC units etc as reqd.  Supply and fixing of capacitor for fan motors in the existing AC units etc as reqd.  Supply and fixing of control card for conventional type split ac units 1 etc as reqd.  Supply and fixing of rotary type compressor for split type AC unit 1	Providing and fixing of 32 mm dia (OD) PVC pipe of 10Kg/Sq cm pressure for disposal of condensate water along with accessories, fixing etc. as required.  Supplying and fixing MS powder coated readymade stand for fixing the outdoor units i/c all accessories etc as required  Supply and filling R22 refrigerant in the existing AC units etc as reqd.  Supply and fixing of Indoor unit blower fan motor in the existing AC units etc as reqd.  Supply and fixing of outdoor unit blower fan motor in the existing AC units etc as reqd.  Supply and fixing of capacitor for fan motors in the existing AC units etc as reqd.  Supply and fixing of capacitor for fan motors in the existing AC units etc as reqd.  Supply and fixing of control card for conventional type split ac units 1 etc as reqd.  Supply and fixing of rotary type compressor for split type AC unit 1	Providing and fixing of 32 mm dia (OD) PVC pipe of 10kg/Sq cm pressure for disposal of condensate water along with accessories, fixing etc. as 25 required.  Supplying and fixing MS powder coated readymade stand for fixing the outdoor units i/c all accessories etc as required  Supply and filling R22 refrigerant in the existing AC units etc as reqd.  Supply and fixing of Indoor unit blower fan motor in the existing 1 AC units etc as reqd.  Supply and fixing of outdoor unit blower fan motor in the existing 1 AC units etc as reqd.  Supply and fixing of capacitor for fan motors in the existing AC units etc as reqd.  Supply and fixing of capacitor for fan motors in the existing AC units etc as reqd.  Supply and fixing of control card for conventional type split ac units etc as reqd.  Supply and fixing of rotary type compressor for split type AC unit 1	Providing and fixing of 32 mm dia (OD) PVC pipe of 10Kg/Sq cm pressure for disposal of condensate water along with accessories, fixing etc. as required.  Supplying and fixing MS powder coated readymade stand for fixing the outdoor units i/c all accessories etc as required  Supply and filling R22 refrigerant in the existing AC units etc as reqd.  Supply and fixing of Indoor unit blower fan motor in the existing AC units etc as reqd.  Supply and fixing of outdoor unit blower fan motor in the existing AC units etc as reqd.  Supply and fixing of capacitor for fan motors in the existing AC units etc as reqd.  Supply and fixing of capacitor for fan motors in the existing AC units etc as reqd.  Supply and fixing of control card for conventional type split ac units etc as reqd.  Supply and fixing of rotary type compressor for split type AC unit 1	Providing and fixing of 32 mm dia (OD) PVC pipe of 10Kg/Sq cm pressure for disposal of condensate water along with accessories, fixing etc. as required.  Supplying and fixing MS powder coated readymade stand for fixing the outdoor units i/c all accessories etc as required  Supply and filling R22 refrigerant in the existing AC units etc as reqd.  Supply and fixing of Indoor unit blower fan motor in the existing AC units etc as reqd.  Supply and fixing of outdoor unit blower fan motor in the existing AC units etc as reqd.  Supply and fixing of capacitor for fan motors in the existing AC units etc as reqd.  Supply and fixing of capacitor for fan motors in the existing AC units etc as reqd.  Supply and fixing of control card for conventional type split ac units etc as reqd.  Supply and fixing of rotary type compressor for split type AC unit 1	Providing and fixing of 32 mm dia (OD) PVC pipe of 10Kg/Sq cm pressure for disposal of condensate water along with accessories, fixing etc. as required.  Supplying and fixing MS powder coated readymade stand for fixing the outdoor units i/c all accessories etc as required  Supply and filling R22 refrigerant in the existing AC units etc as reqd.  Supply and fixing of Indoor unit blower fan motor in the existing 1 AC units etc as reqd.  Supply and fixing of outdoor unit blower fan motor in the existing 1 AC units etc as reqd.  Supply and fixing of capacitor for fan motors in the existing AC units etc as reqd.  Supply and fixing of capacitor for fan motors in the existing AC units etc as reqd.  Supply and fixing of control card for conventional type split ac units etc as reqd.  Supply and fixing of rotary type compressor for split type AC unit etc as reqd.	Providing and fixing of 32 mm dia (OD) PVC pipe of 10Kg/Sq cm pressure for disposal of condensate water along with accessories, fixing etc. as required.  Supplying and fixing MS powder coated readymade stand for fixing the outdoor units i/c all accessories etc as required  Supply and filling R22 refrigerant in the existing AC units etc as reqd.  Supply and fixing of Indoor unit blower fan motor in the existing AC units etc as reqd.  Supply and fixing of outdoor unit blower fan motor in the existing AC units etc as reqd.  Supply and fixing of outdoor unit blower fan motor in the existing AC units etc as reqd.  Supply and fixing of outdoor unit blower fan motor in the existing AC units etc as reqd.  Supply and fixing of capacitor for fan motors in the existing AC units etc as reqd.  Supply and fixing of control card for conventional type split ac units etc as reqd.  Supply and fixing of control card for conventional type split ac units etc as reqd.	Providing and fixing of 32 mm dia (OD) PVC pipe of 10Kg/Sq cm pressure for disposal of condensate water along with accessories, fixing etc. as required.  Supplying and fixing MS powder coated readymade stand for fixing the outdoor units vic all accessories etc as required  Supply and filling R22 refrigerant in the existing AC units etc as reqd.  Supply and fixing of Indoor unit blower fan motor in the existing AC units etc as reqd.  Supply and fixing of outdoor unit blower fan motor in the existing AC units etc as reqd.  Supply and fixing of capacitor for fan motors in the existing AC units etc as reqd.  Supply and fixing of capacitor for fan motors in the existing AC units etc as reqd.  Supply and fixing of control card for conventional type split ac units etc as reqd.  Supply and fixing of rotary type compressor for split type AC unit 1	Providing and fixing of 32 mm dia (OD) PVC pipe of 10kg/Sq cm pressure for disposal of condensate water along with accessories, fixing etc. as required.  Supplying and fixing MS powder coated readymade stand for fixing the outdoor units i/c all accessories etc as required Nos Each  Supply and filling R22 refrigerant in the existing AC units etc as reqd.  Supply and fixing of ludoor unit blower fan motor in the existing AC units etc as reqd.  Supply and fixing of outdoor unit blower fan motor in the existing AC units etc as reqd.  Supply and fixing of capacitor for fan motors in the existing AC units etc as reqd.  Supply and fixing of capacitor for fan motors in the existing AC units etc as reqd.  Supply and fixing of control card for conventional type split ac units etc as reqd.  Supply and fixing of rotary type compressor for split type AC unit 1

Contractor Page 22 of 34 Executive Engineer

Repair	Split AC utility	1	I	I	I	I	I	l	1	I	I	I	I
	Supply and fixing of louver motor												
13	in the existing AC units etc as	1											
.0	regd.	Nos	Each										
	Supply and fixing of single phase												
14	contactor for VOLTAS make AC	1											
	unit	Nos	Each										
15	Supply and fixing of liquid	1											
10	strainer etc as reqd.	Nos	Each										
	Supply and fixing of flair nut set of												
17	sizes (1/2, 5/8, 1/4 inches) as a	1											
	set etc as regd.	set	set										
	·												
	Supply and laying 3core 4sqmm												
	PVC / XLPE insulated PVC												
19	sheathed armoured copper												
	conductor cable on surface i/c												
	providing necessary supports and etc as reqd.	1 m	mtr										
	etc as requ.	1 111	IIIu										
	Supplying and fixing 20 A, 240 V,												
	SPN Industrial type socket outlet,												
	with 2 pole and earth, metal												
	enclosed plug top along with 20												
20	A, "C" curve, SP MCB, in sheet steel enclosure, on surface or in												
20	recess, with chained metal cover												
	for the socket out let and												
	complete with connections,												
	testing and commissioning etc as	1											
	required.	Nos	Each										

Repair	of Split AC units)				1	ı	1	ſ	I	I	1	
21	Supplying and fixing 5 amps to 32 amps rating, 240 volts, C-curve, mininature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc as required.(MK: BSNL approved make)											
а	Single pole	1 Nos	Each									
22	Attending to leakages in the refrigerant lines/condensing/evaporating unit i/c pressure testing, vacuumising, charging of refrigerant gas etc complete as required	1 Nos	Each									
23	S/F the following spares in existing split/ wondow type AC unit including removing faulty/damaged and refixing new spares & electrical inter conncetion etc as requred											
а	Rewinding of Indoor/Outdoor Fan Motor ( For Split AC Unit )	1 Nos	Each									
b	Upto 50 Mfd Metallic encapsulated capacitor for Compressor	1 Nos	Each									
С	Outdoor Fan Motor Blade	1	Each									
		ı	Lacii			1		I				

Contractor Page 24 of 34 Executive Engineer

ltopan	or Spire AC drints)	Nos								
24	Topping up of 410 refrigerant gas (aprx=1.5Kg) for existing 1.5TR inverter S/T AC unit with necessary tools and plant complete etc as required		Each							
	Total ex . GST Rs.				Total i/c GST Rs.					

#### **IMPORTANT NOTES:-**

1	The firm shall be responsible to ensure that GST shown in the above columns is correct &Input Tax Credit for the amount shown above is admissible as per GST Act as amended up to date".
2	Invoice /Bill should be pre-printed as per the GST format.
3	The evaluation and comparison of responsive bids shall be done on the basis of <b>Net cost to BSNL</b> on the prices offered inclusive of packing, forwarding, freight and insurance charges etc., <b>but excluding GST</b>
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	The HSN / SAC Codes indicated are most appropriate. However, any other HSN/SAC code is applicable, the vendor may give it in writing, in case their tender is accepted, so that the same may be incorporated in the invoices.

Contractor

Executive Engineer(E)

#### **SPECIFICATIONS FOR EI & FANS**

The work shall be done as per current CPWD Specification. For Electrical works amended from time to time & Indian Electricity Rules as attended up to date.

The work shall be supervised by qualified technical staff of the Contractor.

The layout of the work will be given by the Engineer in charge or his duly authorized representative at the site of work.

The following wiring shall be done in separate conduits:-

- A) Power plug wiring.
- B) Light & Fan point wiring.
- C) Emergency Light point wiring (AC Supply/DC Supply)
- D) Telephone wiring.
- E) Clock wiring.
- F) AC Unit wiring.

The number of power plug points, and emergency light points fed from DC supply shall not exceed two per circuit in any of the cases.

The earthing sets shall be provided in presence of engineer in charge or his authorized representative.

Sample of all the materials, fittings, accessories, IC switch gears etc., shall be got approved from the Engineer in-charge before using the same on work. The rejected materials shall be removed immediately from the site of work.

The Contractor will be have to carry out the following tests at his cost and intimate test results before final bills are paid. Nothing extra will be paid to him on this account.

- A) Earth Test b) Polarity test c) Insulation test
- d) Earth continuity test of the surface/recessed conduits.

Any damage done to the building, by the Contractor during the execution of work shall have to be made god at his cost and risk. If he does not do it himself within a reasonable time determined by the Engineer In-charge the same will be got done at his cost departmentally after notice given to him.

The outlet boxes, IC BOXES for Switches and end of conduits etc. of different types of electrical wiring as mentioned in clauses above shall be painted inside/outside with different colours each signifying the different categories mentioned so as to avoid mixing of various circuits and their wiring and nothing extra will be paid for this.

At the time of laying conduit pipe in the slab in recess, the contractor should keep fish wire of 16 SWG GI wire throughout conduit pipe and will have to take special care so that the conduit do not cross through AC ducts, grills, etc.

Contractor Page 26 of 34 Executive Engineer

The contractor should recess the conduits in the walls before they are plastered and in coordination with progress of building works. The conduit should be mechanically and Electrically continues.

All the Switch board, SDB and DB shall be clearly sign written indicating the number/type of load/Circuit Nos. etc.

Under ground cables of both 1.1 KV and 11 KV should be subject to pressure/insulation tests before and after laying the same.

While making end connections of wore, no strand shall be cut and termination of wire shall be done with necessary lugs without any extra cost.

The termination of conduits etc. in the junction box should be done by making proper holes instead of cutting the box.

Rs.1/- per empty box for the ceiling fans, fittings and other items supplied by the Department will be recovered from Contractor irrespective of the size of box.

The Contractor will have to make arrangements to take the materials to site of work at his own risk and cost.

If any conduits are laid before the award of work, the same shall be recovered at rate mentioned in SR-94 (Internal) enhanced by abatement of similar items in the tender.

ALL MATERIALS SHALL BE "ISI" MARKED OR APPROVED BY THE BSNL.

## Specification for A/C works

- 1. The work shall be done as per latest C.P.W.D. specifications for electrical works and Indian Electricity Rules as amended from time to time.
- 2. The layout of the work, will be given by the Engineer-in-charge or his duly authorized representative, at site of work.
- 3. The work shall be done in accordance to schedule of work and specification.
- 4. Any damage to the building during execution of the work shall have to be made good by the contractor at his own cost and risk.

Contractor Page 27 of 34 Executive Engineer

- 5. The contractor shall arrange all tools and plants for execution of work and nothing extra will be paid on this account.
- 6.All material shall be provided as per department product list/ specification unless otherwise specified or as approved by engineer in charge
- 7. Pressure test, vacuum test and performance test of compressor for two days shall be done in presence of engineer in charge or his authorized representative and test report shall be submitted along with bill.
- 8. Original bill / invoice of the compressor shall be produced at the time of payment.
- 9. The warranty period of compressor shall be one year from date of successful performance test.
- 10.All the electrical works shall confirm to various standards amended up to date wherever applicable.
- 11.It is contractor's liability to follow all safety procedures in accordance with relevant I.S. amended up to date during execution of work at site.
- 12.Materials provided by the contractor shall be of makes already existing at site. If any change is required, the EE (E) based on approved product list of department shall approve the same
- 13. The agency will provide the workers with necessary T&P, Testing and safety equipments.
- 14Agency has to observe all the labour rules and regulations in force.

Contractor Page 28 of 34 Executive Engineer

### LIST OF APPROVED MAKES- BSNL ELECTRICAL WING

Ashok Leyland /Cummins/ Cater pillar / KOEL/ Volvo Penta / Mahindra & Mahindra (up to 40 KVA) /Escorts (it to 30 KVA)/ Eicher (up to 20 KVA)  Alternator(Brushless)  Crompton Greaves (AL. series) / KEC / Leroy Somer / Stamford/Jyoti Ltd  Battery (Lead Acid / Mntc. Free)  Amara Raja / AMCO / Farukawa / Hitachi / Exide/ Pres / Standard  HV Switchgear (Vacuum Circuit Breaker/SF6)  Transformer (Oil filled / Dry type)  ABB / Schneider Electric /Andrew Yule / Bharat Bijlee / Crompton / EMCO / Kirloskar / Siemens  ABB / Schneider Electric / Siemens  Biecco Lawrie / Crompton / Kirloskar / MEI / Jyoti Ltd  Biecco Lawrie / Crompton / Kirloskar / MEI / Jyoti Ltd  Biecco Lawrie / Crompton / Kirloskar / MEI / Jyoti Ltd  Biecco Lawrie / Crompton / Kirloskar / MEI / Jyoti Ltd  Biecco Lawrie / Crompton / Kirloskar / MEI / Jyoti Ltd  Biecco Lawrie / Crompton / Kirloskar / Siemens  Biecco Lawrie / Crompton / Kirloskar / MEI / Jyoti Ltd  Biecco Lawrie / Crompton / Kirloskar / MEI / Jyoti	
Stamford/Jyoti Ltd  Battery (Lead Acid / Mntc. Free)	olite
ABB / Schneider Electric / Andrew Yule / Bharat Bijlee /   Crompton / Kirloskar / MEI / Jyoti Ltd	olite
Breaker/SF6 )  Transformer (Oil filled / Dry type)  ABB / Schneider Electric /Andrew Yule / Bharat Bijlee / Crompton / EMCO / Kirloskar / Siemens  a) Above 400 KVA  b) Up to 400 KVA  In addition to above makes, Uttam/Automatic Electric Gear(AEG)/Patson/Rajasthan Transformer and Switchg  Air Circuit Breaker  KET/ Schneider Electric / Siemens  SDF units  L&T/ Schneider Electric / Siemens  Ewt/ Schneider Electric / Siemens HPL/Havells  Power Contactors  L&T/ Schneider Electric / Siemens/ Lakshmi(LECS)  Change Over Switch  HPL / Havells / H-H Elcon  Intelligent APFC Relay  L&T/EPCOS(Siemens)/ Schneider Electric / Neptune	
a) Above 400 KVA b) Up to 400 KVA In addition to above makes, Uttam/Automatic Electric Gear(AEG)/Patson/Rajasthan Transformer and Switchg  Air Circuit Breaker KCCB(Ics=Icu)  By SDF units  L&T/ Schneider Electric / Siemens  L&T/ Schneider Electric / Siemens/ HPL/Havells  Change Over Switch  HPL / Havells / H-H Elcon  Intelligent APFC Relay  L&T/EPCOS(Siemens)/ Schneider Electric / Neptune	
b) Up to 400 KVA  In addition to above makes, Uttam/Automatic Electric Gear(AEG)/Patson/Rajasthan Transformer and Switchg  Air Circuit Breaker  KCCB(Ics=Icu)  Early Schneider Electric / Siemens  Early Schneider Electric / Siemens  Early Schneider Electric / Siemens  Early Schneider Electric / Siemens/ HPL/Havells  Power Contactors  Early Schneider Electric / Siemens/ Lakshmi(LECS)  Change Over Switch  HPL / Havells / H-H Elcon  Intelligent APFC Relay  L&T/EPCOS(Siemens)/ Schneider Electric / Neptune	
Gear(AEG)/Patson/Rajasthan Transformer and Switchg  Air Circuit Breaker  MCCB(Ics=Icu)  L&T/ Schneider Electric / Siemens  L&T/ Schneider Electric / Siemens  Ewart / Schneider Electric / Siemens  L&T/ Schneider Electric / Siemens/ HPL/Havells  Power Contactors  L&T/ Schneider Electric / Siemens/ Lakshmi(LECS)  Change Over Switch  HPL / Havells / H-H Elcon  Intelligent APFC Relay  L&T/EPCOS(Siemens)/ Schneider Electric / Neptune	
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	ear
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	
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	
10 Change Over Switch HPL / Havells / H-H Elcon  11 Intelligent APFC Relay L&T/EPCOS(Siemens)/ Schneider Electric / Neptune	
11 Intelligent APFC Relay L&T/EPCOS(Siemens)/ Schneider Electric / Neptune	
12 Bus Bar Trunking/ Sandwiched Moeller/L&T/Schneider Electric/ABB/Legrand/Zeta Bus Duct	
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	
15 Cold shrink HT/LT Cable Joint Denson / 3M(M-Seal )/ Raychem	
16 Rubber Matting ISI mark	
17 MCB/ Isolator /ELCB/RCCB/ Crompton / Havells / Indokopp / MDS Legrand/ L&T / Schneider Electric/ Siemens / Standard/ C&S/ABB/HPL	
18 MS/ PVC Conduit ISI mark	
19 Cable Tray MEM/Bharti/Ratan/Slotco/Profab	
20 HT/LT Cables ISI mark	

Contractor Page 29 of 34 Executive Engineer

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 / Pilkingston / 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				
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	IŚI mark				
43	Fire Extinguisher	ISI mark				
44	Lift	OTIS, Kone, Mitsubishi , Schindler, Johnson				

#### LIST OF INDIAN STANDARDS

- I.S.277 Galvanized steel sheets.
- I.S.325 Three Phase Induction Motors
- I.S.655 Metal Air Ducts
- I.S.732 Code of Practice for Electrical Wiring and fittings for Buildings.
- I.S.778 Gun Metal Gate, Globe and Check Valves for general purposes.
- 1.S.900 Code of Practice for Installation and Maintenance of Induction Motors.
- I.S.996 Single Phase small AC and Universal Motors.
- I.S.1239 Mild Steel Tubes, G.I. Pipes, Tubular and other wrought steel fittings.
- I.S.1248 Direct Acting Electrical Indicating Instruments.
- I.S.1520 Horizontal Centrifugal Pumps for clear, cold and fresh water.
- I.S.1554 PVC Insulated (heavy duty) Electrical Cables
- (Part-I) for working voltages upto and including 110 volts.
- I.S.2372 Timber for cooling towers.
- I.S.2516 AC Circuit Breakers.
- I.S.2592 Recommendation for Methods of Measurements of Fluid flow by

means of Orifice Plates and Nozzles.

- I.S.1822 Motor Starters of Voltage not exceeding 1000 volts.
- I.S.2208 HRC Cartridge Fuse Links upto 650 volts.
- I.S.3589 Electrically welded steel pipes for water, gas and sewage.
- I.S.3624 Bourden Tube Pressure and Vacuum Gauges.
- I.S.4047 Heavy Duty air break switches and composite units of air break

switches and fuses for voltage not exceeding 1000 volts.

- I.S.6392 Steel Pipe Flanges.
- I.S.7403 Code of Practice for Selection of Standard Worm and Helical Gear

Boxes.

- I.S.8148 Specification for packaged air conditioning.
- CPWD General Specifications for Heating, Ventilation & Air conditioning (HVAC)-2004

#### IMPORTANT NOTE

All references to I.S.I. appearing in this specification may be read as Bureau of Indian Standards, Latest amended versions.

#### **LIST OF SAFETY STANDARDS**

- I.S.618 Code of Practice for safety and health requirements in Electrical and
- Gas Welding and Cutting Operations.
- I.S.659 Safety code for Air Conditioning.
- I.S.660 Safety code for Mechanical Refrigeration.
- I.S.3016 Code of Practice for Fire precautions in welding and cutting operations.
- I.S.3210 Code for Safety procedures and practices in Electrical works.
- I.S.3696 Safety for Scaffolds and Ladders.

Contractor Executive Engineer(E)

Contractor Page 31 of 34 Executive Engineer

#### **PROFORMA OF SCHEDULES**

(Operative Schedules to be supplied separately to each intending tenderer)

SCHEDULE 'A'

Schedule of quantities : Attached

SCHEDULE 'B'

Schedule of materials to be issued to the bidder: Nil

SCHEDULE 'C'

Tools and plants to be hired to the bidder: Nil

SCHEDULE 'D'

Extra schedule for specific requirements/documents for the work, if any: Nil

SCHEDULE 'E'

Schedule of components of Materials, Labour etc. for escalation: Nil

SCHEDULE 'F'

Reference to General Conditions of contract:

Name of work:	
Estimated cost of work:	As per NIT notification page
Earnest money:	
Security Deposit and	
performance Guarantee	

General Rules &Directions: Officer inviting tender: Sub Divisional Engineer (E)

Electrical Sub Division, Chennai

Definitions:

2(v) Engineer-in-Charge Executive Engineer (E), ED-I, Chennai

2(vi) Accepting Authority EE (E), BSNL Electrical Division -I, Chennai

2(x) Percentage on cost of materials

and labour to cover all 10%(TEN)

overheads and profits

**CLAUSE 5** 

Time allowed for execution one Month

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.

Contractor Page 32 of 34 Executive Engineer

#### **BSNL EW-8**

## Bharat Sanchar Nigam Limited Electrical Wing

Electrical Division: ED-I, Chennai Sub Division: ESD VI, Chennai

- 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.
- 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 upto 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 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 there from 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.

Contractor Page 33 of 34 Executive Engineer

Signature of Witness (required in the case of bidder's thumb impression is given by the bidder in place of signature) Occupation of Witness:	(Signature of bidder ) (Name & Postal address)						
	Seal of Bidder						
	Date:						
Acceptance of Tender							
	rovided in the letters mentioned hereunder) is accepted of BSNL for a sum of Rs.						
,	of BSNL for a sum of Rs. )						
The letters referred to below shall form part of a) b)							
	For & on behalf of BSNL						
Dated	Signature :  Designation :						

Contractor Page 34 of 34 Executive Engineer