

Bharat Sanchar Nigam Limited (Electrical Wing)

O/o The Executive Engineer (E)
BSNL Electrical Division-I
No.22, Kellys Road,
Chennai - 600010.

Office: 044-26470405, 26470123 Fax: 044-2647 0406 E-mail: <u>ee1chennai@gmail.com</u>

E-TENDER DOCUMENT

Name of work: Providing Initial repair of faulty fire fighting and fire detection equipments and AMC of Fire fighting / wet riser system and AFD system at TE KK Nagar, Chennai (SW:-AMC of Fire fighting / wet riser system and AFD system)

NIT No: 26/ EEE/ED-I/CH/2023-24

Date of opening: 19-08-2023 15: 30 hrs

This tender document contains 38 (thirty eight) pages only.

(To be filled in by the Contractor)

Name of the Agency

Address

Telephone No. of agency:

E_mail ID of agency:

Contractor Page 1 of 38 Executive Engineer

......

INDEX

SL. No	Description	Page no.
1	Front cover and Index	2
2	Notice Inviting Tender form - BSNL EW6	5
3	General Instructions to the Bidders	9
4	Undertaking to abide by EW 6 & EW 8 (Form 'A')	11
5	Undertaking regarding EPF& ESI provisions (Form 'B')	12
6	Performance report of works (Form 'C')	13
7	No Near relative working certificate (Form 'D')	14
8	Model form of Bank Guarantee for EMD (Annexure-I)	15
9	Model form of Performance security Guarantee bond (Annexure-II)	16
10	Schedule of Quantities	18
11	Important Instructions to the tenderer	21
12	Specifications (general)	24
13	Technical Specifications	28
14	INVENTORY	32
15	List of Approved Makes	33
16	List of Indian Standards	35
17	Proforma Schedules	36
18	BSNL EW – 8 form	37

Contractor Page 2 of 38 Executive Engineer

INFORMATION AND INSTRUCTIONS FOR BIDDERS

The Executive Engineer (Elect), BSNL, ED-I, Chennai on behalf of the CMD, BSNL invites Item rate bids from eligible bidders in Single bid system for the following work:

1	Name of work	Providing Initial repair of faulty fire fighting and fire detection equipments and AMC of Fire fighting / wet riser system and AFD system at TE KK Nagar, Chennai (SW:-AMC of Fire fighting / wet riser system and AFD system)
2	Estimated cost put to tender	Rs. 1,98,408/-
3	Earnest Money	Rs. 3,968/-
4	Period of completion	24 Months
5	Tender Fee(Non- refundable)	Rs.500 (+) 18% GST=Rs 590/-
6	Last date & time for submission of tender	Up to 15:00 Hrs. on 19-08-2023
7	Date and time for opening of tender	15:30 Hrs. on 19-08-2023

ELIGIBILITY CRITERIA

(a) Financial Norms:

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

(b) Physical Norms:

1) BSNL enlisted contractors in Electrical category of respective class as per their tendering limits and having valid HT licence.

(OR)

- 2) Experience of having successfully completed similar works in BSNL/Central Govt/State Govt/Public sector under takings during last 7 years ending last day of the month previous to the one in which applications are invited should be either of the following:-
 - Three similar successfully completed works costing not less than the amount equal to 40% of the estimated cost put to tender.

(OR)

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

(OR)

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

By Similar work means, Operation and/or maintenance of Electromechanical services with wet riser as one of the service / Maintenance or AMC of wet riser.

Contractor Page 3 of 38 Executive Engineer

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

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

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

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

10. The **Cover-1 and 2** shall be deposited in the tender box available in the office of tender opening authority, by all the bidders before **3:00 PM** on **19-08-2023** the tender opening date, failing which the tender shall not be opened.

Contractor Page 4 of 38 Executive Engineer

BSNL EW-6

Bharat Sanchar Nigam Limited Electrical Wing

Electrical Division: **ED-I, Chennai** Sub Division: **ESD-III, Chennai**

NIT No.: 26/EEE/ED-I/BSNL/CH/23-24 dtd 09/08/2023

Item rate tenders on single bid system are invited on behalf of CMD,BSNL for the work "Providing Initial repair of faulty fire fighting and fire detection equipments and AMC of Fire fighting / wet riser system and AFD system at TE KK Nagar, Chennai (SW:-AMC of Fire fighting / wet riser system and AFD system) " from the eligible bidders as per NIT notification. The enlistment of the bidders should be valid on the opening date of tender. In case the date of opening of tender is extended, the enlistment of bidder should be valid on the original date of opening of tender.

- Tenders which should always be placed in sealed covers with the name of the work written on the envelope will be received and opened by the tender opening authority as per the date and time mentioned in INFORMATION AND INSTRUCTIONS FOR BIDDERS. Unsealed tenders will be summarily rejected.
- 2. Intending bidder is eligible to submit the bid provided that he has definite proof from the appropriate authority, which shall be to the satisfaction of the competent authority as per the eligibility conditions mentioned in the NIT notification page.
- 3. The work is estimated to cost **Rs 1,98,408/-** This estimate, however, is given merely as a rough guide.
- 4. Agreement shall be drawn with the successful bidder on prescribed form as amended up to the date of opening of tender. Bidder shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.
- 5. The time allowed for carrying out the work will be **24 Months** from the 10th day after the date of written order to commence the work.
- 6. The site for the work is available / or the site for the works shall be made available in parts. The successful bidder shall execute the work in coordination with other agencies working in the campus.
- 7. The bid documents consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website www.chennai.bsnl.co.in at free of cost. The BSNL EW-8 document can be seen from the web site www.chennai.bsnl.co.inatfree of cost.
- 8. The Tender Fee in the form of Demand Draft issued by the Nationalized / Scheduled bank authorized by the Reserve Bank of India, drawn in favour of **BSNL**, **Chennai Telephones** payable at **Chennai.** The validity of the tender cost in the form of DD shall be **60 days** from the date of opening.
- 9. The Earnest money deposit (EMD) in the form of Demand Draft / FDR / BG (BG is only for Air Conditioning, Diesel Engine Alternator, Lifts, and Sub Station works wherever the amount of EMD is more than Rs.20,000)/ CDR of a nationalized / scheduled bank authorized by the Reserve Bank of India, drawn in favour of BSNL, Chennai Telephones payable at Chennai. The validity of the EMD in the form of DD shall be 60 days from the date of opening. If the EMD is in the form of CDR/FDR/BG, the validity shall be 180 days from the date of opening. In case of L1 bidder, the validity of CDR/FDR/BG is 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.

Contractor Page 5 of 38 Executive Engineer

- 10. The last date for submission of bid is **19-08-2023 up to 3:00 PM** and the bid submitted shall be opened at 03:30 PM on the day. If a holiday is declared on the tender opening day, the tender will be opened on the next working day.
- 11. **Performance Guarantee**: The bidder is required to furnish Performance guarantee for an amount equal to 5% of the contract value in the form of bank guarantee/CDR/FDR/DD (of a Nationalized/ Scheduled Bank in a standard format) within two weeks from the date of issue of acceptance letter. This period can be further extended by the Engineer-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: 24 Months from the date of actual completion of work, for AMC works; and One year from the date of actual completion of work for all other works. **In case the bidder fails to deposit the said performance guarantee within the stipulated period, including the extended period if any, the Earnest Money deposited by the bidder shall be forfeited automatically without any notice to the bidder and the bidder will not be allowed to participate in the re tendering for the same work.**
- 12. **Security Deposit**: In addition to Performance guarantee stated above, a sum @ 10% of the gross amount of the bill shall be deducted from each running bill of the contractor till the sum be deducted with the sum already deposited as earnest money, will amount to security deposit of 5% of the contract value of the work. **The security deposit shall be released after an observation period as follows: Three Months from the date of actual completion of work, for AMC works; and One year from the date of actual completion of work for all other works.**
- 13. If it is found at any stage of tender scrutiny after submission of tender that the bidder has made any correction/addition/alteration/omission intender documents vis-à-vis tender documents available on the website /original Draft NIT in office, the bid shall be treated as non-responsive and shall be summarily rejected and the BSNL shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further, the bidder shall not be allowed to participate in the retendering process of the work.
- 14. The Tender documents shall not be sent through the Courier/Post. Tender documents received through Courier/post shall not be opened / considered at all. All communication with the bidders shall be in writing. Fax / E-mail shall be covered under this category and considered as adequate means of communication.
- 15. Intending bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders, the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidder shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the
- 16. contract documents. Submission of a tender by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the BSNL and local conditions and other factors having a bearing on the execution of the work.

Contractor Page 6 of 38 Executive Engineer

- 17. 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.
- 18. 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.
- 19. 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.
- 20. The bidder should give a certificate as per the following that none of his/her relative is employed in BSNL units as per **Form 'D'**. In case of proprietorship firm, certificate will be given by the proprietor and for partnership firm certificate will be given by all the Directors of the company.
 - a. Near relatives of all BSNL employees either directly recruited or on deputation are prohibited from participation in tenders and execution of works in the different units of BSNL. The near relatives for this purpose are defined as:
 - i. Members of a Hindu Undivided family.
 - ii. They are husband and wife.
 - iii. The one is related to the other in the manner as father, mother, son(s) & son's wife(daughter-in-law), Daughter(s) & daughter's husband(son-in-law), brother(s) & brother's wife, sister(s) & sister's husband(brother -in-law).
 - b. The company or firm or any other person is not permitted to tender for works in BSNL unit in which his near relative(s) is(are) posted. The unit is defined as SSA/Circle/Chief Engineer/Chief Archt./Corporate office for non-executive employees and all SSA in a circle including circle office/Chief Eng./Chief Archt./Corporate office for executive employees (including those called as Gazetted officers at present). The bidder should give a certificate that none of his/her such near relative is working in the units as defined above where he is going to apply for tender/work, for proprietorship, partnership firms and limited company certificate shall be given by the authorized signatory of the firm. Any breach of these conditions by the company or firm or any other person, the tender/work will be cancelled and earnest money/performance guarantee will be forfeited at any stage whenever it is so noticed. BSNL will not pay any damages to the company or firm or the concerned person. The company or firm or the person will also be debarred for further participation in the concerned unit.
 - c. No employee in BSNL/ Govt. of India is allowed to work as a contractor for a period of two years of his retirement from service without the prior permission. The contract is liable to be cancelled if either the bidder or any of his employees is found at any time to be such a person who had not obtained the permission as aforesaid before submission of tender and engagement in the bidders service.

Contractor Page 7 of 38 Executive Engineer

- 21. The tender for the work shall remain open for acceptance for a period of ninety (90) days from the date of opening of tenders. If any bidder withdraws his tender before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the tender which are not acceptable to the BSNL, then the BSNL shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the tenderer shall not be allowed to participate in the retendering process of the work.
- 22. The bidder has to comply with the provisions of EPF and miscellaneous provisions Act-1952 and employees provident fund scheme-1952 as amended up to date in respect of labours/employees engaged by them for this work. Any consequence arising due to non-complying of provisions as specified above shall be the sole responsibility of the firm only. The agency shall give an undertaking to this effect as per **Form 'B'**.
- 23. 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.
- 24. 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.
- 25. This notice inviting tender shall form a part of the contract document. The successful bidder, on acceptance of his tender by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign the contract consisting of:
 - a. The Notice Inviting Tender, all the documents including additional conditions, specifications and drawings, if any, forming part of the tender as uploaded at the time of invitation of tender, subsequent amendments issued and the rates quoted at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
 - b. Standard BSNL EW-8 form

Contractor Page 8 of 38 Executive Engineer

General Instructions to the Bidders

- The intending bidder must read the terms and conditions of BSNL-EW 6 carefully. He should only submit his bid, if he considers himself eligible and he is in possession of all the documents required.
- 2. Information and instructions for bidders posted on website shall form part of bid document.
- 3. Applicants are advised to keep visiting the above mentioned website from time to time (till the deadline for bid submission) for any updates in respect of the tender documents, if any. Failure to do so shall not absolve the applicant of his liabilities to submit the applications complete in all respect including updates thereof, if any. An incomplete application may be liable for rejection.
- 4. Even though any bidder may satisfy the above requirements, he would be liable to disqualification if he has:
- a. Made misleading or false representation or deliberately suppressed the information in the forms, statements and enclosures required in the eligibility criteria document.
- b. Record of poor performance such as abandoning work, not properly completing the contract, or financial failures / weaknesses etc.
- 5. If any information furnished by the bidder is found incorrect at a later stage, he shall be liable to be debarred from tendering/taking up of works in BSNL. The BSNL reserves the right to verify the particulars furnished by the applicant independently.
- 6. GST and any other tax applicable in respect of this contract shall be borne by the bidder himself. The bidder shall quote his rates considering all such taxes. The TDS as per the Govt. regulations will be recovered from the contractor.

7. **Tender Evaluation**:

- (a) The evaluation and comparison of responsive bids shall be done on the basis of Net cost to BSNL on the prices offered inclusive of packing, forwarding, freight and insurance charges etc., but excluding GST. The bid with lowest net cost as elaborated above will be the L1 bidder.
- (b) Vendors should furnish the correct GST Rate in the price schedule. If the Input Tax Credit is found to be not admissible at any stage subsequently owing to wrong furnishing of GST Rate, then the vendors will be liable to refund such non-admissible amount, if already paid, along with penalty if charged by the concerned authority.
- 8. However, pursuant to the constitution (Forty-sixth amendment) act, 1982, if any further tax or levy is imposed by statute, after the last date of receipt of tenders, and the contractors there upon necessarily and properly pays such taxes/ levies, the contractor shall be reimbursed the amount so paid, provided such payment, if any, is not in the opinion of Superintending engineer (whose decision shall be final and binding) be attributable to delay in execution of work within the control of contractor.
- 9. The Contractor shall, within a period of 30 days of imposition of any further tax or levyin pursuant to the constitution of (Forty sixth amendment) act 1982 give a written notice thereof to the Engineer-in-charge that the same is given pursuant to this condition, together with all necessary information relating thereto.

10. Bye laws Indemnity against liabilities:

(a) The bidder shall comply with all bylaws and regulations of the local and statutory authorities having jurisdiction over the works and shall be responsible for payment of all fees and other charges and giving and receiving all necessary notices and keep the Engineer –in-charge informed about the notices issued and received.

Contractor Page 9 of 38 Executive Engineer

- (b) The bidder shall indemnify the department against all claims in respect of patent rights design, trademark or name of other protected rights in respect of any plant, machine, work or materials used for or in connection with the works or temporary works and from and against all claims demands, proceedings, costs, charges and expenses whatsoever in respect of or in relation thereto.
- (c) The bidder shall defend all actions arising from such claims and shall himself pay all royalties, License fees, damages, costs and charges of all and every sort that may be legally incurred in respect hereof shall be borne by the bidder.
- (d) All liabilities / penal recoveries on matters arising out of tax /levies such as incorrect deductions, discrepancies in the filing of returns, revised assessments by the concerned authorities etc., shall be borne by the bidder.

11. Termination of contract on death of contractor:

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

- 12. Indulging of contractor in criminal /antisocial activities and cases under investigation/charge sheeted by CBI or any other government agencies etc. :If the CBI/Independent External Monitor (IEM) /Income tax/ Sales Tax /GST/ Central Excise/Custom Departments recommend such a course Action will be taken as per the directions of CBI or concerned department.
- 13. As a general notion, the terms and conditions/instructions contained in various pages of this document are addressed assuming the bidder as 'Male'. However, the same shall remain and assumed to be addressed in case of 'Female' bidder also, except for the gender centric words, which shall be 'female' centric at appropriate places.

Contractor Page 10 of 38 Executive Engineer

FORM 'A'

Undertaking to abide by EW 6 & EW 8

"I	Son / Daughter of
Re	sident of
, 5	ig that I have read the complete bid document and I am aware of BSNL EW 6 $\&$ 8 forms and I confirm that I will abide by all the SNL EW 6 $\&$ 8 forms.
(Seal of the firm)	(Signature of Bidder)

Contractor Page 11 of 38 Executive Engineer

FORM 'B'

Undertaking regarding EPF provisions

"IResident ofhereby give an undertaking that
* I/We have employed only persons in our establishment and hence the EPF and Miscellaneous provisions Act, 1952 is not applicable to my / our establishment.
* I / We have registered as per the EPF and Miscellaneous provisions Act, 1952 and our registration no** is We undertake to keep it valid during the currency of contract.
In case at any stage, it is found that the information given by me is false / incorrect, BSNL shall have the absolute right to take any action as deemed fit/without any prior intimation to me".
* strike out whichever is not applicable
**Attach a self-attested photo copy of the above said EPF registration certificate.
(Seal of the firm) (Signature of Bidder)
Undertaking regarding ESI provisions
"IResident of
st I / We have employed only persons in our establishment and hence the ESI and Miscellaneous provisions Act,1948 is not applicable to my / our establishment.
* I / We have registered as per the ESI and Miscellaneous provisions Act, 1948 and our registration no.** is We undertake to keep it valid during the currency of contract.
In case at any stage, it is found that the information given by me is false / incorrect, BSNI shall have the absolute right to take any action as deemed fit/without any prior intimation to me".
* strike out whichever is not applicable
**Attach a self-attested photo copy of the above said ESI registration certificate.
(Seal of the firm) (Signature of Bidder)

Contractor Page 12 of 38 Executive Engineer

FORM 'C'

Executive Engineer or Equivalent

Performance report of works

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

Dated:

Contractor Page 13 of 38 Executive Engineer

FORM 'D'

No	Noar	rolativo	working	certificate
OVI	near	relative	working	certificate

I	Son /	Daughter	of	Shri			Resident
of hereby	certify th	nat none of	my rela	ative(s) as	defined in the	e tender	document
is/are employed in BSNL	unit as p	per details g	iven in	tender docu	ment. In case	at any s	stage, it is
found that the information	given by	me is false /	incorre	ct, BSNL sh	all have the ab	solute rig	jht to take
any action as deemed fit/w	ithout any	prior intima	ation to	me.			
(Seal of the fir	m)				(Signature of B	idder)	

Annexure I MODEL FORM OF BANK GUARANTEE FOR EMD

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

Whereas		(hereinafter called "the bide	ler(s)") has submitted
its Tender dated	for the work	(hereinafter called "the bido	IZNIONAZ ALL BAFRI
by these prese		registered office at	KNOW ALL MEN OF
(hereinafter called "the BSNL") in the su the said BSNL, the Ba	ne Bank") are bound of	unto for which payment will an cessors and assigns by these pr	(hereinafter called ad truly to be made of
THE CONDITIONS of the 1. If the Bidder(s) with Tender Form: or	_	ring the period of Tender valid	ity specified on the
 If the Bidder(s) hat the period of Tender (a) Fails or refuse 	er validity. es to execute the Cont	the acceptance of its Tender b tract. ty Deposit in accordance with	-
without the BSNL havi	o the BSNL up to the ang to substantiate its laimed by it is due to	above amount upon receipt of i demand, provided that in its it owing to the occurrence of or conditions.	demand, the BSNL wil
	iod of the Tender vali		
Signature of the W Name of Witness	itness		
Address of Witness	:		

Contractor Page 15 of 38 Executive Engineer

ANNEXURE II PERFORMANCE SECURITY GUARANTEE BOND

1.	In co						after called `BSI` `the said bidder				
	the	terms	and	conditions	of ar	า .	agreement/Adva	ance	Purchase	Order	No
				for the c	upply of	' F	nade between _		(horoi	naftor c	allod
for the supply of (label{eq:continuous_cont										id biddo	alleu
							e said Agreeme				
guarantee forwe, (name of thewe, (name of the (hereinafter refer to as "the bank") at the requ										roque	alik)
(hereinalter refer to as the bank) at the reque (bidder(s)) do hereby undertake to p										e to na	or to
	the F	RSMI an	amoui	nt not excee	dina		(bluder(s)) do	202	inct any loc	s or dan	nage
	Calle	ed to o	amoui r suffe	red or would	d he ca	IISA	d to or suffered	_ aga 1 hv	RSNI by re	ason of	anv
							e terms or con				
		ement.	ic said	Didder(5)	i uni, o		e terms or con	iaicioi i	o contained		Jaia
	7 191 0	Cirici									
2.	We	(name (of the	bank)			do he	erebv	undertake	to pav	the
	amou	unts du	e and	payable un	der this	g qu	uarantee withou	ut an	y demur, n	nerely (on a
							by the said bid				
	cond	itions co	ontaine	ed in the sai	d Agree	mei	nt or by reasor	n of tl	he bidders(s	s)' failur	e to
	perfo	rm the	said Ag	greement. Ar	y such (dem	and made on th	ne bar	nk shall be o	onclusiv	e as
	regai	rds the	amour	nt due and	payable	by	the Bank und	er thi	s guarantee	e where	the
	decis	ion of E	SSNL ir	these coun	ts shall	be 1	final and bindin	g on	the bank. H	lowever,	our
	liabili	ity und	er thi	s guarantee	shall	be	restricted to	an a	amount not	t excee	ding
							•				
_			_								
3.			•	•	•		ey so demanded		_	•	•
		•		•			(s) in any suit	•		_	
							ability under thi				
			•	•	•		nder this bond			_	
						tn	e bidder(s)/sup	plier(s) snall nav	ve no c	claim
	agair	ist us to	r makii	ng such payr	nent.						
1 .	Wo (namo o	f tha h	ank)			furt	hor a	aroo that th	o auara	ntoo
т.	herei	n conta	ined sl	nall remain i	n full fo	rce	and effect duri	ina th	e period th	at would	d he
							greement and				
							ider or by virtue				
							scharged or till		ic sala Agre	,ciriciic i	ilavc
							and conditions		ne said Agre	ement l	have
							aid bidder(s) ar				
							er this guarante				
							ALF/THREE YEA				
			-	•			d from all liab	-	•	-	
		eafter.							um	- 555.0	

Contractor Page 16 of 38 Executive Engineer

We (name of the bank)__ _____ further agree with the BSNL that the BSNL shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Agreement or to extend time of performance by the said bidder(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the BSNL against the said Bidder(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Bidder(s) or for any forbearance, act or omission on the part of the BSNL or any indulgence by the BSNL to the said Bidder(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us. This guarantee will not be discharged due to the change in the constitution of the Bank or the Bidder(s)/supplier(s). 7. We (name of the bank) _____ lastly undertake not to revoke this guarantee during its currency except with the previous consent of the BSNL in writing. Dated the _____ day of _____

for______ (indicate the name of bank)

Name of the work :- Providing Initial repair of faulty fire fighting and fire detection equipments and AMC of Fire fighting / wet

riser system and AFD system at TE KK Nagar, Chennai (SW:-AMC of Fire fighting / wet riser system and AFD system)

Na	Name of Work: Providing Initial repair of faulty fire fighting and fire detection equipments and AMC of Fire fighting / wet riser system and AFD system at TE KK Nagar, Chennai (SW:-AMC of Fire fighting / wet riser system and AFD system)											
SI. no	Description of Item	Qty	Unit	Rate per Unit excluding GST	Total Amount Excluding GST (Net cost)	% LSSO	Amount in Rs.	SGST %	Amount in Rs.	"IGST "	Amount in Rs.	Total Amount including GST Rs.
1	2	3	4	5	6	7	8=Col. (6 x 7)	9	10= col.(6x 9)	11	12=col(6*11)	13=col. (6+8 +10+12)
1	Comprehensive maintenance of the following pump sets along with starter switch gears, SFUs i/c arranging specialised manpower and materials for replacement of faulty components, attending of faults, and carrying out periodical checks as per maintenance schedule etc as required, Lifting from existing open well / bore well / existing PCC pedestal, transportation, reinstallation, servicing, replacement of items such as bearings / bushes / spares, terminal plates, glands, flange plates/ rewinding of motors, etc shall also be covered in this item.	Months	Month									
а	55 KW Centrifugal pump electric pump - 1 no.	24	Ĭ									
b	7.5 KW Centrifugal pump electric pump - 1 no.	24 Months	Month									
2	Comprehensive maintenance of the 76 BHP Engine alternator set coupled with a centrifugal pump i/c arranging specialised man power and materials viz filters, lub oil, glands, battery with in-built charger and all other related spares etc as required. Lifting from existing existing PCC pedestal, transportation, reinstallation, servicing, replacement of items such as bearings / bushes / spares, terminal plates, glands, flange plates, etc shall also be covered in this item.	24 Months	Month									

Contractor Page 18 of 38

1	2	3	4	5	6	7	8=Col. (6 x 7)	9	10= col.(6x 9)	11	12=col.(6*11)	13=col. (6+8+10+12)
3	Comprehensive maintenance of the wet riser system excluding main pump and engine driven pump but including all other related MS piping, multiple outlets, yard hydrants, hoses, i/c arranging specialised manpower and materials for replacement of faulty components, attending of faults, and carrying out periodical checks as per maintenance schedule etc as required.	24 Months	Month									
4	Comprehensive maintenance of the fire extinguishers of the following type i/c arranging specialised manpower and materials for replacement of faulty components, attending of faults, and carrying out periodical checks as per maintenance schedule etc as required.											
а	2Kg CO ₂ - 9 Nos	24 Months	Month									
b	4.5Kg CO ₂ - 71 Nos	24 Months	Month									
С	2Kg ABC - 16 Nos	24 Months	Month									
d	5.0Kg ABC - 10 Nos	24 Months	Month									

Contractor Page 19 of 38 Executive Engineer

1	2	3	4	5	6	7	8=Col. (6 x 7)	9	10= col.(6x 9)	11	12=col.(6*11)	13=col. (6+8+10+12)
е	9Kg Foam - 1 No	24 Months	Month									
5	Labour charges for visit & testing of Fire detection system and attending fault whenever needed. [Note:- A Monthly visit by skilled technician and helper need to be arranged by the agency and test reports from concerned exchange area must be obtained. The testing is in such a way that all the panel MCP & part of detectors in each zone are covered in every month and all detectors in all zone are covered in every 3 months)	Jonths	Month									
	(Total Net cost (excl. GST) Rs. Total cost (Incl. GST) Rs.											

Total Net cost (Excl GST) in words Rupees

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.

Contractor Page 20 of 38 Executive Engineer

IMPORTANT INSTRUCTIONS TO THE TENDERERS

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

1 (i) INCREASE / DECREASE OF TENDERED QUANTITY

- a) BSNL will have the right to increase or decrease up to 25% of the Contract value depending upon the requirement of goods and services specified in the schedule of items without any change in the unit price or other terms and conditions at the time of award of contract.
- b) In exceptional situation where the requirement is of an emergent nature and it is necessary to ensure continued supplies from the existing vendors, the purchaser reserves the right to place repeat orders up to 50% of the quantity of goods and services contained in the running tender/contract within a period of 12 months from date of award of work at the same rate or a rate negotiated (downwardly) with the existing vendors considering the reasonability of rates based on prevailing market conditions and the impact of reduction in duties and taxes etc.

1 (ii) **CURTAILMENT OF QUANTITY**:-

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

2) <u>COMPLETION OF WORK</u>:-

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

3) **EXTENSION OF TIME**:-

If the contractor shall desire an extension of time for completion of work on the grounds of his having been unavoidably hindered in its execution or on any other grounds, he shall apply in writing to the

Engineer in charge within 30 days of the hindrance on the account on which he desires such extension as aforesaid, and the Engineer in charge shall if in his opinion reasonable grounds to be shown therefore, authorize such provisional extension of time, if any as in his opinion be necessary are proper.

Contractor Page 21 of 38 Executive Engineer

4) **COMPENSATION FOR DELAY:**

If the contractor fails to maintain the required progress or complete the work and clear the site on or before the contract or extended date of completion, he has to pay the compensation for delay which is limited to 0.5% per week of the tendered value for the first 10 weeks and 0.7% per week for next 10 weeks and thereafter subject to a maximum of 12% of the tendered value for the location where the work is delayed and the firm is found responsible for the same. The clause 2 of BSNL - 8 forms stands modified accordingly. Flow chart of the Procurement process/ contract shall be supplied by the contractor and approved by Executive Engineer concerned.

5) TERMS OF PAYMENT:

100% of prorata of the approved price breakup of contract value after successful installation and commissioning of the equipment.

6) **EPF PROVISIONS:**-

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

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

7) PROGRAMME FOR EXECUTION

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

8) STORES AND SAFETY

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

9) <u>CO-ORDINATION AT SITE</u>

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

10) COMPLETION DRAWINGS

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

Schematic diagram.

Contractor Page 22 of 38 Executive Engineer

11) CHANGES IN SPECIFICATIONS

The BSNL reserves the right to make changes in respect of specifications of work if in its opinion same is found necessary. However such alterations shall be made after mutual discussions and agreement between the BSNL and the contractor. Any price implications in this regard shall be mutually discussed and agreed up on in terms of clause 12 of EW forms. The BSNL as matter of principle will not permit modifications by the contractor in design /specifications of any document /material. However the same can be agreed upon by the BSNL under exceptional circumstances where

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

(or)

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

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

12) I.S. Standards:

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

Contractor Page 23 of 38 Executive Engineer

A. GENERAL

1.0 SCOPE OF WORK

- 1.1 Attending of faults in the electromechanical services/ work in Technical installations of BSNL, as applicable in this contract means that all Services included in the schedule of work are kept in healthy, 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 Attending of faults in the electromechanical services shall be carried out as per instructions contained herein. However all other forms & instructions to be used shall be as per works instructions / forms & checklists etc., issued from time to time.
- 1.3 The Agency has to make own arrangement to obtain key from concern SDE BSS incharge for attending faults and return back the key to the same place. No extra payment will be made.

2.0 METHODOLOGY

- 2.1 It is presumed that contractor will provide qualified staff at the site, which will be adequate to perform the work
- 2.2 In case of faults beyond the capacity of the staff provided as above, contractor shall immediately provide extra-specialized work force so as to attend to the fault in minimum reasonable time without any extra cost.
- 2.3 If during the period of contract, any of the inventory are added/ altered, all inclusive of the same shall be done by the firm.

3.0 MATERIALS AND TOOLS & PLANTS

- 3.1 While attending the faults 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 with the approval of Engineer in charge. However, in case of non-availability of a particular make, Engineer-in-charge will approve the alternate make.
- 3.2 Dismantled and unserviceable items for which a replacement is supplied, shall be removed from the site under intimation to the JTO(E)/SDE(E).
- 3.3 All materials shall be of approved make, model and capacity and shall be matching to the system.
- 3.4. All tools and plants, testing & safety equipments required for carrying out various tasks relevant to fault attending have to be arranged by firm at its own cost.
- 3.5 The firm shall possess sufficient quantity of tools such as screw driver, tester, cutting pliers, tools and meters such as clamp meter, earth megger, insulation tester ,digital thermometer, anemometer etc., of sufficient quantity for carrying out the attending the faults activity.
- 3.6 The firm shall also coordinate with the JTO (E) / SDE (E) for carrying out energy audit/capacity test at site
- 3.7 The Firm/Contractor will provide the workers with necessary Safety Equipments.

4.0 COMMERCIAL

- 4.1 The tenderer 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.
- 4.2 The workers engaged by firm should maintain proper discipline and good behavior with occupants.
- 4.3 The firm shall remove such workers from the site whose behaviour is found improper. Executive Engineer's decision in this matter shall be final.
- 4.4 Any damage to the installation (s) / building during the attending the faults period due to the carelessness on the part of maintenance staff shall be the responsibility of firm & be replaced / rectified without any extra cost.
- 4.5 Any accident or damage during attending the faults will be the responsibility of agency & BSNL will not entertain any claim, compensation, penalty etc. on this account or on account of non-observance of law to the work.
- 4.6 Agency has to observe all the labour rules & regulations in force.
- 4.7 Dismantled materials shall be returned to the department except those items for which the replacement is supplied by the agency.
- 4.8 The BSNL reserves the right to carry out any work at the risk and cost of the agency, if the agency fails to perform any duty as per the contract.
- 4.9 The tenderer must obtain himself at his own expense all the information necessary for the purpose of execution, before tendering.
- 4.10 The agency should inspect the site & acquaint itself with all the local condition, means of access to work & nature of work etc. No claim shall be entertained on these accounts.
- 4.11 The contractor shall not sublet the work or part thereof. However, services of specialised agencies for specified work can be obtained.
- 4.12 The firm shall maintain the installation(s) in such a way as to provide uninterrupted required conditions in air conditioned rooms.
- 4.13 The BSNL 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.
- 4.14 The BSNL reserves the right to extend the contract as per the provisions of agreement at the same rate & conditions.
- 4.15 The contractor has to keep all the Electro mechanical equipment at site neat and clean to avoid any accident and fire hazard.
- 4.16 Firm should have the round the clock contact number. In case of emergency contractor and authorized engineer / supervisor shall be available at the site on short notice from engineer-in-charge and make efforts to take situation to normal at the earliest.
- 4.17 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.
- 4.18 Contractor has to observe all the labour rules and regulations in force & BSNL shall not be liable for any default.
- 4.19 The Firm/Contractor will provide the workers with necessary Testing and Safety Equipment.
- 4.20 BSNL is having right to pre close the agreement in special cases with one month notice without assigning any reason.
- 4.21 BSNL is having the right to curtail the quantity according to the requirement.
- 4.22 The rates quoted must be full & final. Nothing extra is payable other than quoted rates. Clause10-CC shall not be applicable for this account.

Contractor Page 25 of 38 Executive Engineer

5.0 **DAMAGES TO BSNL INSTALLATION**:

- 5.1 Any damage to the installation(s)/building While attending the faults 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.
- 5.2 Any accident or damage during attending the fault period will be the responsibility of the firm/contractor & BSNL will not entertain any claim, compensation, penalty etc. on this account or on account of non observance of any other requirement of law relevant to his work.

6.0 CURRENCY OF CONTRACT:

- 6.1 The currency of contract shall be **24** months. BSNL 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.
- a. The BSNL reserves the right to curtail any quantity during the currency of contract without assigning any reason.
- 6.2 The BSNL 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.

7.0 TERMINATION OF CONTRACT:

- 7.1 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, failure to attend breakdown, disobedience and abandoning the site etc. In such a case, Full Performance Guarantee shall be forfeited to BSNL. The decision of Executive Engineer (E) in this regard shall be final and binding.
- 7.2 Right is reserved by BSNL for closure of the contract at any time by giving one month's notice without assigning any reasons. 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.

8.0 GENERAL CONDITIONS:

- 8.1 The contractor shall not sublet the work. However, services of specialized agencies for specific work can be obtained.
- 8.2 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.
- 8.3 The Contractor will provide the workers with necessary T & P, Testing & safety equipments.
- 8.4 Contractor has to observe all the labour rules and regulations in force & BSNL shall not be liable for any default.
- 8.5 Firm is responsible to keep workable spares and consumables for due
- 8.6 In case of Emergency, contractor and/or his authorized engineer or supervisor shall be available at short notice from Engineer-in-charge and make all efforts to make the situation normal at the earliest.

Contractor Page 26 of 38 Executive Engineer

9.0 TEST CHECK BY THE FIELD ENGINEERS:

✓ For the purpose of assessing the quality of service rendered by the firm against the above contract, the SDE & JTO shall carryout inspection & test checks of the service/work under the contract periodically.

10.0 Guarantee and Defect Liability

- 10.1 The guarantee for replaced components / equipments/spares shall be valid for twelve months from date of replacements. The contractor shall guarantee that all replaced components / equipments/spares are free from any defects and also the equipments work with satisfactory performance and efficiency not less than the guaranteed values.
- 10.2 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, 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.
- 10.3. Wherever components of other services are replaced by BSNL, the firm shall take over such units/services immediately on expiry of guarantee period.

Contractor Page 27 of 38 Executive Engineer

TECHNICAL SPECIFICATIONS

1. Fire detection system

Detectors to be cleaned every three months from the out side and once a year with blower. This activity is to be carried out on continuous basis so that turn of each detector comes every months/year.

Testing on zones in such a manner that every detector is tested at least once in 3 months.

Note: The methodology to be worked out in consultation with Maintenance in charge as the same may vary according to number of detectors / zones. Proper record to be kept for monitoring. Defects have to be removed on PRIORITY basis.

The firm has to demonstrate to the Maintenance-in-charge proper working of the entire fire detection system once a month. Deficiencies if any noticed during demonstration shall be attended within a weeks' time.

In case of fire alarm it is expected that the maintenance person has to immediately rush to the trouble spot and also inform building in charge/fire Department. He should also take 'first aid' steps depending upon situation Specific details for first and steps to be worked out in consultation with maintenance in charge and kept on record.

In case of persistent problem or if required by the Engineer-in-charge arrange on inspecting by an expert in the fire detection system for identifying defects and solutions.

1.1 COMPLAINT / FAULT REGISTER

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

Name of work :
Name of contractor :
Agreement No :
Name of Sub-Division :
Station/Exchange/Bldg :
Register Format :

Complaint No.	Date &Time	Location of fault.	Complaint Lodged by / FAULT Observed by	Nature of complaint reported / Fault	Time & Dt of attending complaint / Fault vide service report no.	Proposed action to avoid future complaint / Fault	Dated Signature of Firm's Representativ	Acknowledge ment by SDE(E)/ Ex In charge

All the complaints / spares attended/replaced should be recorded in the register

1.2 FORMAT OF TEST REPORT FOR FIRE DETECTION SYSTEM:

- (1) Make of panel
- (2) Maintained by :
- (3) Agreement nos.
- (a) Operation & Comprehensive maintenance:
- (4) Name of testing : Testing Of Fire Detection & alarm system
- (5) Date of testing
- (6) In presence of following:

Name Designation:

- (1)
- (2) (3)
- The testing of the above installation has been carried out and the results are stated below. The inventory of the installation has been attached.

Contractor Page 28 of 38 Executive Engineer

(A) Whether the MCP and LCP have the following supervisory facilities and are healthy and good working condition: -

M.C.P. L.C.P.

- i) Open Circuits :
- ii) Short Circuits :
- iii) Reset Push Button
- iv) Alarm Acknowledge
- v) Lamp Test Push Button:
- (B) Whether each control panel has the following facilities and are healthy and good working condition:
 - i) Fire Test :
 - ii) Normal / Zone Isolation :
 - iii) Alarm Test
 - iv) Fault Trouble test
- (C) Check of Earthing:
 - i) Main Control Panel
 - ii) Local Control Panel
- (D) Check of Main Power Supply:
 - Check of fuses.
- (E) Check of Battery: -

M.C.P/. L.C.P.

- i) Location of Battery
- ii) Condition of Battery
- iii) Check of Fuses
- iv) Voltage
- v) Specific Gravity
- vi) Automatic Changeover of the System on Battery,

in case of Mains Failure. :

- vii) Remarks. :
- (F) Check of Open, Short, and Isolation of Detectors.
- (G) Check of Operation / Activation of Detectors.
- (H) Check of Manual Call Points (Pill Box).
- (I) Functional Test of Control Panel & P. A. System.
- (J) Check of alarms:

AUDIO VISUAL

- i) Mains Failure
- ii) Open Circuit :
- iii) Short Circuit :
- iv) Close Circuit :
- v) Fuse Blown :
- vi) Low Voltage
- vii) Reverse Polarity
- viii) Remarks: -
- (K) DEFECTS / DISCREPANCIES:
- (L) CONCLUSION: -

Contractor's representative Departmental Representative

Contractor Page 29 of 38 Executive Engineer

2. Wet Riser system Complaint register

	Complaint No. Date & Time
	Location of fault.
	Complaint Lodged by / FAULT Observed by
_	Nature of complaint reported / Fault Observed
	Time & Date of attending complaint / Fault vide service report no.
	Proposed action to avoid future complaint / Fault
	Dated Signature of Firm's Representative
	Acknowledgement by SDE(E) / Ex. In charge

All the complaints attended should be recorded in the register

Monthly Maintenance activity

- 1. Greasing of all outlet valves yard hydrant and floor hydrant
- 2. Checking of operation of valve
- 3. Arresting of leakage of valve if any by tightening of the gland including gland packing
- 4 Observation of leakage in wetriser system
- 5. Extending and operation of hose reels
- 6. Checking of Operation of pumps and recording of the set pressure
- 7. Checking of automatic operation of Jokey pump main pump and diesel pump
- 8. General cleaning of pumps/ panels
- 9. Checking of connections i/c earthing

Quarterly maintenance

- 1. Quarterly demonstration of fire fighting by connecting the hose and release of some water. This should be done in cyclic manner so that at each quarter one valve is tested by connecting and extending the hose and releasing some water.
- 2. Preventive maintenance of pumps/ lubrications etc
 - i. As regards to item under comprehensive maintenance, replacement of major equipments (such as pump sets) which is required to be replaced as a whole after due scrapping shall be the responsibility of the BSNL. Till such time firm has to maintain the equipments, which are under comprehensive maintenance.

3. GENERAL:

- i. Contractor shall have a round the clock communication landline/ Mobile telephone number at Chennai. Agency shall furnish official mail id for correspondence.
- ii. Any official communication from BSNL, through mail is deemed to be valid communication.
- iii. If during the period of contract, any of the service/services are added/ altered, the comprehensive maintenance of the same shall be done by the firm, the rates will be regularized as per Clause -12 of EW 8. Similarly in case of deletion of any service/services similar recovery shall be made from the bill of the contractor. However operation of the services shall be done without any extra cost, except where the work requires continuous additional shifts of workmen to be deployed at site.
- iv. The details of the Inventory are approximate to give an idea of services to be operated/ maintained. Any variation on higher or lower side shall deem to be included at the initial take over. However the tenderers are advised to inspect the site (s) and make them acquainted before quoting.
- v. The contractor shall not sublet the work or part thereof. However, services of specialized agencies for specific work can be obtained.
- vi. 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

Contractor Page 30 of 38 Executive Engineer

- person employed by it in carrying out the contract. Further, such staff has no right to claim employment in BSNL.
- vii. The Contractor will provide the workers with necessary T & P, Testing & safety equipments.
- viii. Contractor has to observe all the labour rules and regulations in force & BSNL shall not be liable for any default

4. **DAMAGES TO BSNL INSTALLATION**:

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

5. CURRENCY OF CONTRACT:

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

6 TERMINATION OF CONTRACT:

- i. Right is reserved by BSNL for terminating the contract due to serious default. This includes major break down or accident or loss due to negligence on the part of firm, failure to attend breakdown, disobedience and abandoning the site etc. In such a case, Full Performance Guarantee shall be forfeited to BSNL. The decision of Superintending Engineer (E) in this regard shall be final and binding.
- ii. Right is reserved by BSNL for closure of the contract at any time by giving one month's notice for reasons not attributed to the Contractor. The decision of Executive Engineer shall be final and binding on the contractor for closure of contract and for which BSNL shall not entertain any claim.
- iii. <u>Termination of contract on death of contractor</u>: 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.

Contractor Page 31 of 38 Executive Engineer

INVENTORY

TE KK Nagar AFD / FF system AMC cost 2023-24 S. No. of Fire Fighting Make **hydrants** no 14outlets + 6yard hydrants +3Fire Kirlokar pump / 1 2 Kirloskar engine brigade **Equipment Part** 1a Electric motor driven pump (Kirloskar Pump/Engine) 1no. 1b Jockey pump 1no. 2 1no. Diesel driven engine pump 3 Wet riser fire fighting sytem 29.41mtrs riser 2nos. Yard hydrant length=70mtr(apprx) 70mtr 14outlets+6yard hydrants+3Fire brigade 23nos. 4 Fire Extinguishers а 2Kg CO₂ 9nos. b 4.5Kg CO₂ 71nos. С 2Kg ABC 16nos. d 5.0Kg ABC 10nos. е 9Kg Foam 1nos. Automatic Fire Detection System of entire KK Ngr TE 5 12nos.

(only those which are presently Working)

Contractor Page 32 of 38 Executive Engineer

LIST OF APPROVED MAKES - BSNL ELECTRICAL WING

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

Contractor Page 33 of 38 Executive Engineer

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

NOTE:

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

Contractor Page 34 of 38 Executive Engineer

LIST OF INDIAN STANDARDS

I.S.277	Galvanized	steel	sheets.

- I.S.325 Three Phase Induction Motors
- I.S.655 Metal Air Ducts
- I.S.732 Code of Practice for Electrical Wiring and fittings for Buildings.
- I.S.778 Gun Metal Gate, Globe and Check Valves for general purposes.
- I.S.900 Code of Practice for Installation and Maintenance of Induction Motors.
- I.S.996 Single Phase small AC and Universal Motors.
- I.S.1239 Mild Steel Tubes, G.I. Pipes, Tubular and other wrought steel fittings.
- I.S.1248 Direct Acting Electrical Indicating Instruments.
- I.S.1520 Horizontal Centrifugal Pumps for clear, cold and fresh water.
- I.S.1554 PVC Insulated (heavy duty) Electrical Cables
- (Part-I) for working voltages upto and including 110 volts.
- I.S.2372 Timber for cooling towers.
- I.S.2516 AC Circuit Breakers.
- I.S.2592 Recommendation for Methods of Measurements of Fluid flow by
- means of Orifice Plates and Nozzles.
- I.S.1822 Motor Starters of Voltage not exceeding 1000 volts.
- I.S.2208 HRC Cartridge Fuse Links upto 650 volts.
- I.S.3589 Electrically welded steel pipes for water, gas and sewage.
- I.S.3624 Bourden Tube Pressure and Vacuum Gauges.
- I.S.4047 Heavy Duty air break switches and composite units of air break switches and fuses for voltage not exceeding 1000 volts.
- I.S.6392 Steel Pipe Flanges.
- I.S.7403 Code of Practice for Selection of Standard Worm and Helical Gear Boxes.
- I.S.8148 Specification for packaged air conditioning.
- CPWD General Specifications for Heating, Ventilation & Air conditioning (HVAC)-2004

IMPORTANT NOTE

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

LIST OF SAFETY STANDARDS

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

Contractor Page 35 of 38 Executive Engineer

PROFORMA OF SCHEDULES

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

SCHEDULE 'A'

Schedule of quantities: Attached

SCHEDULE 'B'

Schedule of materials to be issued to the Nil

bidder:

SCHEDULE 'C'

Tools and plants to be hired to the Nil

bidder:

SCHEDULE 'D'

Extra schedule for specific Nil

requirements/documents for the work, if any:

SCHEDULE 'E'

Schedule of components of Materials, Labour etc. Nil

for escalation:

SCHEDULE 'F'

Reference to General Conditions of contract:

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

General Rules & Directions: Officer inviting Executive Engineer (E) tender: Electrical Division-I, Chennai

Definitions:

2(v) Engineer-in-Charge Executive Engineer (E)

Electrical Division-I, Chennai

2(vi) Accepting Authority Executive Engineer (E)

Electrical Division-I, Chennai

2(x) Percentage on cost of materials and

labour to cover all over heads and profits 10% (TEN)

CLAUSE 5

Time allowed for execution 24 Months

Authority to give fair and reasonable extension

of time for completion of work: Executive Engineer (E)

Competent Authority for deciding reduced rates: Executive Engineer (E)

Clause 25

Competent authority for conciliation: Executive Engineer (E)

•

Contractor Page 36 of 38 Executive Engineer

BSNL EW-8

Bharat Sanchar Nigam Limited Electrical Wing

Electrical Division: **ED-I, Chennai** Sub Division: **ESD-III, Chennai**

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

Contractor Page 37 of 38 Executive Engineer

Signature of Witness (required in the case of bidder's thumb impression is given by the bidder in place of signature) Occupation of Witness:	(Signature of bidder) (Name & Postal address)				
	Seal of Bidder				
	Date:				
<u>Acceptan</u>	ce of Tender				
The above tender (as modified by you as	provided in the letters mentioned hereunder) is				
accepted by me for and on behalf of BSNL for a sum of Rs.					
(Rupees)					
The letters referred to below shall form part of	this contract Agreement.				
a)					
b)					
	For & on behalf of BSNL				
Dated Signature:					
Dα	signation:				

Contractor Page 38 of 38 Executive Engineer