

(A Govt. of India Enterprise)

% SUB DIVISIONAL ENGINEER (E), BSNL Electrical Sub Division, SGD, BSNL Bhavan, Sangareddy.

#### NOTICE INVITING TENDER

#### NIT No: 06/BESD/SGD/ 2023-24

Dated: 06/12/2023

The Sub Divisional Engineer (E), BSNL Electrical Sub Division, Sangareddy, BSNL Bhavan, Sangareddy, invites on behalf of the Chairman, BSNL sealed item rate tenders for the following work:

Work No.	Name of work	Estimated Cost (Rs.)	EMD (Rs.)	Tender cost (Non- Refundable) (Rs.)	
01	Shifting of AC units from TE Rudraram to GM Chamber at Patancheru and DGM Chamber at GM office, Sangareddy	48,206	961	177/-	01 Month

#### **Eligibility Conditions:**

from contractors satisfying the following conditions

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

#### AND

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

#### Contractor shall submit and confirm:

- 1) Valid "Chartered Accountant Certificate" and Registration Certificate with attested copies as applicable along with application on their printed letterheads for purchase of Tenders.
- 2) The tenderer shall submit the tenders in two sealed covers marked as cover 1<sup>st</sup> and 2<sup>nd</sup>. The first cover should contain earnest money deposited in the shape of Demand draft/ pay order of a Scheduled Bank or Nationalized Bank / State Bank guaranteed by Reserve Bank of India drawn in favour of the Accounts officer (cash), BSNL, O/o GMTD, Sangareddy and the 2<sup>nd</sup> cover should contain the tender document. In case the first cover is not annexed or earnest money is not in proper form, the 2<sup>nd</sup> cover containing tenders will not be opened at all.
- 3) The firm who quotes on the tender downloaded from website shall strictly follow the following procedure:

The tenderer shall submit the tenders in two sealed covers marked as cover 1st and 2nd.

4) The first cover should contain the following

- a) Earnest Money Deposit (EMD) in the shape of Demand draft/ pay order of a Scheduled Bank or Nationalized Bank / State Bank guaranteed by Reserve Bank of India or Bank Guarantee bond drawn in favour of the **Accounts officer (cash)**, **BSNL**, **O/o GMTD**, **Sangareddy**.
- b) Cost of the tender documents in the shape of DD.
- c) The Credentials of tenderer self attested and certified by any BSNL Executive. If not certified by BSNL Executive, then original documents shall be produced at the time of opening.
- 5) The Second cover should contain duly filled tender document. The first envelop containing tender fee, attested document proving fulfilment of eligibility criteria containing and EMD in proper form shall be opened first.
- 6) The second envelope shall not be opened in case
  - a) Tender fee is not submitted in proper form
  - b) EMD is not in proper form
  - c) Firm fails to fulfill eligibility criteria on the basis of document submitted in the first envelope.
- 7) If any difference/ discrepancies found between downloaded tender form, any hard copy issued from division office, the contents in Draft NIT issued from SDE(E)'s office will be final and binding.
- 8) Tenders received by post/courier shall not be entertained.

Tender Cost: **Rs. 177/-** (inclusive of all Taxes, Non-refundable) by cash/ DD to **Accounts officer** (cash),BSNL, O/o GMTD, Sangareddy.

The tender will be received up to 3 PM on Dt: 16/12/2023 and opened at 3.30 PM on the same day. In case holiday is declared on the opening day, the tenders will be opened on the next working day.

Note: Tender Documents can be downloaded from website https://telangana.bsnl.co.in/tenders\_active.php

#### Sub Divisional Engineer (E)

Lr. No: NIT 06/ BESD/ SGD/ 2023-24/ <b>40</b>	Dated: 06/12/2023

1) The Executive Engineer (E), BSNL, Electrical Division No.I, Hyderabad.

2) SDE (E) Electrical Sub Division IV/Sangareddy/ Nizamabad/ Nlg/ KHM/ II/ III

- 3) All Eligible Contractors.
- 4) SR SS/ SDE (EP)/ AO/ Cashier/ Auditor/ Notice Board.

Sub Divisional Engineer (E) BSNL Electrical Sub Division, Sangareddy.

#### DNIT No: 31 / BEDH-I / 2023-24

#### Dated: 06/12/2023

SDE (E-P) BEDH-I



भारत संचार निगम लिमिटेड <sup>(भारत सरकार का उपक्रम)</sup> BHARAT SANCHAR NIGAM LIMITED

#### **Electrical Wing**

**Circle :** Telangana BSNL Circle **Branch**:

**Division:** Div-I, Hyderabad Electrical Works **Sub Division: ESD, SGD** 

- *i)* Tender for the work of Shifting of AC units from TE Rudraram to GM Chamber at Patancheru and DGM Chamber at GM office, Sangareddy
  - ii) Issued to (contractor)Tender Cost\_177/-\_\_\_
  - iv) Date of application \_
  - vi) Signature of officer issuing the documents
  - (iii) Receipt No.
- (v) Date of issue
- vii) Designation Sub Dvn.<u>Sangareddy</u>

**(A)**i)

Tobesubmittedby15.00hourson\_16-12-2023\_\_toEE(E)/SDE(E), BSNL El. Dvn/Sub Division, Sangareddyrii)To be opened in presence of tenderers who may be present at 15.30 hours on \_\_16-12-

ii) To be opened in presence of tenderers who may be present at 15.30 hours on\_16-12-2023\_in the office of EE(E) / SDE (E), BSNL El. Dvn./ Sub Dvn, Sangareddy

## <u>UNDERTAKING</u>

**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 / have read and examined the General Rules and Directions and clauses of EW-8.The name of work, time allowed for work , estimated cost, tender cost, mode and amount of EMD etc, where ever appearing in EW-6/EW-8 shall be as per the notice inviting tender available on the web site.

**3.** I / We hereby tender for the execution of the work specified for BSNL within the time specified, as perthe 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.

**4.** 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.

**5.** A sum of **Rs. 961/-** is hereby forwarded in the form of Depositat call receipt / FDR / Bank guarantee of a Nationalized / Scheduled Bank as earnest money. 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 inlaw 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.

6. Should this tender be accepted, I/We agree to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to therein and to carry out such deviations as may be ordered up to maximum of 50%, as per the conditions of "Important Note for the contractors".

7. I/ We agree that the said EW-6/ EW-8 shall be made a part of the contract while entering into the agreement(can be down loaded at )

I / we agree to furnish to BSNL Deposit at call receipt / FDR / Bank guarantee of a 8. Nationalised / 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 letter of Acceptance. I / We agree to keep the Performance Bank Guarantee validity asper relevant clause of Notice Inviting Tenders.

9. 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.

10. This agreement is subject to the jurisdiction of court of law at Sangareddy.

Signature of Witness Signature of contractor (Required in case thumb impression is(Seal of Contractor) given by the contractor in place of signature) (Name & Postal address) Occupation of Witness

## **ACCEPTANCE**

Date:

	i) The a	above ter	nder (as i	modified	by you a	s provided	in the le	tters mei	ntioned	hereun	der) is ac	cepted
	by	me	for	and	on	behalf	of	BSNL	for	а	sum	of
		Rs.										
	(Rupe											
				) The let	ters refe	erred to be	ow sha	ll form p	art of th	is cont	ract Agre	ement.
	a)											
	<b>b</b> )											
	b)											
	c)											
	CJ											
							For	& on beh	alf of <b>B</b>	SNI.		
_							1010					
Dated												

Signature Designation

## IMPORTANT NOTE FOR THE CONTRACTOR/ FIRM WHO DOWNLOAD THE TENDER FROM WEB SITE

The contractor/ firm who are down loading the tender form are instructed to go through the following points:-

- The contractor/firm has to submit an undertaking (duly signed, in the format enclosed with the NIT) that he shall abide by the original standard forms PWD-6 and 8. BSNL forms which can be seen in any nearest Electrical units of BSNL.
- 2. The contractor/ firm shall submit the following in FIRST ENVELOPE: -
  - (A) Application on the firm's printed letter-head
  - (B) Necessary documents for credentials for meeting the eligibility conditions.
  - (C) Non-refundable cost of tender documents (in the shape of demand draft).
  - (D) Earnest money (in the prescribed form and of prescribed amount).
  - (In case of demand draft, separate demand draft for Cost of tender documents and EMD are to be submitted)
- 3. After verification of the documents in FIRST ENVELOPE (i.e. credentials, cost of tender documents and earnest money, etc) and on finding them in order, the SECOND ENVELOPE containing the tender documents shall be opened as per instructions contained under NIT.
- 4. It shall be the responsibility of the firm to clearly list the documents attached to establish their eligibility credentials in the application (on their printed letter head).
- 5. The credential of tenderer fulfilling eligibility criteria as mentioned above should be enclosed.
- 6. EMD of non-eligible firms shall be returned in original at the time of opening of tender.
- 7. The tenderer has to submit the downloaded original computer print out of the documents from the web site. The photocopy shall be not accepted.
- 8. If during the opening of tender and process of tender finalization, it is detected that the tenderer has submitted tender documents after making any charges/ additions/ deletions in the tender documents down loaded from the web site, the offer shall be summarily rejected and the EMD deposited by the tenderer shall be forfeited in addition to any action as per the prevalent rules.

Sub Divisional Engineer(E)

## PROFORMA – A

From: Name: Address : Place: Date:

To The Sub Divisional Engineer (E) BSNL Electrical Sub Division, Mahabubnagar.

Sub: Request for issue of Tender Documents for the work of "

Ref:	NIT Dated	 Published in	on
Sir,			

I/ We request that I/ We may please be issued with the tender documents for the above work, My/ our registration and other details are as follows:

1	Particulars of Registration (Copy of Regd. Certificate and insolvency in case of		
	PWD registration enclosed)	:	
	a) Class of registration		
	b) Monetary limit for tendering	:	
	c) Authority by whom the registration issued	:	
	d) Validity of registration	:	
2	Full name of the firm / Contractor	:	
3	Telephone number	:	
4	Mobile Number	:	
5	e-mail id	:	
6	Is the firm proprietary/ Partnership	:	
7	Income tax account No.	:	
8	Work experience (copies of work experience		
	certificate enclosed) List of at least 3 works		
	executed during the last 3 years with their values.		
	i)	:	
	ii)	:	
	iii)	:	
9	Certificate regarding near relative in prescribed		
	proforma has been signed by me (overleaf)	:	
10	Mode of remittance of tender form cost		
	a) Amount		Mode: Cash / DD

**Important:** The originals of the above records shall be produced for verification at the time of issue of tender documents. Encl:

Yours faithfully

#### PROFORMA - B

Certificate regarding near relatives (not employed in BSNL) to be given by prospective the tenderer.

## CERTIFICATE

I/ We	S/o	
		hereby certify
that none of my near relat	ive's* is / are employed in BSNL	unit <sup>**</sup> . In case of any stage it is found
that the information given	by me is false / incorrect BSNL	shall have been absolute right to take
any action including termi	nation of contract, as deemed fit	t / without any prior intimation.

\*Near Relative(s) for this purpose is / are defined as:

- (a) Members of a Hindu Undivided family.
- (b) They are husband and wife.
- (c) The one is related to the other in the manner as father, mother son(s) and sons'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).

**BSNL Unit** \*\* is defined as SSA / Circle / Chief Engineer (Civil)/ (Elect.) / Chief Archt. / Corporate office for non executives employees and all SSA in a circle including Circle office / Chief Eng. (Civil) / (Elect.) / Chief Archt. / Corporate office for executive employees (including those called as Gazetted officers at present).

#### Note:

1. The near relatives<sup>\*</sup> of all BSNL Employees either directly recruited or on deputation are prohibited from participation in tenders and execution of works in the different BSNL units<sup>\*\*</sup>.

2. Company or firm is not permitted to tender for work in BSNL unit \*\* in which his near relative(s)\* is / are working.

3. "Government of India Financial Institutions nominees and independent non official part time Directors appointed by Govt. of India or the Governor of the state including full time Directors of PSUs both state and central are excluded from the purview of submission of certificate in regard of employment of near relatives working in the BSNL while submitting tenders by limited companies."

<u>**Condition No. 21**</u> – Recovery of 1% cess on the gross bill amount (R.A. and / or Final) shall be effected under the provisions of Building and other construction Workers Welfare Act 1996.

Name	
Postal address	

Telephone & Mobile No \_\_\_\_\_

Signatures of Contractor

#### PROFORMA – C

Certified that I / we	S/o
	resident of
have	downloaded the entire tender document including
the NIT, Proforma A,B, Schedules, additional spe	cification, condition, special condition, annexures,
proforma, Schedule of quantities etc. and all ot	her contents in the tender documents intact as it
was displayed on the web-site <u>www.ap.bsnl.co.ir</u>	on(date) at
(time) and no tempering/ char	nge viz any modification/ addition/ correction /
deletion etc. has been made anywhere. The te	nder document submitted by me/ us are same/
identical as available on the web-site. If it is fo	und at any stage that I/We have resorted to any
tempering/ change as mentioned above in the	downloaded tender document which may or may
not lead to change in any of the specification,	condition, clauses, nomenclatures, quantities or
meaning of any of the relevant sentences, BSNL	shall have absolute right to terminate the contract
and start criminal proceedings. BSNL shall hav	e full rights to indemnify themselves against any
losses occasioned due to such tampering of the	document as mentioned above. I understood that
PWD 6, PWD 7/8 will be part of the Agreement	t. I have gone through fully the clauses of PWD 6,
PWD 7/8 and will be abide by that.	

Name
Postal Address
Telephone & Mobile No

#### **UNDERTAKINGS TO BE FURNISHED BY THE TENDERER**

## NO NEAR RELATIVE WORKING CERTIFICATE

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

# ➢ In case of proprietorship firm, certificate will be given by the proprietor & for partnership firm certificate will be given by all the Directors of the company

(Seal of the firm)

(Signature of Bidder)

## UNDERTAKING REGARDING EPF PROVISIONS

"I...... Son of ...... hereby 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".

\* Strikeout whichever is not applicable

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

(Seal of the firm)

(Signature of Bidder)

## **UNDERTAKING REGARDING ESI PROVISIONS**

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

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

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

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

\* Strikeout whichever is not applicable

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

(Seal of the firm)

(Signature of Bidder)

## UNDERTAKING TO ABIDE BY EW 6 & EW 8

(Seal of the firm)

(Signature of Bidder)

## SPECIFICATION FOR THE WORK OF PROVIDING EI & FANS

- 1. The work shall be carried out as per current CPWD specifications for Electrical works as amended from time to time and Indian Electricity Rules as amended up to date.
- 2. The work shall be supervised by a qualified technical staff.
- 3. Layout of the work will be given by the Engineer in charge or his duty authorized representative at the site of work.
- 4. Following categories of wiring shall be done on separate conduits.
  - a) Power plug
  - b) Light and fan wiring
  - c) Emergency light point wiring
  - d) Telephone wiring e) AC unit wiring.
- 5. The No. of power plug points and emergency light point (fed from DC supply) shall not exceed 2 per circuit.
- 6. Earthing sets work shall be carried out in the presence of the Engineer-in-charge or his authorized representative.
- 7. Samples of all the materials, fittings accessories switch gears etc., shall be approved from the Engineer-in-charge before using the same on the work. Rejected material shall be removed immediately form the site of work.
- 8. The contractor will have to carry out the following test at his cost and intimate test results before final bills are paid. Nothing extra will be paid to him on this account.
  - 1) Earth test
  - 2) Polarity test
  - 3) Insulation test
  - 4) Earth continuity test of the surface recessed conduit pipes.
- 9. Any damages done to the building by the contractor during the executing of the work shall have to be made good at his cost and risk. If it is not done within a reasonable time determined by the Sub Divisional Engineer (E) then the same will be got done at his cost departmentally after giving notice to him.
- 10. The outlet boxes, IC boxes for switch gears and ends of conduit etc., for different categories of conduit runs catering for different types of electrical wiring as mentioned in clause above shall be painted inside/outside with different colours satisfying different categories mentioned so as to avoid mixing of various circuits and their wiring and nothing extra will be paid for this.
- 11. At the time of laying conduit pipes in the slab and in recess the contractor will keep wire of 15 SWG GI throughout the conduit pipe and will have to take special care so that the conduit does not pass through air conditioning ducts, grills columns, beams etc. If any such necessity is foreseen special written permission of Sub Divisional Engineer (Electrical) should be obtained before such work is carried out. In case of failure the contractor will not be paid on this account. The contractor should recess the conduit in the walls before they

are plastered and co-ordination with the progress of building work. Any damages thus done will have to be made good at the cost of the contractor. The conduit pipes should be mechanically and electrically continuous.

- 12. The bakelite covers for the switches; plug sockets etc., shall not be removed or broken for taking connections which shall be done at their back by providing. Suitable wooden reaper in the IC boxes where found necessary. All wooden boxes for switches, plug and regulator etc., shall be provided with 1/8" thick bakelite sheet covers.
- 13. The runs of various circuits wiring at various places shall be kept minimum by taking the runs on walls where cross of columns is not necessary. This has to be decided before casting of slab so that unnecessary length of conduit is not laid there in.
- 14. All the IC distribution sub-main board and corresponding switch near shall be sign-written clearly indicating the No. of distribution boards, type of load it is serving and the number of circuits contained in the distribution box. Details of the routes led from a particular distribution box shall be placed in tabular from on the reverse of the cover of the distribution box.
- 15. Under ground cables both of 11KV and 1.1 KV grade should be subjected to pressure of insulation tests before and after laying the same in the ducts. In case of unsatisfactory tests, the cost of all repairs and replacement and all extra works of removal and relaying will have to be made good by the contractor at his own risk.
- 16. While making the end connections of wires, no strand shall be cut and the termination of wires shall be done with necessary lugs and ferrules without any extra payment.
- 17. The bus-bars of the single phase distribution box shall be of solid aluminium strip instead of sheet metal.
- 18. Lugs should be provided while terminating 8 SWG GI wire fro earth continuity without any extra payment.
- 19. The termination of conduit etc., in the junction box to be provided above DBs should be done by making proper holes knockouts instead of cutting the box.
- 20. The contractors will have to make arrangements to take the materials to site of work at his own cost and risk. Octroi if paid by the contractor for the materials supplied by the Department can be claimed by his against the original vouchers.
- 21. If any conduits were laid before award of this work the recovery for the same will be made from the contractor at rates specified in the SR 94 (internal) plus abatement of tender.
- 22. The contractor shall submit the completion plan as required vide general specifications for electrical works. Part-I (internal) & part II (external) as applicable within 30days the completion of the work. In case of contractor fails to submit the completion plan as aforesaid he shall be liable to pay sum equivalent to 2.5% of the value of the work subject to a ceiling of Rs. 2500/- as may be fixed by the Higher authority

Sub Divisional Engineer (E) BSNL Electrical Sub-Division, Sangareddy.

## LIST OF APPROVED MAKES- BSNL ELECTRICAL WING

S	Item	Makes
1	Engine	Ashok Leyland /Cummins/ Cater pillar / KOEL/ Volvo Penta / Mahindra & Mahindra (up to 40 KVA) /Escorts (up to 30 KVA)/ Eicher (up to 20 KVA)
2	Alternator(Brushless)	Crompton Greaves (AL. series) / KEC / Leroy Somer / Stamford/Jyoti Ltd
3	Battery (Lead Acid / Mntc. Free)	Amara Raja / AMCO / Farukawa / Hitachi / Exide/ Prestolite / Standard
4	HV Switchgear (Vacuum Circuit Breaker/SF6 )	Biecco Lawrie / Crompton / Kirloskar / MEI / Jyoti Ltd
5	Transformer (Oil filled / Dry type)	ABB / Schneider Electric /Andrew Yule / Bharat Bijlee / Crompton / EMCO / Kirloskar / Siemens
	a) Above 400 KVA	
	b) Up to 400 KVA	In addition to above makes, Uttam/Automatic Electric Gear(AEG)/Patson/Rajasthan Transformer and Switchgear
6	Air Circuit Breaker	L&T/ Schneider Electric / Siemens
7	MCCB(Ics=Icu)	L&T/ Schneider Electric / Siemens
8	SDF units	L&T/ Schneider Electric / Siemens/ HPL/Havells
9	Power Contactors	L&T/ Schneider Electric / Siemens/ Lakshmi(LECS)
10	Change Over Switch	HPL / Havells / H-H Elcon
11	Intelligent APFC Relay	L&T/EPCOS(Siemens)/ Schneider Electric / Neptune Ducati/Syntron/ABB
12	Bus Bar Trunking/ Sandwiched Bus Duct	Moeller/L&T/Schneider Electric/ABB/Legrand/Zeta
13	Power Capacitors (MPP/APP)	L&T/EPCOS(Siemens)/ABB/Crompton/ Schneider Electric/Neptune Ducati
14	Digital/ KWHr meter	Schneider Electric/ AE/ Digitron / IMP/ Meco / Rishabh / Universal/HPL/L&T/ABB
15	Cold shrink HT/LT Cable Joint	Denson / 3M(M-Seal )/ Raychem
16	Rubber Matting	ISI mark
17	MCB/ lsolator /ELCB/RCCB/ Distribution Board	Crompton / Havells / Indokopp / MDS Legrand/ L&T / Schneider Electric/ Siemens / Standard/ C&S/ABB/HPL
18	MS/ PVC Conduit	ISI mark
19	Cable Tray	MEM/Bharti/Ratan/Slotco/Profab
20	HT/LT Cables	ISI mark
21	PVC insulated copper conductor wire	ISI mark
22	Centrifugal Pump	Amrut / BE / Beacon / Batliboi / Crompton / Jyoti / Kirloskar / KSB / Mather & platt / WASP/Grundfos
23	Submersible Pump	Crompton/Amrut / BE / Calama / Kirloskar / KSB
24	Motors	ABB/ Bharat Bijlee / Crompton Greaves / Schneider Electric / HBB / KEC / Siemens/Jyoti Ltd
25	Fresh Air Fans	GE / Khaitan/Almonard/Crompton
26	Starter	ABB / BCH / Schneider Electric / L&T / Siemens /
27	Single Phase Preventer	L&T / Minilec / Siemens / Zerotrip
28	GI/MS Pipe	ATC / ATL / BST / GSI / ITC / ITS / IIA / JST / Jindal /TTA / Tata/Zenith
29	Foot Valve	ISI mark

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

NOTE:

1. In case of External/ PMC works, the list of approved makes may be modified as per client's requirement.

- 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 additional makes may be approved by concerned PCEs/ Sr CEs/ CEs(Elect) for the work under his jurisdiction as already accorded vide letter no. 3-2-5/EW/VEP-1/2007 dated 05-07-2007.

# **COMPUTERISED MEASUREMENT BOOK**

### CLAUSE 6A

- Engineer-in-Charge shall, except as otherwise provided, ascertain and determine by measurement the value of work done in accordance with the contract.
- All measurements of all items having financial value shall be entered by the contractor and compiled in the shape of the Computerized Measurement Book having pages of A-4 size as per the format of the department so that a complete record is obtained of all the items of works performed under the contract.
- All such measurements and levels recorded by the contractor or his authorized representative from time to time, during the progress of the work, shall be got checked by the contractor from the Engineer-in-Charge or his authorized representative as per interval or program fixed in consultation with Engineer-in-Charge or his authorized representative. After the necessary corrections made by the Engineer-in-Charge, the measurement sheets shall be returned to the contractor for incorporating the corrections and for resubmission to the Engineer-in-Charge for the dated signatures by the Engineer-in-Charge and the contractor or their representatives in token of their acceptance.

Whenever bill is due for payment, the contractor would initially submit draft computerized measurement sheets and these measurements would be got checked/test checked from the Engineer-in-Charge and/or his authorized representative. The contractor will, thereafter, incorporate such changes as may be done during these checks/test checks in his draft computerized measurements, and submit to the department a computerized measurement book, duly bound, and with its pages machine numbered. The Engineer-in-Charge and/or his authorized representative would thereafter check this MB, and record the necessary certificates for their checks/test checks.

- The final, fair, computerized measurement book given by the contractor, duly bound, with its pages machine numbered, should be 100% correct, and no cutting or over-writing in the measurements would thereafter be allowed. If at all any error is noticed, the contractor shall have to submit a fresh computerized MB with its pages duly machine numbered and bound, after getting the earlier MB cancelled by the department. Thereafter, the MB shall be taken in the Divisional Office records, and allotted a number as per the Register of Computerized MBs. This should be done before the corresponding bill is submitted to the Division Office for payment. The contractor shall submit two spare copies of such computerized MB's for the purpose of reference and record by the various officers of the department.
- The contractor shall also submit to the department separately his computerized Abstract of Cost and the bill based on these measurements, duly bound, and its pages machine numbered along with two spare copies of the bill. Thereafter, this bill will be processed by the Division Office and allotted a number as per the computerized record in the same way as done for the measurement book meant for measurements.
- The contractor shall, without extra charge, provide all assistance with every appliance, labour and other things necessary for checking of measurements/levels by the Engineer-in-Charge or his representative.
- Except where any general or detailed description of the work expressly shows to the contrary, measurements shall be taken in accordance with the procedure set forth in-the specifications notwithstanding any provision in the relevant Standard Method of measurement or any general or local custom. In the case of items which are not covered by specifications, measurements shall be taken in accordance with the relevant standard, method of measurement issued by the Bureau of Indian Standards and if for any item no such standard is available then a mutually agreed method shall be followed.
- The contractor shall give not less than seven days' notice to the Engineer-in-Charge or his authorized representative in charge of the work before covering up or otherwise placing beyond the reach of checking and/or test checking the measurement of any work in order that the "Same may be checked and/or test checked and correct dimensions thereof be taken before the same is covered up or placed beyond the reach of checking and/or test checking measurement and shall not cover up and place beyond reach of measurement any work without consent, in writing of the Engineer-in-Charge or his authorized representative in charge of

the work who shall within the aforesaid period of seven days inspect the work, and if any work shall be covered up or placed beyond the reach of checking and/or test checking measurements without such notice having been given or the Engineer-in-Charge's consent being obtained in writing the same shall be uncovered at the Contractor's expense, or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.

- Engineer-in-Charge or his authorized representative may cause either themselves or through another officer of the department to check the measurements recorded by contractor and all provisions stipulated herein above shall Inapplicable to such checking of measurements or levels.
- It is also a term of this contract that checking and/or test checking the measurements of any item of work in the measurement book and/or its payment in the interim, on account of final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates nor shall it relieve the contractor from liabilities from any over measurement or defects noticed till completion of the defects liability period.

## 1. As per the CPWD Works Manual 2014

# 7.1Computerised Measurement Books (CMB's) and Bills to be submitted by the contractor

#### 7.2 Application and format of the Computerised M.B.

(1) Irrespective of value of the work the conventional Measurement Books shall be replaced by a bound volume of computerized measurements to be furnished by the contractor, duly machine numbered for the pages, and with an MB number given by the Division Office. The pages of these Measurement Books shall be of A-4 size. All these Measurement Books belonging to a Division shall be serially numbered and a record of these Computerised Measurement Books shall be maintained in a separate

Register in Form CPWA 92.

(2) The same format as in existing Measurement Books shall be used for the Computerised Measurement Books. The measurements shall be carried forward from the previous recorded measurements as per the existing procedure.

#### 7.3 Mode of measurements

(1) The measurements shall be recorded and entered in computerised format in the first instance by the contractor, and a hard copy shall be submitted to the Department. All entries shall be made exactly as per the existing procedure.

(2) These measurements shall then be 100% checked by the Junior Telecom Officer (E)If Junior Telecom Officer (E) is not available, the Sub-Divisional Engineer(E) shall perform 100% check of the measurements. The contractor shall incorporate all such changes or corrections, as may be done during these checks, to his draft computerised measurements, and submit to the department the corrected computerized measurements in the form of a book, duly hard bound in red colour on the lines of the conventional Measurement Books now in use, and with its pages machine numbered.

(3) The Sub-Divisional Engineer(E) and the Executive Engineer(E) shall test check these computerized measurements as per the existing instructions. This book shall be treated as a Computerised Measurement Book.

(4) The Junior Telecom Officer (E), Sub-Divisional Engineer(E) and the Executive Engineer(E) shall record the necessary certificates for their checks and test checks as per the existing procedure in this Computerised Measurement Book.

(5) The Computerised Measurement Book shall be allotted a serial number as per the Register of Computerised Measurement Books.

#### 7.4. Cutting or over-writing in the computerised M.B. not allowed

(1) The Computerized Measurement Book given by the contractor, duly bound, with its pages machine numbered, shall have no cutting or over-writing.

(2) It is the responsibility of the Junior Telecom Officer (E) or the Sub-Divisional Engineer(E) as the case may be to ensure that the checks and test checks done by them in the initial draft measurements are correctly incorporated in the Computerized Measurement Book before they record their certificates.

(3) In case of any error, the Computerised Measurement Book shall be cancelled, and the contractor shall resubmit a fresh Computerized Measurement Book. This should be done before the corresponding computerised bill is submitted to the Division for payment.

(4) The contractor shall submit as many copies of Computerised Measurement Books as may be required, and as are specified in the NIT/contract, for the purpose of reference and record in the various offices of the department.

## 7.5.Computerised Bill to be submitted by the contractor

(1) The contractor shall submit his running and final bills in a computerised form in the same format as the existing conventional bills, with all the pages machine numbered, and hard bound, and with all the entries made as per the existing procedure.

(2) The contractor shall submit as many copies of the computerized bills as may be required for the purpose of reference and record in the various offices of the department.

(3) The bill shall be carried forward from the previous running account bill as per the existing procedure.

(4) These computerised bills shall be processed by the various offices for payment, as per the existing procedure.

#### 7.6. Review of Measurement Books

(1) The Measurement Books are required to be reviewed by Divisional Accountant under the supervision of Executive Engineer (E). The Sub-Divisional Engineer(E) is are required to submit the Measurement Books in use in the Sub-Divisions to the Divisional Office, from time to time, so that at least once a year the entries recorded in each of the Books are subjected to a percentage check. The Divisional Officer should ensure that this annual review is conducted regularly and positively every year.

(2) The review by the Divisional Accountant shall be in the following respects:-

(i) To compare the books in use with part I of the Register of Measurement Books maintained in CPWA Form 92, and to note necessary corrections in the Register.

(ii) To see that no original sheet is torn out of a Measurement Book, nor any entry erased or disfigured, and that the corrections made therein are initialed.

(iii) To see that pencil entries are not inked over.

(iv) To test check the accuracy of calculations, and to ensure that the instructions regarding writing of Measurement Books, recording of measurements, and their test check are being followed properly.

(3) On receipt of the Measurement Books in the Divisional Office, the Executive Engineer(E)should indicate in column 2 of the "Review Notes" in each Measurement Book as referred to in para 7.6(5) below as to which of the calculations are to be test checked by the Divisional Accountant. The extent of this check will be determined by the Executive Engineer (E)having regard to the result of the last review, and should cover complete set of measurements.

(4) Payments based on the entries reviewed should be traced into various accounts and verified. Similarly, supplies or issue of materials should be traced into the various accounts, contractor's ledger, etc. and verified.

#### (5) **Communication of discrepancies**

The defects, discrepancies, etc. noticed should be communicated to the Sub-Divisional Engineer (E)concerned and summarized in the following form in the Measurement Book that has been test audited:

Pages reviewed	Calculations selected by Divisional Officer for re-check		Defects and discrepancies	Dated initials of		
generally	Pages	Dated initials	noticed	Divisional Accountant	Divisional Officer	
1	1 2 3 4		5	6		

**Review Notes by Divisional Accountant** 

(6) The Measurement Book completed and returned for record during the year should also be similarly examined prior to their final record in the Divisional Office.

#### 7.7. Loss of Measurement Books

(1) When a Measurement Book is lost, an FIR should be lodged with the police.

(2) An immediate report of the facts of the case together with an explanation of all parties concerned responsible for the loss should also be made promptly to the Chief Engineer, who is empowered to sanction the write off of the lost Measurement Books. In case of theft or loss of a blank Measurement Book, the Superintending Engineer shall be the competent authority to write off the loss.

(3) Such losses for write off should be reported in the proforma as at Appendix 10.

(4) It is also necessary that the measurements in the lost Measurement Book should be reconstructed at the earliest.

2. The M.B. movement Register is opened in the Sub Division and all other routine procedures followed in case of normal Measurement books are also followed in computer Measurement Books also.

# **SCHEDULE OF WORK**

S	Item	Qty		Rate	Unit	Amount
1	Dismantling of following type air conditioning units, indoor and outdoor unit in case of split units, from Rudraram TE. to GM Chamber Patancheru & DGM Chamber Sangareddy etc. including shifting all the units to ground floor	4	labs		lah	
	a) Split Type AC units	4	Jobs		Job	
2	Transportation of above material from Dudrause					
2	Transportation of above material from Rudraram Telephone Exchange to GM office, sangareddy along with loading and unloading etc as reqd	2	Jobs		Job	
3	Installation testing and commissioning of 1.5 TR Split type AC units in suitable location including fixing of indoor unit on wall/ existing angle iron stand, out- door unit on the wall/ existing angle iron frame laying of existing copper pipe lines, leak testing, gas releasing, interconnections making opening in wall, making good the damages etc as reqd	3	Jobs		Job	
4	Supplying and laying 3 Core 2.5Sqmm flexible copper wire along with refrigerant pipe <u>etc</u> , as required,	20	Mtrs		Mtr	
5	Supplying and fixing extra copper pipe line both 1 /4" for gas line and 3/4" for liquid line including providing foaming along the gas line necessary clamping, etc,, as required. (For 1.5 TR AC unit)	20	Mtrs		Mtr	
6	Supplying and fixing of 2' dia steel reinforced flexible pipe for mechanical protection of the copper refrigerant pipe provided along with split AC unit etc as reqd.	20	Mtrs		Mtr	
7	Complete gas charging for 1.5 TR Inverter type split AC units with R22 refrigerant gas i/c nitrogen pressure testing, leak arresting Vaccumization etc as reqd.	1	Job		Job	
8	Supplying and fixing 20mm dia medium class PVC conduit along with accessories (bends & elbows) in surface/recess including cutting the wall and making good the same in case of recessed conduit as required, (for drain line)	5	Mtrs		Mtr	

9	General servicing of 15 TR Inverter/Non-Inverter					
	type split AC units including removing of filters and					
	washing with water, Cleaning of condenser and					
	evaporating coil with jet water, blowing dust/					
	cleaning of filters checking of connections etc	2	Jobs		Job	

Total

Add GST @18% on above total

Grand Total

NOTE:

NOTE:	
i)	The prices shall be quoted after taking into account the entire credit on inputs under GST act introduced with effect from 01-07-17.
ii)	The firm shall be responsible to see that input tax credit shown in the above columns are correct & Input tax credit for the amount shown above are admissible as per GST ACT 2017.
ii)	Invoice favouring BSNL shall be issued by the supplier indicating GST (as applicable CGST/ SGST/ IGST) with documentary proof to avail input tax credit by BSNL as per the requirement of GST ACT.
iv)	The rates quoted shall be inclusive of all taxes and duties.
v)	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 but excluding input tax credit/ GST as indicated in the price schedule. Octroi/ Entry tax are not to be included in the composite price and hence the same will not be considered for the purpose of evaluation and comparison of responsive bids. However, Octroi will be paid extra, as per actual wherever applicable on production of proof of payment/ relevant invoices/ documents.
vi)	Works contract tax will not be deducted at the source as it is subsumed in the GST. However any deduction of tax at source under GST is affected it will be done as per statutory instructions issued by Govt of India time to time.
vii)	If any levy/ duty is not payable or documentary proof is not produced, the amount for the same shall be deducted.
viii)	The firm should quote for each item separately. They should not club the items while quoting.
ix)	In case of ambiguity, between schedule and specifications, schedule shall prevail. If there is ambiguity between "schedule and specification" verses IS/ BS standards, "schedule and specification" shall prevail.
x)	The agency shall scrupulously follow the "Minimum Wages Act - 1948" and its amendments from time to time.
xi)	It shall be ensured by the agency that there are no complaints from the workers regarding short payment of wages.

### CONTRACTOR

# SUB DIVISIONAL ENGINEER (E)