## BHARAT SANCHAR NIGAM LIMITED (NOTICE INVITING TENDER)

SI No.	Name of work	Estimated cost.(Rs.)	EMD (Rs).	Time	NIT No.	<b>№</b> 2G
1	Attending day to day faults and repairing & maintenance of DG sets for various TE/ BTS sites under Berhampur SSA (For 2019-20)		3879	06 months	N.I.T No 204/BSNL-BSR/19-20.	BSNL Connecting India

A/A & E/S Reference	ARMO	
T/S No.	62/BSNL-EDB/19-20	

Tender paper cost (Non refundable) Rs.	590.00	
Last Date of receipt of application:-	10.01.2020	(upto 4.00PM)
Last Date of tender paper sale:-	10.01.2020	(upto 5.30PM)
Last Date of tender paper receipt:	13.01.2020	(upto 3.00PM)
Date of opening:-	13.01.2020	(after 3.30 PM)

## Eligibility Criteria :-

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

The manufacturer/authorised dealer/OEM of EA Set approved by BSNL.The letter of authorization from manufacturer in original/photo copy attested by BSNLexecutive will be submitted.

### OR

Experience of having successfully completed similar works in BSNL during last 7 years ending last day of month previous to the one in which applications are invited should either of the following

Three similar successfully completed works costing not less than the amount equal to 40% of the estimated cost put to tender.Current certificate of having completed the work in the satisfactory manner with the requisite infracture/set up relevant to the work under NIT shall be furnished.

#### OF

Two similar successfully completed works costing not less than the amount equal to 60% of the estimated cost put to tender. Current certificate of having completed the work in the satisfactory manner with the requisite infracture/set up relevant to the work under NIT shall be furnished.

#### OF

One similar successfully completed works costing not less than the amount equal to 80% of the estimated cost put to tender. Current certificate of having completed the work in the satisfactory manner with the requisite infracture/set up relevant to the work under NIT shall be furnished.

#### OR

BSNL enlisted contractors in Electrical category of respective class with valid electrical licence as per their tendering limits.

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/19/511

Dt.03/01/2020

- 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

Executiv	e Engineer (E), BSNL Electrical	Division,Bhubaneswar.

	NOTICE INVITING TENDER		CPWD - 6
		BHARAT SANCHAR NIGAM LIMITED (A Govt. of India Enteprise)	
em rate	tenders are invited on behalf of the BSNL from elegible co	ntractors for the work of :-	
	Attending day to day faults and repairing & maintena Berhampur SSA (For 2019-20)	nce of DG sets for various TE/ BTS sites under	

1) Tender will be issued to Please refer to eligibility criteria completed work of magnitude as specificied in press notification at page No. 4.

2). Agreement shall be drawn with the successful tenderer on prescribed form no. 8 which is available as a Govt. of India publication, tender shall quote his rates as per various tems and conditions of the said form which will form part of the agreement.

3 ). The time allowed for carrying out the work will be 06 months

4). The availablity of individual site will be specified in the award letter.

5). Receipt of applications for issue of forms will be stopped by 1600 Hrs. two days before the date fixed for opening of tenders. Issue of tender forms will be stopped two days before the date fixed for opening of tenders.

Tender documents consists of plans, specifications, the schedule of quantities of the various classes of work to be done and the set of terms and conditions of contract to be complied with by the whose tender may be accepted and other necessary document can be seen in the office of the Executive Engineer (E),BSNL ELECTRICAL DIVISION, Bhubaneswar between 11.00 AM & 04.00 PM every day except on Sunday and public Holiday. Tender documents, excluding standard form, will be issued from his office, during the hours specified above on payment of Rs.

590.00 only in cash.

193950.00 This estimate however is given merely as a rough guide.

6). The tender must produce an Cartered Accountant certificate in the revised form as modified under Ministry of Finance O.M. No. 67/30/69/ITAL dated 02.07.1970 as amended from time to time before tender papers can be sold to him.

7).	Tenders, whi	ich should alway	s be in sealed	envelope, with	the name of w	ork and due dat	te written on	the envelope, wi	Il be received by

Executive Engineer (E), BSNL Electrical Division, Bhubaneswar. up to 03.00 PM on the same day at 03.30 PM.

8) The tender shall be accompanied by earnest money of Rs. 3879 in the form of DD of a scheduled Bank issued in favour of Accounts Officer(CASH), BSNL, GMTD, BHUBANESWAR, the amount being credited to Nationalized Bank / State Bank.

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

The work is estimated to cost Rs.

#### Name of the work :-

Attending day to day faults and repairing & maintenance of DG sets for various TE/ BTS sites under Berhampur SSA (For 2019-20)

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 shall 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 secundations 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 accoun 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.

Executive Engineer (E), BSNL Electrical Division, Bhubaneswa	r.

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 / Chief 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 CERTIFIC	CATE TO BE O	SIVEN BY THE	FIRM/ PERSON:
------------------------	--------------	--------------	---------------

Date :-

FORMAT OF THE CERTIFICATE TO BE GIVEN BY THE FIRM/ PERSON:	
IS/OR/O	iny
Signature of the firm / person.	
DECLARATION	
I (full name of Tenderer ) hereby eclare that I am fully aware of the terms and conditions of contract	ts
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 vari	ious clauses
clausesand Sub - Clauses of terms P.W.D 8 l/c up to date amendments therein . I	
further declare that while submitting the tender for	
( full r	name of work)
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 an	ccepted.
I undertake to bear all liablities I.e. duties etc. arising out of 46th amendments of constitution of India.	

(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 exclusive 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 exclusive of GST. The firm shall claim GST with the bill clearly furnishing the complete details of GST so included.

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

## 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.
- 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.
- 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

LIST OF A	pproved 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	МССВ	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				<del>,</del>	
List of	Approved makes for EA Set Works						
1	ENGINE	CUMMINS/ RUSTON/ ESCORTS/ KEOL/ CATER PILLAR/ ASHOK LEYLAND/ GREAVES/VOLVO PENTA (200-500 KVA)					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)					
3	ACB	L&T/ SIEMENS/ CON	NTROL & SWITCHG	EAR SCHNEIDER/	GE POWER CONTR	ROLS	
4	MCCB	L&T/ SIEMENS/ CON	NTROL & SWITCHG	EAR SCHNEIDER/	GE POWER CONTR	ROLS	
5	CONTACTORS AUXILIARY	L&T/ LAXMI/ GE PO	WER CONTROLS S	IEMENS/ SCHNEID	ER/ MEI/		
6	IDMT RELAY	AVKC-SEGC					
7	ст	AE/ IMP/ MARSHAL/	PACTIL/ KAPPA/ L8	RT/ ASHMOR/ INDO	COIL/ WACO/ MEC	0/	
8	PF METER	AE/ IMP/ RISHABH/	MECO/ UNIVERSAL	/ DIGITRON			
9	AMMETER / VOLTMETER	AE/ IMP/ UNIVERSA	L/ RISHABH/ KAYCE	EE/ MECO ENERCO	ON		
10	SELECTOR SWITCH	L&T/ KAYCEE/ AE /	MP/ THAKOOR/ RE	CO/VAISHNO/ SALZ	ZOR/ RASS CONTR	OL	
11	INDICATING LAMPS	VAISHNO/ SIEMENS	S/ L&T/ AE/ IMP/ RAS	SS CONTROL/TEK	NIC/ SCHNEIDER/	KAYCEE	
12	FREQUENCY METER	DIGITRON/ RISHAB	H/ MECO/ KELTRON	I/ IMP AE			
13	LEAD ACID BATTERY	EXIDE/ STANFORD/ GREAVES/ HITACH		O/ PACE SETTER/ I	NICCO/ PRESTOLIT	E/ AMAR RAJA/STANDARD/ C	CROMPTON
14	GI / MS PIPE	BST/ TATA/ ATL/ ITO	C/ ATC/ IIA/ JST/ ITS	/JINDAL/ ZENITH/ G	SSI/ TTA		
15	AVM PADS	DUNLOP/ POLYBON	<b>I</b> D				
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/ TRISHU	L/ LEADER/ KIRLOS	SKAR			

20	TRIVECTOR METER	SUNCO/ JAIPUR/ IMP			
21	KWH METER	SIMCO/ JAIPUR/ IMP/ AE/ UNIVERSAL/RISHABH			
	List of Approved makes for El and fans, Pu	ump sets and Compound Light Works			
1	ACB	L&T/ SIEMENS/ CONTROL & SWITCHGEAR SCHNEIDER/ GE POWER CONTROLS			
2	мссв	L&T/ SIEMENS/ CONTROL & SWITCHGEAR SCHNEIDER/ GE POWER CONTROLS			
3	TPN SWITCH AND HRC FUSES	L&T/ SIEMENS/ HAVELLS/ HH ELCON/SCHNEIDER/ STANDARD (UPTO 400A) GE POWER CONTROLS			
4	ст	AE/ IMP/ MARSHAL/ PACTIL/ KAPPA/ L&T/ ASHMOR/ INDOCOIL/ WACO/ MECO/			
5	AMMETER / VOLTMETER	AE/ IMP/ UNIVERSAL/ RISHABH/ KAYCEE/ MECO ENERCON			
6	SELECTOR SWITCH	L&T/ KAYCEE/ AE / IMP/ THAKOOR/ RECO/VAISHNO/ SALZOR/ RASS CONTROL			
7	INDICATING LAMPS	VAISHNO/ SIEMENS/ L&T/ AE/ IMP/ RASS CONTROL/ TEKNIC/ SCHNEIDER/ KAYCEE			
8	CAPACITORS (APP TYPE)	KHATAU JUNKER/ SCHNEIDER/ L&T/ IMP UNIVERSAL ELECTRIC/ USHA/ ASIAN/ AE			
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/ ZEROTRIP/ SIEMENS			
15	TIMER	L&T/ SIEMENS/ MINILEC/ TELEMECHANIQUE/ AE			
16	MCB, ISOLATOR AND DISTRIBUTION BOARD	BENTEX/ CLARITON/ HAVELLS/ INDO-KOPP/STANDARD/ SCHNEIDER/ MDS/SIEMENS			
17	CHANGEOVER SWITCH	STANDARD/ HAVELLS/ CONTROL & SWITCHGEAR HH ELCON			
18	PIANO SWITCH	ISI MARK			
19	MONOBLOCK PUMP SET	KSB/ BEACON/ KIRLOSKAR/ BATLIBOI/ JYOTI/BE/ CROMPTON/ PEC/ MATHER&PLATT/WASP			
20	STARTER	L&T/ SIEMENS/ BCH/ ABB/ MEI/ GE POWER CONTROLS			
21	GI / MS PIPE	BST/ TATA/ ATL/ ITC/ ATC/ IIA/ JUST/ ITS/JINDAL/ ZENITH/ GSI/ TTA			
22	FOOT VALVE	ISI MARK			
23	GATE VALVE	FOUNTAIN/ TRISHUL/ SANT/ ANNPURNA LEADER			

24	MS CONDUIT	ISI MARK			
25	SUBMERSIBLE PUMP	KSB/ KALAMA/ AMRUT/ KIRLOSKAR/ PEC BE			
26	ELCB	   STANDARD/ MDS/ HAVELLS/ DATAR/SIEMENS/ GE POWER CONTROLS			
27	CONTACTOR	SIEMENS/ L&T/ SCHNEIDER/ MEI/ LAXMI GE POWER CONTROLS			
List of A	Approved makes for Fire Detection Works				
1	HEAT DETECTORS	NITTON/ APPOLLO/ CHEMTRON/ HOCHIKI/EDWARD/ WORMALD/ FENWAL/			
2	SMOKE DETECTOR IONIZATION TYPE	VIJAY/ APPOLLO/ CEREBRUS/ HOCHIKI/EDWARD/ WORMALD/ FENWAL/ NITTON			
3	SMOKE DETECTOR PHOTOELECTRIC TYPE	NITTON/ APPOLLO/ CEREBRUS/ HOCHIKI EDWARD/ WORMALD/ FENWAL/ VIJAY			
4	FIRE PANELS	MATHER & PLATT/ MELTRON/ STEELAGE INDUSTRIES (MINIMAX)/ VIJAY/ SAFEWAY SECURITY SYSTEM MUMBAI/ CARMEL AND RAVAL ELECTRONICS CO. CHENNAI/ NAVEEN SYSTEM CHENNAI/ ALERT FIRE SERVICE BANGALORE			
5	P A SYSTEM	AHUJA/ PHILIPS/ MOTWANI/ AKG			
6	HOOTER	VAISHNO/ AHUJA/ AGNI/ PHILIPS/ MOTWANI			
7	PVC INSULATED COPPER CONDUCTOR CABLE	ISI MARK			
8	BATTERY (LEAD ACID SEALED	EXIDE/ STANFORD/ FURUKAWA/ AMCO/ PACE			
	AND MAINTENANCE FREE)	SETTER/ NICCO/ PRESTOLITE/ AMAR RAJA/STANDARD/ CROMPTON GREAVES/ HITACHI			
9	CONDUIT	ISI MARK			
	Approved makes for Fire Fighting Wet Riser Works				
1	HOSE REEL	ISI MARK			
2	HOSE PIPE	ISI MARK			
3	DIESEL ENGINE FOR FIRE PUMP	CUMMINS/ ESCORTS/ KEOL/ CATERPILLAR/ ASHOK LEYLAND/ GREAVES/ VOLVO PENTA (200-500 KVA)/ RUSTON			
4	FIRE EXTINGUISHERS	ISI MARK			
5	MOTORS	GE/ SIEMENS/ CROMPTON/ HBB/ KEC/ BHARAT BIJLEE/ ABB/ MEI/ SPARTON/ NGEF (ENERGY EFFICIENT MOTORS AS PER IS 12615/1984 FOR MOTORS BELOW 37KW)			
6	STARTER	SIEMENS/ L&T/ BCH/ ABB/ MEI/ GE POWER CONTROL			
7	TPN SWITCHES AND HRC FUSES	L&T/ SIEMENS/ HAVELLS/ HH ELCON/STANDARD / SCHNEIDER/ GE POWER CONTROLS			
8	MCCB	SIEMENS/ L&T/ CONTROL & SWITHGEAR SCHNEIDER/ GE POWER CONTROLS			
9	INDICATING LAMPS	VAISHNO/ SIEMENS/ L&T/ AE/ IMP/ RASS CONTROL/ TEKNIC/ SCHNEIDER/ KAYCEE			
10	AMMETER / VOLTMETER	AE/ IMP/ UNIVERSAL/ RISHABH/ KAYCEE/ MECO ENERCON			

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				
	FILTER, 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)

# SCHEDULE 'B'

Schedule of materials to be issued to the contractor.

Sr.			Rates in figures and words at				
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

ce to General Conditions of contract.	
Name of work:	Attending day to day faults and repairing & maintenance of DG sets for various TE/ BTS sites under Berhampur SSA (For 2019-20)
Estimated cost of work:	193950.00
Earnest money:	3879
Performance guarantee	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:	
Officer inviting tender:	Executive Engineer (E), BSNL Electrical Division, Bhubaneswar.
Definitions:	
2(v) Engineer-in-Charge	Executive Engineer (E), BSNL Electrical Division, Bhubaneswar.
2(vi) Accepting Authority	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	<del></del>
Time allowed for execution of work.	06 months
Authority to give fair and reasonable extension of time for completion of work.	SE(E)
Clause 12	NA
<b>12.1.2</b> (iii) Schedule of rates for determining rates for additional, altered or, substituted items that cannot be determined under 12.1.2 (i)and(ii)	± the % over the rate entered in the schedule of rates
Clause.25	1
Authority competemt for conciliation	S.E(E) not in charge

# Schedule-A

	Name of work:	Attending day to day faults and repairing & maintenance of DG sets for various TE/ BTS sites under Berhampur SSA (For 2019-20)				
SI. no.	Description of Items	Quantity	Unit Price excluding GST (Rs)	Unit	Total Amount excluding GST (Rs₹)	
1	Attending to break down call, physical inspection of DG sets at site, checking of lube oil sump, lube oil & lube oil filter, Radiator & coolant, Fans & fan belts, Fuel tank, Fuel, fuel filters & fuel lines, status of starting batteries, Battery charger, self starter, DG foundation bolts, Alternator coupling, exhaust pipes, AMF/conventional DG control panel, Alternator terminals, Alternator AVR, starting system etc., fault finding , top up of coolant, lube oil, Diesel, distilled water in battery etc. if required, rectification of other minor faults, make the DG set suitable for starting, trial run, load testing, checking of Engine & Alternator parameters, working of charging dynamo, etc. complete as required.(Supply of materials are not in the scope of this item)					
		20		Job		
2	Servicing of different capacity & make DG sets i/c drain out of old deteriorated lube oil from lube oil sump, dismantling of old oil & fuel filter elements, supply and pouring of suitable grade lube oil, supply & fixing of genuine fuel & oil filter elements, cleaning of fuel lines, air filters, radiator coils, cleaning of DG inside canopy, AMF/conventional control panel, tightening all electrical connections, trial run of DG set, load testing etc. complete as required.					
Note:	1) Typical makes of DG sets : Kirloskar / Mahindra / Eicher /					
	Escorts / Ashok leyland/Greaves/ Cummins etc.  (2) All the materials should be got verified from the SDE (E)/JTO (E) and to the satisfaction of Engineer in charge before using at site.  a) 15 KVA to 20 KVA Air / Water cooled DG set			Job		
	b) 25 KVA to 30 KVA Air / Water cooled DG sets					
	c) 40 KVA to 63 KVA Air / Water cooled DG sets	2		Job Job		
3	Supplying and fixing/fitting, connection of the following spare parts / components/accessories of the DG sets i/c dismantling/disconnecting the faulty /defective ones, functional testing of new ones etc. complete as required.			300		
Note:	<ol> <li>The make &amp; specifications of the new spares/components/accessories should be same as that original ones or as per the recommendations of the Engine manufacturer / OEM</li> </ol>					

Escorts / Ashok leyland/Greaves/ Cummins			
a) For 15 to 30 KVA DG sets			
i) Steel wire Braided fuel pipes (Supply/ return) (Approx-			
1700mm)			
	2	Each	
ii) Radiator hoses and clamps	1	Set	
iii) V- Velts	· · · · · · · · · · · · · · · · · · ·	Set	
iii) v- veits	4	Set	
iv) Tappet cover gaskets			
	1	Set	
v) Steel wire braided lub oil pressure pipe			
3) D. 1. 1. 10. 201 1	1	Set	
vi) Banjo bolts with washer	2	Each	
vii) Steel wire braided fuel short piece pipe with banzo bolts	_	200	
and washers from Feed pump to Fuel Filter			
	1	Set	
viii) Steel wire braided fuel short piece pipe with banzo bolts			
and washers from Filter to Fuel pump		_	
	1	Set	
ix) Feed Pump assembly	4	Cot	
b) For 40 to 63 KVA DG sets	1	Set	=
i) Steel wire Braided fuel pipes (Supply/ return) (Approx-			$\dashv$
1700mm)	1		
1700111111		Each	
ii) Radiator hoses and clamps	1	Set	
iii) V- Velts	1	3EI	
m/ v veice	1	Set	
iv) Tappet cover gaskets	'	- OCI	
11) rapper cover gashers	1	Set	
v) Steel wire braided lub oil pressure pipe		360	
·, · · · · · · · · · · · · · · · · · ·	1	Set	
vi) Banjo bolts with washer		Fair	
.::\ Carelin borided firel decad aires aireish ! ! !	1	Each	
vii) Steel wire braided fuel short piece pipe with banzo bolts			
and washers from Feed pump to Fuel Filter	4	Sot	
viii) Steel wire braided fuel short piece pipe with banzo bolts	1	Set	
and washers from Filter to Fuel pump	1	Set	
ix) Feed Pump assembly	'	331	
,	1	Set	
Supply and top up of Lube oil/coolant of suitable grade in the			
DG sets i/c transportation to sites etc. as required.			
a) Luba eil 1FW/40			_
a) Lube oil 15W/40	20	Ltr	
b) Coolant			
.,	5	Ltr	

c) Diesel for Testing wherever required		
	5	Ltr
d) Distilled water for DG Starting battery		
	10	Ltr
5 Supply and fixing/connection, testing of the following		
accessories of DG sets i/c dismantling and disconnection of the		
new ones etc. complete as required. (Make and Specification		
should be as per recommendations of the manufacturer / OEM		
/Engineer in charge)		
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
a) 10 Amps, 12 volts DC O/P & 170 to 270 Volts AC input,		
SMPS type Panel mounting Battery charger for charging of DG		
set starting battery	1	Each
b) Automatic Electronic voltage Regulator for 15 to 63 KVA		Edon
brushless type 3 phase, 415 volts Alternator (for excitation		
circuit) (BSNL Approved make)		
	2	Each
c) Dial type Hour cum RPM meter (Mechanical type)		
d) Digital hour meter (Electronic & panel mounted type)	1	Each
d) Digital hour meter (Electronic & panel mounted type)	1	Each
e) Stop solenoid assembly suitable for operation on 12 volts		
DC		
	1	Set
f) Starting Key set	1	Set
g) Battery charging Leads made of PVC insulated stranded	<u>'</u>	Sei
copper conductor cable with clamps (not less than 35sqmm)		
copper conductor caste with damps (not less than ossq,	,	
h) Proce Pottom, clamps with nuts and halts	1	Set
h) Brass Battery clamps with nuts and bolts	_	0-4
i) 63Amps, 415 volts , 50 Hz 4 pole MCCB (Not less than 25 KA)	1	Set
i) osamps, 413 voits , 30 Hz 4 pole Wiccb (Not less than 23 ka)		
	1	Each
j) 40Amps, 415 volts , 50 Hz, 4 pole contactor with 2NO+2 NC		
(AC3 duty)		
1) 6 1 1 6 11 6 1 1 1 1 1 1 1 1 1 1 1 1	1	Each
k) Contactor Coil for power Contactors in AMF Panel	1	Each
I) Engine Start Relay	'	Lacii
, , , , , , , , , , , , , , , , , , , ,	1	Each
6 Repairing of Self starter (12 volts ) of the DG sets i/c		
dismantling from DG set, transportation to workshop and		
back, replacement of solenoid coil, carbon brushes, springs,		
washers, bearings, refitting with DG set, testing etc. complete		
as required.		
For 15 to 63 KVA DG set		
	1	Job

7 Extra for winding of self sarter (12 volts) coil by superior quality and size enamel copper wire, heat varnishing etc. complete as required.			
For 15 to 63 KVA DG set	1	Job	
8 Repairing of Battery charging Dynamo (12 volts) of the DG sets i/c dismantling from DG set, transportation to workshop and back, replacement of carbon brushes, springs, washers, bearings, refitting with DG set, testing etc. complete as			
required. For 15 to 63 KVA DG set	,		
9 Extra for winding of Battery charging Dynamo (12 volts) coil by superior quality and size enamel copper wire, heat varnishing etc. complete as required.		Job	
For 15 to 63 KVA DG set	1	Job	
10 Making arrangements for charging of starting Battery of the DG set at workshop, replacement of electrolyte, servicing i/c transportation from site to nearest workshop and back etc. complete as required.			
11 Servicing & Repairing of the fuel pump, injector & nozzles I/c dismantling ,decarbonising, replacement of minor worn out spare like gasket, "o"ring etc., complete as required.		Job	
12 Extra for calibration of above mentioned fuel pump in authorised workshop i/c transportation from site to workshop and back etc. as required.		Job	
a) For 02 Cylinder Engine	1	Job	
b) For 04 Cylinder Engine	1	Job	
13 Checking and cleaning of Engine Radiator after drainage of coolant leak testing etc. complete as required.		1.5	
14 Checking and cleaning of Engine Diesel tank after drainage of Diesel leak testing etc. complete as required.	1	Job	
	1	Job	

Total Value in Rs