



Connecting India (<u>A Government Of India Enterprise</u>) O/o The Sub-Divisional Engineer (Electrical) BSNL Electrical Sub-Division Doorsanchar Bhawan(3rd floor). Rourkela Ph- 0661-2600356, <u>NET NOTIFICATION</u>

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

SI. No.	Name of work	Estimated cost.(Rs.)	E.M.D. (Rs).	Time	NIT No.
	Repairing/Replacement of self starter of 15/20KVA DG sets at N BSNL BTS sites 1) Kusumdihi 2) Jalda C (theft sel 3) and other misc works at Kuarnmunda,Garposh under Rourkela SSA		977	07 days	109/TED-TED/20-21
	Tender paper cost(Non refundable) Rs		17	77.00	
	Last Date of receipt of application:-		10-、	Jun-20	(upto 4.00PM)
	Last Date of tender paper sale:-		12	Jun-20	(upto 5.30PM)
	Last Date of tender paper receipt:		12-、	Jun-20	(upto 3.00PM)
	Date of opening:-		12-Jun-20		(at 3.30 PM).

Eligibility Criteria :-

1 The BSNL Enlisted/ any Government ,PSU approved Contractors satisfying the following conditions: 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 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 be either of the following:

a. Three similar successfully completed works costing not less than the amount equal to 40% of the estimated cost put to tender. OR

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

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

- 2 All other terms& conditions as per BSNL ED-6 and BSNL EW-8 form.
- 3 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 guarranted by reserve bank of India drawn in favour of Accounts Officer BSNL Electrical Division , Sambalpur. 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 AO BSNL Electrical Division Sambalpur 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 If the performance of the contractor is not satisfactory his tender shall not be opened. EE(E)'s decision shall be final and binding.

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

No:-2(6)/TESDR/ 41

Dt. 02.06.2020

- 1) SE(E), BSNL Electrical Circle, Bhubaneswar
- 2) The Executive Engineer(E) BSNL Electrical Division, Sambalpur.
- 3-13). The Sub-Divisional Engineer(E) BSNL.E.S.D., Bhubaneswar-I/II/
- Cuttack-I/II/Dhenkanal/Berhampur/Sambalpur-I/II/Balasore/Koraput/Bolangir.
- 14) The Vigilance Officer, O/O the CGMT, Orissa Circle, Bhubaneswar.
- 15) The Accounts Officer, BSNL Electrical Division, Sambalpur.
- 16-17) The Notice Board/ Agreement.
- 18) website.(www.orissa.bsnl.co.in)
- 19) Contractors

CPWD - 6

NOTICE INVITING TENDER 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 :-Repairing/Replacement of self starter of 15/20KVA DG sets at N BSNL BTS sites 1) Kusumdihi 2) Jalda C (theft sel 3) and other misc works at Kuarnmunda,Garposh under Rourkela SSA

The work is estimated to cost Rs. This estimate however is given merely as a rough guide.	48849.00
) Tender will be issued to	The BSNL Enlisted/ any Government ,PSU approved Contractors satisfying the following conditions: 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 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 be either of the following: a. Three similar successfully completed works costing not less than the amount equal to 40% of the estimated cost put to tender. OR b. Two similar successfully completed works costing not less than the amount equal to 60% of the estimated cost put to tender. OR c. One similar successfully completed work costing not less than the amount equal to 80% of the estimated cost put to tender. OR

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 terms and conditions of the said form which will form part of the agreement.

07 days

1

- 4). The availability of individual site will be specified in the letter of intent.
- 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 three 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 becomplied with by the whose tender may be accepted and other necessary document can be seen in the office of the Sub-Divisional Engineer (E),BSNL Electrical Sub-Division, Rourkela 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. 177.00 only.

- 6) The tender must produce an Chattered 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 the Sub-Divisional Engineer(E), BSNL Electrical Sub-Division, Rourkela. up to 03.00 PM on 12-Jun-20 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 (unless exempted) of Rs. 977 in the form of DD of a scheduled Bank issued in favour of Accounts Officer (Cash) ,O/O The GMTD ,BSNL Sambalpur the amount being credited to Nationalized Bank / State Bank .
- 9). The description of the work is a follows :- Name of the work :-

Repairing/Replacement of self starter of 15/20KVA DG sets at N BSNL BTS sites 1) Kusumdihi 2) Jalda C (theft sel 3) and other misc works at Kuarnmunda,Garposh under Rourkela SSA

^{3).} The time allowed for carrying out the work is

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 specifications of the work to be done and of conditions and rates 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 tenderand 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 prohibited and the tenders submitted by the contractors who restore 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 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 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 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 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.

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

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 Architect / Corporate office for non- executive employees and all SSA in a circle including circle office / Chief Engineer/ Chief Architect/ 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. 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 deposited 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:

_____ S/O _____ here by certify that none of my relative(S) L R/O 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 déclare 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)

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 Engineering - in Charge or his duty authorized representative.

3) Samples of the all articles shall be got approved from the Engineer - in Change 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 manufacturing 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.

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 - Change.

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

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

"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.

BSNL shall deduct income tax and other statutory deductions / cess from payments due to the firm as per rules of the State / Central Government. The Accounts Officer of the concerned Division shall issue certificates for such deductions to the firm. In case of statutory variation in GST within the stipulated date of completion of individual agreement, the same shall be paid or recovered as per the actual against documentary proof for major equipments/ materials. However, beyond this period BSNL will take advantage of any duty reduction but will not pay extra on account of duty increase.

- 2 Evaluation of Tenders:-The evaluation and comparison of responsive tenders shall be done on the basis of cost to BSNL,
- 3 Loading , unloading , transportation, insurance etc. shall all be included in their offer.
- 4 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.
- 5 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 for rejection by the department. **There will be negotiate 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:

8.1 All taxes and Duties are as per applicable GST. Variation if any will be guided by Statutes pertaining to GST.

8.2 The Firm shall furnish Invoices to BSNL for availing of applicable Input Tax Credit.

8.3 Vendors should furnish the correct HSN/SAC code. If the Input Tax Credit (ITC) under GST is found to be not admissible at any stage subsequently owing to wrong furnishing of data, the vendor will be liable such non-admissible amount, if already paid along with penalty if charged by the concerned authority.

8.4 If the Vendors fail to furnish necessary supporting documents for availing of input tax credit by BSNL, the amount pertaining to such input credit will be deducted from the payment due to the firm.

8.5 Invoices should clearly indicate break up details of composite price i.e. unit price of goods/services/materials and GST etc.
8.6 In case of any statutory variations in regard to GST or any other taxes, within the currency of contract including extension period if any, the same shall be admissible as per prevailing GST laws as applicable subject to the condition that, the reason for such extension of time period is not attributable to the agency

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

<u>E.I & FANS :</u>

- 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.
- Following works shall be carried out by the contractor and therefore their cost shall be deemed to be included in their tendered 5 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 D.S.R. 16 + 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 M.S. 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.

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

	Name of work:	Repairing/Replacement of self starter of 15/20KVA DG sets at N BSNL BTS sites 1) Kusumdihi 2) Jalda C (theft sel 3) and other misc works at Kuarnmunda,Garposh under Rourkela SSA			
SI. No.	Description of items	Quantity	Unit	Total Rate	Amount
	S.H-I				
1	Repairing and visit for checking the various faults including dismantling faulty/missing parts of DG set ,voltage adjustment, ,Panel etc as complete as reqd. (Kusumdihi,Jalda-C, Garposh)		job		
2	Supply & fixing of following item by replacing damaged/burnt one etc as reqd.				
a)	12V Battery cable terminations brass leads ,copper cable ,Jalda-C	1	Nos		
b)	Self starter for Eicher DG set(mico)& RB-33 KOEL at kusumdihi & jalda-c	2	set		
c)	Self starter nuts and bolts at Jalda-c	3	Nos		
d)	Fuel Filter pipe(s) steel braided at main pipe sorada	1	Nos		
e)	Steel braided pipe at Jalda C	2	Nos		
f)	V belt for fan,Dynamo at Koida,Kalta	2	Nos		
g)	Diesel	5	Ltrs.		
h)	Avr for alternator at Kuarnmunda	1	Nos		
3	S/F external battery charger SMPS type 230V,o/p 12V,0- 12A rating ,with auto,trickle,fast charging mode etc as complete as reqd.(GARposh,Kuruda)		Nos		
			Total	Rs.	
		Less credit fo	r UDM	1.0.	450.

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

LIST OF APPROVED MAKES- BSNL ELECTRICAL WING

SI.Ne	Items	Make
1		Ashok Leyland /Cummins/ Cater pillar /KOEL/ Volvo Penta / Mahindra & Mahindra (up to 40 KVA) /Escorts (up to 30 KVA)/ Eicher (up to 20 KVA)

3 Battery (Lead Acid /Mntc. Free) Amara Raja / AMCO / Farukawa / Hitachi / Exide/ Prestolite / Standard 4 HV Switchgear (Vacuum Circuit Breaker/SF6) Biecco Lawrie / Crompton / Kirloskar /MEI / Jyoti Ltd 5 Transformer (Oil filled / Dry type)a) Above 400 KVA ABB / Schneider Electric / Andrew Yule /Bharat Bijlee / Crompton / EMCO / Kirloskar / Siemens b) Up to 400 KVA In addition to above makes.Uttam/Automatic Electric Gear(AEC)/Patson/Rajastithan Transformer and Switchgear 6 Air Circuit Breaker L&T/ Schneider Electric / Siemens 7 MCCB(Ics=Icu) L&T/ Schneider Electric / Siemens/Lakshmi(LECS) 8 SDF units L&T/ Schneider Electric / Siemens/Lakshmi(LECS) 9 Power Contactors L&T/ Schneider Electric/Neptune Ducati/Syntron/ABB 10 Change Over Switch HPL / Havells / H-H Elcon 11 Intelligent APEC Relay Ducati/Syntron/ABB 12 Bus Bar Trunking/Sandwiched Bus Duct Moeller/L&T/Schneider Electric/ABB/Legrand/Zeta 13 Power Capacitors(MPP/APP) Ducati/Syntron/ABB 14 Digital/ KWHr meter /Universal/HPL/L&T/ABB 15 Cold shrink HT/LT Cable Joint Denson / 3M(M-Seal /) Raychem					
4 HV Switchgear (Vacuum Circuit Breaker/SF6) Biecoo Lawrie / Crompton / Kirloskar / MEI / Jyoli Ltd 5 Transformer (Oii filled / Dry type)a) Above 400 KVA ABB / Schneider Electric / Andrew Yule /Bharat Bijlee / Crompton / EMCO /Kirloskar / Stemens b) Up to 400 KVA In addition to above makes, Uttam/Automatic Electric / Gear/AEGI/Patson/Rajasthan Transformer and Switchgear 6 Air Circuit Breaker L&T/ Schneider Electric / Stemens 7 MCCB(Ics=Icu) L&T/ Schneider Electric / Stemens 8 SDF unts L&T/ Schneider Electric / Stemens/HPL/Havells 9 Power Contactors L&T/ Schneider Electric / Stemens/Lakshmi(LECS) 10 Intelligent APFC Relay Ducati/Syntrom/ABB 11 Intelligent APFC Relay Ducati/Syntrom/ABB 12 Bus Bar Trunking/Sandwiched Bus Duct Moeller/L&T/Schneider Electric/ABB/Legrand/Zeta 13 Power Capacitors/(MPP/APP) Ducatif Ducatif 14 Digital/KWH meter Juniversal/HPL/L&T/ABB Electric/Stemens / Standard C&S/ABB/HPL 15 Cold strink HT/LT Cable Joint Denson / 3M(M-Seai) / Rayotor / MDS Legrand/L&T / Schneider Electric/Stemens / Standard C&S/ABB/HPL 16 Rubber Matting <td< td=""><td>2</td><td>Alternator(Brushless)</td><td>Crompton Greaves (AL. series) / KEC /Leroy Somer / Stamford/Jyoti Ltd</td></td<>	2	Alternator(Brushless)	Crompton Greaves (AL. series) / KEC /Leroy Somer / Stamford/Jyoti Ltd		
5 Transformer (Oil filled / Dry type)a) Above 400 KVA ABB / Schneider Electric / Andrew Yule /Bharat Bijlee / Crompton / EMCO /Kritoskar / Siemens 5 Transformer (Oil filled / Dry type)a) Above 400 KVA In addition to above makes, Ultam/Automatic Electric / Semens 6 Air Circuit Breaker L&T/ Schneider Electric / Siemens 7 MCCB(Ics=Icu) L&T/ Schneider Electric / Siemens 8 SDF units L&T/ Schneider Electric / Siemens 9 Power Contactors L&T/ Schneider Electric / Siemens/Lakshmi(LECS) 10 Change Over Switch HPL / Havells / H-H Elcon 11 Intelligent APFC Relay Ducati/Schneider Electric/ABB/Legrand/Zeta 12 Bus Bar Trunking/Sandwiched Bus Duct Moeller/L&T/Schneider Electric/AED Jogitron / MP/Mecio / Rishabh 14 Digital / KWHr meter Schneider Electric / AED Jogitron / MP/Mecio / Rishabh 14 Digital / KWHr meter Schneider Electric / AED Jogitron / MP/Mecio / Rishabh 15 Cold shrink HT/L T Cable Joint Derson / JM(M-Seal J/ Raychem 16 Rubber Matting ISI mark Imark 19 Cable Tray MEMBharti/Ratan/Slotco/Profab 20 HT/L T Cables ISI mark Imark	3	Battery (Lead Acid /Mntc. Free)	Amara Raja / AMCO / Farukawa / Hitachi / Exide/ Prestolite / Standard		
9 Hahstormer (Unitied / Unity type)a) Adove 400 KVA EMCO /Kirloskar / Siemens b) Up to 400 KVA Clear/AEG/Patson/Rajasthan Transformer and Switchgear 6 Air Circuit Breaker L&T/ Schneider Electric / Siemens 7 MCCB(ics=icu) L&T/ Schneider Electric / Siemens/HPU-Havelis 8 SDF units L&T/ Schneider Electric / Siemens/HPU-Havelis 9 Power Contactors L&T/ Schneider Electric / Siemens/HPU-Havelis 11 Intelligent APFC Relay Ducati/Simmon/ABB 12 Bus Bar Trunking/Sandwiched Bus Duct Moeller/L&T/Schneider Electric/ABB/Legrand/Zeta 13 Power Capacitors(MPP/APP) Ducati/Simmon/ABB 14 Digital/ KWHr meter Schneider Electric/ABB/Legrand/Zeta 15 Cold shrink HT/LT Cable Joint Denson / 3M(M-Seal)/ Raychem 16 Ruber Matting ISI mark 17 MCK/Elostaot/ELCB/RCCB/Distribution Board Compton / Havelis / Indxkopp / MDS Legrand/ L&T / Schneider Electric/Siemens / Standard// C&S/ABB/HPL 18 MS/PVC Conduit ISI mark ISI mark 19 Cable Tray MEM/Bharti/Ratan/Siotoc/Profab 20 HT/LT Cables ISI mark ISI mark <	4	HV Switchgear (Vacuum Circuit Breaker/SF6)	Biecco Lawrie / Crompton / Kirloskar /MEI / Jyoti Ltd		
0 DP 10* 400 KVA Gear(AEG)/Patson/Rajasthan Transformer and Switchgear 6 Air Circuit Breaker L&17 Schneider Electric / Siemens 7 MCCB(ics=Icu) L&17 Schneider Electric / Siemens/HPL/Havells 8 SDF units L&17 Schneider Electric / Siemens/HPL/Havells 9 Power Contactors L&17 Schneider Electric / Siemens/HPL/Havells 10 Change Over Switch HEL / Havells / H-H Elcon 11 Intelligent APFC Relay L&17/EPCOS(Siemens)/ Schneider Electric/NaBi/Legrand/Zeta 12 Bus Bar Trunking/Sandwiched Bus Duct Molelin/L&17/Schneider Electric/ABB/Legrand/Zeta 13 Power Capacitors(MPP/APP) Diatii 14 Digital/KWHr meter //Universal/HPL/L&17/ABB 15 Cold shrink HT/LT Cable Joint Derson / 3M(M-Seal)/ Raychem 16 Rubber Matting ISI mark 17 MCB/Isolator/ELCB/RCCB/Distribution Board Electric/Siemens / Standard/C&S/ABB/HPL 18 MS/ PVC Conduit ISI mark 19 Cable Tray MEMBhart//Ratan/Slotor/Profab 20 HT/LT Cables ISI mark 21 PVC insulated copper conductor wire ISI mark 22 Centrifugal Pump Amrut / BE / Beacon / Batilboi /Crompton / Jyoti / Kirloskar / KSB 23 Submersible Pump Crompton/Amrut / BE / Calama /Kirloskar / KSB	5	Transformer (Oil filled / Dry type)a) Above 400 KVA			
1 Decoder 1 MCCB(les=lcu) 2 MCCB(les=lcu) 3 SDF units 4 SDF units 5 DF units 6 SDF units 7 MCCB(les=lcu) 10 Change Over Switch 11 Intelligent APEC Relay 12 Bus Bar Trunking/Sandwiched Bus Duct 13 Power Capacitors(MPP/APP) 14 Digital/ KWHr meter 15 Cold shrink HT/LT Cable Joint 16 Rubber Matting 17 MCB/Isolator/ELCB/RCCB/Distribution Board 18 MS/ PVC Conduit 19 Cable Tray 20 HT/LT Cables 21 PVC Insulated copper conductor wire 22 Centrifugal Pump 23 Submersible Pump 24 Motors 25 Fresh Air Fans 26 Fresh Air Fans 27 Singl		b) Up to 400 KVA			
8 SDF units L&T/ Schneider Electric / Siemens/IAPL/Havells 9 Power Contactors L&T/ Schneider Electric / Siemens/Lakshmi(LECS) 10 Change Over Switch HPL / Havells / H-H Elcon 11 Intelligent APFC Relay Ducati/Syntron/ABB 12 Bus Bar Trunking/Sandwiched Bus Duct Moeller/LXTSchneider Electric/ABB/Legrand/Zeta 13 Power Capacitors(MPP/APP) Ducati/Syntron/ABB 14 Digital/ KWHr meter Schneider Electric/AE/ Digitron / IMP/Meco / Rishabh 15 Cold shrink HT/LT Cable Joint Denson / JM(M-Seal /) Raychem 16 Rubber Matting ISI mark Electric/Siemens / Standard/ C&S/ABB/HPL 17 MCB/ Isolator/ELCB/RCCB/Distribution Board Erompton/ Havells / Indokopp / MDS Legrand/ L&T / Schneider 18 MS/ PVC Conduit ISI mark ISI mark 19 Cable Tray MEWBantri/Ratan/Slotco/Profab 20 HT/LT Cables ISI mark ISI mark 21 PVC Insulated copper conductor wire ISI mark ISI mark 22 Centrifugal Pump Amrut / BE / Bacon / Batilboi /Crompton / Jyoti / Kirloskar / KSB 23 Submersible Pump Compton/Amrut / BE /	6	Air Circuit Breaker	L&T/ Schneider Electric / Siemens		
9 Power Contactors L&T/ Schneider Electric / Siemens/Lakshmi(LECS) 10 Change Over Switch HPL / Havells / H-H Elcon 11 Intelligent APFC Relay L&T/EPCOS(Siemens)' Schneider Electric/Neptune Ducatl/Syntron/ABB 12 Bus Bar Trunking/Sandwiched Bus Duct Moeller/L&T/Schneider Electric/ABB/Legrand/Zeta 13 Power Capacitors(MPP/APP) L&T/EPCOS(Siemens)/ABB/Crompton/Schneider Electric/Neptune Ducati 14 Digital/ KWHr meter Schneider Electric/AE/ Digitron / IMP/Meco / Rishabh 14 Digital/ KWHr meter Cold shrink HT/LT Cable Joint Denson / 3M(M-Seal)/ Raychem 16 Rubber Matting ISI mark Condition / Flavells / Indokopp / MDS Legrand/ L&T / Schneider 19 Cabla tor/ELCB/RCCB/Distribution Board ISI mark Image (Cas)/ELCB/RCB/Distribution Board 19 Cable Tray MEW/Bharti/Ratan/Slotco/Profab Image (Cas)/ELCB/RCB/Distribution Board 20 HT/LT Cables ISI mark Image (Cas)/ELCB/RCB/Distribution Board Image (Cas)/ELCB/RCB/Distribution Board 21 PVC Insulated copper conductor wire ISI mark Image (Cas)/ELCB/RCB/Distribution Board Image (Cas)/ELCB/RCB/Distribution Board 22 Centrifugal Pump Amrut / BE / Beacon / Batilbo	7	MCCB(lcs=lcu)	L&T/ Schneider Electric / Siemens		
10 Change Over Switch HPL / Havells / H-H Elcon 11 Intelligent APFC Relay L&T/EPCOS(Siemens)/ Schneider Electric/ Neptune Ducati/Syntron/ABB 12 Bus Bar Trunking/Sandwiched Bus Duct Moeller/LAT/Schneider Electric/ABB/Legrand/Zeta 13 Power Capacitors(MPP/APP) L&T/EPCOS(Siemens)/ABB/Crompton/Schneider Electric/Neptune Ducati 14 Digital/ KWHr meter Schneider Electric/ AE/ Digitron / IMP/Meco / Rishabh 14 Digital/ KWHr meter Juniversal/HP/LAT/ABB 15 Cold shrink HT/LT Cable Joint Denson / 3M(M-Seal)/ Raychem 16 Rubber Matting ISI mark ISI mark 17 MCB/ Isolator/ELCB/RCCB/Distribution Board Crompton / Havells / Indokopp / MDS Legrand / L&T / Schneider 18 MS/ PVC Conduit ISI mark ISI mark 19 Cable Tray MEWBharti/Ratan/Slotco/Profab 20 HT/LT Cables ISI mark ISI mark 21 PVC insulated copper conductor wire ISI mark ISI mark 22 Centrifugal Pump Amrut / BE / Beacon / Batiliboi /Crompton / Jyoti / Kirloskar / KSB 23 Submersible Pump Crompton/Amrut / BE / Calama /Kirloskar / KSB 24 <t< td=""><td>8</td><td>SDF units</td><td>L&T/ Schneider Electric / Siemens/HPL/Havells</td></t<>	8	SDF units	L&T/ Schneider Electric / Siemens/HPL/Havells		
Intelligent APFC Relay L&T/EPCOS(Siemens)/ Schneider Electric/ Neptune Ducati/Syntron/ABB 12 Bus Bar Trunking/Sandwiched Bus Duct Moeller/L&T/Schneider Electric/ABB/Legrand/Zeta 13 Power Capacitors(MPP/APP) L&T/EPCOS(Siemens)/ABB/Crompton/Schneider Electric/ABB/Legrand/Zeta 14 Digital/ KWHr meter Schneider Electric/AE/Digitron / IMP/Meco / Rishabh 14 Digital/ KWHr meter Schneider Electric/AE/Digitron / IMP/Meco / Rishabh 15 Cold shrink HT/LT Cable Joint Denson / 3M(M-Seal)/ Raychem 16 Rubber Matting ISI mark Image: Cold shrink HT/LT Cable Joint 17 MCB/ Isolator/ELCB/RCCB/Distribution Board Crompton / Havelis / Indokopp / MDS Legrand/ L&T / Schneider 18 MS/ PVC Conduit ISI mark Imark 19 Cable Tray MEM/Bharti/Ratan/Slotco/Profab 20 HT/LT Cables ISI mark Imark 21 PVC insulated copper conductor wire ISI mark Imark 22 Centrifugal Pump Amrut / BE / Beacon / Batiboi /Crompton / Jyoti / Kirloskar / KSB 23 Submersible Pump Crompton/Amrut / BE / Calama /Kirloskar / KSB 24 <	9	Power Contactors	L&T/ Schneider Electric / Siemens/Lakshmi(LECS)		
11 Intelligent AP-C Relay Ducati/Syntron/ABB 12 Bus Bar Trunking/Sandwiched Bus Duct Moeller/L&T/Schneider Electric/ABB/Legrand/Zeta 13 Power Capacitors(MPP/APP) L&T/EPCOS(Siemens)/ABB/Crompton/Schneider Electric/Neptune Ducati 14 Digital/ KWHr meter Schneider Electric/AE/Digitron / IMP/Meco / Rishabh 14 Digital/ KWHr meter Schneider Electric/AE/Digitron / IMP/Meco / Rishabh 15 Cold shrink HT/LT Cable Joint Denson / 3M(M-Seal)/ Raychem 16 Rubber Matting ISI mark Crompton / Havells / Indokopp / MDS Legrand/ L&T / Schneider 17 MCB/ Isolator/ELCB/RCCB/Distribution Board Crompton / Havells / Indokopp / MDS Legrand/ L&T / Schneider 18 MS/ PVC Conduit ISI mark ISI mark 19 Cable Tray MEM/Bharti/Ratan/Slotco/Profab 20 HT/LT Cables ISI mark ISI mark 21 PVC insulated copper conductor wire ISI mark ISI mark 22 Centrifugal Pump Armut / BE / Beacon / Batilboi /Crompton / Jyoti / Kirloskar / KSB 23 Submersible Pump Crompton/Armut / BE / Calama /Kirloskar / KSB 24 Motors ABB/ BACH / Schneider Electric / L&T /Siemens /	10	Change Over Switch	HPL / Havells / H-H Elcon		
12 Bus Bar Trunking/Sandwiched Bus Duct Moeller/L&T/Schneider Electric/ABB/Legrand/Zeta 13 Power Capacitors(MPP/APP) L&T/EPCOS(Siemens)/ABB/Crompton/Schneider Electric/Neptune Ducati 14 Digital/ KWHr meter //Lniversal/HPL/L&T/ABB 15 Cold shrink HT/LT Cable Joint Denson / 3M(M-Seal)/ Raychem 16 Rubber Matting ISI mark	11	Intelligent APFC Relay			
13 Power Capacitors(WPP/APP) 14 Digital/ KWHr meter 14 Digital/ KWHr meter 15 Cold shrink HT/LT Cable Joint 16 Rubber Matting 17 MCB/ Isolator/ELCB/RCCB/Distribution Board 18 MS/ PVC Conduit 19 Cable Tray 19 Cable Tray 20 HT/LT Cables 21 PVC conduit 22 Centrifugal Pump Amrut / BE / Beacon / Batliboi /Crompton / Jyoti / Kirloskar / KSB 23 Submersible Pump 24 Motors 25 Fresh Air Fans 26 Ktarer 27 Single Phase Preventer 28 Gl/MS Pipe 29 Fot Valve 20 Fot Valve 21 PVC insulated copper conductor wire 22 Centrifugal Pump //Mather & platt / WASP/Grundfos 23 Submersible Pump Crompton/Amrut / BE / Calama /Kirloskar / KSB 24 Motors 25 Fresh Air Fans 26 Ktarer	12	Bus Bar Trunking/Sandwiched Bus Duct			
14 Digital/ KWHr meter Schneider Electric/ AE/ Digiton / IMP/Meco / Rishabh 15 Cold shrink HT/LT Cable Joint Denson / 3M(M-Seal)/ Raychem 16 Rubber Matting ISI mark ISI mark 17 MCB/ Isolator/ELCB/RCCB/Distribution Board ISI mark ISI mark 18 MS/ PVC Conduit ISI mark ISI mark 19 Cable Tray MEM/Bharti/Ratan/Slotco/Profab 20 HT/LT Cables ISI mark ISI mark 21 PVC insulated copper conductor wire ISI mark ISI mark 22 Centrifugal Pump Amrut / BE / Beacon / Batlibbi /Crompton / Jyoti / Kirloskar / KSB 23 Submersible Pump Crompton/Amrut / BE / Calama /Kirloskar / KSB 24 Motors ABB/ Bharat Bijlee / Crompton Greaves /Schneider Electric / HBB / KE 25 Fresh Air Fans GE / Khaitan/Almonard/Crompton 26 Starter ABB / BCH / Schneider Electric / L&T / Siemens / 27 Single Phase Preventer L&T / Minilec / Siemens / Zerotrip 28 GI/MS Pipe ATC / ATL / BST / GSI / ITC / ITS / IIA /JST / Jindal /TTA / Tata/Zenith 29 Foot Valve ISI mark ISI mark <td>13</td> <td>Power Capacitors(MPP/APP)</td> <td></td>	13	Power Capacitors(MPP/APP)			
15 Cold shrink HT/LT Cable Joint Denson / 3M(M-Seal)/ Raychem 16 Rubber Matting ISI mark Crompton / Havells / Indokopp / MDS Legrand/ L&T / Schneider Electric/Siemens / Standard/ C&S/ABB/HPL 17 MCB/ Isolator/ELCB/RCCB/Distribution Board Crompton / Havells / Indokopp / MDS Legrand/ L&T / Schneider Electric/Siemens / Standard/ C&S/ABB/HPL 18 MS/ PVC Conduit ISI mark ISI mark 19 Cable Tray MEM/Bharti/Ratan/Slotco/Profab 20 HT/LT Cables ISI mark ISI mark 21 PVC insulated copper conductor wire ISI mark ISI mark 22 Centrifugal Pump Amrut / BE / Beacon / Batiliooi /Crompton / Jyoti / Kirloskar / KSB 23 Submersible Pump Crompton/Amrut / BE / Calama /Kirloskar / KSB 24 Motors ABB/ Bharat Bijlee / Crompton Greaves /Schneider Electric / HBB / KE 25 Fresh Air Fans GE / Khaitan/Almonard/Crompton 26 Starter ABB / BCH / Schneider Electric / L&T /Siemens / 27 Single Phase Preventer L&T / Minilec / Siemens / Zerotrip 28 Gl/MS Pipe ATC / ATL / BST / GSI / ITC / ITS / IIA /JST / Jindal /TTA / Tata/Zenith 29 Foot Valve ISI mark	14	Digital/ KWHr meter	Schneider Electric/ AE/ Digitron / IMP/Meco / Rishabh		
17 MCB/ Isolator/ELCB/RCCB/Distribution Board Crompton / Havells / Indokopp / MDS Legrand/ L&T / Schneider Electric/Siemens / Standard/ C&S/ABB/HPL 18 MS/ PVC Conduit ISI mark 19 Cable Tray MEM/Bharti/Ratan/Slotco/Profab 20 HT/LT Cables ISI mark 21 PVC insulated copper conductor wire ISI mark 22 Centrifugal Pump Amrut / BE / Beacon / Batliboi /Crompton / Jyoti / Kirloskar / KSB 23 Submersible Pump Crompton/Amrut / BE / Calama /Kirloskar / KSB 24 Motors ABB/ Bharat Bijlee / Crompton Greaves /Schneider Electric / HBB / KE 25 Fresh Air Fans GE / Khaitan/Almonard/Crompton 26 Starter ABB / BCH / Schneider Electric / L&T / Siemens / 27 Single Phase Preventer L&T / Minilec / Siemens / Zerotrip 28 GI/MS Pipe ATC / ATL / BST / GSI / ITC / ITS / IIA /JST / Jindal /TTA / Tata/Zenith 29 Foot Valve ISI mark ISI mark 30 Gate Valve Advance/Audco/Johnson Controls/Zoloto/Annapurna / Fountain 31 Compressors Carrier/Emerson copeland/York/Danfoss(for chillers only) 32 Resin Bonded Glass wool Fibre Glass / Plikingst	15	Cold shrink HT/LT Cable Joint			
11 MCD/Istolator/ECCB/Distribution Board Electric/Siemens / Standard/ C&S/ABB/HPL 18 MS/ PVC Conduit ISI mark ISI mark 19 Cable Tray MEM/Bharti/Ratan/Slotco/Profab 20 HT/LT Cables ISI mark ISI mark 21 PVC insulated copper conductor wire ISI mark ISI mark 22 Centrifugal Pump Amrut / BE / Beacon / Batiliboi /Crompton / Jyoti / Kirloskar / KSB 23 Submersible Pump Crompton/Amrut / BE / Calama /Kirloskar / KSB 24 Motors ABB/ Bharat Bijlee / Crompton Greaves /Schneider Electric / HBB / KE 25 Fresh Air Fans GE / Khaitan/Almonard/Crompton 26 Starter ABB / BCH / Schneider Electric / L&T / Siemens / 27 Single Phase Preventer L&T / Minilec / Siemens / Zerotrip 28 GI/MS Pipe ATC / ATL / BST / GSI / ITC / ITS / IIA /JST / Jindal /TTA / Tata/Zenith 29 Foot Valve ISI mark ISI mark 30 Gate Valve ISI mark ISI mark 31 Compressors Carrier/Emerson copeland/York/Danfoss(for chillers only) 32 Resin Bonded Glass wool Fibre Glass / Pilkingston / UP Twiga	16	Rubber Matting	ISI mark		
18 MS/ PVC Conduit ISI mark 19 Cable Tray MEM/Bharti/Ratan/Slotco/Profab 20 HT/LT Cables ISI mark 21 PVC insulated copper conductor wire ISI mark 22 Centrifugal Pump Amrut / BE / Beacon / Batilboi /Crompton / Jyoti / Kirloskar / KSB 23 Submersible Pump Amrut / BE / Beacon / Batilboi /Crompton / Jyoti / Kirloskar / KSB 24 Motors ABB/ Bharat Bijlee / Crompton Greaves /Schneider Electric / HBB / KE 25 Fresh Air Fans GE / Khaitan/Almonard/Crompton 26 Starter ABB / BCH / Schneider Electric / L&T / Siemens / 27 Single Phase Preventer L&T / Minilec / Siemens / Zerotrip 28 GI/MS Pipe ATC / ATL / BST / GSI / ITC / ITS / IIA /JST / Jindal /TTA / Tata/Zenith 29 Foot Valve ISI mark ISI mark 30 Gate Valve Advance/Audco/Johnson Controls/Zoloto/Annapurna / Fountain /Kirloskar / Leader / Sant / Trishul 31 Compressors Carrier/Emerson copeland/York/Danfoss(for chillers only) 32 Resin Bonded Glass wool Fibre Glass / Pilkingston / UP Twiga	17	MCB/ Isolator/ELCB/RCCB/Distribution Board			
20 HT/LT Cables ISI mark 21 PVC insulated copper conductor wire ISI mark 22 Centrifugal Pump Amrut / BE / Beacon / Batiliboi /Crompton / Jyoti / Kirloskar / KSB 23 Submersible Pump Crompton/Amrut / BE / Calama /Kirloskar / KSB 24 Motors ABB/ Bharat Bijlee / Crompton Greaves /Schneider Electric / HBB / KE 25 Fresh Air Fans GE / Khaitan/Almonard/Crompton 26 Starter ABB / BCH / Schneider Electric / L&T / Siemens / 27 Single Phase Preventer L&T / Minilec / Siemens / Zerotrip 28 GI/MS Pipe ATC / ATL / BST / GSI / ITC / ITS / IIA /JST / Jindal /TTA / Tata/Zenith 29 Foot Valve ISI mark	18	MS/ PVC Conduit			
21 PVC insulated copper conductor wire ISI mark 22 Centrifugal Pump Amrut / BE / Beacon / Batiliboi /Crompton / Jyoti / Kirloskar / KSB 23 Submersible Pump Crompton/Amrut / BE / Calama /Kirloskar / KSB 24 Motors ABB/ Bharat Bijlee / Crompton Greaves /Schneider Electric / HBB / KE 25 Fresh Air Fans GE / Khaitan/Almonard/Crompton 26 Starter ABB / BCH / Schneider Electric / L&T /Siemens / 27 Single Phase Preventer L&T / Minilec / Siemens / Zerotrip 28 GI/MS Pipe ATC / ATL / BST / GSI / ITC / ITS / IIA /JST / Jindal /TTA / Tata/Zenith 29 Foot Valve ISI mark ISI mark 30 Gate Valve Advance/Audco/Johnson Controls/Zoloto/Annapurna / Fountain //Kirloskar / Leader / Sant / Trishul 31 Compressors Carrier/Emerson copeland/York/Danfoss(for chillers only) 32 Resin Bonded Glass wool Fibre Glass / Pilkingston / UP Twiga	19	Cable Tray	MEM/Bharti/Ratan/Slotco/Profab		
22 Centrifugal Pump Amrut / BE / Beacon / Batliboi /Crompton / Jyoti / Kirloskar / KSB 23 Submersible Pump Crompton/Amrut / BE / Calama /Kirloskar / KSB 24 Motors ABB/ Bharat Bijlee / Crompton Greaves /Schneider Electric / HBB / KE 25 Fresh Air Fans GE / Khaitan/Almonard/Crompton 26 Starter ABB / BCH / Schneider Electric / L&T /Siemens / 27 Single Phase Preventer L&T / Minilec / Siemens / Zerotrip 28 GI/MS Pipe ATC / ATL / BST / GSI / ITC / ITS / IIA /JST / Jindal /TTA / Tata/Zenith 29 Foot Valve ISI mark Advance/Audco/Johnson Controls/Zoloto/Annapurna / Fountain //Kirloskar / Leader / Sant / Trishul 31 Compressors Carrier/Emerson copeland/York/Danfoss(for chillers only) 32 Resin Bonded Glass wool Fibre Glass / Pilkingston / UP Twiga	20	HT/LT Cables	ISI mark		
22 Centrifugal Pump Amrut / BE / Beacon / Batliboi /Crompton / Jyoti / Kirloskar / KSB 23 Submersible Pump Crompton/Amrut / BE / Calama /Kirloskar / KSB 24 Motors ABB/ Bharat Bijlee / Crompton Greaves /Schneider Electric / HBB / KE 25 Fresh Air Fans GE / Khaitan/Almonard/Crompton 26 Starter ABB / BCH / Schneider Electric / L&T /Siemens / 27 Single Phase Preventer L&T / Minilec / Siemens / Zerotrip 28 GI/MS Pipe ATC / ATL / BST / GSI / ITC / ITS / IIA /JST / Jindal /TTA / Tata/Zenith 29 Foot Valve ISI mark Advance/Audco/Johnson Controls/Zoloto/Annapurna / Fountain //Kirloskar / Leader / Sant / Trishul 31 Compressors Carrier/Emerson copeland/York/Danfoss(for chillers only) 32 Resin Bonded Glass wool Fibre Glass / Pilkingston / UP Twiga	21	PVC insulated copper conductor wire	ISI mark		
24 Motors ABB/ Bharat Bijlee / Crompton Greaves /Schneider Electric / HBB / KE 25 Fresh Air Fans GE / Khaitan/Almonard/Crompton 26 Starter ABB / BCH / Schneider Electric / L&T /Siemens / 27 Single Phase Preventer L&T / Minilec / Siemens / Zerotrip 28 GI/MS Pipe ATC / ATL / BST / GSI / ITC / ITS / IIA /JST / Jindal /TTA / Tata/Zenith 29 Foot Valve ISI mark Advance/Audco/Johnson Controls/Zoloto/Annapurna / Fountain //Kirloskar / Leader / Sant / Trishul 31 Compressors Carrier/Emerson copeland/York/Danfoss(for chillers only) 32 Resin Bonded Glass wool Fibre Glass / Pilkingston / UP Twiga	22				
24 Motors /Siemens/Jyoti Ltd 25 Fresh Air Fans GE / Khaitan/Almonard/Crompton 26 Starter ABB / BCH / Schneider Electric / L&T /Siemens / 27 Single Phase Preventer L&T / Minilec / Siemens / Zerotrip 28 GI/MS Pipe ATC / ATL / BST / GSI / ITC / ITS / IIA /JST / Jindal /TTA / Tata/Zenith 29 Foot Valve ISI mark 30 Gate Valve Advance/Audco/Johnson Controls/Zoloto/Annapurna / Fountain //Kirloskar / Leader / Sant / Trishul 31 Compressors Carrier/Emerson copeland/York/Danfoss(for chillers only) 32 Resin Bonded Glass wool Fibre Glass / Pilkingston / UP Twiga	23	Submersible Pump	Crompton/Amrut / BE / Calama /Kirloskar / KSB		
26 Starter ABB / BCH / Schneider Electric / L&T /Siemens / 27 Single Phase Preventer L&T / Minilec / Siemens / Zerotrip 28 GI/MS Pipe ATC / ATL / BST / GSI / ITC / ITS / IIA /JST / Jindal /TTA / Tata/Zenith 29 Foot Valve ISI mark 30 Gate Valve Advance/Audco/Johnson Controls/Zoloto/Annapurna / Fountain 31 Compressors Carrier/Emerson copeland/York/Danfoss(for chillers only) 32 Resin Bonded Glass wool Fibre Glass / Pilkingston / UP Twiga	24	Motors	ABB/ Bharat Bijlee / Crompton Greaves /Schneider Electric / HBB / KEC /Siemens/Jyoti Ltd		
27 Single Phase Preventer L&T / Minilec / Siemens / Zerotrip 28 GI/MS Pipe ATC / ATL / BST / GSI / ITC / ITS / IIA /JST / Jindal /TTA / Tata/Zenith 29 Foot Valve ISI mark 30 Gate Valve Advance/Audco/Johnson Controls/Zoloto/Annapurna / Fountain /Kirloskar / Leader / Sant / Trishul 31 Compressors Carrier/Emerson copeland/York/Danfoss(for chillers only) 32 Resin Bonded Glass wool Fibre Glass / Pilkingston / UP Twiga	25	Fresh Air Fans	GE / Khaitan/Almonard/Crompton		
28 GI/MS Pipe ATC / ATL / BST / GSI / ITC / ITS / IIA /JST / Jindal /TTA / Tata/Zenith 29 Foot Valve ISI mark 30 Gate Valve Advance/Audco/Johnson Controls/Zoloto/Annapurna / Fountain /Kirloskar / Leader / Sant / Trishul 31 Compressors Carrier/Emerson copeland/York/Danfoss(for chillers only) 32 Resin Bonded Glass wool Fibre Glass / Pilkingston / UP Twiga	26	Starter	ABB / BCH / Schneider Electric / L&T /Siemens /		
29 Foot Valve ISI mark 30 Gate Valve Advance/Audco/Johnson Controls/Zoloto/Annapurna / Fountain 31 Compressors Carrier/Emerson copeland/York/Danfoss(for chillers only) 32 Resin Bonded Glass wool Fibre Glass / Pilkingston / UP Twiga	27	Single Phase Preventer	L&T / Minilec / Siemens / Zerotrip		
30 Gate Valve Advance/Audco/Johnson Controls/Zoloto/Annapurna / Fountain /Kirloskar / Leader / Sant / Trishul 31 Compressors Carrier/Emerson copeland/York/Danfoss(for chillers only) 32 Resin Bonded Glass wool Fibre Glass / Pilkingston / UP Twiga	28	GI/MS Pipe	ATC / ATL / BST / GSI / ITC / ITS / IIA /JST / Jindal /TTA / Tata/Zenith		
30 Gate Valve /Kirloskar / Leader / Sant / Trishul 31 Compressors Carrier/Emerson copeland/York/Danfoss(for chillers only) 32 Resin Bonded Glass wool Fibre Glass / Pilkingston / UP Twiga	29	Foot Valve	ISI mark		
32 Resin Bonded Glass wool Fibre Glass / Pilkingston / UP Twiga	30	Gate Valve			
33 Expanded Polystyrene BASF(India) Ltd.					
34 Gauge Feibig / H.Guru / Pricol	33				

35	Controls	FLICA / Honeywell / Indfoss / Penn-Danfoss / Ranco / Ranutrol / Sporland				
36	Fine Filters	Anfiltra Effluent / ARW / Athlete/Airtake/ Dyna / Kirsloskar/ Puromatic/Purafill/ Purolator / Tenacity				
37	GI Sheet	HSU Jindal / National / Nippon Denro /Sail / Tata				
38	Heat Detector	Appollo / Chemtron/ Edward / Fenwal/Hochiki / Nitton /System Sensor/Wormald/Honeywell Essar/Notifier				
39	Ionization Detector	Appollo / Cerebrus / Edward/ /Fenwal /Hochiki / Nitton / System Sensor /Wormald				
40	Photo Electric Smoke Detector	Appollo / Cerebrus / Edward / Fenwal/Hochiki / Nitton / Wormald				
41	Fire Panel(Microprocessor based)	Agni Instruments / Agni Devices/ Aruna Agencies/ Carmel Sensor / Ravel Elect./Honeywell Essar/Notifier/Navin Systems				
42	Sprinkler/ Hose Reel & Hose Pipe	ISI mark				
43	Fire Extinguisher	ISI mark				
44	Lift	OTIS, Kone, Mitsubishi, Schindler, Johnson				

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

PROFORMA OF SCHEDULES

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

SCHEDULE 'A'

Schedule of quantities :Enclosed.

SCHEDULE 'B'

Schedule of materials to be issued to the contractor.

SI. No.	Description of item	Quantity	Rates in figures and words at which the material will be charged to the contractor	Place of Issue	
1	2	3	4	5	
	NIL				

SCHEDULE 'C'

Tools and plants to be hired to the contractor

SI.	Description of item	Hire charges per day	Place of Issue		
No.					
1	2	3	4		
	NIL				

SCHEDULE 'D'

Extra schedule for specific requirement/documents for the work if any.

- A. General conditions & specifications :Enclosed
- B. List of approved makes :Enclosed
- C. Correction slips :Enclosed

SCHEDULE 'F'

Reference to General Conditions of contract.

Name of work:

Repairing/Replacement of self starter of 15/20KVA DG sets at N BSNL BTS sites 1) Kusumdihi 2) Jalda C (theft sel 3) and other misc works at Kuarnmunda,Garposh under Rourkela SSA

48849.00	
977	

Security Deposit:

Estimated cost of work: Earnest money:

5% of the tendered value of the work.

	EE(E) within 15 days after receipt of award letter			
GENERAL RULES and DIRECTIONS:				
Officer inviting tender:	Sub-Divisional Engineer(E), BSNL Electrical Sub-Division, Rourkela.			
Maximum percentage for quantity of items of work to be e determined in accordance with clauses 12.2 and 12.3.	executed beyor	nd which rates are to be	25%	
Definitions:				
2(v) Engineer-in-Charge	Sub-Divisional Engineer(E), BSNL Electrical Sub-Division, Rourkela			
2(viii) Accepting Authority	Sub-Divisional Engineer(E), BSNL Electrical Sub-Division, Rourkela.			
2(x) Percentage on cost of materials and labour to cover all overheads and profits.	10%			
2(xi) Standard Schedule of Rates		2016 & SR-EXTERNAL-2016		
2(xii) Department		9 as modified 9 corrected	l unto doto	
9(ii) Standard CPWD contract Form Clause 2		8 as modified & corrected		
Authority for fixing compensation under Clause 2.	Superintendi	ng Engineer (E), BSNL El	ectrical Circle, Bhubaneswar.	
Clause 5				
Time allowed for execution of work. Authority to give fair and reasonable extension of time for completion of work.	07 days			
	L		I	
Clause 7 Gross work to be done together with net payment/ adjustment of advances for material collected, if any, since the last such payment for being eligible to interim payment.	As Applicable.			
Clause 11 Specifications to be followed for execution of work	CPWD intern	al and external specificati	on up to date	
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)	SR-INTERNAL-2016 & SR- EXTERNAL-2016			
12.1.2 (iii) ± the % over the rate entered in the schedule of rates.	NA			
12.1.2 (vi) A. Deviation Limit beyond which sub-clauses (i) to (v) shall not apply and clauses 12.2 and 12.3 shall apply	25%			
12.1.2 (vi) B(a). Limit for value of any item of any individual trade beyond which sub-clauses (i) to (v) shall not apply and clauses 12.2 and 12,3 shall apply.	NA			
Clause 16 Competent Authority for deciding reduced rates.	Superintendi	ng Engineer (E), BSNL El	ectrical Circle, Bhubaneswar.	
Clause 36 (i) Minimum Qualifications and experience required for Principal Technical Representative.				
a) For works with estimated cost put to tender more than i) Rs. 10 lakhs for Civil work ii) Rs. 5 Lakhs for Elect/ Mech.Works		Graduate or retired AE po diploma	ossessing at least recognised	
 b) For works with estimated cost put to tender more than i) Rs. 5 lakhs but less than Rs. 10 lakhs for Civil works ii) Rs. 1 lakh but less than Rs.5 Lakhs for Elect/ Mech. We 	orks	Recognised diploma hold	ler	
c) Discipline to which the Principal Technical Representation belong.	ive should	:Electrical/ Mechanical		

5% of the tendered value of the work. The same to be submitted to

Performance guarantee

d) Minimum experience of works

e) Recovery to be effected from the contractor in the event of not fulfilling provision of clause 36(1)

:Rs.4,000/- p.m. for Graduate Rs 2,000/- p.m for Diploma holder

: Three (3) years.