

BHARAT SANCHAR NIGAM LIMITED

(A Govt of India Enterprise) (Electrical Wing)

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

> No.22, Kellys Road, Chennai - 600010.

Office: 044-26470123, 26448081 E-mail: <u>ee1chennai@gmail.com</u>

TENDER DOCUMENT

Name of Work: Operation and Comprehensive annual maintenance of Electro mechanical services at RMC DC,3rd floor, TE Kellys, Chennai. (2024-2026)

NIT no: 28/EEE/ED-I/CH/2024-25

This tender document contains:

- 1) Technical Bid 55 (FIFTY FIVE) pages only.
- 2) Financial Bid 2 (TWO) Page only

For E Tender Helpdesk Pls Contact: https:// etenders.gov.in.

Ph: 0120-4200462/4001002/4001005/6277787

Mail Id:support-eproc@nic.in

CHECK LIST FOR THE TENDERER

IMPORTANT NOTE: Before on line submission of tender document, contractor must verify the check list properly.

Technical & Commercial Bid/Financial Bid				
NAN	ME OF THE VENDOR	manciai biu		
Sl.		Submitted/Uploaded	Detail of document	
No	Description	Yes/No	Submitted/Uploaded	
1	The Firms who fulfill the following		•	
	requirements shall be eligible to bid:			
	Average annual turnover during last 3			
	years, ending 31st March of the previous			
	financial year should be at least 30% of			
	the estimated cost put to tender.			
	AND			
	1) 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/CPWD/MES/CPSE comprising of			
	either substation or air conditioning			
	service as part of scope of work during			
	last 7 years ending last day of month			
	previous to the one in which			
	applications are invited, should be			
	either of the following with at least one			
	of the works being in BSNL:			
	• Three similar successfully			
	completed works costing not less than			
	the amount equal to 40% of the			
	estimated cost put to tender.			
	• Two similar successfully			
	completed works costing not less than			
	the amount equal to 60% of the			
	estimated cost put to tender			
	One similar successfully			
	• One similar successfully completed work costing not less than			
	the amount equal to 80% of the			
	estimated cost put to tender.			
NOTE: 1. Agency participating in the tender shall have a valid EB license.				
2. The estimated cost of one year shall be considered to evaluate the eligibility criteria.				
3. Sin	nilar work means operation and CAMC of I	Electrical Installation / EM	S / PAC	
	a) Cost of Bid Document: Demand draft			
	amounting to Rs <mark>.590/-</mark> (inclusive of GST) drawn in favour of "BSNL Chennai			
	Telephones payable at Chennai			
	(Demand Draft only). The validity of the			
	tender cost in the form of DD shall be 60			
	days from the date of opening			

	b) EMD -amounting Rs. 84,320/-in the form	
	,	
	of demand draft/FDR/ BG (As per format at	
	Annexure-I) (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 guaranteed by the	
	Reserve Bank of India, drawn in favour of "	
	BSNL Chennai Telephones" The same 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 120 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. Exemption from payment of Tender	
	Fee, Earnest Money and Security Deposit by	
	any other unit/ department shall not hold good	
	for BSNL	
3.	Self-attested Copy of PAN card.	
4	Self-attested Copy of valid GST	
4.	registration	
_	Self-attested Copy of CA certificate for	
5.	turnover (if applicable)	
	Self-attested copy of EPF Registration	
6.	certificate	
7	Self-attested copy of ESI Registration	
,	certificate	
	The tenderer should give a certificate that	
0	none of his/her relative is employed in	
8.	BSNL units(In the format as given in Form	
	D)	
	Duly filled and signed undertaking regarding	
9.	EPF and ESI Provisions (In the format as	
<i>)</i> .	given in Form B)	
	Duly filled and signed Undertaking and to	
11.	abide by EW6 and EW 8 (In the format as	
11.	given in Form A).	
	Deviation if any in Technical & Commercial	
	Bid of NIT will be given by the firm on its	
12.	letter head duly signed & same shall be	
120	uploaded. In the absence of such letter it will	
	be assumed that there are no deviations	
	Documents fulfilling Eligibility criteria	
	(Please note that in case the bidder is	
12	authorized by the manufacturer, the original	
13	authorization letter is to be scanned and	
	uploaded)	
	I have read/Understood all the terms and	
	conditions as mentioned in bid Document and	
14.	accept the same unconditionally. It is certified	
	that the Tender Document i/c all credentials	
	has been re uploaded with Digital Signature.	

15.	Compliance Statement as per page no.38		
•	Tender Document should be downloaded	and Uploaded again with	
Digit	al Signature.		
]	For E Tender Helpdesk Pls Contact: http	os:// etenders.gov.in.	
	Ph: 0120-4200462/4001002/40010	05/6277787	
	Mail id:support-eproc@r	nic.in	

INDEX

S. No.	CONTENTS	Page No.
1,0,	PART ITECHNICAL BID	1,0,
1.	Check List	1-2
2.	Index	3
3.	Notice Inviting e-Tender (EW6)	4-7
4.	Notice Inviting e-Tenders (Form BSNL EW – 6 amended as per this NIT)	8-12
5.	General instructions to the bidders	13-14
6.	Undertaking to abide by EW6 and EW8 (FORM A)	15
7.	Undertaking regarding EPF Provisions (FORM B)	16
8.	Undertaking regarding ESI Provisions (FORM B)	16
9.	Performance Report of works (FORM C)	17
10.	No relative working certificate (FORM D)	18
11.	Annexure 1 : Model form of BG for submitting EMD	19
12.	Annexure II : Model form of BG for Performance Security Guarantee	20-21
13.	Important instructions to the tenderers	22-24
14.	Schedule of Quantity	25-26
15.	Technical Specifications	27
16.	List of approved makes	49
17.	Compliance Statement	51
18.	Proforma of Schedules	52
19.	BSNL EW8	53
Part IIPRICE BID		
1.	Schedule of Quantitiesprice bid [EXCEL FILE FORMAT]	1-2

Note---Part II Price bid is attached as separate document in Excel file format for quoting the rates by the bidder.

BHARAT SANCHAR NIGAM LIMITED (A GOVERNMENT OF INDIA ENTERPRISE) NOTICE INVITING e- TENDER (EW-6)

The Executive Engineer [E], BSNL Electrical Division-I, Chennai -600010 on behalf of BHARAT SANCHAR NIGAM LIMITED invites online Item rate bids from eligible bidders in **SINGLE STAGE BIDDING & TWO STAGE OPENING SYSTEM** for the following work.

1.0

NIT No.	28/EEE/ED-I/CH/2024-25
Name of Work	Name of work: Operation and Comprehensive
	annual maintenance of Electro mechanical
	services at RMC DC,3rd floor, TE Kellys, Chennai.
	(2024-2026)
Estimated Cost put to tender	Rs. 42,16,003/-
Earnest Money	Rs. 84,320/-
Cost of Bid Document	Rs.590 /- (Rupees Five hundred and ninety only)
	i/c GST (Non-Refundable)
Bid validity	120 days
Period of completion	24 months
Last date & Time of on line submission of	11.00 Hrs on 29.07.2024
Technical & Financial Bid	11.00 1113 011 27.07.2024
Period during which EMD, Cost of Bid	Up to 11.00 Hrs on 30.07.2024
Document shall be submitted in Division	Cp to 11.00 1113 on 50.07.2024
Time & Date of opening of hard copies of	11.30 Hrs on 30.07.2024
documents of intending bidders	
Time & Date of Opening of Technical Bid	11.30 Hrs on 30.07.2024
Time & Date of Opening of Financial Bid	Opening of Financial bid shall be notified later
	after opening of Technical Bid
ELIGIBILITY CRITERIA	

The Firms who fulfill the following requirements shall be eligible to bid:

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

AND

1) 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/CPWD/MES/CPSE comprising of either substation or air conditioning service as part of scope of work during last 7 years ending last day of month previous to the one in which applications are invited, should be either of the following with at least one of the works being in BSNL:
- Three similar successfully completed works costing not less than the amount equal to 40% of the estimated cost put to tender.
- Two similar successfully completed works costing not less than the amount equal to 60% of the estimated cost put to tender
- One similar successfully completed work costing not less than the amount equal to 80% of the estimated cost put to tender.

NOTE: 1. Agency participating in the tender shall have a valid EB license.

- 2. The estimated cost of one year shall be considered to evaluate the eligibility criteria.
- 3. Similar work means operation and CAMC of Electrical Installation / EMS / PAC
 - **1.2** The intending bidder has to fill all the details such as Banker's name, Demand Draft/Fixed Deposit Receipt /Pay Order/ Banker's Cheque/Bank Guarantee number, amount and date
 - (i) **Cost of Bid Document** -Demand draft amounting to Rs.590/- (inclusive of GST) drawnin favour of "BSNL Chennai Telephones" payable at Chennai ,(Demand Draft only). The validity of the tender cost in the form of DD shall be 60 days from the date of opening
 - (ii) **EMD** amounting to **Rs. 84,320/-** in the form of demand draft/FDR/ BG / CDR of a nationalized/scheduled bank guaranteed by the Reserve Bank of India, drawn in favour of "**BSNL Chennai Telephones**" The same 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 120 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. Exemption from payment of Tender Fee, Earnest Money and Security Deposit by any other unit/ department shall not hold good for BSNL
 - 2.0. The Bid documents consisting of the detailed plans, complete specifications, the schedule of quantities of the various classes of works to be done and the set of conditions of contract to be complied with and other necessary documents, can be seen and downloaded from website https://etenders.gov.in free of cost from 15.00 Hrs on 19.07.2024 onwards and upto 11.00 Hrs on 29.07.2024.
 - 2.1But the Bid can only be submitted after uploading the following scanned documents (all documents shall be self-attested)—
 - a) Documentary proof of satisfying eligibility conditions as per 1.1 above.
 - b) Copy of PAN card, copy of valid GST registration, CA certificate for turnover, copy of EPF Registration certificate, copy of ESI Registration Certificate.
 - c) Demand draft of cost of tender documents.
 - d) EMD in prescribed form.
 - 2.2 The contractor shall submit the DD for cost of Bid documents and EMD in the prescribed form , in a sealed envelope with mention of Name of work, date & time of opening of bids in a sealed bid box in the office of Executive Engineer (Electrical), BSNL Electrical Division-I, No.22, Kellys Road, Chennai -600010 up to 11.00 Hrs on 30.07.2024 at above location in presence of AO, SDE [E] and contractors present .
 - 2.3 Online financial bid documents submitted by intending bidders shall be opened only of those bidders, whose Earnest Money Deposit and Cost of Bid Document placed in the envelope are found in order.
 - 2.4 After submission of the bid online the contractor can re-submit revised bid any number of times but before last time and date of submission of bid as notified.
 - 2.5 While submitting the revised bid, contractor 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 bid as notified.
 - 2.6 The bid submitted shall become invalid and cost of bid & e-tender processing fees shall not be refunded if:

- (i) The bidder is found ineligible. (ii) The bidder does not upload all the documents as per 2.1 above.(iii) Any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically in the office of tender opening authority.
- 2.7 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 https://etenders.gov.in at free of cost. The BSNL EW-8 document can be seen from the web site www.Chennai.bsnl.co.in/BSNL EW 8 12072018.pdfat free of cost.
- 2.8 The intending bidders must have Class-III digital signature to submit the bid.
- 2.9 On opening date, the contractor can login and see the bid opening process. After opening of bids he will receive the competitor bid sheet.

2.10 The bidding process will be accepted only through e-Tendering platform.

As tenders are invited through e-Tendering process, physical copy of the tender document would not be available for sale. Contractor can upload documents in the form of JPG format, PDF format and any other format as permissible by the e-tendering portal.

- 2.11Contractor must ensure to quote rate of each item. The column meant for quoting rate in figures appears in yellow color. 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}.
- 2.12 Deviation if any in Technical & Commercial Bid of NIT will be given by the firm on its letter head duly signed & same shall be uploaded. In the absence of such letter it will be assumed that there are no deviations.
- 3. Before e- tendering, the contractor shall inspect the site and fully acquaint himself about the condition with regard to accessibility of site and site nature and the extend of grounds, working condition, including stocking of materials, installation of T&P etc., and conditions affecting accommodation and movement of labour etc., required for the satisfactory execution of the contract. No claim whatsoever on such account shall be entertained by the BSNL in any circumstances.
- 4. Agreement shall be drawn with the successful Tenderer on prescribed Form No. **BSNL EW-6/8**, which is available on BSNL website www.chennai.bsnl.co.in/BSNL_EW_8_12072018.pdf
 . Tenderer shall quote his rates as per various terms and conditions of the said form
- 5. The time allowed for carrying out the work will be as mentioned above.
- 6.0 The EMD of all the unsuccessful tenderers shall be released on issue of award letter to the successful tenderer. This shall be done within one week of award letter.
- 6.1 Exemption from payment of earnest money and security deposit by any other unit/ department shall not hold good for BSNL.
- 6.2 The EMD of the successful tenderer will be returned to the contractor without interest only after submission of performance guarantee and commencement of work. The successful tenderer has to extend the validity of EMD as per BSNL requirements.
- 7. In case the eligibility credentials are found to be fake or falsified at any stage i.e. before award of work or during execution of the work or after completion of the work, the contractor will be debarred from tendering in BSNL for three years including any other action under the contract or existing law.

Two Bid System - (Single stage bidding & two stage opening)

The tender will be submitted online in two parts:

Part -1:- TECHNICAL BID

Part - 2: PRICE BID

- > The technical bid will be opened on line at the first instance and evaluated by the Committee. At the second stage price bids of only the technical & commercially accepted offer will be opened for further evaluation and ranking before awarding the contract. The price bid shall be opened subsequently on a date and time to be notified by BSNL.
- The Original Instruments for Tender Fee and EMD (the scanned copies of which are uploaded) shall be deposited in the tender box available in the office of tender opening authority, by all the bidders **on or before 11.00 Hrs on 30.07.2024,** the tender bid (if already opened on basis of scanned copies uploaded in 1st electronic Envelope i.e. Technical Envelope), **shall be** rejected.
- > The technical bid shall be evaluated by the tender evaluation committee and if necessary clarifications / confirmation, for deviations (if any) shall be taken from the eligible bidders so as to evaluate their bids as per terms and conditions of the tender documents to decide the technically responsive / non-responsive bidder.
- > The bidders shall not be at any stage allowed to revise / modify the price bid after the opening of Technical Bid.

BSNL EW-6

Bharat Sanchar Nigam Limited Electrical Wing

Electrical Division: **ED -I, Chennai** . Sub Division: ESD-IV Chennai

Item rated tenders on Single stage bidding & two stage opening are invited on behalf of CMD,BSNL for the work "Operation and Comprehensive annual maintenance of Electro mechanical services at RMC DC,3rd floor, TE Kellys, Chennai. (2024-2026)"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 42,16,003/- (i/c GST)
- 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 (24) 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 https://etenders.gov.in 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 revise the 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 the rate of all the items).
 - 8. The Tender Fee **Rs.** 590/- 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 shall be scanned & uploaded in the etendering 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) for Rs 84,320/-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 same 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 120 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. Exemption from payment of Tender Fee, Earnest Money and Security Deposit by any other unit/ department shall not hold good for BSNL

- 10. 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. (CPPP) [CLAUSE DELETED]
- 11. 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.
- 12. The last date for online submission of bid is 29.07.2024 up to 11.00 Hrs and the submitted bid shall be opened at 11:30 Hrs on 30.07.2024 If a holiday is declared on the tender opening day, the tender will be opened on the next working day.
- 13. The e-Tender processing fee and tender cost are non-refundable
- 14. Performance Guarantee: The bidder is required to furnish Performance guarantee for an amount equal to 3% 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 (APO-Advance purchase order). This period can be further extended by the Engineer-incharge 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: TWO 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. The award letter (PO) shall be issued only after receipt of the performance guarantee. In case the bidder fails to deposit the said performance guarantee within the stipulated period, including the extended period if any, BSNL will be at liberty to disqualify the bidder from bidding for any contract with BSNL for a period of one year from the date of disqualification as may be notified by BSNL (without Prejudice to BSNL's rights to claim damages or any other legal recourse).
- 15. **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: TWO 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.**
- 16. 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.

- 17. 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.
- 18. 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.
- 19. 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.
- 20. 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.
- 21. 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.
- 22. The tender for the work shall remain open for acceptance for a period of One Twenty Days (120) 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.
- 23. 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'**.
- 24. 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.
- 25. 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.

- 26. 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. Tender Bidding Methodology: "Single Stage Bidding and Two stage opening system". In this system Technical Bid (Techno-commercial NIT document) and Price Bid shall be submitted by the bidder at the same time.
- 6. On opening date, the bidder can login and see the bid opening process. After opening of bids he will receive the competitor bid sheets.
- 7. Bidder can upload documents in the form of JPG format or / and PDF format.
- 8. 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)
- 9. 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.
- 10. 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.
- 11. 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.

12. **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.
- 13. 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.
- 14. 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.

15. 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.

16. 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.

17. 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.

18. 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
have read the complete bid document and	hereby give an undertaking that delam aware of all the clauses and sub-clauses on the lambda will abide by all the terms and conditions
(Seal of the firm)	(Signature of Bidder)

FORM 'B'

<u>Undertaking regarding EPF provisions</u>
"I
I/ We have registered as per the EPF and Miscellaneous provisions Act, 1952 and ou registration no.** is We undertake to keep it valid during the currency ocontract.
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".
**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>
"ISon ofResident ofhere by give an undertaking that
I/ We have registered as per the ESI and Miscellaneous provisions Act, 1948 and ou registration no. ** is We undertake to keep it valid during the currency ocontract.
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".
**Attach a self-attested photo copy of the above said ESI registration certificate.
(Seal of the firm) (Signature of Bidder)

FORM 'C'

Performance report of works

Name of Agency
 Name of work
 Agreement no.
 Final Value of Work Done
 Date of start of work
 Actual date of completion
 Performance: Satisfactory / Not Satisfactory

FORM 'D'

No Near relative working of

I	Son	/daughter	of		Shri/
Smt	Reside	nt of	hereby co	ertify	that
none of my relative(s) as de	efined in the	tender document	is/are employed	in	BSNL
unit as per details given in te	ender docun	nent. In case at a	ny stage, it is four	nd th	at the
information given by me is fals	se/incorrect,	BSNL shall have	the absolute right	to tak	e any
action as deemed fit/without a	ny prior inti	mation to me.			
(Seal of the firm)		(Sig	gnature 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/-)

Station Works wherever the amount of EMD is more than Rs.20,000/-)
Whereas (hereinafter called "the bidder(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 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:

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 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
2 TAZ dt. l. t
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
YEARS (as specified in P.O) from the date hereof, we shall be discharged from
all liabilities under this guarantee thereafter.
- W / (d. 1. 1)
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

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 or the Bidder(s)/supplier(s).	change in the constitution of the Bank
7. We (name of the bank)guarantee during its currency except with the previous	
Dated the day of	
for	(indicate the name of bank)

IMPORTANT INSTRUCTIONS TO THE TENDERERS

The tenderers are required to read the following carefully before quoting the rates and submission of the tenders. 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 of tender. Please note that the offers, which do not comply with 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. 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 Three 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. 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.

3. **COMPLETION OF WORK**:

The time period will be reckoned from the 10th day after the date on which the order to commence the work issued to the contractor. The normal time of completion shall be 24 months

4. 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.

5. <u>COMPENSATION FOR DELAY:</u>

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.

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 & regulations in force. Agency shall be fully responsible for any violation observed at any time.

7. PROGRAMME FOR EXECUTION

The firm shall supply a 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. 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.
- 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.

11.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.

SI.no	Description of Items	Qty	Unit	Rate	Total	CGST		SGST		Total Amount
					Amount excl. GST	% Rate	Rate per unit	% Rate	Rate per unit	including GST
1	2	3	4	5	6 = 3x5	7	8 = 6x7	9	10 = 6x9	11= (6+8+10
1	Providing operation of the following installations in RMC DC, Kellys TE by deploying required manpower as per specifications & carrying out scheduled activities for smooth operation of installation on all working days, including all holidays and by arranging required tools and plants etc to keep all services operational i/c maintaining records, required up to standards coordinating with other AMC service providers complete as per specification etc as reqd. a.EI & Fans & Earthing b.All types of Panels c.Fire Extinguishers d.15 Nos. 1.5 TR S/T AC units i/c stabilizers. e.2x125 KVA EA set f.Building Management System g.Fire detection and Extinguishing system h.Access control i.CCTV j.UPS with Battery sets k.Precision AC units-3nos.	24 months	month							

2	Comprehensive Maintenance of following				-				
	electro-mechanical services as per inventory								
	attached i/c arranging specialised manpower,								
	tools and materials for replacement of faulty								
	components, attending to faults, and carrying out								
	periodical checks as per maintenance schdule etc								
	as required.								
a	EI & Fans & Earthing	24 months	month						
b	MV Panels	24 months	month			// _^ \\\ // <u>/</u>	·		5 /n)
		24 1110111115	month						
С	Portable Fire Extinguishers	24 months	month						
d	1.5 TR S/T AC units i/c stabilizers -15 Nos	24 months	month		S		7/5/	7/7/	
е	2x125 KVA EA set (WITHOUT OIL SERVICING)	24 months	month						
f	7TR HPAC - 3Nos	24 months	month						
	Servicing of 1 x 125 KVA EA set i/c changing of								
3	engine oils, fuel filters, Oil filters and cleaning of air	4 jobs	job						
	filters etc as reqd.								
	Total excl GST (A)				•	Total incl	GST (A1)		

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 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	Bidders must mandatorily quote for all GST components (CGST,SGST and IGST) as applicable.
7	Bidders must mandatorily mention correct HSN / SAC Codes

SPECIFICATIONS FOR WORK

A. GENERAL

1.0 **SCOPE**

- 1.1 Operation & maintenance of electrical services Technical/ Administrative/ Residential Building(s) as applicable in this contract means that all Electro Mechanical Services included in the schedule of work are kept in clean and working condition. Specific details of activities required with regard to each service are detailed under sections pertaining to those service/technical specifications.
- 1.2 Operation and maintenance of services shall be carried out as per instructions contained herein. All documents to be used shall be as per works instructions / forms & checklists, proforma schedules etc., forming part of the agreement and that are issued by from time to time. Services under operation shall be generally maintained clean.
- 1.3 Watch and ward of the installation under Operation shall be the responsibility of the contractor during contract period.
- 1.4 After the contract period is over the installation has to be duly handed over to the new agency along with the record of test results of equipments & associated items, under supervision of SDE (E)/JTO (E) in charge. However in general, installation is to be taken over by the agency for Operation within 15 days of award of work.

2.0 **METHODOLOGY**

- 2.1 It is presumed that contractor will provide minimum qualified staff at the site, which will be adequate to perform routine operational functions. For optimum utilization one person can be responsible for number of services. Also operation staff has to be available round the clock, round the Year even on holidays. However, strength may vary during day and night shifts. Scheme for staff employed shall be got approved by the Engineer-in-charge. Wherever the shifts/strength is indicated elsewhere in the specifications, the same shall be binding on the firm. In case of faults beyond the capacity of the staff provided as above, contractor shall immediately provide extraspecialized work force so as to attend to the fault in minimum reasonable time without any extra cost.
- 2.3 At the start of work, firm shall prepare an inventory of service under operation jointly with J.T.O (E)/SDE (E), concerned.
- 2.4 Before start of the work complete equipments/services under scope of operation/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. Based on the type of preceding contract, the Defects/discrepancies agreed upon by BSNL shall be got attended by the outgoing agency or by BSNL itself. Since the material for maintenance/breakdown are to be separately measured, agency shall maintain a record of breakdown and carryout urgent works upon information to SDE(E)/JTO(E). For items not covered in the schedule of work depending upon the necessity and requirements, agency shall carryout the same under specific instructions of SDE(E)/JTO(E).
- 2.5 A complaint / fault Register as per **annexure- III** shall be kept up-to-date at site by the firm and the same shall be available for checking & verification.

2.6 Firm shall maintain records / logbooks as per annexure listed below

1	INVENTORY	Annexure I
2	DETAILS TO BE SUPPLIED BEFORE	Annexure II
	STARTING WORK WITHIN 15 DAYS	
3	COMPLAINT / FAULT REGISTER (model)	Annexure III
4	LOGBOOK FOR AIR COOLED PACKAGE AC	Annexure IV
	PLANT	

5	Log Books in respect of E/A Set	Annexure V
6	Log Books in respect of Sub- Station	Annexure VI
7	Log Books in respect of Pump set	Annexure VII
8	Log book for Electricity bill	Annexure VIII
9	Program for periodical maintenance	Annexure IX
10	Actual periodical maintenance carried out in	Annexure X
	the month of	
11	Layout Details of the various Equipments to	Annexure XI
	be displayed at Site	
12	CERTIFICATE TO BE SUBMITTED ALONG	Annexure XII
	WITH EACH BILL	

- 2.7 If during the period of contract, any of the equipment(s) are added/ altered, the operation of those equipments/ services shall be done by the agency at no extra cost except for the situation where deployment of additional staff is required on a permanent basis to manage operation. Similarly in case of deletion of any of the equipment, no recovery shall be made except for the situation when strength of operator on shifts on daily basis is reduced. Wherever equipments are added or removed from comprehensive maintenance rates will be worked out from the similar class of item. Decision of SE(E) is final and binding in this regard.
- 2.8 The details in the annexure I (Inventory) are approximate to give an idea of services to be taken over for operation. 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.
- 2.9 For services under comprehensive maintenance, at the start of each month, the firm in consultation with the SDE (E) concerned shall prepare a Program for preventive maintenance to be carried out during the month as per annexure- IX. The actual maintenance carried out shall be recorded in annexure- X at the end of each month.

3.0 **MAINTENANCE PERSONNEL**

Service	Туре	Skill requirements	No. of personnel	To be based at
Operation of EI / EMS & E/A set	Skilled / Semi skilled labour Three Shifts per day	Minimum 10th Pass with Minimum of 3 Year experience, preferably in operation / maintenance of pump, Electrical Installation or attending electrical faults in industrial establishment	Round the clock in	Site of operation

- 3.1 Wherever HT Sub-station is included in the scope of work, Operation & Maintenance of HT equipments shall have to be carried out under strict supervision of supervisor with valid permit / HT license for working in Tamilnadu / Pondicherry states.
- 3.2 The maintenance staff has to be available round the clock throughout the year even on holidays. Since the firm will be doing the operation of critical services such as Substation and standby genset, responsible & trained person(s) placed at site, should be able to take initial steps under emergency situation.
- 3.3 The firm shall maintain attendance register which can be inspected at any time by the SDE/JTO. The workman shall not leave the duty point, till his reliever has reported for duty. In addition to the attendance register, the firm shall abide by the attendance recording methods in vogue in the site of operation such as finger print scanning, punch card etc., which are available or will be installed by BSNL at a later date.
- 3.4 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).

- 3.5 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. Engineer in Charge's decision shall be final and binding.
- 3.6 The firm has to supply details as per **annexure- II** of all the workers likely to be engaged by it before start of the work. The workers engaged by the firm should wear proper formal dresses with detachable badge indicating the name of the person and firm's name.
- 3.7 The sitting arrangement for the staff engaged by the agency, space, water, telephone and electricity shall be made available by BSNL free of cost.
- 3.8 Provision of Supervisor to be made as per standard form of contract (EW8) which forms the part of this contract.
- 3.9 The firm and their personnel shall follow the attendance guidelines / practices such as finger print identification,
- 3.10 The firm and their personnel shall also co-ordinate, operate and feed information on automatic data collection services/automation devices that will be introduced by BSNL at any date during the period of contract.

4.0 MATERIALS, TOOLS & PLANTS

4.1 **(A) Material** – Wherever the scope of work includes maintenance of complete installation on comprehensive basis i.e. no material will be supplied by the Department.

The minimum inventory of material as shown in the table below, required for smooth maintenance of installation shall be maintained at site. The inventory shall be from BSNL approved make wherever applicable. Items which are under comprehensive maintenance shall be maintained till such time BSNL decides to scrap and discontinue its usage, except in situations when the spare parts/components for the same is not available, product is discontinued from the market, obsoleteness etc. .

a	36W Fl. Tubes	25 Nos
b	Electronic Ballast suitable for 36/40 W Fl. Tube	5 Nos
c	Starters for FL. Fittings	5Nos
d	Side holder for Fl. Fittings	5 Nos
e	2.5 mfd capacitor for ceiling fan	5 Nos
F	Step type electronic Fan Regulator	2 Nos
g	5-32 A Single Pole C series MCB	2 Nos
h	63A HRC fuse link	1 No
i	1.5sqmm copper flexible cable	25 Mtrs

- 4.2 Contractor shall comply with any inclusion/exclusion in the above items and/or their quantity depending upon site requirements. The decision of the Engineer in charge shall be final in this regard
- 4.3 The replacement of material shall be with the same rating and make as that of the original. The firm may also replace an item with energy efficient item wherever the same is available on intimation to JTO (E). However, in case of non-availability of a particular make, Engineer-in-charge will approve the alternate make.
- 4.4. Dismantled and unserviceable items for which a replacement is supplied, shall be removed from the site under intimation to the JTO(E).
- 4.5 .All materials shall be of approved make, model and capacity and shall be matching to the system. However, wherever approved makes are not readily available in the market and that there in urgency, matching makes may be provided with the approval of EE(E).

- 4.6 Invoice shall be produced in case of all major items etc. as a proof of genuine spares. Obsolete items not available in market can be repaired and re used.
- 4.7 The contractor shall maintain minimum inventories at site in addition to items/spares mentioned under specifications as section 4.0 above.
- **4.8 (B) TOOLS & PLANTS:**. All tools and plants, testing & safety equipments required for carrying out various tasks relevant to operation have to be arranged by firm at its own cost.
- 4.1.1. Wherever the firm is carrying out the Operation of equipment, the firm shall possess the following minimum T&P Insulated Screw Driver

i.Line Tester

ii.Insulated Cutting Plier

iii.Torch Light

iv.Waste Cloth

v.Ring and adjustable spanner -1 Set; box spanners - 1set

vi.Insulated Hand gloves

vii.Test Lamps

4.1.2 <u>In addition to the above, the firm shall generally posses the following T & P at their maintenance office according to the services covered under the scope.</u>

GENERAL

i.Crimping tool suitable for 6 Sq.mm To 300 Sq.mm Cable.

ii.LT meggar

iii.HT meggar

iv.Earth tester

v.Hammer

vi.Blower for cleaning.

vii.Tong tester.

viii.Drilling Machine

- 4.2 The above list is general and any other requirements for smooth Operation of installation shall be contractor's responsibility and shall not claim anything extra on this account.
- 4.3 The firm shall also coordinate with the JTO (E) / SDE (E) for carrying out energy audit/capacity test at site in respect of services maintained by the firm, in addition to collection /recording of data such as MD, number of units in total or for a particular load for a fixed period/ interval as instructed by JTO(E)/SDE(E).
- 4.4 The Firm/Contractor will provide the workers with necessary Testing and Safety Equipment.
- 4.5 While the work is taken over the firm shall be provided with fully replenished First Aid box and other safety devices such as artificial resuscitator, rubber mat. The firm shall ensure that the same is maintained and replenished during the period of contract. Normal wear and tear of these items is allowed.

Note:-1.The stocking/ storing arrangement of minimum inventory and T&P shall be the responsibility of the firm.

5.0 **COMMERCIAL.**

- 5.1 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.
- 5.2 Payment shall be made on <u>quarterly basis</u> and on submission of bill in printed letter head together with requisite certificate and documents as per **Clause 2** of Important instructions to Contractors.
- 5.3 The rates quoted must be full & final. Nothing extra is payable other than quoted rates. Clause 10-CC shall not be applicable for this account.

6.0 DAMAGES TO BSNL INSTALLATION:

- 6.1 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
- 6.2 Any accident or damage during /operation will be the responsibility of the firm/contractor & the Department 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.

7.0 CURRENCY OF CONTRACT:

- 7.1 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.
- 7.2 The Department reserves the right to extend the contract for a maximum period of six months (three months at a time) at the same rates & conditions, without the consent of the firm and beyond this period with mutual consent.

8.0 **TERMINATION OF CONTRACT:**

- 8.1 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 or their workers, 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.
- 8.2 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.

9 **PENALTY FOR DEFICIENCY IN SERVICE**:

SL NO	SERVICE	SERVICE CONDITIONS	PENALTY FOR DEFICIENCY IN SERVICE
1	E/A set [applicable where items are under amc]	1. Where minimum of two E/A sets are available, at least one E/A set shall always be in healthy working condition. The E/A set shall be switched on within one hour. Failure to make available the E/A set supply beyond one hour will attract penalty. 2. Where one E/A set is available, power supply shall be restored within 2 hours. If there is likely delay, the contractor has to arrange the mobile EA set at his own cost within 4 hours from the time of failure of power supply, failing which penalty shall be imposed. 3. The standby EA set(s) shall not be out of service for more than 3 days failing which penalty shall be imposed.	Rs.1000/- for each hour of

2	1. Packag e AC units	 i) Faults involving the following in the individual units shall be replaced within the time frame failing which penalty shall be imposed. 1. Condenser coil & Evaporator coil – Beyond one month. 	Rs. 1000/- per day per unit
		2. Compressor replacement –Beyond 3 weeks	Rs. 1000/- per day per unit
		3. Blower fan/ motor, Condenser fan/ motor, MCCB replacement – Beyond 15 days	Rs. 500/- per day per unit
		4. Others (Digital and Electronic components and control circuits) – Beyond one week.	Rs. 250/- per day per unit
		5. Failure to carryout monthly preventive maintenance activity (In addition to non-payment for the unit)	Rs.500/- per unit per month
		6. Failure to respond to Emergency situation due to PAC failure leading to temperature rise	

Note:

- (a) In case contractor fails to comply with preventive/ periodical maintenance schedules, penalty of **one month's bill amount per building** shall be imposed.
- (b) In case of major accident/ loss on account of negligence on part of the contractor, the contract shall be terminated and 10% (ten percent) of the tendered amount shall be recovered. Decision of Executive Engineer (E) shall be final and binding on the contractor.
- (c) 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.
- (d) In case of absence of worker from the duty/site where operation is carried out, penalty shall be made @ Rs. 1000/- per day per person per shift. (Staff employed of less than the prescribed qualifications **shall be treated as absent).** The Decision of the Executive Engineer shall be final & binding. In case of persistent non wearing of badge by the operators, noticed and recorded in the relevant registers/records/conveyed in writing penalty of Rs.100/- per occasion shall be levied.
- (e) If the performance is found to be unsatisfactory (Such as non-recording of data, continuous non-availability of staff at site, not informing in writing to the SDE(E)/JTO(E) the faults and/or defects requiring maintenance activity in time etc.,) noticed by the Officers during their site visits / test checks, penalty upto 5% of one month's bill for that service for that site shall be recovered. This is in addition to the penalty for specific deficiencies as per Clause(s) above.
- (f) Notwithstanding the compensation clause described above, BSNL reserves the right to take necessary steps for operation of the installation 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. BSNL also reserves the right to levy additional penalties, wherever deficiency in the work carried out by the firm results in loss to BSNL.

10.0 GENERAL CONDITIONS:

- 10.1 The contractor has to keep all the equipment under operation under maintenance neat and clean to avoid any accident and or fire hazards.
- 10.2 Dates of earth test, refilling of fire extinguisher, servicing details of E/A set, Package ac plants / window / split ac units and sub-station equipments (wherever applicable), shall be displayed at site as per **annexure XII attached**. Dates of weekly, monthly, biannual / annual tests (wherever applicable), shall be displayed / recoded in relevant columns.
- 10.3 Contractor shall have a round the clock communication landline/ Mobile telephone number at Chennai. A complaint register shall be maintained as per annexure III. Whenever any complaint is received, it shall be recorded and complaint no. shall be given to the complain. Disposal of complaint shall be recorded and monthly report shall be submitted to the SDE (E) concerned
- 10.4 If the complaint is covered under the scope of work, firm shall promptly attend to the same and record such action in relevant registers. Where action not covered under scope of work, the firm shall intimate the same to SDE(E)/JTO(E) in writin g. Decision of Executive Engineer(E) shall be final and binding in this regard.
- 10.5 The Contractor will display on a board in Substation room important telephone numbers.
- 10.6 The contractor shall not sublet the work or part thereof. However, services of specialized agencies for specific work can be obtained.
- 10.7 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.
- 10.8 BSNL reserves the right to carry out any work at the risk and cost of the contractor, if the agency fails to perform any duty as per the contract.
- 10.9 The firm will be doing the maintenance and /or operation of critical services like substation, fire fighting standby power etc. responsible and trained person(s) should be placed round the clock at site who could take initial steps under emergency situation.
- 10.10 Firm shall ensure **energy conservation** by switching on the air-conditioner units /lights & fans etc only when required, wherever Operation is forming the scope of contract.
- 10.11 In case of Emergency, contractor and/or his authorized engineer or supervisor shall be available at site on short notice from Engineer-in- charge and make all efforts to make the situation normal at the earliest

11.0 DOCUMENTS TO BE MAINTAINED AT SITE/MAINTENANCE OFFICE

The contractor shall maintain following documents.

- 11.1 A complaint / fault register as per format given in annexure- III.
- 11.2 **Log Book:** log book in format approved by Executive Engineer (E) shall be maintained at site for the following components of work (as per Annexure IV to VIII).
- Sub-Station (Both HT & LT) Annexure VI
- 2) Packaged A.C. system. Annexure IV
- 3) E/A set. Annexure V
- 4) Pumps. Annexure VII
- Electricity bills. Annexure VIII
- 11.3 **Maintenance register:-** In this register, the agency will keep a record of daily, weekly, fortnightly, monthly, quarterly, & annual maintenance activities carried out by him including details of replacement / repair of any item. Such register shall contain records of maintenance activities in respect of each service separately in standard form.(as per annexure- IX, X)
- 11.4 **Report file:-** Containing all the test reports in original Viz. Oil test report, IDMT test report, E/A set service reports, A.C. package reports, reports on fire drill conducted etc shall be maintained at site.

- 11.5 **History register:** The firm shall record all major breakdown maintenance carried out by the firm like rewinding of motor / compressor / transformer / alternators/ major overhauling of engine etc.
- 11.6 **Inspection notes:** A file containing all inspection notes released by CE(E) / SE(E) / EE(E) / SDE(E) along with the action taken report on it shall be available at site.
- 11.7 **Maintenance card:** A maintenance card in standard proforma (as shown below) showing the history of maintenance activities undertaken shall be displayed for every equipment such as EA set, AC units, Sub-Station, AFD panel & Fire fighting system.

FRONT SIDE OF CARD

SITE:- AMC FIRM:-

EQUIPMENT:- FIRM'S PH NO:-CAPACITY:- JTO (E)'S PH NO:-MAKE & SL NO:- SDE(E)'S PH NO:-

BACK SIDE OF CARD

DATE	NATURE OF FAULT	REPORTED TO	SIGN OF XGE INCHARGE	ATTENDED ON	SIGN OF MECHANIC	SIGN OF XGE STAFF

12.0 TEST CHECK BY THE FIELD ENGINEERS:

- 12.1 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.
- 12.2 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. 9.

13.0 Guarantee and Defect Liability

- 13.1 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.
- 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.
- 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.

14.0 ENERGY CONSERVATION

BSNL TN zone is committed to reduction in energy bills by the way of energy conservation over a year by 12%. The contractor shall continuously monitor energy conservation measures to save energy bills with suitable testing using energy monitoring instruments at his own cost to meet the Energy Conservation Building Code.

The contractors shall co-ordinate with the departmental SDEs / JTOs while conducting Energy auditing of the buildings under maintenance for effective Energy Conservation. The contractors are responsible for display of Energy conservation slogan stickers at prominent locations in the buildings under maintenance. The list of Energy conservation slogans as per **Annexure XI** shall be displayed by the firm at the respective locations and as directed by the JTO(E)/SDE (E) concerned

Faulty chokes / fluorescent lamps / incandescent bulbs etc. shall be replaced by energy efficient items viz; electronic chokes, 36 watt fluorescent lamps, CFLs, LED lights etc.

Burnt out fan motors shall not be repaired but replaced with higher efficiency motors of reputed make.

Energy efficiency of Package AC plants, AC units, EA sets (whichever is forming part of maintenance), shall be maintained within the benchmark value. The benchmark value shall be assigned by JTO (E)/SDE (E) after testing, with respect to the present conditions within 2 months from the date of handing over the services for maintenance. A 10% allowance shall be given for ageing while setting the benchmark itself. Energy efficiency report shall be submitted once every 6 months by the contractor. Reduction in Energy efficiency below the benchmark value shall result in suitable penalty as per the penalty clause.

INVENTORY Annexure I

EI	&FANS (OPE	ERATION &	Comprehen	sive AMC	to be do	1e)			
	ROOM	2x28 M/O FL TUBE	2x36W CFL	6W LED	WALL FAN	EXHAUST FAN	EXIT LAMP	4.5kg Co2	6 Kg DCP
1	RMC DC Area	2nos.	21 nos.	20 nos.	3 nos.	2 nos.	2 Nos	4 nos.	1 nos.

	INVENTORY MAIN LT DANIEL (ODEDATION & Comprehensive AMC to be done)
1	MAIN LT PANEL (OPERATION & Comprehensive AMC to be done) AUTO SEELCTION PANEL
	250 A MCCB- 4NOS
	225A 4 POLE CONTACT 3 NOS
	AUTO SELECTION CIRCUIT- 1 SET
	TRANSFORMER SELECTOR -1NO
2	MAIN LT PANEL
	250A MCCB 1 NO
	100 A MCCB-5 NOS
	SPMCB-12 NOS
3	PAC PANEL
	100A MCCB 1 NO
	63A TPN SWITCH -4NOS 10A DPMCB
4	UPS Paralleling Panel
	5 nos 100A switch
	2 set of Multifunction meter
5	Distribution DB
	12 way spn -ups -1no
	8way TPDB vertical-1 no
	4 way TPDB-1 no
	UPS TPDB 2 nos
6	EARTHING SYSTEM
	UPS NEUTRAL-2NOS
	DG NUETRAL -4 NOS
	DG BODY -2NOS
	RMCDC BODY -2NOS

No of staff required:

One Electrician (Skilled) (B license holder with knowledge to operate computer)/Shift for one shift per day

Three Electrician (Semi skilled) (B license holder) for 3 shifts per day (1st, 2nd & 3rd shifts)

Annexure-II

DETAILS TO BE SUPPLIED BEFORE STARTING WORK WITHIN 15 DAYS

a) The following information to be pasted/displayed in the Substation.

The Operation of Substation & E/A sets, in this building is carried out by

1.	Name of the Agency
1.	Name of the Agency
2	Address
3.	Person to contact
4.	Telephone No.
5	Contact Numbers of Operators (i) (ii) (iii)
5.	Name of JTO(E) in-charge and his contact No.(landline & mobile)
6	Name of the SDE(E) in-charge and his contact no.(landline & mobile)

In case of emergency please call:____(Agency's Emergency Contact Number)_

- In case of no response call JTO (E)/SDE(E).
- b) Details of staff to be deputed to site: To be furnished to JTO (E) along with qualification and antecedents certificate.

Sl.no.	Name & Address	Qualification	Designation	To be stationed at
1.				
2.				
3				
4				

- c)List of T&P
- d)List of Inventory
- e) Test details of the equipments taken over for maintenance and defects discrepancies noticed if any.

ANNEXURE - III

COMPLAINT / FAULT REGISTER (model)

The following information shall be pasted in front cover of the register

Name of work:

Name of contractor:

Agreement No:

Name of Sub-Division:

Location:

Complaint No.	Date & Time of complaint	Officer / section lodging complaint	Nature of complaint	Location	Time & Date of attending complaint vide service report no.	Cause of fault	Material used	Dated Signature of Firm's Representative	Dated Signature of SDE/JTO	Remarks

Note: The above format is general and addition/deletion of any of the data columns that may be required specific to particular site shall also be incorporated, with the approval of SDE(E)

ANNEXURE - IV LOG BOOK FOR AIR COOLED PACKAGE AC PLANT

Month:				PAG			PAC	າ ງ		PAC	ר 2		PAC	٠,		PAC	· 5		Con	ditior	ns of t	emp i	n doa	. C	Remar k
Date	Time	Volt	Total Amp	H P	L P	Am p	Plar	nt		Side	Swi roo tem	tch m	K												
																			D B	W B	D B	W B	D B	W B	
	12:0 0 AM																								
	2:00 AM																								
	4:00 AM																								
	6:00 AM																								
	8:00 AM																								
	10:0 0 AM																								
	12:0 0 PM																								
	2:00 PM																								
	4:00 PM																								
_	6:00 PM																								
	8:00 PM																								
	10:0 0 PM																								
	12:0 0 AM																								

ANNEXURE - V LOG BOOK FOR EA SET READING FOR THE MONTH OF

LOG I	300K F	OR EA	SET RE	ADING	FOR T	не мо	NTH O	F														
	Start time	Stop time	Voltag	ge		Load	Current		Freq	Speed	Lub oil Tem p	Lub oil Pr.	Wat er Tem p	Diesel Ltrs	l level	KWH		Check set	before	e start	of EA	Rem arks
Date	Hrs	Hrs	RY	YB	BR	R	Y	В	Hz	RPM		Kg/c m2		Start	Stop	Start	Stop	Wat er in radi ator & cool ant	Lub oil level & leak age	Batt ery char ger syst em	Batt ery term inal conn ectio n	

ANNEXURE - VI

	E.I & Fans	Pumps	Comp. Lighting	Lightning Cond.	S/Stn. & AVR	EA set	Fire Det. /Alarm	W/SAC/ Volt.St.	Package AC	Des.cooler/ Heater	Lifts	Fire Fighting
January							Fire drill	Filter cleaning & servicing	Filter cleaning & servicing	Cleaning of Tank	Cleaning lift car & Machine Room	Fire drill
February	Fan/Fixture cleaning						Fire drill	Filter cleaning & servicing	Filter cleaning, & servicing	Cleaning of Tank	Cleaning lift car & Machine Room	Fire drill
March							Fire drill & detector cleaning	Filter cleaning & servicing	Filter cleaning & servicing	Cleaning of Tank Pad changing	Cleaning lift car & Machine Room	Fire drill
April	Earth & insulation test	Earth & insulation test, oil insulation test	Earth & insulation test, OEM services	Fire drill	Earth & insulation test, Filter cleaning & servicing	Filter cleaning & servicing Earth & insulation test	Cleaning of Tank	Cleaning lift car & Machine Room	Earth & insulation test, OEM services, Fre drill			
May	Painting	Painting	Painting of poles etc.		Painting	Painting	Fire drill	Filter cleaning, Painting & servicing	Filter cleaning, & servicing painting	Cleaning of Tank Painting	Cleaning lift car & Machine Room	Painting, Fire drill
June							Fire drill	Filter cleaning & servicing	Filter cleaning & servicing	Cleaning of Tank	Cleaning lift car & Machine Room	Fire drill
July							Fire drill	Filter cleaning &	Filter cleaning &	Cleaning of Tank	Cleaning lift car & Machine	Fire drill

Contractor

								servicing	servicing		Room	
August							Fire drill	Filter cleaning & servicing	Filter cleaning & servicing	Cleaning of Tank	Cleaning lift car & Machine Room	Fire drill
September							Fire drill, detector cleaning	Filter cleaning & servicing	Filter cleaning, & servicing	Cleaning of Tank	Cleaning lift car & Machine Room	Fire drill
October	Earth & insulation test	Earth & insulation test, oil, insulation	Earth & insulation test.	Fire drill	Filter cleaning, & servicing Earth & insulation test	Filter cleaning & servicing Earth & insulation test	Cleaning of Tank	Cleaning lift car & Machine Room	Earth & insulation test, OEM services, Fire drill			
November					Electrical Inspector report		Fire drill	Filter cleaning & servicing	Filter cleaning & servicing	Cleaning of Tank	Cleaning lift car & Machine Room	Fire drill
December					Relay Calibration		Fire drill	Filter cleaning & servicing	Filter cleaning & servicing	Cleaning of Tank	Cleaning lift car & Machine Room	Fire drill

The above chart shows yearly program schedule for reference. Actual Program based on the sites and the services being maintained, to be drawn up after award of work.

Contractor Engineer in Charge

ANNEXURE - VII

Contractor's representative

Sr.no	Service	Activity as per quarterly plan	Date on which actual activity carried out	Result of the activity	Departmental representativ e	Remarks
			nt maintenance proper eriod has been perform	-	edule of work ar	nd as per tern

Departmental representative

Contractor Engineer in Charge

Annexure-VIII

A. Layout Details of the various Equipments shall be preferably available at site wherever comprehensive maintenance of the service is carried out.

(i) Sub-Station Diagram

Layout Drawing.

Single Line Diagram.

Control Wiring Diagram as supplied by the Installation Co.

ANNEXURE - IX

JTO(E)

CERTIFICATE TO BE SUBMITTED ALONG WITH EACH BILL

1. CERTIFIED THAT WE HAVE CARRIED OUT THE PREVENTIVE MTCE. OF ALL THE SERVICES COVERED IN THE ABOVE CONTRACT SATISFACTORILY AND ALL THE SERVICES HAVE BEEN UNDER SATISFACTORY WORKING CONDITION EXCEPT THE FOLLOWING DUE TO THE REASONS MENTIONED AGAINST THE RESPECTIVE ITEM:

Sl.No	ITEM/SERVICES	REASONS FOR NON OPERATION
HAVE BE 3. CERT	EN PRESCRIBED WERE MAINTAINED WITI TFIED THAT REQUIRED INVENTORY HAS B	
Counters	signed by:	

SDE(E)

Contractor Engineer in Charge

SECTION-2 MAINTENANCE SCHEDULE

ENGINE ALTERNATOR SETS

Part- I Scope of maintenance

Ensuring that the EA set installation is kept in clean and healthy working condition. Testing the system every day for operating fitness. Carrying out various maintenance activities and test as stated in part-III. The vendor shall arrange inspection of installation by authorized Engine service station and shall submit its health check report to BSNL. At the beginning of contract. The vendor shall replace the set of batteries as per schedule of work, once during the currency of contract. The engines have to be operated whenever required and staff should be available round the clock for the same.

Part -II Tasks to be performed within 15 days

- 1. Inspect the installation for any shortcoming which is to be recorded and brought to the notice of Engineer in charge.
- 2. Check the safety devices as well as operating switches for their proper functioning.
- 3. The system should be brought into working condition, if this is not the case, on priority.
- 4. The persons(s) should familiarize themselves with the installation, load distribution and working of E/A set. Need for watch to keep various parameters in permissible limits and responding to various alarms should be clearly understood.
- 5 Inspect the EA room for proper ventilation (normally $1\ 1/2$ times the radiator area should be available for fresh air and the hot air during operation should have free passage to outside atmosphere. Steps for improvement to be discussed with maintenance in charge.
- 6 The Engine capacity vis-à-vis the load being supplied be checked to ensure that there is no mismatch.
- 7 Check the earthing system for proper values. The results of inspection as above should be recorded in register and brought to the notice of Engineer in charge.

Part III - Maintenance schedule to be followed.

Daily

- 1. Check Engine oil level & leakage if any.
- 2. Check Radiator/ Make up water tank water level & leakage if any.
- 3. Check fuel level.
- 4. Check state of batteries, terminals for cleanliness and level of water.
- 5. Check that the battery charger is in trickle charging position
- 6. Check whether insulation of the Exhaust pipe is proper.
- 7. Check that ventilation of the EA Room is proper.
- 8. Check oil pressure.
- 9. Check if lights and exhaust fan are working properly.
- 10. Check physically before start for loose connection/ nut bolt.
- 11. Check hydraulic governor of oil.

Weekly.

- 1. Check Air line connection and filter.
- 2. Check fan belt and its tension.
- 3. Check all Safety, indications, alarms, interlocking & Voltage Regulation

Fortnightly.

- 1. Check Battery voltage, Terminals, Electrolyte level (Top up if necessary).
- 2. Check Specific Gravity of Electrolyte. (After the above checks, start the engine for No load/ Connected Load and test for 10 minutes the following)
- 1. Check for any abnormal noise. Shut down the E/A immediately and cause be examined.
- 2. Check frequency & output voltage.
- 3. Check the colour of Exhaust gas.
- 4. Check working of the Indication lamps.
- 5. Check working of Dynamo and Auto Cut off of the battery charger.
- 6. Check for any Exhaust gas restriction.
- 7. Check manual/auto-changeover from commercial supply on connected load

8. Record various readings in the logbook.

Monthly

- 1. Check for tightness of connections in engine and control panel.
- 2. Watering of earth pits and tightening of connections.
- 3. Check functioning of safety devices.
- 4. Check belt tensions.
- 5. Check of battery charger.
- 6. Check for leakage of fuel line.
- 7. Check for leakage of exhaust pipes.
- 8. Inspect the manufacturer's chart for due date of maintenance. Servicing of the DEA set on the basis of hour meter/log book reading shall be done by the firm i/c material

Half vearly

- 1. Cleaning of bus bars & chambers and tightening of nut bolts.....(Feb & Aug)
- 2. Checking of ACB/ MCCB tripping mechanism(Feb & Aug)
- 3. Earth testing and Meggering(April & Oct)
- 4. Relays and other protection devices working properly (April & Oct)

Yearly.

- 1. Tighten all mounting, nut and bolt.....(March)
- 2. Check turbo charger bearing clearance.(if applicable)......(Oct)
- 3. Check crankshaft and float......(Oct)
- 4. Check injector inlet screen.(Oct)
- 5. Clean and calibrate all injectors.....(Nov)
- 6. Check fuel pump calibration.....(Nov)
- 7. Replace fuel pump filter screen and magnet.....(Nov)
- 8. Complete health check of each set through Authorized service station.....(March)

Testing Detailed Testing of the installation shall be done once in a year to find out capacity and efficiency of various equipment with respect to their rating. The testing procedure shall be same as adopted at the time of original testing (but without involving the T&D persons.)

Notes

- 1. The attendants shall check respective items daily as per the checklist. This shall be 100% test checked by JTO (E)/SDE (E) once in 15 days.
- 2. Fortnightly, Monthly, Half Yearly & Yearly checks shall be performed directly under the supervision of JTO (E)/SDE (E) and monthly report on the same duly countersigned by EE (E) shall be sent to the SE (E) before 7th of next month.
- 3. The yearly testing report shall be sent to SE (E) with copy to CE (E) directly by EE (E) in charge.

Part-IV: Material

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

Diesel for E/A sets.

Replacement of complete Engine, Alternator and control panel.

Battery of DEA Set only once.(at the beginning of contract as given in schedule of work)

Major overhauling of DEA Set which is due after some fixed running hours (top overhauling). The contract is for the comprehensive maintenance as such the firm shall arrange all materials at his own cost including rewinding of Alternators.

NOTE:- The replacement of material shall be with the same rating and make as that of the original. However, in case of non-availability of a particular make, the Engineer-in-charge will approve the alternate make..

AIR CONDITIONING PACKAGE SYSTEM

Part -1 Scope of operation & routine Maintenance

1. Ensuring round the clock, without any holiday, operation of AC package unit during the period of contract. Comprehensive Maintenance (Routine, Preventive & Break Down) throughout the period of contract, as per the guidelines of BSNL/Engineer-in-charge.

- 2. When compressor needs replacement the same should be purchased from the manufacturer/authorized dealer and necessary documentary proof of replacement should be submitted to the BSNL.
- 3. Replacement of Fine & Coarse Filters as per schedule of work, to be replaced once in two years.
- 4. Monitoring and recording on continuous basis inside temp. /humidity conditions and ensuring that they are maintained within limits.
- 5. Monitoring and recording on continuous basis important operational parameters.
- 6. Providing necessary man Power (skilled, semi-skilled and un-skilled) as required for the above activities.
- 7. The operation of system and maintenance activities are to be divided in such a manner that inside Temp. Conditions are maintained. The desired inside conditions are:
- a) The temperature below the rack wherever bottom feed is provided of the switch room shall be 20+3 Deg. C.
- b) Required design condition for Electronic exchanges i/c E-10-B shall be 23+3 Deg. C
- c) Relative humidity within the limit of 40% to 60%.

PART-II -TASKS TO BE PERFORMED WITHIN 15 DAYS

- 1. Keeping in mind that operation of this critical system is to be carried out on round the clock basis, inspect the complete system for any shortcoming which may come in the way of proper operation.
- 2. Familiarize with the staff with installation, various safeties and alarms.
- 3. Clearly understand what is to be done in an emergency & response called for. This should be done in consultation with Engineer-in Charge.
- 4. Check all the switches and meters for proper operation.
- 5. Check availability and working of fire extinguishers at earmarked locations.
- 6. Check operation of all the safety devices like LP/HP cut-outs, SPP, Tripping on fire-alarm etc..
- 7. Check the earthing system for the proper earth values & continuity of earthing system.
- 8. Check Amp. Meter, Voltmeter etc. for proper functioning.
- 9. Check the tripping of Package unit on thermostat etc, for proper functioning.
- 10 Check all the electrical connections for proper tightness

Part III - Maintenance schedule to be followed.

DAILY

- 1. Check for general cleanliness of plant room and condenser area
- 2. Record various readings in the log-book (Elect.MW./Form-22).
- 3. Check for abnormal heating of Electrical contacts and Motor starter.
- 4. Check for any vibration in Package units (or in the floor)/suction/discharge pressure gauge.
- 5. Check discharge and suction pressure.
- 6. Check for any obstruction in the return air.
- 7. Check HP/LP cutouts.
- 8. Check V-belt tension of blower Motor/ condenser motor.
- 9. Check for any frosting at cooling coil.
- 10. Check the fire protection appliance. (Check for interlocking with F/D system).
- 11. Check Mechanical interlocking keys in position.
- 12. Check working of fresh air fan.
- 13. In case of water cooled plant, check water supply, pumps, cooling tower operation and strainers/nozzles.
- 14. Ensure working of fresh air fan in combination with blower in winter nights so as to utilize the outside lower ambient.

MONTHLY

- 1. Micro filter cleaning.
- 2. Fresh air filter cleaning.
- 3. Check electrical contacts and tighten them.
- 4. Check for leakage of conditioned air.

- 5. For water cooled plant, check water supply for hardness, cooling tower sump cleanliness, strainers/nozzle, float valves, cooling tower pump, Expansion tank insulation of chilled water pipes etc.
- 6. Check of controls.

Quarterly.

- 1. Check opening closing of volume control Damper, and supply Air Dampers.(March, June, Sept, Dec)
- 2. Check electrical contacts and tighten them if required.(March, June, Sept, Dec)
- 3. Lubrication of all bearing etc.(Jan, April, July, Oct)

HALF YEARLY

VEARIA

1. Complete servicing of A/C pkg. plant before onset of summer (i/c charge of compressor oil , descaling of all water lines , valves and condensers.)

Testing

Detailed Testing of the installation shall be done once in a year to find out capacity and efficiency of various equipment with respect to their rating. The testing procedure shall be same as adopted at the time of original testing (but without involving the T&D persons.)

Notes

- 1. The attendants shall check respective items daily as per the checklist. This shall be 100% test checked by JTO (E)/SDE (E) once in 15 days.
- 2. Monthly, Quarterly, Half Yearly & Yearly checks shall be performed directly under the supervision of JTO (E)/SDE (E) and monthly report on the same duly countersigned by EE (E) shall be sent to the SE (E) before 7th of next month.
- 3. The yearly testing report shall be sent to SE (E) with copy to CE (E) directly by EE (E) in charge. Part-IV: Material

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

- 1. Replacement of complete AC pkg unit, Complete Condenser and main MV Panel.
- 2. Refrigerant lost during the operation, oil, fan belt, & filter shall be firm's responsibility.

NOTE: - The replacement of material shall be with the same rating and make as that of the original. However, in case of non-availability of a particular make, the Engineer-in-charge will approve the alternate make.

Part-V Special conditions relevant to particular job/particular site.

1. Package unit compressors shall only be replaced with new one whenever it goes faulty without any extra cost. No repair of the compressors is permitted.

LIST OF APPROVED MAKES-BSNL ELECTRICALWING

Sl. No.	Item	Makes
1	Engine	Ashok Leyland/Cummins/ Caterpillar/ KOEL/ VolvoPenta/Mahindra&Mahindra(upto40KVA)/Escorts(upto30 KVA)/Eicher(upto20KVA)
2	Alternator (Brushless)	Crompton Greaves(AL.series)/KEC/ Leroy Somer/Stamford/Jyoti Ltd
3	Battery(Lead Acid/ Maintenance Free)	AmaraRaja/AMCO/Farukawa/Hitachi / Exide/Prestolite/Standard
4	HV Switchgear (Vacuum Circuit Breaker/SF6)	BieccoLawrie/Crompton/Kirloskar/ MEI/ JyotiLtd
5	Transformer(Oil filled /Dry type) a)Above400KVA	ABB/Schneider Electric/Andrew Yule/ BharatBijlee/Crompton/EMCO/ Kirloskar /Siemens
	b) Upto400KVA	Inadditiontoabovemakes, Uttam/AutomaticElectric Gear(AEG)/Patson/Rajasthan Transformerand 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-HElcon
11	Intelligent APFC Relay	L&T/EPCOS(Siemens)/SchneiderElectric/ NeptuneDucati/Syntron/ABB
12	Bus Bar Trunking / Sandwiched Bus Duct	Moeller/L&T/Schneiderelectric/ABB/Legran /Zeta
13	Power Capacitors(MPP/APP)	L&T/EPCOS(Siemens)/ABB/Crompton/ Schneider Electric/NeptuneDucati
14	Digital/KWH meter	SchneiderElectric/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	ISImark
17	MCB/ isolator/ELCB/RCCB/ Distribution Board	Crompton/ Havells/Indokopp /MDS Legrand/L&T/SchneiderElectric/ Siemens/Standard/C&S/ABB/HPL
18	MS/ PVC Conduit	ISImark
19	Cable Tray	MEM/Bharti/Ratan/Slotco/Profab
20	HT/LT Cables	ISImark
21	PVC insulated copper conductor wire	ISImark
22	CentrifugalPump	Amrut/BE/Beacon/Batliboi/ Crompton/Jyoti/Kirloskar/KSB/Mather &platt/WASP/Grundfos

23	SubmersiblePump	Crompton/Amrut/BE/Calama/ Kirloskar/KSB						
24	Motors	ABB/BharatBijlee /CromptonGreaves/ SchneiderElectric/HBB/KEC/ Siemens/JyotiLtd						
25	FreshAirFans	GE/Khaitan/Almonard/Crompton						
26	Starter	ABB/BCH/SchneiderElectric/L&T/ Siemens/						
27	SinglePhase Preventer	L&T/Minilec/Siemens/Zerotrip						
28	GI/MSPipe	ATC/ATL/BST/GSI/ITC/ITS/IIA/ JST/Jindal/TTA/Tata/Zenith						
29	FootValve	ISImark						
30	GateValve	Advance/Audco/Johnson Controls/Zoloto/Annapurna/Fountain/ Kirloskar /Leader/Sant/Trishul						
31	Compressors	Carrier/Emersoncopeland/York/Danfoss(forchillersonly)						
32	ResinBondedGlass wool	FibreGlass/Pilkingston/UPTwiga						
33	ExpandedPolystyrene	BASF(India)Ltd.						
34	Gauge	Feibig/H.Guru/Pricol						
35	Controls	FLICA/Honeywell/Indfoss/Penn- Danfoss/Ranco/anutrol/Sporland						
36	Fine Filters	AnfiltraEffluent/ARW/Athlete/Airtake/ Dyna/Kirsloskar/Puromatic/Purafill/Purolator/Tenacity						
37	GI Sheet	HSUJindal/National/NipponDenro/Sail/Tata						
38	Heat Detector	Appollo/Chemtron/Edward/Fenwal/ Hochiki /Nitton/SystemSensor/ Wormald/HoneywellEssar/Notifier						
39	Ionization Detector	Appollo/Cerebrus/Edward//Fenwal/ Hochiki/Nitton/SystemSensor/ Wormald						
40	PhotoElectricSmoke Detector	Appollo /Cerebrus/Edward/Fenwal/ Hochiki/Nitton/Wormald						
41	Fire Panel (Microprocessor based)	AgniInstruments/AgniDevices/ArunaAgencies/CarmelSensor/R avel Elect./Honeywell Essar/Notifier/NavinSystems						
42	Sprinkler/HoseReel&HosePipe	ISImark						
43	FireExtinguisher	ISImark						
44	Lift	OTIS,Kone,Mitsubishi, Schindler,Johnson						

Contractor

Executive Engineer(E)

COMPLIANCE STATEMENT

We	(name of the firm) state to comply in full manner with						
all the General, Commercial, Technical, Operating, financial conditions of the Tender Document for the work of "Operat							
and Comprehensive annual maintenance of Electro mechanical	services at RMC DC,3rd floor, TE Kellys, Chennai.						
(2024-2026) " without any reservation and deviation.							
For and on behalf of (Name of Firm)							
(Seal of the contractor /Company /Firm)	(Signature of contractor/Authorized Signatory)						
(Postal address)	Dated						

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:	no per ivir nomication page
Security Deposit and	
performance Guarantee	

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

Electrical Division-I, Chennai

Definitions:

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

2(vi) Accepting Authority SE(E), EC-II, Chennai.

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: ED I, Chennai Sub Division: ESD-IV, 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 One Hundred and Twenty (120) 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 3%

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.

	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											
The abo	ve tend	ler (as mod	dified by	y you as pr	ovided i	n the	e letters me	entione	d hereunde	r) is a	ccepted	by me for
and	on	behalf	of	BSNL	for	a	sum	of	Rs.			
(Rupees	5)					
The letters referred to below shall form part of this contract Agreement a) b)												
		Fo	or & on b	oehalf of B	SNL							
Dated Signatu Designa	re:											

> Engineer in Charge Contractor