

## **BHARAT SANCHAR NIGAM LIMITED**

*(A Government of India Enterprise)*

**O/o THE EXECUTIVE ENGINEER (ELECTRICAL), BSNL ELECTRICAL DIVISION, DOOR SANCHAR BHAWAN (3RD FLOOR), UNIT-IX, BHUBANESWAR-751 022**

### **NIT NOTIFICATION**

The Executive Engineer (Elect.), BSNL Electrical Division, Bhubaneswar invites sealed item rate tenders on behalf of the Bharat Sanchar Nigam Limited for the following work from the Electrical contractors satisfying the under mentioned eligibility conditions: -

SI No.	Name of work	Estimated cost including GST(Rs.)	EMD (Rs).	Time	NIT No.
1	Attending day to day faults and repairing & maintenance of DG sets for various TE/ BTS sites under Koraput SSA (For 2020-21)(Ph-1).	197650.00	3953.00	06 months	N.I.T No.- 61/BSNL-BSR/20-21.



<b>A/A &amp; E/S Reference</b>	<b>ARMO</b>
T/S No.	37/BSNL-EDB/20-21

Tender paper cost (Non refundable) Rs.	<b>590.00</b>
Last Date of receipt of application:-	17.11.2020 (upto 4.00PM)
Last Date of tender paper sale:-	18.11.2020 (upto 5.30PM)
Last Date of tender paper receipt:-	19.11.2020 (upto 3.00PM)
Date of opening:-	19.11.2020 (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 DEA Set approved by BSNL. The letter of authorization from manufacturer in original/photo copy attested by BSNL executive 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.

OR

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

OR

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

OR

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

Note: Testimonials of satisfactory completion of works should be obtained from an officer not below the rank of Executive Engineer, wherever required clearly mentioning the name & scope of work. Similar work means "Repair & maintenance or comprehensive maintenance of DEA sets of 15 KVA & above".

- All other terms & conditions as per BSNL EW-6 and BSNL EW-8 form.
- The tenderer shall submit the tender in 2 sealed covers marked as cover 1st 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 guaranteed 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 1st 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 1st 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.

**LIST OF MANDATORY SELF ATTESTED DOCUMENTS TO BE SUBMITTED WITH THE TENDER (1st COVER)**

(1) Demand Draft/Pay Order/Banker's Cheque /FDR/TDR/BG of any Nationalized/ scheduled bank in favour of "Accounts Officer (Cash), BSNL, O/o the GMTD, Bhubaneswar" towards EMD.
(2) DD/Pay Order/Bankers Cheque of a Nationalized / Scheduled Bank in favour of "Accounts Officer (Cash), BSNL, O/o the GMTD, Bhubaneswar" towards tender cost.
(3) Documentary proof of satisfying eligibility conditions as per 1.1 to 1.4 above.
(4) Turn Over Certificate from Chartered Accountant for last 03 years.
(5) PAN card issued by Income Tax Department, Govt of India.
(6) Valid GST Registration Certificate issued by statutory authority

**No.-PLG-04/BSNL -EDB/20/283**

**Dt. 07/11/2020**

- 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

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

**BHARAT SANCHAR NIGAM LIMITED**  
( A Govt. of India Enterprise )

Item rate tenders are invited on behalf of the BSNL from eligible contractors for the work of :-

**Attending day to day faults and repairing & maintenance of DG sets for various TE/ BTS sites under Koraput SSA (For 2020-21)(Ph-1).**

The work is estimated to cost Rs.

**197650.00** This estimate however is given merely as a rough guide.

1) Tender will be issued to

Please refer to eligibility criteria

completed work of magnitude as specified 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 terms 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 availability 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 DD.

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, 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. up to 03.00 PM on **19.11.2020** and will be opened by him or his authorized representative in his office on the same day at 03.30 PM.

8) The tender shall be accompanied by earnest money of Rs. **3953.00** 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 :-

**Name of the work :-**

**Attending day to day faults and repairing & maintenance of DG sets for various TE/ BTS sites under Koraput SSA (For 2020-21)(Ph-1).**

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 examine the site and its surroundings and satisfy themselves before submitting their tenders as to the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. A tenderer shall be responsible for arranging and maintaining at his own cost all materials, tools, plants, 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 implies that he has read this notice and all other contract documents and has made himself aware of the scope and special conditions and sites 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 tenderer 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 prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.

3. The competent authority on behalf of BSNL reserves to himself the right of accepting the whole or any part of the tender and the tenderer shall 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 accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate 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 the 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 obtained 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 of opening of tenders. If any tender withdraws his tender before the said period or makes any notifications in the terms 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 forfeit 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 Accepting Authority, shall, within 15 days from the stipulated date of start of the work sign the contract consisting of :-

- a) The Notice inviting tender, all the documents including additional conditions, specifications and drawings, if any, forming 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, Bhubaneswar.**

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

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 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 certificate that none of his / her such near relatives is 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 company 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 deposit will be forfeited any stage whenever it is so notified. 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 of my 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 / incorrect, 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 ( son-in 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 declare 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 clauses and Sub - Clauses of terms P.W.D. - 8 I/c up to date amendments therein . I ..... ( full name of contractor )  
further declare that while submitting the tender for .....  
.....  
.....( full 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 accepted.

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

Date :-

( Full signature of the tenderer )

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

**GENERAL SPECIFICATIONS.**

- 1) The work shall be carried out as per current department / CPWD specifications.
- 2) Layout of the work shall be given at site of work by the Engineer - in Charge or his duty authorized representative.
- 3) Samples of the all articles shall be got approved from the Engineer - in Charge 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 presence of the Engineer - in - Charge or his duly authorized representative.
- 8) The contract shall stand for guarantee against defective materials of manufacturing defects and workmanship for the work carried out by him for the period of one year from its commissioning & make good / repair / replace the faults during this period without any extra cost , failing which the same shall be done at the risk and cost of the contractor. This is in supercession to the period of 6 months as mentioned in the clause-16 of this agreement.
- 9) Security deposit 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 - Charge.
- 11) Without prejudice of any of the rights or remedies under this contract, if the contractor dies, the Engineer in charge on behalf of the BSNL shall have the option of terminating the contract without compensation to the contractor.
- 12) INDULGING OF CONTRACTOR IN CRIMINAL/ANTISOCIAL ACTIVITIES AND CASES UNDER INVESTIGATION / CHARGE SHEETED BY CBI OR ANY OTHER GOVERNMENT AGENCIES ETC. : If the CBI/Independent External Monitor (IEM) / Income Tax /Sales Tax/ Central Excise/ Custom Departments recommend such a course – Action will be taken as per the directions of CBI or concerned department.

**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 specified time is not acceptable to the department.
7. **Offer should be clear** . Any ambiguous offer is liable for 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.**
- 9) Currency of contract: The currency of contract shall be 06 months. However, the currency of the contract may be extended for another 06 months at mutual consent of the Contractor and BSNL.

- 10 In urgency the agency may be asked to carry out the work in adjacent SSAs as per the requirement. The decision of Engineer-in-charge in this regard shall be final & binding.

**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 materials.
- 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 unwanted 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 shall be made of mild steel of size 16 / 18 SWG as per CPWD specification except the front 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 electrode resistance test.
- 14 On completion of electrical installation a certificate shall be furnished by the contractor in prescribed proforma, this certificate shall be in addition to the certificate 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/ KANO HAR (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	CT	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
<b>List of Approved makes for EA Set Works</b>		
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)
3	ACB	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	CT	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					
<b>List of Approved makes for EI and fans, Pump sets and Compound Light Works</b>							
1	ACB	L&T/ SIEMENS/ CONTROL & SWITCHGEAR SCHNEIDER/ GE POWER CONTROLS					
2	MCCB	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	CT	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
<b>List of Approved makes for Fire Detection Works</b>		
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 AND MAINTENANCE FREE)	EXIDE/ STANFORD/ FURUKAWA/ AMCO/ PACE SETTER/ NICCO/ PRESTOLITE/ AMAR RAJA/STANDARD/ CROMPTON GREAVES/ HITACHI
9	CONDUIT	ISI MARK
<b>List of Approved makes for Fire Fighting Wet Riser Works</b>		
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 & SWITHEGEAR 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	CT	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/ ZERO TRIP/ 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
<b>List of Approved makes for Air Conditioning Works</b>		
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	CT	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. No.	Description of item	Quantity	Rates in figures and words at which the material will be	Place of Issue
1	2	3	4	5
<b>As mentioned in the Schedule of work</b>				

### SCHEDULE 'F'

Reference to General Conditions of contract.

Name of work:	<b>Attending day to day faults and repairing &amp; maintenance of DG sets for various TE/ BTS sites under Koraput SSA (For 2020-21)(Ph-1).</b>
Estimated cost of work:	197650.00
Earnest money:	3953

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.
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#### GENERAL RULES and DIRECTIONS:

Officer inviting tender:	Executive Engineer (E), BSNL Electrical Division, Bhubaneswar.
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#### 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

Time allowed for execution of work.	06 months
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Authority to give fair and reasonable extension of time for completion of work.	SE(E), BSNL, Bhubaneswar
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#### Clause 12

12.1.2 (iii) Schedule of rates for determining rates for additional, altered or, substituted items that cannot be determined under 12.1.2 (i)and(ii)	<b>± the % over the rate entered in the schedule of rates</b>
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#### Clause.25

Authority competent for conciliation	S.E(E) not in charge
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### Schedule-A

	<b>Name of work:</b>	<b>Attending day to day faults and repairing &amp; maintenance of DG sets for various TE/ BTS sites under Koraput SSA (For 2020-21)(Ph-1).</b>			
Sl. 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)	8		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.				
<b>Note:</b>	<b>1) Typical makes of DG sets : Kirloskar / Mahindra / Eicher / Escorts / Ashok leyland/Greaves/ Cummins etc.</b>				
	<b>(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.</b>				
	a) 15 KVA to 20 KVA Air / Water cooled DG set	6		Job	
	b) 25 KVA to 30 KVA Air / Water cooled DG sets	3		Job	
	c) 40 KVA to 63 KVA Air / Water cooled DG sets	2		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.				
<b>Note:</b>	<b>1) 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.</b>				
	<b>2) Typical makes of DG sets : Kirloskar / Mahindra / Eicher / Escorts / Ashok leyland/Greaves/ Cummins</b>				
	<b>a) For 15 to 30 KVA DG sets</b>				
	i) Steel wire Braided fuel pipes (Supply/ return) (Approx-1700mm)	2		Each	
	ii) Radiator hoses and clamps	1		Set	
	iii) V- Velts	2		Set	
	iv) Tappet cover gaskets	1		Set	
	v) Steel wire braided lub oil pressure pipe	1		Set	
	vi) Banjo bolts with washer	3		Each	
	vii) Steel wire braided fuel short piece pipe with banzo bolts 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	1		Set	
	<b>b) For 40 to 63 KVA DG sets</b>				
	i) Steel wire Braided fuel pipes (Supply/ return) (Approx-1700mm)	1		Each	
	ii) Radiator hoses and clamps	1		Set	
	iii) V- Velts	1		Set	
	iv) Tappet cover gaskets	1		Set	
	v) Steel wire braided lub oil pressure pipe	1		Set	
	vi) Banjo bolts with washer	1		Each	
	vii) Steel wire braided fuel short piece pipe with banjo bolts and washers from Feed pump to Fuel Filter	1		Set	
	viii) Steel wire braided fuel short piece pipe with banjo bolts and washers from Filter to Fuel pump	1		Set	
	ix) Feed Pump assembly	1		Set	
4	Supply and top up of Lube oil/coolant of suitable grade in the DG sets including transportation to sites etc. as required.				

	a) Lube oil 15W/40	10		Ltr	
	b) Coolant	14		Ltr	
	c) Diesel for Testing wherever required	10		Ltr	
	d) Distilled water for DG Starting battery	10		Ltr	
5	Supply and fixing/connection, testing of the following accessories of DG sets including 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 brushless type 3 phase, 415 volts Alternator (for excitation circuit) (BSNL Approved make)	2		Each	
	c) Dial type Hour cum RPM meter (Mechanical 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 copper conductor cable with clamps (not less than 35sqmm)	1		Set	

	h) Brass Battery clamps with nuts and bolts	1		Set	
	i) 63Amps, 415 volts, 50 Hz 4 pole MCCB (Not less than 25 KA)	1		Each	
	j) 40Amps, 415 volts , 50 Hz, 4 pole contactor with 2NO+2 NC (AC3 duty)	1		Each	
	k) Contactor Coil for power Contactors in AMF Panel	1		Each	
	l) Engine Start Relay	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.				
a)	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.				
a)	For 15 to 63 KVA DG set	1		Job	
8	Repairing of Battery charging Dynamo (12 volts) of the DG sets including 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.				
a)	For 15 to 63 KVA DG set	1		Job	

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.				
	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 including transportation from site to nearest workshop and back etc. complete as required.	1		Job	
11	Servicing & Repairing of the fuel pump, injector & nozzles l/c dismantling ,decarbonising, replacement of minor worn out spare like gasket, "O"ring etc., complete as required.	1		Job	
12	Extra for calibration of above mentioned fuel pump in authorised workshop including transportation from site to workshop and back etc. as required.				
	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		Job	
14	Checking and cleaning of Engine Diesel tank after drainage of Diesel leak testing etc. complete as required.	1		Job	
				Total Rs.	
				Add GST @	
				Grand Total:	

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

**\_\_x\_\_ END OF NIT \_\_x\_\_**