

BHARAT SANCHAR NIGAM LIMITED

(A Govt. of India Enterprise)

O/O THE SUB DIVISIONAL ENGINEER [E] , BSNL ELECTRICAL SUB DIVISION - I , CTO BUILDING COMPOUND , OPPOSITE MP HIGH COURT , JABALPUR [MP] PIN : 482001 PHONE NO. - 0761 - 2629400 MOBILE NO. - 94251 - 41600 FAX NO. - 0761 - 2652505PP

NIT NO. :- 77 / EE[E] / BSNL - JBP / 2012 - 2013

TENDER DOCUMENT

FOR THE WORK

SITC of 1.5 TR Split type A/C Units and associated work at GSM BTS at T & D Colony , JNKV,Tilhari ,& Vidut Nagar(Rampur)Jabalpur .[<u>SUB HEAD</u> :- ITC of 1.5 TR Split type AC units at T& D Colony , JNKV and Tilhari]

TENDER FORM

SITC of 1.5 TR Split type A/C Units and associated work at GSM BTS at T & D Colony , JNKV , Tilhari ,& Vidut Nagar (Rampur) Jabalpur . [SUB HEAD :- ITC of 1.5 TR Split type AC units at T& D Colony , JNKV and Tilhari]

1	Name of Contractor	
2	Date of application & receipt	
3	Tender Issued on	
4	Last date of receipt of Application	22.04.2013
5	Last date of issue of tender	23.04.2013
6	Date of opening of tender	25.04.2013
7	Cost of Tender	Rs. 150.00 + ST as Applicable
8	Estimated Cost	Rs. 20,028.00
9	Earnest Money Deposit	Rs. 401.00
10	Currency of contract for Issue.of L.O.I	N/A
11	Time allowed	One Month

SUB DIVISIONAL ENGINEER [E]
BSNL ELECTRICAL SUB DIVISION - I ,
JABALPUR

UNDERTAKING

I/We hereby certify that I/We have gone through the clauses, specifications, Drawings of tender & CPWD-8 corrected up to August 1998 as adopted by the Bharat Sanchar Nigam Limited & agreed with the terms & conditions contained therein.

Seal & Signature of Contractor

	(For Office use , to fill details of	E.M.	D. in Office at the time of tender opening)
	Amount of E.M.D. Deposited Rs Form of E.M.D. :- D.D. / Pay Order / TDR / FDR /		
3	Sr. No. :	4	
5	Name of Bank :-		



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O/O THE SUB DIVISIONAL ENGINEER [E], BSNL ELECTRICAL SUB DIVISION - I, CTO BUILDING COMPOUND, OPPOSITE MP HIGH COURT, JABALPUR [MP] PIN: 482001

PHONE NO. - 0761 - 2629400

MOBILE NO. - 94251 - 41600

FAX NO. - 0761 - 2652505PP

A[18] / SDE[E] / ESD - I / BSNL - JBP / 2013 - 2014 / 26

Jabalpur Dated:

15/04/2013

NIT approved vide Letter No.: - 56(1)/2K-13/EE(E)/BSNL-JBP/ 1547

Dated: - 30 / 03 / 2013

NIT NO. :- 77 / EE[E] / BSNL - JBP / 2012 - 2013

The Sub Divisional Engineer, B.S.N.L. Electrical Sub Division - I, Jabalpur invites on behalf of the B..S.N.L. sealed item rate tender for the following work from BSNL registered eligible contractors having valid electrical license of M.P. state and who have been enlisted in BSNL in a category whose financial limit is more than the estimated cost.

Ş	SN	Name of work	Estimated cost	EMD	Time allowed
	-	SITC of 1.5 TR Split type A/C Units and associated work at GSM BTS at T & D Colony , JNKV , Tilhari ,& Vidut Nagar (Rampur) Jabalpur . [SUB HEAD :- ITC of 1.5 TR Split type AC units at T& D Colony , JNKV and Tilhari]		401.00	One Month

The Contractor shall submit and confirm:

- Valid Chartered Accountant Certificate with attested copies as applicable along with application on their printed letter head for purchase of Tender. Permanent Account Number (PAN) should be quoted along with a certified copy of PAN card in their tender or other relevant documents.
- List of works completed of the requisite magnitude along with attested copies of certificates, testimonials of their satisfactory completion from the Department concerned obtained from an officer not below the rank of Executive Engineer. The credentials should be certified by any BSNL executive, and if it is not certified by a BSNL executive, then original documents shall be produced at the time of tender opening.
- Valid Electrical lincense for execution of work in MP State.
- EPF,ESI, Service tax and VAT registration certificate.
- 5 [a] The tenderer shall submit the tenders in two sealed covers marked as cover 1st and 2nd. The first cover should contain the earnest money deposited in the form of Demand Draft / Pay order / Bankers cheque/FDR/TDR from a schedule / nationalised / State Bank guaranteed by RBI or a Bank guarantee in a prescribed form {model form of Bank guarantee available in the tender documents} in favour of Accounts Officer (Cash) O/o The GMTD , Jabalpur. The bank guarantee shall be valid for a period of 120 days from the date of opening of tender. The 2nd cover should contain the tender documents. In case the 1st cover is not annexed or Earnest money is not in proper form then the second cover containing tender will not be opened and will be rejected.

- [b] For the tenderers intending to download the tender from the web-site, they shall submit the tenders in two sealed covers marked as Cover 1st and 2 nd. The 1st cover should contain credentials in support of fulfilling the experience criteria & other documents as per NIT, the tender cost in form of demand draft in favour of Account Officer [Cash] O/o the General Manager Telecom District, Jabalpur and Earnest money in the form of Demand Draft / Pay order / Bankers cheque / FDR/ TDR from schedule / nationalised / State Bank guaranteed by RBI or a Bank guarantee in a prescribed form {model form of Bank guarantee available in the tender documents} in favour of Accounts Officer[Cash] O/o the General Manager Telecom District, Jabalpur. Credentials shall be self attested and certified by any BSNL Executive If not certified by BSNL Executive then original documents shall be produced at the time of tender opening. In case 1st cover is not annexed or Credentials submitted by the firm are not as per NIT or Tender cost is not accompanied or Earnest money is not in proper form then the second cover containing tender will not be opened and will be rejected.
- [c] The tenderer shall submit the downloaded original printout of the tender document from the website. The photocopy shall not be accepted. If during the process of tender finalization, it is detected that the tenderer has submitted tender documents after making any changes/additions/deletions in the tender documents downloaded from website, the offer shall be summarily rejected and EMD deposited by tenderer shall be forfeited in addition to any other action as per prevalent.

The intending tenderers shall invariably sign the Undertaking provided with the tender documents. Any failure to do so shall result in rejection of the tenders.

The firm should note that the offers with conditions including that with conditional rebates will be summarily rejected.

The department reserves the right to issue any corrigendum in the NIT till ten days prior to the opening of the tender. The intending tenderers are advised to check the website before submitting their offer.

Exemption from payment of Earnest Money and Security deposit granted by Chief Engineer, CPWD shall not hold good for Bharat Sanchar Nigam Limited.

Validity of tender shall be for 90 days from the date of opening of tender.

The tender document and all other relevant information / Conditions can be has on Payment of Rs. 150.00 (Rupees One Hundred and Fifty Only) plus Sales Tax as applicable (Non-refundable).

"The tender received by post / courier after the due date & time shall not be entertained and opened".

I	Last date of receipt of application	22.04.2013	[Along with tender cost]
Ш	Last date of issue of tender	23.04.2013	Upto 17:30 Hrs.
Ш	Last Date of Submission of tender	25.04.2013	Upto 15:00 Hrs.
IV	Date of opening of tender	25.04.2013	at 15:30 Hrs.

In case holiday is declared on opening date tender will be opened at 15:30 Hrs. on next working day.

Tender documents downloaded from the website www.mp.bsnl.co.in can be used (Only original print from website shall be used Photo copied tenders shall be rejected) cost of which should be submitted in the form of demand draft in favour of the Account Officer [cash] O/o the GMTD, Jabalpur on or before 23.04.2013 & payable at Jabalpur.

SUB DIVISIONAL ENGINEER[E]
BSNL ELECTRICAL SUB DIVISION - I ,
JABALPUR.

COPY FORWARDED TO:-

- 1 The Additional General Manager [Plg.], CTO Building, Jabalpur
- 2 The Executive Engineer (E), BSNL Electrical Division, Jabalpur.
- 3 The AO[Cash] O/o the GMTD / AO O/o the Executive Engineer (E), BSNL Electrical Division, Jabalpur,
- 4 All SDE's/ Notice Board / On M.P.Telecom Website www.mp.bsnl.co.in

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O/O THE SUB DIVISIONAL ENGINEER [E] , BSNL ELECTRICAL SUB DIVISION - I , CTO BUILDING COMPOUND , OPPOSITE MP HIGH COURT , JABALPUR [MP] PIN : 482001 PHONE NO. - 0761 - 2629400 MOBILE NO. - 94251 - 41600 FAX NO. - 0761 - 2652505PP

UNDERTAKING

- 1 I/we have read and examined the notice inviting tender. Important note for the contractors, Schedule of Quantity, material to be issued to the contractor (departmental supply), "specification for EI & Fans, list of the approved makes.
- 2 I/we have read and examined the General Rules and Directions & Clauses of CPWD-8 (as corrected up to Aug 1998) and with following modifications:
 - [i] Conditions at S.No. 13, 18 & 34 of CPWD-6 stands deleted.
 - [ii] The name of work, time allowed for work, estimated cost, tender cost, mode & amount of EMD etc wherever appearing in CPWD-6/8 shall be as per the notice inviting tender available on the web site.
 - [iii] In condition no. 22 of the CPWD-6, the amount of EMD, which can be forfeited, is 50%.
 - [iv] The deviation in quantity shall be governed as per condition no.2 of "Important note for the contractor.
- 3 I/we agree that the said CPWD-6/8 shall be made a part of the contract while entering into the agreement.
- 4 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.
- 5 I/we agree to keep the tender open for sixty (90) days from the due date of submission thereof and not to make any modifications in its terms and conditions.
- 6 A sum of Rs. 401.00 is hereby forwarded in the form of Demand Draft / Pay order / Bankers cheque from a schedule/ nationalized / State Bank guaranteed by RBI in a prescribed form as earnest money. If I/we, fail to commence the work specified, I/we agree that the said BSNL or his successors in office 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.
- 7 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, as per conditions no.2 of "important note for the contractor.
 - 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 authorised to communicate the same or use the information in any manner prejudicial to the safety or interest of BSNL.

(Seal of the contractor)	(Signature of contractor)
(Postal address)	Dated

IMPORTANT NOTE FOR THE CONTRACTOR

The firm shall read carefully the following conditions and shall quote accordingly confirming all the points in their offer.

1 TAX AND DUTIES:-

- **1.1** The firm shall quote rates for all items inclusive of all taxes, duties and Octroi **EXCLUDING SERVICE TAX**. The Service tax paid by the firm shall be reimbursed as per the actual against submission of documentary proof. The agency must get itself registered with Service Tax Authority and furnish the registration number.
- 1.2 Works contract tax:- The rates offered by firm shall also be inclusive of the work contract tax as applicable in the state. The Corporation i.e. BSNL shall deduct work contract tax from payments due to the firm as per rules of the state Government. The Accounts Officer of the concerned Division shall issue certificates for such deductions to the firm.

2 Earnest Money:

[a] The firm has option to Deposit Earnest Money in the form of CDR/ FDR/ DD/ BG

3 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 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 venders, the purchaser reserves the right to place repeat order up to 50% of the quantities of goods and services contained in the running tender / contract within a period of twelve months from date of award of work at the same rate or a rate negotiated (downwardly) with the existing venders considering the reasonability of rates based on prevailing market conditions and the impact of reduction in duties and taxes etc.

4 The following conditions supercedes the conditions/ claims wherever else describe in the NIT in this regard.

[a] 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 ground, 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 or proper.

[b] 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 work order value for the first 10 weeks and 0.7% per week for next 10 weeks and here after subject to a maximum of 12% of the work order value for the location where the work is delayed and the firm is found responsible for the same Flow chart of the procurement process/ contact shall be supplied by the contractor and approved by Executive Engineer concerned.

[c] Determination of Contract

The Engineer-in-charge may determine the contract in respect of any delay, inferior workmanship as per clause 3 of PWD –8 contract conditions.

5 Performance Guarantee

- [i] The contractor is required to furnish performance guarantee for an amount equal to 5% of the contract value in the form of bank guarantee (of a Nationalized / Scheduled Bank in a standard format)/ CDR/ FDR/ DD within two weeks from the date of issue of award letter. The validity period of the performance security in the form of performance bank guarantee shall be one year from the date of stipulated completion of work, and in the event the time of completion of the work gets enlarged, the contractor shall get the validity of performance guarantee extended to cover such enlarged time of completion.
- [ii] 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 amount to security deposit of 5% of the tendered value of the work.
- [iii] If any contractor fails to submit the 5% Performance guarantee then 10% S.D. of the tendered amount shall be deducted from the First R.A. Bill or First & Final Bill or as decided by the Engineer in charge.

6 Terms of Payments

Payment to the contractors during progress of work is regulated for all the items as below:

- [a] Upto 90% payment as per prorate rate after installation and ready for testing commissioning.
- **[b]** Balance 10% on successful completion of work after commissioning acceptance testing and handover.

7 Taking Over

After the successful installation testing and commissioning the same shall be taken over by the Department For practical use the minor defects and discrepancies which might be noticed during commissioning / testing shall be attended by the firm & completion date shall be recorded after rectification of defects and discrepancies

- 8 The contractor shall ensure fulfillment/compliance of the provisions of EPF & Misc. Provisions Act 1952 & Employees Provident Fund Scheme 1952 in respect of labourers / employees engaged by them for performing the works of BSNL.
- **9** Each claim bill of the contractor must accompany the (i) List showing the details of labourers/employees engaged (ii) duration of their engagement (iii) the amount of wages paid to such labourers/employees for the duration in question (iv) amount of EPF contributions (both employer's and employee's contribution) for the duration of engagement in question, paid to the EPF authorities (v) copies of authenticated documents of payments of such contribution to EPF authorities and (vi) a declaration from the contractor regarding compliance of the conditions of EPF Act, 1952.
- **10** As a partial modification to condition No. 10 of the C.P.W.D. 6 and clause 4 & 4A of the GENERAL RULES & CONDITIONS and in future in suppression of all earlier instructions, tenders with any condition including conditional rebates shall be rejected forthwith. This issue with the order received from Director (EW-QC) BSNL New Delhi vide no. 5-2-28 / EW / 2001 Dtd. 23.01.2001.

11 CURRENCY OF CONTRACT / OPERATION OF AGREEMENT

It is a rate contract for many works at different Districts in BSNL Electrical Sub divisions as mentioned in name of work and department reserves the right to award the work outside the jurisdiction of the District/sub division but within the BSNI Electrical Division Jabalpur without any extra cost. A letter of intent (L.O.I.) will be issued for individual work and separate agreement will be framed by S.D.E.(E) concerned against for sites falling with in their jurisdiction. All questions and dispute concerning the work shall be in reference to individual agreements only and will be adjudicated as per Clause-25 for individual agreements without co-relation with other individual agreements. In the event of any contradiction regarding the interpretation of the specifications, clauses or conditions of the individual agreement, the Rate contract agreement will prevail. This rate contract will be valid for six months, the period of completion of individual work will be one month from the date of L.O.I.

SUB DIVISIONAL ENGINEER (E)
BSNL ELECTRICAL SUB DIVISION - I,
JABALPUR.

PROHIBITION OF PARTICIPATION OF NEAR RELATIVES OF THE BSNL EMPLOYEES IN THE TENDER / EXECUTION OF WORKS IN BSNL UNITS:-

The near relatives of any BSNL Employee either directly recruited or on deputation are prohibited from participation in tenders and execution of works in the different units of BSNL.

- i The near relatives for this purpose 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 manners 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).
- ii. 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 tenderer 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. In case of proprietorship firm certificate will be given by the proprietor, for partnership firm certificate will be given by all the partners and in case of limited company by all the Directors of company. Any breach of these conditions by the company or firm or any other person, the tender/work will be cancelled and earnest money/Security deposit will be forfeited at any stage whenever it is so noticed. The department 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.

CERTIFICATE

I	S/o	Sh.	
Resident of			hereby certify
that none of my relative(s) as details given in tender docum false/incorrect, BSNL shall ha intimation to me.	ent. In case at any stage	e, it is found that the	information given by me is
Date:		Signature(s)	
	١	Name & Seal of Com	oany

NIT NO. :- 77 / EE[E] / BSNL - JBP / 2012 - 2013

SCHEDULE OF QUANTITY

Name of work:-

SITC of 1.5 TR Split type A/C Units and associated work at GSM BTS at T & D Colony , JNKV , Tilhari ,& Vidut Nagar (Rampur) Jabalpur . [$\underline{\textbf{SUB}}$ $\underline{\textbf{HEAD}}$:- ITC of 1.5 TR Split type AC units at T& D Colony , JNKV and Tilhari]

SN	DESCRIPTION OF ITEM	Q	ΓY	RATE	UNIT	AMOUNT
1	ITC of 1.5 TR Split type A/C Units i/c transportation from place of Storage to Site with condenser unit suitable to work on 230 V , 50 Hz A/c Supply with following works complete as required .					
	[a] Fixing of indoor evaporator unit directly on wall with nut bolt etc as reqd.					
	[b] Fixing of Outdoor Compressor and Condenser unit on existing MS angle frame etc as reqd.					
	[c] Fixing of refrigerant Copper pipe with Flaring , brazing Between the indoor &outdoor section of the A/C unit as required .					
	[d] Providing Electrical supply to the indoor and outdoor unit with recommended size of Copper wires and earthing the body as required .					
	[e] P/F superior quality synthetic insulator material on copper piping along with suitable size of medium duty PVC pipe for extra protection complete as required .					
	[f] P/L PVC drain water pipe of 1.5 mm thick from evaporator unit to out side as required .					
	[g] Flushing of Copper piping & checking of R-22 pressure and adding of refrigerant if required .	3	Jobs		Job	
2	Supplying and laying of the following copper pipe line including fixing bending, flaming, brasing and fixing superior quality [Almonard] synthetic insulated material etc. between the indoor and outdoor unit i/c additional electrical line with recommended copper wires and earthing the body, Complete gas charging beyand the standared length etc. as required.					
	[a] 3/8 " Size .	15	Mtrs		Mtr	
	NOTE :					
	[1] The A/C Units shall be supplied to the agency from respective sub division and agency will have to make arrangement for the transportation of material upto the site at his own risk and cost , nothing extra shall be paid .					
3	P/F on surface / ceiling 50mm dia medium duty PVC pipe for Protection of Copper refrigerant piping with all accessories etc complete as required .[beyond the standared length of refrigerant piping supplied by the Supplier 1					
	refrigerant piping supplied by the Supplier]	15	Mtrs		Mtr	
	Page 10 of 1	6				

4	including welding, fabrication, providing one coat of red oxide and one coat of superior quality enamelled paint, grouting,										
	minor civil work	, making go	od the dam	ages etc	as requi	red .	25	Kgs		Kg	
	TOTAL OF SCI	HEDULE QU	ANTITY		▶ 1	>					
	DEPARTMENT	AL SUPPLY	7		1						
1	Supplying 0f 1.						3	Nos.	30,000.00	Each	90,000.00
	all accessories , Indoor & Outdoor Unit , Copper Piping etc.										
	TOTAL OF DE	PARTMENT	AL SUPPL	<u>Y</u>	>	> >					90,000.00

SEAL AND SIGNATURE OF THE CONTRACTOR

SUB DIVISIONAL ENGINEER [E]
BSNL ELECTRICAL SUB DIVISION - I ,
JABALPUR

GENERAL SPECIFICATION

The contractor shall do the following works, and therefore their cost shall be deemed to be included in their tendered cost: -

- 1 Painting of all exposed metal surfaces of equipment's and components with appropriate colour.
- **2** Testing and commissioning of the completed installation.
- **3** A qualified Engineer as provided in C.P.W.D. Manual shall supervise the work.
- **4** The Engineer-in-charge or his duly authorized representative at site of work will give the layout of the work.
- 5 The contractor shall coordinate with all other agencies involved in the site of work so that the works of other agencies are not hampered due to delay in his work security or other reasons.
- 6 The work shall be carried out in accordance with the drawing(s) if any, enclosed with tender and also in accordance with modification(s) if any there to from time to time approved by the Engineer-in-charge, and also instructions from him in the course of execution of the works.
- 7 All Electrical works shall be carried out in accordance with the provisions of Indian Electricity Act, 2003 and Indian Electricity Rules, 1956 amended up to date (Date of call of tender unless specified otherwise). The electrical works shall also confirm to C.P.W.D. General Specification for electrical works Part –I (Internal)1994 and Part- II (External) 1994 amended up to date.
- 8 The works shall also conform to relevant Indian standard codes of practice (COP) for the type of work involved.
- **9** In all electrical installation works, relevant safety codes of practices shall be followed.
- **10** Good workmanship is an essential requirement to be complied with the entire work of manufacture/ fabrication assembly and installation shall conform to sound engineering practice.
- 11 The work shall be carried out under the direct supervision of a first class licensed foreman or of a person holding a certificate of competency issued by the state Govt. for the type of work involved, employed by the contractor, who shall rectify then and there the defects pointed out by the Engineer-in-Charge during the progress of work.
- **12** All tests prescribed in these General specifications, to be done before, during and after installation, shall be carried out, and the test results shall be submitted to the Engineer-in-Charge in prescribed proforma, forming par of the completion certificate.
- 13 The contractor while handing over the installation shall submit three sets of completion drawings comprising the following.
 - [a] Equipment installation drawings giving complete details of the entire equipment.
 - **[b]** Electrical drawings for the entire electrical equipment showing cable sizes, equipment capacities, switch-gears ratings, control components, control wiring etc.

- 14 The ACB/MCCB/SFU etc. shall be fitted on the panel through G.I. hexagonal nut and bolts, self tapping screws/ round headed bolts shall not permitted. Enough clearance on all sides as per manufacturer's recommendation are to be provided while mounting the switches. Horizontal/Vertical/ or any other type of switch mounting shall be strictly as per practice recommended by the switch manufacturer. Only anodised nut bolts and washers shall be used in current circuits.
- 15 LT panel shall be fully assembled and tested from factory. Local assembly of components at site are not permitted. L T panel shall be fabricated from 16 SWG (1.6 mm) MS sheet , powder coated , completely dust and vermin proof with neoprene gasket.
- **16** All material shall be provided as per department product list/ specification unless otherwise specified or as approved by engineer in charge.
- 17 The work shall be carried out according to approved drawings / details which can be seen in the office of the engineer in charge which could be suitably issued to the successful tenderer for execution of the work and as per the instruction of the Engineer in charge. However, the department reserve the right to change the layout as per requirement at site and the contractor shall not have any claim due to change in layout.
- 18 The departmental material will be issued to the contractor "Free of Cost" from the Electrical Division Store Bhopal. It will be the responsibility of the contractor to collect and carriage the same to site of work for which nothing shall be paid for this. Any surplus of unutilized materials shall be returned in good condition by the contractor to the store at Bhopal, falling which recovery will be made at specified panel recovery rates. Safe storage of the materials and watch & ward there of till completion of work / handing over to the department shall be the responsibility of the contractor and nothing extra shall be paid for the same. Any breakage/ loss due to handing / shifting / installation shall be the responsibility of the contractor. The quantity shown in schedule are approximate, the same shall be issued as per actual requirement & requisition of the contractor, during execution of work.
- 19 Any damages done to the building during the execution of electrical works shall be the responsibility if the electrical contractor and the same will be made good immediately at his own cost to the satisfaction of the Engineer- in- charge. Any expenditure incurred by the department in this connection shall be recovered from contractor and decision of the Engineer- in- charge about recovery shall be final.
- 20 Bad workman ship will not be accepted and defects shall be rectified at contractor's cost to the satisfaction of the Engineer- in- charge. The progress of the electric works are to be co- ordinate in accordance with the building works and no claimed for idle labour will be entertained by the department.
- **21** All the debris of the electrical works should be removed and the contractor should clear the site immediately after the occurring of debris. Similarly the contractor should immediately clear of any rejected materials from the site.
- 22 Earthing strip/ wire shall be connected with the existing systems at site.
- 23 The contractor or his representative is bound to sign the site order book as and when required by the Engineer- in- charge and to comply with the remarks therein.
- 24 All connections and inter-connection at the SDB's switches and power out-lets shall be carried out with crimped lugs/thimbles. Nothing extra shall be paid on this account.

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- 25 The contractor shall make his own arrangement at his own cost for electrical/general tools and plants required for the work.
- **26** Central/State Sales Tax/Excise Duty etc. should be include in the rates tendered statuary deductions of contract tax at source shall be made while releasing payment through running/ final bills.
- 27 The entire installation shall be at the risk and responsibility of the contractor until these are tested and handed over to the department. However if there is any delay in construction from the dept. side, the installation may be taken over in parts but the decision on the same shall be binding on the contractor.
- 28 All dismantle material shall be hand over to the Engineer in charge at the time of measurement .The safe custody of the dismantle material shall be the responsibility of the contractor till the handing over to the Engineer in charge
- 29 The contractor shall check whole installation & summit the list of faulty items to be replacing to bring the Electro mechanical services in working & good condition with out any extra payment. Without intimation to the Engineer in charge no material will be replace.
- **30** The contractor will arrange necessary tool & plant to check the electrical installation.
- 31 Materials to be used in work shall be of ISI marked, whenever such ISI marked material are available or as approved by engineer in charge.
- **32** Erection of pole , cable laying in ground, earthing sets & other hidden items shall be done in the presence of Engineer in charge or his duly authorized representative at the site of work.

SEAL AND SIGNATURE OF THE CONTRACTOR

SUB DIVISIONAL ENGINEER [E]
BSNL ELECTRICAL SUB DIVISION - I,
JABALPUR

LIST OF APPROVED MAKES - BSNL ELECTRICAL WING

1	Engine	Ashok Leyland / Cummins / Cater Piller / KOEL / Volvo Penta / Mahindra & Mahindra (Upto 40 KVA) / Escort (Upto 30 KVA) / Eicher (Upto 20 KVA)
2	Alternator (Brushless)	Crompton Greaves (Al. Series) / KEC / Leroy Somer / Stamford / Jyoti Ltd.
3	Battery Lead Acid / Mtc. Free)	Amar Raja / AMCO / Farukawa / Hitachi / Exide / Prestolite / Standard
4	HV Switchgear (Vaccum 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] Upto 400 KVA	In Addition to above makes , Uttam / Automatic Electric Gear (AEG) / Patson / Rajasthan Transformer and Switch gear .
6	ACB	L & T/ Schneider Electric / Siemens
7	MCCB (lcs = lcu)	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 / Neptune Ducati / Syntron / ABB / Legrand / Zeta .
13	Power Capacitors (MPP / APP)	L & T / EPCOS (Siemens) / ABB / Crompton / Schneider Electric / Neptune Ducati .
	Digital / KWHr Meter	Schneider Electric / AE / Digitron / IMP / Meco / Rishabh / Univarsal / HPL / L & T / ABB .
15	Cold Shrink HT / LT Cable Joint	Denson / 3M (M - Seal) / Raychem
	Rubber Matting	ISI mark.
17	MCB / ISOLATOR / ELCB / RCCB / Distribution Board	Crompton / Havells / Indokopp / MDS Legrand/ L&T / Schneider Electric / Siemens / Standard / C&S / ABB / HPL
	MS/ PVC Conduit	ISI mark
	Cable Tray	MEM / Bharti / Ratan / Slotco / Profab
	HT/LT Cables PVC insulated copper conductor	ISI mark
	wire	TOT MAIN
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 Page 15 of 16

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 . / Honey well Essar / Notifier / Navin Systems				
42	Sprinkler/ Hose Reel & Hose Pipe	ISI mark				
43	Fire Extinguisher	ISI mark				
44	Lift	OTIS / Kone / Mitsubishi / Schindler / Johnson				
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[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.					

SUB DIVISIONAL ENGINEER [E]
BSNL ELECTRICAL SUB DIVISION - I
JABALPUR