

**BHARAT SANCHAR NIGAM LIMITED (NOTICE INVITING TENDER)**



| SI No. | Name of work                                                                                                                                                                                   | Estimated cost.(Rs.) | EMD (Rs). | Time   | NIT No.                       |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------|--------|-------------------------------|
| 1      | Emergency Construction of 11 KV Line for Transformer Substation damaged by Sever cyclone FANI at BTS at Sadangoi, Birapurusottampur, TE Pipili, BTS Algum & BTS Alipingal under Puri District. | 130756               | 2615      | 7 days | N.I.T No.- 65/BSNL-BSR/19-20. |

|                                |                   |
|--------------------------------|-------------------|
| <b>A/A &amp; E/S Reference</b> | PROJECT WORK      |
| T/S No.                        | 20/BSNL-EDB/19-20 |

|                                           |            |                 |
|-------------------------------------------|------------|-----------------|
| <b>Tender paper cost (Non refundable)</b> | <b>Rs.</b> | <b>590.00</b>   |
| Last Date of receipt of application:-     | 30.07.2019 | (upto 4.00PM)   |
| Last Date of tender paper sale:-          | 30.07.2019 | (upto 5.30PM)   |
| Last Date of tender paper receipt:-       | 31.07.2019 | (upto 3.00PM)   |
| Date of opening:-                         | 31.07.2019 | (after 3.30 PM) |

**Eligibility Criteria :-**

- 1 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 any makes of major equipment included in the NIT. 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. Current certificate of having completed the work in the satisfactory manner with the requisite infrastructure/set up relevant to the work under NIT shall be furnished.

**OR**

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

**OR**

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

**OR**

BSNL enlisted contractor of Class - III & above in Electrical category.

Note- 1. The firm should have to possess a valid HT Electrical Licence issued by any State Govt. 2. Testimonials of satisfactory completion of works should be obtained from an officer not below the rank of Executive Engineer. 3. Xerox copy of Employees Provident Fund & ESI Registration Certificate, PAN Card & GST registration certificate must be submitted for verification.

- 2 All other terms & conditions as per BSNL EW-6 and BSNL EW-8 form.
- 3 The tenderer shall submit the tender in 2 sealed covers marked as cover 1 st and 2nd inscribing the name of work. Both should be separate & they should not be enclosed in common third cover. The first cover should contain the earnest money deposited in the shape of demand draft /pay order of a schedule bank/nationalised bank/state bank 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 1 st cover should contain DD

towards cost of tender document and EMD drawn in favour of A.O(CASH), BSNL,GMTD, Bhubaneswar along with attested copy of eligible criteria. The second cover contains the tender documents, if the 1 st cover is not annexed in proper form, the second form containing tender will not be opened at all.

Note :- 1) The company or firm or any other person is not permitted to tender for work in BSNL unit in which his/her near relative(s) is(are) posted .

4 If the date of opening is declared as holiday, then the tender shall be opened on next working day.

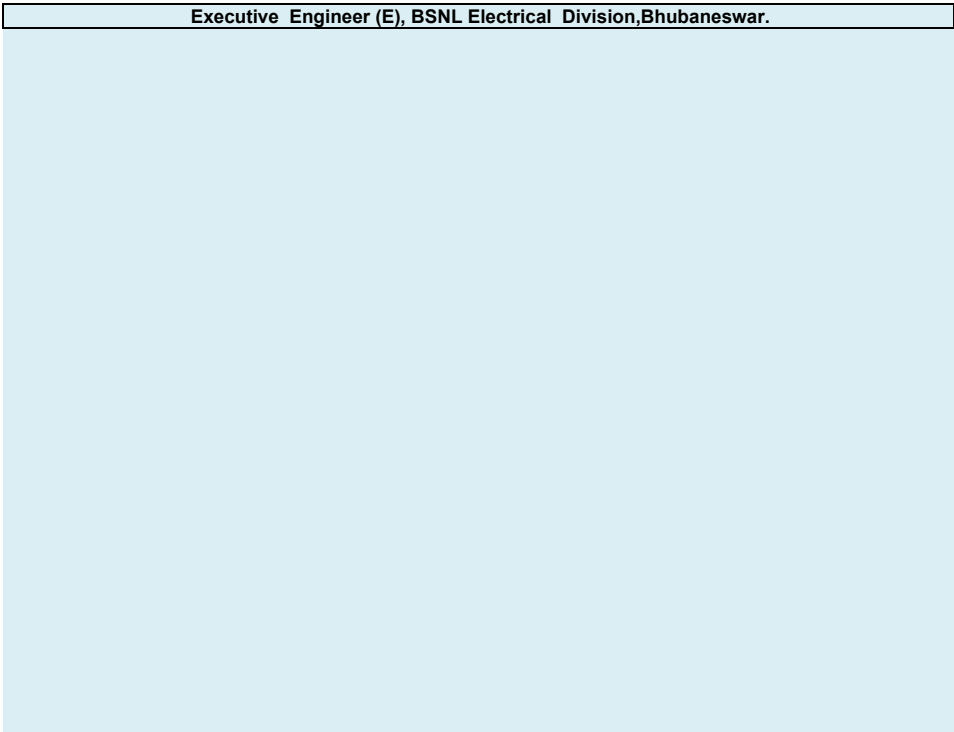
5 The tender documents shall not be sent through courier /post. The tender documents received through courier/ post shall not be opened / considered at all.

**No:-PLG-04/BSNL-EDB/19/182**

**Dt.22/07/19**

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

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



**NOTICE INVITING TENDER**

**CPWD - 6**

**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 :-

**Emergency Construction of 11 KV Line for Transformer Substation damaged by Sever cyclone FANI at BTS at Sadangoi, Birapurussottampur, TE Pipili, BTS Algum & BTS Alipingal under Puri District.**

The work is estimated to cost Rs.

130756.00 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

7 days

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 cash.

6) . The tender must produce an Chartered 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 31.07.2019 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. 2615 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 as follows :-

**Name of the work :-**

**Emergency Construction of 11 KV Line for  
Transformer Substation damaged by Sever cyclone  
FANI at BTS at Sadangoi, Birapurussottampur, TE  
Pipili, BTS Algum & BTS Alipingal under Puri District.**

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 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 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 \_\_\_\_\_

hereby 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 /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 Engineering - 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 pres4nce of the Engineering - in - Change or his duly authorized representative.
- 8) The contract shall stand for guarantee against defective materials of manufacturering defects and workmanship for the work carried out by him for the period of one year from it's commissioning & make good / repair / replace the faults during this period without any extra cost , failing which the same shall got done at the risk and cost of the contactor. This is in superseesion to the period of 6 months as mentioned in the clause-16 of this agreement.
- 9) Security deposite of the contractor shall be released only after satisfactory completion of guarantee period.
- 10) Makes of product shall be as per product directory enclosed or approved by the Engineer - in - Chanrg.

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

**"ESSENTIAL CONDITIONS OF CONTRACT"**

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

1. **TAXES AND DUTIES** : The firm shall quote the rate each time on lump sum basis .The rate quoted by the agency should be exclusive of GST & other Taxes.
2. Loading , unloading , transportation, insurance etc. shall all be included in their offer.
3. All the materials will be under the charge of the contractor till it is completed and handed over . No materials will be removed from site without written permission of the Engineer - in Charge.
4. Firm shall confirm to carry out the work as per the N.I.T. conditions.
6. **PAYMENTS TERMS** : No advance payments will be made. Stipulations like levy of interest if any payment is not made in specificied time is not acceptable to the department.
7. **Offer should be clear** . Any ambiguous offer is liable fo rejection by the department. **There will be no negotiation with the lowest tenderer. Hence the firms are requested to quote carefully. Department's decision in this regard shall be final and binding on the tenderer . Offer with condition will be summarily rejected.**
8. **GST** : **The rates offered by the firm shall be exclusive of GST.The firm shall claim GST with the bill clearly furnishing the complete details of GST so included.**

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

**SPECIFICATION**  
**E.I & FANS :**

- 1 The work is to be carried out as per CPWD specifications ( External ) and I.E Rule amended up to date.
- 2 Good workmanship is an essential requirement to be complied with. The entire work of manufacturer, fabrication, assembly and installation shall conform to sound engineering practice.

- 3 Rates quoted shall be inclusive of packing , forwarding, insurance , freight and delivery at site watch and ward of all marerials.
- 4 All Sundry fittings , accessories , hardware items, foundation bolts, termination lugs for electrical connection as required and all other sundry items which are useful & necessary for proper assembly and efficient working of the various components of the works shall be deemed to have included in the tender.
- 5 Following works shall be carried out by the contractor and therefore their cost shall be deemed to be included in their tendered cost.
  - a) The contractor shall be responsible for repairing all damages and restoring the same to their original finish. He shall also remove at his cost all inwanted and waste materials arising out of his work from his site.
  - b) All chases required in connection with the electrical works shall be provided and filled by the contractor to the original finish.
  - c) Temporary shed if required over the storage space and locking arrangement , watch and ward of the materials shall be provided by firm till completion of the work and final taking over of the installation by the department.
- 6 The contractor shall employ qualified engineer ? Supervisor as required and intimate names of such persons to the Engineer- in- Charge on commencement of work. Failure to employ will attract penalty as per agreement.
- 7 If any conduit is laid before award of work recovery for the same will be made from contractor at the rate of S.R-2012 + Abatement of respective S/H of this tender.
- 8 All non- metallic conduit pipes and accessories shall be of I.S.I marked , conduit accessories shall be of grip type / threaded type.
- 9 PVC conduit to be used shall be ISI marked heavy gauge and fire retardant quality.
- 10 The switch box shll be made of mild steel of size 16 / 18 SWG as per CPWD specification except the 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 eletrode resistance test.
- 14 On completion of electrical instalation a certificate shall be furnished by the contractor in prescribed proforma, this certificate shall be in addition to the certficiate 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<br>(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/ KANOVAR (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/ ZERO TRIP/ 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<br>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 & SWITHGEAR SCHNEIDER/ GE POWER CONTROLS                                                                                                                               |
| 9                                                               | INDICATING LAMPS                                | VAISHNO/ SIEMENS/ L&T/ AE/ IMP/ RASS CONTROL/ TEKNIC/ SCHNEIDER/ KAYCEE                                                                                                                      |
| 10                                                              | AMMETER / VOLTMETER                             | AE/ IMP/ UNIVERSAL/ RISHABH/ KAYCEE/ MECO ENERCON                                                                                                                                            |
| 11                                                              | SELECTOR SWITCH                                 | L&T/ KAYCEE/ AE / IMP/ THAKOOR/ RECO/VAISHNO/ SALZOR/ RASS CONTROL                                                                                                                           |

|                                                          |                                |                                                                                              |  |  |  |  |  |
|----------------------------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------|--|--|--|--|--|
| 12                                                       | 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/ ZEROTRIP/ SIEMENS                                                              |  |  |  |  |  |
| 19                                                       | GM VALVE                       | FOUNTAIN- ISI MARK/ TRISHUL/LEADER/ SANT/ ANNPURNA                                           |  |  |  |  |  |
| 20                                                       | GAUGES                         | FIEBIG/ H-GURU/ PRICOL                                                                       |  |  |  |  |  |
| 21                                                       | PUMPS                          | KSB/ BEACON/ KIRLOSKAR/ BATLIBOI/ JYOTI/WASP/ BE/ CROMPTON/ PEC/ MATHER&PLATI                |  |  |  |  |  |
| 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 | FILTER, EFFICIENCY 90% DOWN TO 20 MICRONS) AND EU-3 (FINE FILTER, EFFICIENCY 95% DOWN TO 5 MICRONS) | DYNA/ TENACITY/ KIRLOSKAR/ PUROMATIC/AITECH/ FURAFILL/ ARW/ ATHLETE/ PUROLATOR/ ANFILTRA EFFULENT |
| 15 | GI SHEETS                                                                                           | TATA/ SAIL/ NIPPON/ DENRO/ HSL/ JINDAL/ NATIONAL                                                  |
| 16 | INDICATING LAMPS                                                                                    | VAISHNO/ SIEMENS/ L&T/ AE/ IMP/ RASS CONTROL/ TEKNIC/ SCHNEIDER/ KAYCEE                           |
| 17 | AMMETER / VOLTMETER                                                                                 | AE/ IMP/ UNIVERSAL/ RISHABH/ KAYCEE/ MECO ENERCON                                                 |
| 18 | SELECTOR SWITCH                                                                                     | L&T/ KAYCEE/ AE / IMP/ THAKOOR/ RECO/ VAISHNO/ SALZOR/ RASS CONTROL                               |
| 19 | 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>Emergency Construction of 11 KV Line for Transformer Substation damaged by Sever cyclone FANI at BTS at Sadangoi, Birapurussottampur, TE Pipili, BTS Algum &amp; BTS Alipingal under Puri District.</b> |
| Estimated cost of work: | 130756.00                                                                                                                                                                                                  |
| Earnest money:          | 2615                                                                                                                                                                                                       |
| Performance guarantee   | 5% of the tendered value of the work in the form of Bank Guarantee from Scheduled Bank in respect of works with estimated cost put to tender exceeding Rs6 lacs.                                           |

GENERAL RULES and DIRECTIONS:

|                          |                                                               |
|--------------------------|---------------------------------------------------------------|
| Officer inviting tender: | Executive Engineer (E), BSNL Electrical Division, Bhubaneswar |
|--------------------------|---------------------------------------------------------------|

**Definitions:**

|                                                                                     |                                                               |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------|
| 2(v) Engineer-in-Charge                                                             | Executive Engineer (E), BSNL Electrical Division, Bhubaneswar |
| 2(vi) Accepting Authority                                                           | Executive Engineer (E), BSNL Electrical Division, Bhubaneswar |
| 2(x) Percentage on cost of materials and labour to cover all overheads and profits. | 10%                                                           |

**Clause 5**

|                                     |        |
|-------------------------------------|--------|
| Time allowed for execution of work. | 7 days |
|-------------------------------------|--------|

|                                                                                 |       |
|---------------------------------------------------------------------------------|-------|
| Authority to give fair and reasonable extension of time for completion of work. | SE(E) |
|---------------------------------------------------------------------------------|-------|

**Clause 12**

NA

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

**Clause.25**

|                                      |                      |
|--------------------------------------|----------------------|
| Authority competent for conciliation | S.E(E) not in charge |
|--------------------------------------|----------------------|

### Schedule-A

Name of work:

Emergency Construction of 11 KV Line for Transformer Substation damaged by Sever cyclone FANI at BTS at Sadangoi, Birapurussottampur, TE Pipili, BTS Algum & BTS Alipingal under Puri District.

| Sl. no. | Description of Items                                                                                                                                                                                                                                                                                                                                                                      | Quantity | Rate (₹) | Unit | Amount (₹) |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|------|------------|
| 1       | Supplying of 9 mtrs long PSC Pole conforming to IS 1678/1998 as amended up to date with working load of 300 Kg at 600 mm top with earthing arrangement etc as reqd.(BTS at Alipingal)                                                                                                                                                                                                     | 2        |          | job  |            |
| 2       | Supplying of R.S. joist pole of size not less than 100 mm X 116 mm ( flange and web thickness - 8 mm and 8 mm , 23.00 Kg. per mtr. run ) with ms base plate of size 300 mm x 300 mm x 10 mm including cutting, drilling and painting with one coat of red oxide and two coats of silver oxide paint of approved quality etc. as reqd.(BTS at Birapurussottampur)                          | 18       |          | job  |            |
| 3       | Erection of above PSC Pole for DP Structure & HT Line with 1.5 mtr planting depth, earthing arrangement in no 8 SWG GI wire, rigidly supported at the butt end with cement concrete foundation 1;2;4(1 Cement, 2 Sand & 4 Stone aggregate) of size 600 mm x 600 mm wide & 1600 mm depth i/c excavation & refilling etc as reqd.(BTS at Alipingal)                                         | 2        |          | job  |            |
| 4       | Erection of metallic pole of above length in cement concrete 1:3:6(1 cement :3 coarse sand: 6 graded stone aggregate 40 mm nominal size) foundation including excavation & refilling etc as reqd.(BTS Birapurussottampur)                                                                                                                                                                 | 2        |          | job  |            |
| 5       | Supply & fixing of 11 KV, off load, single break, triple pole, horizontal type, gang operated air break switch having 2 nos. 11 KV post type insulator per phase complete with galvanised channel iron base, arcing horns, 25 mm dia. 6 mtr. long GI pipe, tinned copper wire braided flexible earthing & operating handle with locking arrangement etc. complete as required.(BTS Algum) | 1        |          | job  |            |
| 6       | Supplying & fixing of non-linear resistor type distribution class lightning arrestor suitable for 3 wire, 11 KV supply system with rated voltage of 9 KV (rms) with a nominal discharge current rating of 5 KA and complete with galvanised clamping arrangement etc. complete as required.(BTS Algum)                                                                                    | 1        |          | job  |            |

|    |                                                                                                                                                       |     |  |      |  |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----|--|------|--|
| 7  | Straightening of partially bend DP Structure with the help of Tripod machine & manual labour etc as reqd.(At Algum)                                   | 1   |  | job  |  |
| 8  | Straightening of tilted 9mtr PSC Pole etc as required .( TE Pipili-1 )                                                                                | 1   |  | job  |  |
| 9  | Supply & fixing of 11 KV pin insulator with large steel head G.I. pin, nuts, washers on existing HT pole/ DP structure etc. complete as required.     | 12  |  | each |  |
| 10 | Supply & drawing of 55 sqmm. AAA overhead conductor etc. complete as required. (BTS at Birapurusottampur)                                             | 200 |  | Mtr  |  |
| 11 | Re stringing the 50 sqmm. Insulated / bare overhead conductor of maintaining proper sag etc. complete as required. ( Sadangoi,TE Pipili & Alipingal ) | 250 |  | job  |  |
| 12 | Liasioning with CESU authority in various stages from execution of work to charging the 11 KV line etc as reqd.                                       | 5   |  | job  |  |

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