# BHARAT SANCHAR NIGAM LIMITED (NOTICE INVITING TENDER)

SI No.	Name of work	Estimated cost.(Rs.)	EMD (Rs).	Time	NIT No.	<u>∦</u> 3G
	SITC of 5 x 1.5 TR WAC & 1 x 1.5 TR SAC units for office of Sr.DDG,DOT, Odisha LSA in Ist & 2nd Floor of P&T Building, Bhubaneswar.	199740	3995	7 days	N.I.T No 242/BSNL-BSR/18-19.	BSNL Connecting India

# A/A & E/S Reference AVAILABLE T/S No. 33/BSNL-EDB/18-19

Tender paper cost (Non refundable) Rs.	590.00	
Last Date of receipt of application:-	01.04.2019	(upto 4.00PM)
Last Date of tender paper sale:-	01.04.2019	(upto 5.30PM)
Last Date of tender paper receipt:	02.04.2019	(upto 3.00PM)
Date of opening:-	02.04.2019	(after 3.30 PM)

#### Eligibility Criteria :-

- BSNL enlisted contractor having valid electrical licence and EPF & ESI Registrations according to financial eligibility.
- 2 All other terms & conditions as per BSNL EW-6 and BSNL EW-8 form.
- 3 The tenderer shall submit the tender in 2 sealed covers marked as cover 1 st and 2nd inscribing the name of work. Both should be separate & they should not be enclosed in common third cover. The first cover should contain the earnest money deposited in the shape of demand draft /pay order of a schedule bank/nationalised bank/state bank guarranted by reserve bank of India drawn in favour of A.O(CASH), BSNL,GMTD, Bhubaneswar. In case submitting tender down loading from web site , the 1 st cover should contain DD towards cost of tender document and EMD drawn in favour of A.O(CASH), BSNL,GMTD, Bhubaneswar along with attested copy of eligible criteria. The second cover contains the tender documents, if the 1 st cover is not annexed in proper form, the second form containing tender will not be opened at all.

Note :- I) The company or firm or any other person is not permitted to tender for work in BSNL unit in which his/her near relative(s) is(are) posted .

- 4 If the date of opening is declared as holiday, then the tender shall be opened on next working day.
- 5 The tender documents shall not be sent through courier /post. The tender documents received through courier/ post shall not be opened / considered at all.
  - No:-PLG-04/BSNL-EDB/19/973

Dt.20/03/19

- 1) The C.E(E), BSNL Electrical Odisha Zone, Bhubaneswar
- 2) The Executive Engineer(E) BSNL Electrical Division, Sambalpur.
- 3) The Executive Engineer(E) BSNL Electrical Division, Cuttack
- 4) The Vigilance Officer O/o the CGMT Orissa Circle, Bhubaneswar.
- 5) The Accounts Officer, BSNL Electrical Division, Bhubaneswar.
- 6) The Notice Board.
- 7) Contractors

NOTICE INVITING TENDER

CPWD - 6

### BHARAT SANCHAR NIGAM LIMITED (A Govt. of India Enteprise)

tem rate tenders are invited on behalf of the BSNL from elegible SITC of 5 x 1.5 TR WAC & 1 x 1.5 TR SAC units for Building, Bhubaneswar.	contractors for the work of :- office of Sr.DDG,DOT, Odisha LSA in Ist & 2nd Floor of P&T
The work is estimated to cost Rs.	199740.00 This estimate however is given merely as a rough guide.
<ol> <li>Tender will be issued to complted work of magnitude as specificied in press notification at</li> </ol>	BSNL enlisted contractor having valid electrical licence and EPF & ESI Registrations according to financial eligibility. page No. 4.
c). Agreement shall be drawn with the successful tenderer on pre- is rates as per various tems and conditions of the said form which	escribed form no. 8 which is available as a Govt. of India publication, tender shall quote ch will form part of the agreement .
3). The time allowed for carrying out the work will be	7 days
) . The availablity of individual site will be specified in the award	letter.
) . Receipt of applications for issue of forms will be stopped by 1 vill be stopped two days before the date fixed for opening of tend	1600 Hrs. two days before the date fixed for opening of tenders. Issue of tender forms lers.
onditions of contract to be complied with by the whose tender ma	e of quantities of the various classes of work to be done and the set of terms and ay be accepted and other necessary document can be seen in the office of the Executive veen 11.00 AM & 04.00 PM every day except on Sunday and public Holiday. Tender documents, be hours specified above on payment of Rs. <b>590.00</b> only in cash.
) . The tender must produce an Cartered Accountant certificate 2.07.1970 as amended from time to time before tender papers c	in the revised form as modified under Ministry of Finance O.M. No. 67/30/69/ITAL dated an be sold to him.
). Tenders, which should always be in sealed envelope, with the	name of work and due date written on the envelope, will be received by
Executive Engineer (E), BSNL Electrical Division,Bhubaneswar. In the same day at 03.30 PM.	up to 03.00 PM on 02.04.2019 and will be opened by him or his suthorized representative in his o
<ol> <li>The tender shall be accompanied by earnest money of Rs.</li> <li>Accounts Officer(CASH), BSNL, GMTD, BHUBANESWAR, the article and the structure of the structur</li></ol>	3995 in the form of DD of a scheduled Bank issued in favour of mount being credited to Nationalized Bank / State Bank .

9). The description of the work is a follows :-

#### Name of the work :-SITC of 5 x 1.5 TR WAC & 1 x 1.5 TR SAC units for office of Sr.DDG,DOT, Odisha LSA in Ist & 2nd Floor of P&T Building, Bhubaneswar.

Copies of other drawings and documents pertaining to the works will be open for inspection by the tenderers at the office of the above mentioned officer. Tenderers are advised to inspect and exmine the site and its suttoundings and satisty themselves before submitting eheir tenders as to the ground and sub - soil.(so far as is practicaable), the form and nature of the site, the means of access to the site, the accomodation they may require and in general shal themselves obtain all necessary information as to tisks, contingencies and other circumstances which may influence or affect their tender. A tenderer shall be responsible for arranging and maintaining at his own cost all materials, tools [;ants, water, electricity access, facilities for workers and all other service required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a tender by a tenderer ijplies that he has read this notice and all other contract documents and has made himself aware of the scope and spi

conditions and ates at which stores, tools and plants, etc. will be issued to him by the department and local conditions and other factors having a bearing on the execution, of the work.

1. The competent authority on behalf of the BSNL 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 tenderers in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the renderer shall be summarily rejected.

The public enterprises that avail benefits of the purchase preference should be subjected to adequate penalties for cost overruns etc. 2. Canvassing whether directly or indirectly, in connection with tenders is strictly prohibied and the tenders submitted by the contractors who restore to canvassing will be liable to rejection.

3. The competent authority on hehalf of BSNL reserves to himself the right of accepting the whole or any part of the tender and the tenderer whall be bound to perform the same at the rate quoted.

4. The contractor shall not be permitted to tender for work in the BSNL (responsible for award and execution of contracts) in which his near relative is posted as divisional account tant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer(both inclusive). He shall also intomate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any gazetted officer in the BSNL or in the Ministry of communication. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Department.

5. No Engineer of gazetted rank or other gazetted officer employed in Engineering or Administrative duties in an Engineering Department of he Government of India is allowed to work as a contractor for a period of two years after his retirement from Government service, without the previous permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had abtained the permission of the Government of India as aforesaid before submission of the tender or engagement in the contractor's service.

The tender for the works shall remain open for acceptance for a period of ninety days from the date o opening of tenders. If any tender withdraws his tender before the said period or makes any notifications in the tems and condition of the tender which are not acceptable to the department, then the Government shall, without prejudice to any other right or remedy, be at liberty to forfit 50 % of the earnest money as aforesaid.

6. This Notice Inviting Tender shall form a part of the contract document. The successful tenderer / contractor, on acceptance of his tender by the Acepting 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 the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading there to.

b) Standard C.P.W.D. form 8.

#### Near relative(s) of BSNL employee not permitted to tender :

The company or firm or any other person is not permitted to tende for works in BSNL unit in which his near relative(s) is ( are ) posted . The unit is defined as SSA/ Circle / Chief Engineer / Chief Arch / Corporate office for non- executive employees and all SSA in a circle including circle office / Chie Eng. / Chief Arch. / Corporate office for executive employees ( including those called as Gazetted officers at present).

Therefore, it has been decided by the competent authority that a clause must be added in the tender and other related documents that the tenderer should give a certificatethat none of his / her such near relatives isn working in the units as defined above where he is going to apply for tender work. In case of proprietorship form certificate will be given by the proprietor, for partnership firm certificate will be given by the partners and in case of limited campany by all the directors of the 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 deposite will be forfeited any stage whenever it is so notices. 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.

#### FORMAT OF THE CERTIFICATE TO BE GIVEN BY THE FIRM/ PERSON:

I \_\_\_\_\_\_ S/O \_\_\_\_\_ R/O \_\_\_\_\_\_ here by certify that none ofmy relative(S) as defined below is/ are employed in BSNL unit as per details given in the tender documents. In case at any stage, it is found that the information given by me is false / incorect, BSNL shall have absolute right to take any action as deemed fit / without any prior intimation to me.

a) Members of 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) & son's wife ( daughter- in - law), Daughter(s) & daughter's husband ( sonin law , brother(s) & brother's wife , sister(s) & sister's husband( brother in law).

Signature of the firm / person.

#### DECLARATION

I (full name of Tenderer ) hereby eclare that I am fully aware of the terms and conditions of contracts
for work presently prevailing in the Civil Wing of BSNL . I also declare that, I have thoroughly gone through the terms and agreements as contained in various clauses
clausesand Sub - Clauses of terms P.W.D 8 I/c up to date amendments therein . I
further declare that while submitting the tender for

I fully agree to abide by the aforesaid terms and conditions of the contract and shall be bound to enter into the agreement in case my tender is accepted.

I undertake to bear all liablities I.e. duties etc. arising out of 46th amendments of constitution of India.

Date :-

(Full singnature of the tenderer) Executive Engineer (E), BSNL Electrical Division, Bhubaneswar.

#### **GENERAL SPECIFICATIONS.**

1) The work shall be carried out as per current department / CPWD specificiations.

2) Layout of the work shall be given at site of work by the Engineering - in Charge or his duty authorized representative.

3) Samples of the all articles shall be got approved from the Engineer - in Chanrge before they are used.

4) The work shall be supervised by the qualified supervisor from the contractor's side.

5) Any damage done o the building / equipment of the department shall be made good by the contractor without any extra cost.

6) No T & P shall be issued to the contractor by the department.

7) Testing shall be done in the pres4nce of the Engineering - in - Change or his duly authorized representative.

8) The contract shall stand for guarantee against defective materials of manufacturering defects and workmanship for the work carried out by him for the period of one year from it's commissioning & make good / repair / replace the faults during this period without any extra cost , failing which the same shall got done at the risk and cost of the contactor. This is in superseesion to the period of 6 months as mentioned in the clause-16 of this agreement.

9) Security deposite of the contractor shall be released only after satisfactory completion of guarantee period.

10) Makes of product shall be as per product directory enclosed or approved by the Engineer - in - Chanrge.

Executive Engineer (E), BSNL Electrical Division, Bhubaneswar.

#### "ESSENTIAL CONDITIONS OF CONTRACT "

The firm shall read carefully the following conditions and shall quote accordingly conforming all the points in their offer. Firm should specifically note that if they do not enclose E.M.D. with their tender , their tender will not be opened at all.

1. TAXES AND DUTIES : The firm shall quote the rate each time on lump sum basis . The rate quoted by the agency should be inclusive of GST & other Taxes.

2. Loading , unloading , transportation, insurance etc. shall all be included in their offer.

3. All the materials will be under the charge of the contractor till it is completed and handed over . No materials will be removed from site without written permission of the Engineer - in Charge.

4. Firm shall confirm to carry out the work as per the N.I.T. conditions.

6. **PAYMENTS TERMS**: No advance payments will be made. Stipulations like levy of interest if any payment is not made in specificied time is not acceptable to the department.

7. Offer should be clear. Any ambiguous offer is liable fo rejection by the department. There will be no negotiation with the lowest tenderer. Hence the firms are requested to quote carefully. Department's decision in this regard shall be final and binding on the tenderer. Offer with condition will be summarily rejected.

8. GST: The rates offered by the firm shall be inclusive of GST.

#### SPECIFICATION E.I & FANS :

- 1 The work is to be carried out as per CPWD specifications (External) and I.E Rule amended up to date.
- 2 Good workmanship is an essential requirement to be complied with. The entire work of manufacturer, fabrication, assembly and installation shall conform to sound engineering practice.
- 3 Rates quoted shall be inclusive of packing , forwarding, insurance , freight and delivery at site watch and ward of all marerials.
- 4 All Sundry fittings, accessories, hardware items, foundation bolts, termination lugs for electrical connection as required and all other sundry items which are useful & necessary for proper assembly and efficient working of the various components of the works shall be deemed to have included in the tender.
- 5 Following works shall be carried out by the contractor and therefore their cost shall be deemed to be included in their tendered cost.
- a) The contractor shall be responsible for repairing all damages and restoring the same to their original finish. He shall also remove at his cost all inwanted and waste materials arising out of his work from his site.
- b) All chases required in connection with the electrical works shall be provided and filled by the contractor to the original finish.
- c) Temporary shed if required over the storage space and locking arrangement, watch and ward of the materials shall be provided by firm till completion of the work and final taking over of the installation by the department.
- 6 The contractor shall employ qualified engineer? Supervisor as required and intimate names of such persons to the Engineer- in- Charge on commencement of work. Failure to employ will attract penalty as per agreement.
- 7 If any conduit is laid before award of work recovery for the same will be made from contractor at the rate of S.R-2012 + Abatement of respective S/H of this tender
- 8 All non- metallic conduit pipes and accessories shall be of I.S.I marked , conduit accessories shall be of grip type / threaded type.
- 9 PVC conduit to be used shall be ISI marked heavy gauge and fire retardant quality.
- 10 The switch box shll be made of mild steel of size 16 / 18 SWG as per CPWD specification except the fromt side. The clear depth of MS switch shall not be less than 60 mm. Phenolic laminated sheet cover of 3 mm thick shall be provided in the front side of box.
- 11 Earthing shall be carried out in presence of representative of the department.
- 12 Numbering and sign writing of entire installation shall be carried out by the contractor as per instructions of the Engineering in- Charge for which nothing extra shall be paid.
- 13 On completion of installation following tests shall be carried out:;-
- A) Insulation resistance test. B) Polarity test. C) Earth continuity test. D) Earth eletrode resistance test.
- 14 On completion of electrical instalation a certificate shall be furnished by the contractor in prescribed proforma, this certificate shall be in addition to the certificiate required by local electric supply company.
- 15 Breaking capacity of MCBs should be 10 KA.

Executive Engineer (E), BSNL Electrical Division, Bhubaneswar.

List of Approved makes for Sub Station Works

List of Approved makes for Sub Station Works

1	HV SWITCHGEAR	SOUTHERN SWITCHGEAR/ BIECCO LAWRIE/CROMPTON/ JYOTI/ MEI/ KIRLOSKAR/ VOLTAS/NGEF/ ALSTOM/ SIEMENS (Note: Make of the accessories like meters, CTs PTs etc. shall be as provided by the manufacturer of the HT panel.)
2	TRANSFORMER	ABOVE 400 KVA: KIRLOSKAR/ NGEF/ CROMPTON/ SIEMENS/ ABB/ VOLTAS/ BHARAT BIJLEE/ ANDREW YULE/ EMCO/ GE UPTO 400 KVA: IN ADDITION TO ABOVE MAKES PATSON/ ETE/ KANOHAR (MEERUT)/ ITL RAJASTHAN TRANSFORMER & SWITCHGEAR JAIPUR
3	ACB	L&T/ SIEMENS/ CONTROL & SWITCHGEAR SCHNEIDER/ GE POWER CONTROLS
4	MCCB	L&T/ SIEMENS/ CONTROL & SWITCHGEAR SCHNEIDER/ GE POWER CONTROLS
5	TPN SWITCH AND HRC FUSES	L&T/ SIEMENS/ HAVELLS/ HH ELCON/ SCHNEIDER/ STANDARD (UPTO 400A)/ GE POWER CONTROLS
6	CONTACTORS AUXILIARY	L&T/ LAXMI/ GE POWER CONTROLS SIEMENS/ SCHNEIDER/ MEI/
7	IDMT RELAY	AVKC-SEGC
8	APFC RELAY	SYNTRON/ SCHNEIDER/ TRINITY ELECTRONICS
9	ст	AE/ IMP/ MARSHAL/ PACTIL/ KAPPA/ L&T/ ASHMOR/ INDOCOIL/ WACO/ MECO/
10	AMMETER / VOLTMETER	AE/ IMP/ UNIVERSAL/ RISHABH/ KAYCEE/ MECO ENERCON
11	SELECTOR SWITCH	L&T/ AE/ IMP/ RASS CONTROL/ THAKOOR/ KAYCEE/ RECO/ VAISHNO/ SALZER
12	INDICATING LAMPS	VAISHNO/ SIEMENS/ L&T/ AE/ IMP/ RASS CONTROL/ TEKNIC/ SCHNEIDER/ KAYCEE
13	PF METER	AE/ IMP/ RISHABH/ MECO/ UNIVERSAL/ DIGITRON
14	CAPACITORS (APP TYPE)	KHATAU JUNKER/ SCHNEIDER/ L&T/ IMP UNIVERSAL ELECTRIC/ USHA/ ASIAN/ AE
15	CABLES	
	A. UPTO 1.1 KV GRADE	ISI MARK
	B. ABOVE 1.1 KV GRADE	ISI MARK
16	AIR BREAK SWITCH	NATIONAL/ KIRAN/ PACTIL/ ATLAS
17	PIN INSULATOR	JAYSHREE/ WS/ IEC/ PCL/ BHEL
18	LIGHTENING ARRESTOR	ELARO/ LAMCO/ INTERNATIONAL/ GE/ ATLAS
19	DROPOUT FUSES	NATIONAL/ KIRAN/ PACTIL
20	FIRE EXTINGUISHER	ISI MARK
21	RUBBER MATTING	ISI MARK
22	CABLE JOINT KIT	RACHEM/ M-SEAL/ DENSONE
23	VACUUM CIRCUIT BREAKER	ALSTOM/ SIEMENS

List of Approved makes for EA Set Works	
1 ENGINE	CUMMINS/ RUSTON/ ESCORTS/ KEOL/ CATER PILLAR/ ASHOK LEYLAND/ GREAVES/VOLVO PENTA (200-500 KVA)
2 ALTERNATOR	KIRLOSKAR/ NGEF/ LEROY SOMER/ JYOTI FRAME SIZE PTG (62.5 KVA-500 KVA) STAMFORD/ CROMPTON GREAVES (SLIP RING/BRUSHLESS, 6-200 KVA)/ AVK-SEG (UPTO 250 KVA)/ ELECTRODYNE (UPTO 100 KVA)/ CROMPTON GREAVES AL SERIES (15 TO 100 KVA)/ ELGI (20 TO 380 KVA) / KEL (BRUSHLESS UPTO 1000 KVA)
з асв	L&T/ SIEMENS/ CONTROL & SWITCHGEAR SCHNEIDER/ GE POWER CONTROLS
4 MCCB	L&T/ SIEMENS/ CONTROL & SWITCHGEAR SCHNEIDER/ GE POWER CONTROLS
5 CONTACTORS AUXILIARY	L&T/ LAXMI/ GE POWER CONTROLS SIEMENS/ SCHNEIDER/ MEI/
6 IDMT RELAY	AVKC-SEGC
7 СТ	AE/ IMP/ MARSHAL/ PACTIL/ KAPPA/ L&T/ ASHMOR/ INDOCOIL/ WACO/ MECO/
8 PF METER	AE/ IMP/ RISHABH/ MECO/ UNIVERSAL/ DIGITRON
9 AMMETER / VOLTMETER	AE/ IMP/ UNIVERSAL/ RISHABH/ KAYCEE/ MECO ENERCON
10 SELECTOR SWITCH	L&T/ KAYCEE/ AE / IMP/ THAKOOR/ RECO/VAISHNO/ SALZOR/ RASS CONTROL
11 INDICATING LAMPS	VAISHNO/ SIEMENS/ L&T/ AE/ IMP/ RASS CONTROL/ TEKNIC/ SCHNEIDER/ KAYCEE
12 FREQUENCY METER	DIGITRON/ RISHABH/ MECO/ KELTRON/ IMP AE
13 LEAD ACID BATTERY	EXIDE/ STANFORD/ FURUKAWA/ AMCO/ PACE SETTER/ NICCO/ PRESTOLITE/ AMAR RAJA/STANDARD/ CROMPTON GREAVES/ HITACHI
14 GI / MS PIPE	BST/ TATA/ ATL/ ITC/ ATC/ IIA/ JST/ ITS/JINDAL/ ZENITH/ GSI/ TTA
15 AVM PADS	DUNLOP/ POLYBOND
16 FIRE EXTINGUISHER	ISI MARK
17 RUBBER MATTING	ISI MARK
18 CABLES	
A. UPTO 1.1 KV GRADE	ISI MARK
B. ABOVE 1.1 KV GRADE	ISI MARK
19 GM VALVE	FOUNTAIN/ TRISHUL/ LEADER/ KIRLOSKAR
20 TRIVECTOR METER	SUNCO/ JAIPUR/ IMP
21 KWH METER	SIMCO/ JAIPUR/ IMP/ AE/ UNIVERSAL/RISHABH

	List of Approved makes for EI and fans, P	ump sets and Compo	ound Light Works					
1	АСВ	L&T/ SIEMENS/ COM	NTROL & SWITCHGE	AR SCHNEIDER/ G	E POWER CONTRO	DLS		
2	мссв	L&T/ SIEMENS/ COM	7/ SIEMENS/ CONTROL & SWITCHGEAR SCHNEIDER/ GE POWER CONTROLS					
3	TPN SWITCH AND HRC FUSES	L&T/ SIEMENS/ HAV	/ SIEMENS/ HAVELLS/ HH ELCON/SCHNEIDER/ STANDARD (UPTO 400A) GE POWER CONTROLS					
4	ст	AE/ IMP/ MARSHAL/	PACTIL/ KAPPA/ L&	T/ ASHMOR/ INDOC	COIL/ WACO/ MECO	1		
5	AMMETER / VOLTMETER	AE/ IMP/ UNIVERSA	L/ RISHABH/ KAYCE	E/ MECO ENERCO	N			
6	SELECTOR SWITCH	L&T/ KAYCEE/ AE /	IMP/ THAKOOR/ REG	O/VAISHNO/ SALZ	OR/ RASS CONTRO	DL		
7	INDICATING LAMPS	VAISHNO/ SIEMENS	S/ L&T/ AE/ IMP/ RAS	S CONTROL/ TEKN	NIC/ SCHNEIDER/ K	AYCEE		
8	CAPACITORS (APP TYPE)	KHATAU JUNKER/ S	CHNEIDER/ L&T/ IM	P UNIVERSAL ELE	CTRIC/ USHA/ ASIA	N/ AE		<u>.</u>
9	CABLES							
	A. UPTO 1.1 KV GRADE	ISI MARK						
	B. ABOVE 1.1 KV GRADE	ISI MARK						
10	PVC INSULATED COPPER CONDUCTOR WIRE	ISI MARK						
11	FIRE EXTINGUISHER	ISI MARK						
12	RUBBER MATTING	ISI MARK						
13	CABLE JOINTS	RACHEM/ M-SEAL/	DENSONE					
14	SINGLE PHASING PREVENTOR	L&T/ MINILEC/ ZER	OTRIP/ SIEMENS					
15	TIMER	L&T/ SIEMENS/ MIN	ILEC/ TELEMECHAN	IQUE/ AE				
16	MCB, ISOLATOR AND DISTRIBUTION BOARD	BENTEX/ CLARITON	N/ HAVELLS/ INDO-K	OPP/STANDARD/ S	CHNEIDER/ MDS/S	IEMENS		
17	CHANGEOVER SWITCH	STANDARD/ HAVEL	LS/ CONTROL & SW	ITCHGEAR HH ELC	CON			
18	PIANO SWITCH	ISI MARK						
19	MONOBLOCK PUMP SET	KSB/ BEACON/ KIRI	OSKAR/ BATLIBOI/	JYOTI/BE/ CROMPT	TON/ PEC/ MATHER	&PLATT/WASP		
20	STARTER	L&T/ SIEMENS/ BCH	I/ ABB/ MEI/ GE POV	ER CONTROLS				
21	GI / MS PIPE	BST/ TATA/ ATL/ ITC	C/ ATC/ IIA/ JUST/ ITS	/JINDAL/ ZENITH/ (	GSI/ TTA			
22	FOOT VALVE	ISI MARK						
23	GATE VALVE	FOUNTAIN/ TRISHU	IL/ SANT/ ANNPURN	A LEADER				
24	MS CONDUIT	ISI MARK						

25	SUBMERSIBLE PUMP	KSB/ KALAMA/ AMR	UT/ KIRLOSKAR/ PE	C BE				
26	ELCB	STANDARD/ MDS/ H	IAVELLS/ DATAR/SI	EMENS/ GE POWE	R CONTROLS			
27	CONTACTOR	SIEMENS/ L&T/ SCH	NEIDER/ MEI/ LAXN	II GE POWER CON	TROLS			
List of A	opproved makes for Fire Detection Works							
1	HEAT DETECTORS	NITTON/ APPOLLO/	CHEMTRON/ HOCH	IKI/EDWARD/ WOF	RMALD/ FENWAL/			
2	SMOKE DETECTOR IONIZATION TYPE	VIJAY/ APPOLLO/ C	EREBRUS/ HOCHIK	/EDWARD/ WORM	ALD/ FENWAL/ NITT	ON		
3	SMOKE DETECTOR PHOTOELECTRIC TYPE	NITTON/ APPOLLO/	CEREBRUS/ HOCH	KI EDWARD/ WOR	MALD/ FENWAL/ VI	JAY		
4	FIRE PANELS	MATHER & PLATT/ I	AL ELECTRONICS C					
5	P A SYSTEM	AHUJA/ PHILIPS/ MO						
6		VAISHNO/ AHUJA/ A	GNI/ PHILIPS/ MOT	WANI				
7	PVC INSULATED COPPER CONDUCTOR CABLE	ISI MARK						
8	BATTERY (LEAD ACID SEALED	EXIDE/ STANFORD/						
		SETTER/ NICCO/ PF	RESTOLITE/ AMAR F	(AJA/STANDARD/ (	CROMPTON GREAV	ES/ HITACHI		
9		ISI MARK						
-	Approved makes for Fire Fighting Wet Riser Works							
1		ISI MARK						
2	HOSE PIPE	ISTMARK						
3	DIESEL ENGINE FOR FIRE PUMP	CUMMINS/ ESCORT	S/ KEOL/ CATERPIL	LAR/ ASHOK LEYL	AND/ GREAVES/ VC	OLVO PENTA (200-	500 KVA)/ R	USTON
4	FIRE EXTINGUISHERS	ISI MARK						
5	MOTORS	GE/ SIEMENS/ CRO PER IS 12615/1984 I			BB/ MEI/ SPARTON	/ NGEF (ENERGY E	EFFICIENT	MOTORS AS
6	STARTER	SIEMENS/ L&T/ BCH	I/ ABB/ MEI/ GE POW	VER CONTROL				
7	TPN SWITCHES AND HRC FUSES	L&T/ SIEMENS/ HAV	ELLS/ HH ELCON/S	TANDARD / SCHNE	EIDER/ GE POWER	CONTROLS		
8	мссв	SIEMENS/ L&T/ COM	NTROL & SWITHGE	R SCHNEIDER/ GE	POWER CONTROL	S		
9	INDICATING LAMPS	VAISHNO/ SIEMENS	S/ L&T/ AE/ IMP/ RAS	S CONTROL/ TEKN	NIC/ SCHNEIDER/ K/	AYCEE		
10	AMMETER / VOLTMETER	AE/ IMP/ UNIVERSA	L/ RISHABH/ KAYCE	E/ MECO ENERCO	N			

11	SELECTOR SWITCH	L&T/ KAYCEE/ AE / IMP/ THAKOOR/ RECO/VAISHNO/ SALZOR/ RASS CONTROL			
12	ст	AE/ IMP/ MARSHAL/ PACTIL/ KAPPA/ L&T/ASHMOR/ INDOCOIL/ WACO/ MECO			
13	LEAD ACID BATTERY	EXIDE/ STANDARD/ AMCO/ PACE SETTER/ NICCO/ PRESTOLITE/ AMAR RAJA/			
		CROMPTON GREAVES/ HITACHI/ STANFORD/			
14	GI / MS PIPE	BST/ TATA/ ATL/ ITC/ ATC/ IIA/ JUST/ ITS/JINDAL/ ZENITH/ GSI/ TTA			
15	AVM PADS	DUNLOP/ POLYBOND			
16	RUBBER MATTING	ISI MARK			
17	CABLES				
	A. UPTO 1.1 KV GRADE	ISI MARK			
	B. ABOVE 1.1 KV GRADE	ISI MARK			
18	SINGLE PHASING PREVENTOR	L&T/ MINILEC/ ZEROTRIP/ SIEMENS			
19	GM VALVE	FOUNTAIN- ISI MARK/ TRISHUL/LEADER/ SANT/ ANNPURNA			
20	GAUGES	FIEBIG/ H-GURU/ PRICOL			
21	PUMPS	KSB/ BEACON/ KIRLOSKAR/ BATLIBOI/ JYOTI/WASP/ BE/ CROMPTON/ PEC/ MATHER&PLATT			
22	SPRINKLER	ISI MARK			
List of A	Approved makes for Air Conditioning Works				
1	MOTOR	SIEMENS/ CROMPTON GREAVES/ HBB/ KEC/BHARAT BIJLEE/ ABB/ MEI/ SPARTON/ NGEFGE			
2	COMPRESSOR	VOLTAS/ KIRLOSKAR COPELAND/ BATLIBOI/ CARRIER/ KPC CARRIER/ COPELAND/ ACCEL/BLUE STAR/ TRANE			
3	STARTER	SIEMENS/ L&T/ BCH/ ABB/ MEI GE POWER CONTROLS			
4	MCB, ISOLATOR AND DISTRIBUTION	BENTEX/ CLARITON/ HAVELLS/ INDO-KOPP/			
	BOARD	SIEMENS/ STANDARD/ SCHNEIDER/ MDS			
5	GI / MS PIPE	TATA/ ATL/ ITC/ ATC/ IIA/ JST/ ITS/ JINDAL ZENITH/ GSI/ TTA/ BST			
6	CABLES				
	A. UPTO 1.1 KV GRADE	ISI MARK			
	B. ABOVE 1.1 KV GRADE	ISI MARK			
7	GM VALVE	FOUNTAIN/ TRISHUL/ ANNPURNA/LEADER/ SANT			
8	SPP / OVERLOAD UNIT	L&T/ MINILEC/ ZEROTRIP/ SIEMENS			

9	RESIN BOND GLASS WOOL	FIBRE GLASS/ PILKINGTON/ UPTWIGA
10	EXPANDED POLYSTERENE	BASE (INDIA) LTD.
11	GAUGES	FIEBIG/ H-GURU/ PRICOL
12	CONTROLS	INDFOSS/ HONEYWELL/ SPORLAN/ RANCO/RANUTROL/ PENN/ DANFOSS/ FLICA
13	FRESH AIR FAN	GE/ KHAITAN
14	EFFICIENCY 90% DOWN TO 20 MICRONS) AND EU-3 (FINE FILTER, EFFICIENCY 95% DOWN TO 5 MICRONS)	DYNA/ TENACITY/ KIRLOSKAR/ PUROMATIC/AITECH/ FURAFILL/ ARW/ ATHLETE/ PUROLATOR/ ANFILTRA EFFULENT
15	GI SHEETS	TATA/ SAIL/ NIPPON/ DENRO/ HSL/ JINDAL/ NATIONAL
16	INDICATING LAMPS	VAISHNO/ SIEMENS/ L&T/ AE/ IMP/ RASS CONTROL/ TEKNIC/ SCHNEIDER/ KAYCEE
17	AMMETER / VOLTMETER	AE/ IMP/ UNIVERSAL/ RISHABH/ KAYCEE/ MECO ENERCON
18	SELECTOR SWITCH	L&T/ KAYCEE/ AE / IMP/ THAKOOR/ RECO/ VAISHNO/ SALZOR/ RASS CONTROL
19	СТ	AE/ IMP/ MARSHAL/ PACTIL/ KAPPA/ L&T/ ASHMOR/ INDOCOIL/ WACO/ MECO/

## PROFORMA OF SCHEDULES

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

**<u>SCHEDULE 'B'</u>** Schedule of materials to be issued to the contractor.

			Rates in figures and words at	
Sr. No.	Description of item	Quantity	which the material will be	Place of Issue
1	2	3	4	5
	As mentioned in the Schedule	of work		

# SCHEDULE 'F'

Reference to General Conditions of contract.

	SITC of 5 x 1.5 TR WAC & 1 x 1.5 TR SAC units for office of Sr.DDG,DOT, Odisha LSA in Ist & 2nd Floor of P&T Building, Bhubaneswar.
Estimated cost of work:	199740.00
Earnest money:	3995
	5% of the tendered value of the work in the form of Bank Guarantee from Scheduled Bank in respect of works with estimated cost put to tender exceeding Rs6 lacs.
GENERAL RULES and DIRECTIONS:	
	Executive Engineer (E), BSNL Electrical Division, Bhubaneswar.
Definitions:	
2(v) Engineer-in-Charge	Executive Engineer (E), BSNL Electrical Division, Bhubaneswar.
	Executive Engineer (E), BSNL Electrical Division, Bhubaneswar.
2(x) Percentage on cost of materials and labour to cover all overheads and profits.	10%
Clause 5	
Time allowed for execution of work.	7 days
Authority to give fair and reasonable extension of	
Authority to give fair and reasonable extension of time for completion of work.	
Clause 12	NA
<b>12.1.2</b> (iii) Schedule of rates for determining rates for additional, altered or, substituted items that	

Clause.25 Authority competemt for conciliation S.E(E) not in charge

Schedule-A				
Name of work:				

SITC of 5 x 1.5 TR WAC & 1 x 1.5 TR SAC units for office of Sr.DDG,DOT, Odisha LSA in Ist & 2nd Floor of	
P&T Building, Bhubaneswar.	

SI. no.	Description of Items	Quantity	Rate (`)	Unit	Amount (`)	
1	I.T.C of 1.5 /2 TR split A/C unit I/c fixing of indoor unit & outdoor unit I/c copper piping ,brazing ,leak testing & electrical wiring complete as regd.					
	electrical winning complete as requ.	1		each		
2	S/F of hard drawn 20 mm dia PVC Pipe to throw out the condesate water formed in the indoor unit etc. as reqd.	2		mtr		
3	S/F of the powder coated M.S. angle stand i/c fixing on the wall for installation of outdoor unit etc as reqd.	1		job		
4	Supplying and laying of following size copper refregertate pipe I/c cutting,brezing and testing etc as reqd.					
	a) 5 /8 " dia	1		mtr		
	b ) 1 /2 " dia	1		mtr		
5	S/D 2.5 sqmm 3core copper cord i/c connection etc as reqd.	1		mtr		
6	Supplying of BEE approved 3 Star rated Inverter/Dual Inverter type split Air Conditioning unit having nominal cooling capacity not less than 5187 watts with copper Evaporator & Condenser Coil & Rotary/Dual rotary Compressor suitable for operation on single phase, 220 V + or - 10 %, 50 HZ AC supply as per IS 1391 (part-2) & ISO 16358, minimum room air flow of 565 cub feet/min. & minimum Indian Seasonal Energy Efficient Ratio (ISEER) of 3.68, filled with R 410 A refrigerent gas with standard length of copper pipes, foam insulation, drain pipe & cable etc. complete as per specifications attached. (Make - M/s LG of Model - JS-Q18SUXD2 / Similar Superior make)	1		job		

7	Supplying of 5 star rated, BEE certified, window type Air Conditioning unit with copper Evaporator & Condenser coil suitable for operation on 230 V + 10 %, 50 HZ AC supply having cooling capacity not less than 5100 watts & minimum Energy Efficient Ratio (EER) of 3.3, LCD/LED display unit with wireless remote control handset, fitted with refrigerent gas including transportation to site complete as per scope, specification, terms & conditions attached as required. (Make - M/s Voltas of Model - 185 ZZP/Similar Superior make)		job	
8	ITC of above Window type AC unit in existing opening i/c modification, making good the damages etc. as reqd.	5	job	