

**URANIUM CORPORATION OF INDIA LIMITED**  
**(A GOVT. OF INDIA ENTERPRISE)**  
*AN ISO 9002 COMPANY*  
**JADUGUDA MINES**  
**DISTRICT - EAST SINGHBHUM**  
**JHARKHAND - 832102**

**TENDER DOCUMENT**

**OF**

**N.I.T. No. - BJTA - E –MRS EXT**

**DESIGN, INSTALLATION AND COMMISSIONING OF**  
**33 /3.3 KV MAIN RECEIVING SUB-STATION**  
**AT**  
**BAGJATA MINE.**

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## **SECTION - I**

### **NOTICE INVITING TENDER**

**URANIUM CORPORATION OF INDIA LIMITED**  
**JADUGUDA MINES, DIST-SINGHBHUM (E)**  
**JHARKHAND – 832 102**  
**NOTICE INVITING TENDER NO: BJTA - E – MRS EXT**

**Date:13.01.2016**

Sealed item rate tenders in two parts (Part-I Techno-Commercial part & Part-II Price part) in triplicate (One original plus two sets each self contained in all respects) in prescribed form are invited from bonafide, reliable, resourceful and reputed contractors on the approved list of CPWD / MES / Railway / Public Sector Undertaking / Reputed Large Private Sector for the following works:

Name of the work	Period of Contract	Cost of Tender Document	EMD to be deposited with tender	Date of Issue of tenders	Last date For submission of tenders (Both Parts)	Date of opening of tenders	Estimated Cost (Rs)
Design, Installation and commissioning of 33 /3.3 KV Main Receiving Sub-Station at Bagjata Mine.	06 (six) months	Rs. 1000/- (Rs. One Thousand only)	Rs.1,00,000 (Rs. One Lakh only)	From 13.01.2016 to 12.02.2016	Up to 3.00PM on 12.02.16	12.02.2016 at 3:30PM	5840554

**Prequalification Criteria:**

- 1) Average annual turnover of the tenderer shall be at least Rs.17,52,166/- for the last 3 financial years.
  - 2) Tenderers should have successfully completed similar jobs of value not less than Rs.46,72,443/- in single contract work or Rs.29,20,277/- each in two contract works or Rs.23,36,222/- each in three contract works in last 7 (Seven) years.
  - 3) The tenderer should have executed 33KV/11KV or 6.6 KV or 3.3 KV switchyard and substation in any govt. organisation, public sector or industry of capacity not less than 2 MVA.
  - 4) The tenderer should have profit for at least 2 of the last 3 financial years.
  - 5) For all above party should submit relevant documentary evidence.
  - 6) Tenderer should submit latest income tax and sales tax clearance certificates.
- Tender documents without compliance of the above will not be accepted.

This N.I.T and Tender document shall be downloaded from our website: [www.ucil.gov.in](http://www.ucil.gov.in). The down loaded Tender Document shall be accepted and the cost of Tender Document shall be paid by the tenderers in form of demand draft drawn on S.B.I, Jaduguda, in favour of Uranium Corporation Of India Limited, Jaduguda, payable at State Bank of India, Jaduguda.

Full details, terms and conditions and specifications of the work shall be available in the downloaded tender document. EMD should be in the form of Bank Guarantee issued by SBI Jaduguda/Hartopa or PNB Jamshedpur. In cases the Bank Guarantee is submitted from any other nationalised bank, it must be countersigned by the regional office of the concerned bank. Tenders received without Earnest Money Deposit will be summarily rejected.

Chairman & Managing Director or his representative (s) will open tenders on 12-02-16 at 3.30 PM in the office of GM (P&IR) at Jaduguda in the presence of tenderers who may like to be present.

The tenders to be submitted in two parts i.e. Part-I : Technical & Commercial terms & conditions and PartII : Price Proposal, to GM (P&IR), Jaduguda so as to reach him on or before the date and time fixed for receiving the tender. Telex, telegraphic or e-mail tenders will not be entertained.

The corporation's authorized representative (s) in the presence of tenderers who may like to be present, will open Techno-commercial part of the sealed tenders at Jaduguda at scheduled time and date of opening of the tender. The Price Part shall be opened only of the qualified tenderers who qualifies on the technical proposal. The date of opening of price part shall be intimated to the tenderer later on. The successful tenderer shall have to comply with the provisions of Contract Labour (Regulation & Abolition) Act, 1970 and rules appended thereafter.

The Corporation reserves the right to accept or reject any or all tenders either in full or part thereof or to split up the work if necessary without assigning any reasons whatsoever.

For Chairman & Managing Director  
Uranium Corporation of India Limited, Jaduguda

Distribution : G.M.( Mines),/ G.M.( Pers.)-IRs / Company Secretary / Manager(pers.-Jaduguda) / Mine Manager (Bagjata) / T.O.(Bagjata)/ T.O.(Mines) / T.O.(Mill) / New A .D .Building / Old A.D. Building / Site Office(Mill ) / Estate Office (Jad) / T.O. ( Bhatin) / T.O. ( Narwapahar) / T.O. (Mohuldih) / T.O.(Turamdih)

**URANIUM CORPORATION OF INDIA LIMITED**  
(A Government of India Enterprise)  
**JADUGUDA MINES**  
**P.O. JADUGUDA - 832102**  
**DIST. - EAST SINGHBHUM**  
**JHARKHAND**

**N.I.T. No. - BJTA - E –MRS EXT**

**ITEM RATE TENDER**  
**FOR**  
**DESIGN, INSTALLATION & COMMISSIONING OF 33/3.3KV MAIN**  
**RECEIVING SUB-STATION AT BAGJATA MINE**

1. To be deposited in the tender box at the office of GM (P&IRs), Jaduguda by 15.00 hours on 12.02.2016
2. Tender will be opened in the presence of Tenderers who may like to present at 15.30 hours on 12.02.2016

**Issued to :** \_\_\_\_\_

(Name of the contractor)

**Signature of officer issuing the**

**Tender documents :** \_\_\_\_\_

**Designation :** \_\_\_\_\_

**Date :** \_\_\_\_\_

**Cash Memo No. :** \_\_\_\_\_

**URANIUM CORPORATION OF INDIA LIMITED**

**P.O. JADUGUDA MINE  
DIST: SINGHBHUM (EAST)  
JHARKHAND – 831 102**

**DETAILED NOTICE INVITING TENDER**

1. Sealed item rate contract tenders are invited on behalf of the Chairman & Managing Director, Uranium Corporation of India Limited, Jaduguda for design, installation & commissioning of 33/3.3 KV Main Receiving Sub-Station at Bagjata Mine.
2. The tender shall be in prescribed Form and it shall be valid for a minimum period of six months from the date of opening of tender. Should the tenderer modify or withdraw his tender within the said period of six months from the date of opening the tender, Earnest Money deposited by the tenderer shall be forfeited.
3. The works are required to be completed as given in the Special Condition Of Contract from the seventh day after the date on which the Engineer-in-charge issues written orders to commence the work or from the date of handing over of the site, whichever is later, in accordance with the phasing, if any indicated by the Corporation in the tender documents.
4. Normally contractors whose names are borne on the approval list of contractor of C.P.W.D/M.E.S. or Local reputed/experienced contractors will be permitted to tender. Not more than one tender shall be submitted by a firm of Contractors.
5. Chairman & Managing Director shall be the Accepting Officer herein after referred to as such for the purpose of this contract.
6. A tenderer shall produce an Income Tax Clearance Certificate before tender documents can be issued/sold to him.
7. Submission of a tender by a tenderer implies that he has read this notice and all other contract documents and has made him self aware of the scope and specifications of the work to be done and of considerations and rates at which stores, tools and plants, etc. will be issued to him by the Corporation and local conditions and other factors bearing on the execution of the work.
8. A tenderer should quote in figures as well as in words rate (rates) tendered. The amount for each item should be worked out and the requisite totals given. Special care shall be taken to write rates in figures as well as words, and the amounts in figures only in such a way that interpolation is not possible. The total amount shall be written both in figures and in words. In case of words 'Paissa' after the decimal figures, e.g. Rs. 2.15p and in case of work the Words 'Rupees' should precede and the Words 'Paissa' should be written at the end unless the rate is in whole rupees and followed by words 'only' it should invariably be upto place of decimal.
9. All rates shall be quoted on the tender form in triplicate.

10. In the case of item rate tender, only rates quoted shall be considered. Any tender containing percentage below/above the rates quoted is liable to be rejected.
11. The tender for the works shall not be witnessed by a contractor or contractors who himself/themselves has/have tendered for the same works. Failure to observe this condition shall render the tender of the contractor tendering as well as of those witnessing the tender liable to rejection.
12. Tenders shall be received by GM (P&IRs) **upto 3.00 PM on the 12<sup>th</sup> February, 16 (date) and shall be opened at 3.30 PM on 12-02-16 in the presence of tenderers who may be present.**
13. The tender shall be accompanied by Earnest Money of **Rs. 1,00,000/-** (One Lakh only) in the form of in the form of Bank Guarantee issued by SBI Jaduguda/Hartopa or PNB Jamshedpur. In cases the Bank Guarantee is submitted from any other nationalised bank, it must be countersigned by the regional office of the concerned bank.
14. The Uranium Corporation of India Limited, Jaduguda is connected by both rail and road links and situated on the Howrah-Bombay line of S.E. Railway at a distance of 232 Km. from Howrah and 27km from Tatanagar. The name of the nearest Railway station is Rakha Mines. Jaduguda is at a distance of about 35 Km. from Tata by road on Tata-Mosaboni Road, the main plant is located at about 5 Km. from Rakha Mines Railway station.
15. Uranium Corporation of India Limited, Jaduguda will return the Earnest Money without any interest to unsuccessful tenderer on production by the tenderer of a certificate to G.M(Mines)/ Chief Supdt. (Elect.) Mines. A tenderer shall submit the tender which satisfied each and every condition laid down in this notice, failing which, the tender will be liable to be rejected.
16. The Corporation does not bind themselves to accept the lowest or to give any reasons for their decision.
17. The Corporation reserve to themselves the right of accepting the whole or any part of the tender and tenderer shall be bound to perform the same at quoted rates.
18. Sales Tax or any other tax on materials in respect of this contract shall be payable by the contractor and the Corporation will not entertain any claim whatsoever in this respect.
19. This notice of tender shall form part of the contract documents.

For and behalf of  
CHAIRMAN & MANAGING DIRECTOR  
URANIUM CORPORATION OF INDIA LIMITED

Signature:\_\_\_\_\_

Designation:\_\_\_\_\_

Date:\_\_\_\_\_

## **SECTION - II**

### **GENERAL INFORMATION**



## **SECTION - II**

### **GENERAL INFORMATION**

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5.00.0	-	GENERAL TOPOGRAPHY
6.00.0	-	CLIMATE

## SECTION - II

1.00.00	Executing agency	: Uranium Corporation Of India Ltd. (A Govt. Of India Enterprise) Jaduguda Mines, East Singhbhum Jharkhand PIN 832102
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2.00.00 Site : Bagjata Mines

3.00.00      Location : Latitude - 22° 28' 07" N  
                              : Longitude - 86° 29' 36" E

Bagjata is located 30 Km. from Jaduguda and 11 Km. from Mosabani. The distances given above are approximate.

#### 4.00.0 Rail & Road Connection:

The Bagjata Mine area is approachable from Mosabani by non-metalled motorable road.

The nearest railway station is Ghatsila on South Eastern Railway.

### 5.00.0 General Topography ;

The Mine is located at the foot of two small hillocks on the northern side of the site at the aforesaid location.

The site of the Main Receiving Station is generally level ground adjacent to the Mine.

6.00.0 Climate:

The climate condition at Bagjata is recorded as follows:

Temperature	Maximum	46 <sup>0</sup> C
	Minimum	6 <sup>0</sup> C

Rainfall 1391 mm. (Annual)

Wind Speed 80 Km / hr (Maximum)

Maximum humidity 100%

### **SECTION - III**

#### **CONDITIONS OF TENDERING**

**SECTION- III**

**CONDITIONS OF TENDERING**

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## **SECTION - III**

### **CONDITIONS OF TENDERING**

#### **1.00.0 PREPARATION OF TENDER**

##### **1.01.0 Tenderer to Study**

1.01.01 Before submission of tender the tenderers are requested to make themselves fully conversant with the conditions of Tendering, General conditions, Special conditions, Site conditions, Specifications, Schedule and all other relevant information so that no ambiguity may arise in these respects subsequent to the submission of the tender.

1.01.02 It shall be the responsibility of the tenderer to request for any missing document. In the absence of any such request the tenderer will be deemed to have received and read all documents.

1.01.03 The tenderer shall submit his tender strictly in accordance with the tender specification and terms and conditions laid down in the tender document.

Should there be any discrepancy in or any doubt, or obscurity, to the meaning of any of the clauses of the tender documents, or as to anything to be done or not be done by the accepted tenderer or as these instructions observed by the intending tenderer. The tenderer must set forth in writing such discrepancy, doubt, or obscurity, and submit the same in duplicate to the purchaser (Attn.: the officer of the purchaser issuing NIT) so as to reach them 07 (seven) days in advance before date of tender opening mentioned in the NIT for such purpose. The elucidation given by the purchaser shall be final and binding on the tenderer.

1.01.04. By submitting a tender for the work, a tenderer will deemed to have satisfied himself by actual inspection of the site and locality of the work, and if so required and that the rates quoted by him in the tender will be adequate to complete the work in all respects according to specifications, and other conditions and that he has to taken in to account all conditions and difficulties that may be encountered during its progress whether or not expressly provided in the tender document but necessary for the completion and maintenance of this work to the entire satisfaction of the Engineer.

1.01.05. Tenders must be submitted on the attached prescribed forms and/or copies there of. The schedules shall be filled in item by item, in accordance with the instructions and notes supplementary thereto.

1.01.06. The tender shall contain firm price for the work.

**1.02.0 Language**

English shall be the ruling language. All tenders drawings, technical data, document and or correspondences shall be in English.

**1.03.0 Canvassing Prohibited**

Canvassing in any form is strictly prohibited and any tenderer found to have resorted to canvassing shall be liable to have his tender rejected summarily.

**1.04.0 Misinformation**

If the tenderer deliberately gives wrong information in his tender to create circumstances for the acceptance of his tender, the purchaser reserves the right to reject such tender.

**1.05.0 Documents not transferable**

Tender documents are not transferable. Transfer of tender documents, purchased by the tenderer to another is not permitted and tender submitted on the tender document, purchased by any other party, shall be rejected.

**1.06.0 Not more than one tender**

Not more than one tender for a work shall be submitted by one contractor or one firm of contractors.

**1.07.0 Tender document property of Purchaser**

Tender document in which tender is submitted by the tenderer shall become the property of the purchaser and the purchaser shall have no obligation to return the same to the tenderer.

**1.08.0 Tenderer to bear expenses**

The purchaser shall not be liable for any expenses whatsoever incurred by the tenderer in the preparation of the tender whether his tender is accepted or not even if the purchaser opts for complete withdrawal of invitation of tender.

**2.00.0 SUBMISSION OF TENDER**

**2.01.0 Tenders shall be submitted in two parts**

**Part-1 : Technical & Commercial Part**  
**Part-2 : PRICE BID in the prescribed format**

**NOTE : The offer shall be submitted in one sealed envelope duly marked as stipulated. This sealed envelope shall contain two separate sealed envelopes - one containing the Technical & Commercial Part, and the second containing the Price Bid. The individual envelopes shall be duly marked Part -1 & Part -2.**

**2.01.01 List of documents to be submitted in Part -1**

- a) Tenderer's covering letter.
- b) Document showing deposit of Earnest Money in Original.
- c) Filled in proposal exhibit sheets duly signed.
- d) Signed NIT tender documents i.e. all tender papers which comprise  
The following shall be signed and returned:
  - Notice inviting tender.
  - General Information
  - Conditions of Tendering
  - Forms
  - General Conditions of Contract
  - Special Conditions of Contract
  - Technical Specifications
  - List of deviations if any
  - Proposal exhibit sheets
  - Drawings
  - Safety of Contractor's Employee
- e) Income tax clearance certificate of last three years.
- f) Sales tax clearance certificate of last three years.
- g) Income expenditure/profit and loss account of last three years.
- h) Balance sheet of last three years.
- i) Full statement of, along with documentary proof, in support of past experience of the tenderer in similar works.
- j) Qualification of key personnel to be deployed for this work
- k) List of Plant and equipment along with supporting documents.
- l) Certificate / proof of registration of the firm /company with the Registrar of Firm / Companies.
- m) Other document, if any required by as may be required to be submitted along with the tender in accordance with special conditions and general conditions of NIT Tender documents.
- n) Schedule of quantities in triplicate duly signed in all pages.
- o) Declaration sheet

**2.01.02 List of documents to be submitted in Part - 2 (Price Part):**

**THIS SHALL BE THE PRICE BID ONLY**

THE ITEM RATES DULY FILLED UP IN THE SCHEDULE OF RATES ALONG WITH SCHEDULE OF QUANTITIES.

All pages of Tender document has to be signed with seal of the firm/Agency by the tenderer as a token of acceptance of the same without which tenders are likely to be rejected.

**2.02.0 Tenders to be unambiguous**

No alteration in the form of the tender or in the amount or any addition in the form of special stipulation will be permitted. If corrections be needed while filling in the tender, the same shall be made by the tenderer with his dated signature. Tender which is incomplete, obscure or irregular or only for a part of the package/schedule is liable to rejection.

**2.03.0 All pages to be signed**

All pages of the tenderers offer, drawing and other accompanying documents shall be initialled with Company Seal at the lower right corner in ink only and signed where required by the tenderer or any person holding power of Attorney authorising his sign on behalf of the tenderer before submission of the tender. All signature shall be dated.

**2.04.0 Tenderers Identity**

The tender shall contain the name, residence and place of business of person or persons submitting the tender.

**2.05.0 Authorisation**

In the event of the tender being submitted by a firm, it must be signed by each partner there of and in the event of the absence of any partner, it shall be signed on his behalf by a person holding a power of attorney authorising him to do so, certified copy of which shall be enclosed. Tenders submitted on behalf of companies registered under the Indian Companies Act, for the time being in force, shall be signed by persons duly authorised to submit the tender on behalf of the company and shall be accompanied by certified copies of the resolutions, extracts of articles of association, special or general power of Attorney and other information to show clearly the title, authority and designation of persons signing the tender on behalf of the company.

**2.06.0 Delivery of tender**

The completed tender with all its accompaniments shall be deposited in the tender box kept at the office of GM (P&IRS), UCIL, Jaduguda, super



scribing on the sealed envelope tender notice number, name of work for which tender is submitted, name of tenderer and date of opening as advertised/notified.

2.06.01 If forwarded by mail, the sealed envelope containing the tender as per clause above must be enclosed in another envelope properly addressed.

2.06.02 Personnel delivery is recommended. Tenderers forwarding tenders by mail shall do so at their own risks and tenders received after due date and hour shall not be entertained. Telegraphic offers will not be entertained.

### **3.00.0 QUALIFICATION OF TENDERERS**

3.01.0 Only such firms need tender who can produce satisfactory evidence that they have the necessary experience and financial resources and organisation to undertake such work as specified in the purchaser's tender document.

3.02.0 In case of open tenders the intending tenderers will have to produce documentary evidence to prove their past experience, capabilities and financial resources to do such work and they will have to enclose with the tender detail document on the past experience, capabilities and financial resources along with the balance sheets, profit and loss account for the last three years, as the same and qualification of the key personnel to be deployed for this contract and other details as per clause 2.01.01

3.03.0 Notwithstanding any pretender check on qualification the purchaser will undertake the post tender evaluation of qualification of tenderers.

### **4.00.0 VALIDITY OF TENDER**

The tender submitted shall be deemed to constitute an agreement between the tenderer and the purchaser whereby such tender shall remain open for acceptance by the purchaser for a period of (6) six months from the date the tenders are opened, during which period the tenderer shall not withdraw his offer or amend, impair or derogate therefrom. If the tender submitted does not contain all the relevant information or needs clarification on the information furnished and the tenderer is requested to supplement the information or submit clarification, the aforesaid validity period of six months shall be deemed to commence from the date of receipt of the information and clarification called for. Every tenderer is therefore requested to furnish all the relevant information to make the tender complete.

Every tenderer shall be deemed to have agreed as aforesaid in consideration of the tender being considered by the purchaser in terms thereof, provided the same has been duly submitted and found to be in order. If the tenderer be notified in writing at the address given in the tender within the said period of (6) six months that his tender has been accepted, he shall be bound by the terms of agreement constituted by his tender and such acceptance thereof by the purchaser until a written contract has been executed in place of such agreement.

The tenderer whose tender has been accepted and so notified shall become the " Successful Tenderer".

## **5.00.0 EARNEST MONEY**

5.01.0 Earnest money shall be deposited in the following ways and must accompany the tender document without which the tender will not be considered at all.

### **Details of Earnest Money Deposit:**

a.	Amount of Earnest Money Deposit	Rs. 1,00,000 (Rupees One Lakh only.)
b.	Mode of Payment	In the form of Bank Guarantee issued by SBI Jaduguda/Hartopa or PNB Jamshedpur. In cases the Bank Guarantee is submitted from any other nationalised bank, it must be countersigned by the regional office of the concerned bank.
c.	Validity	06 (six) months from the date of opening of tender
d.	Claim Period	03 (three) months beyond the period validity

**Note: Earnest Money Deposit in any other form will not be accepted. No interest will be paid on E.M.D or any other guarantee.**

5.02.0 Uranium Corporation of India Limited will return the Earnest Money without any interest to unsuccessful tenderer on production of a request by the tenderer to G.M (Mines) /Chief Supdt. Elect. (Mines.) Jaduguda.

5.03.0 Upon acceptance of the tender, Earnest Money may be treated as part of the Security Deposit if desired by the tenderer and allowed by the purchaser. Failure of successful tenderer to carryout the tendered work shall entail forfeiture of E.M.D and security deposit entirely.

- 5.04.0 The tenderer shall submit the tender which satisfies each and every condition laid down in the notice, failing which the tender will be liable to be rejected.
- 5.05.0 The Corporation reserves to themselves the right of accepting the whole or any part of the tender and tenderer shall be bound to perform the same at quoted rates.
- 5.06.0 Tender without requisite Earnest Money at the time of submission is liable to be rejected.
- 5.07.0 Sales Tax , Service Tax or any other tax on materials transportation in respect of this contract, if any shall be payable by the contractor and the Corporation will not entertain any claim whatsoever in this respect.

#### **6.00.0 TIME FOR COMPLETION**

The time of completion for this work shall be 06 (six) months which shall be reckoned as stipulated in L.O.I/Work Order. The work shall be considered completed only if the Engineer has issued a certificate to that effect.

#### **7.00.0 OPENING OF TENDER**

Tenders will be opened at the place notified on the appointed and time presence of tenderers authorised representative who are present. Not more than 02 (two) representative of each tenderer shall be permitted to attend the opening of the tenders.

If the tenders can not be opened on the notified date and time as per tender notice, due to natural calamity, civil commotion, floods, strikes or any other unavoidable circumstances, this will be opened on a subsequent date which shall be notified to the tenderers by the Corporation.

#### **8.0 SECRECY**

The tenderer (whether his tender is accepted or not ) shall treat the details of the tender specifications and other documents attached thereto, as private and confidential. The tenderer shall take necessary steps to ensure that all persons employed in any work in connection with his tender have noticed that the Indian official secret act 1923 (XIX of 1923) and Indian Atomic Energy Act 1962 (XXXIII OF 1962) applied to them and shall continue so to apply even after award of the contract (whether his tender is accepted or not).

## 9.00.0 GENERAL INFORMATION AND GUIDANCE FOR CONTRACTOR

The information given below is only for the Tenderer's general guidance and shall not relieve him of the responsibility for fully detailed first hand site investigations of his own before tendering:

1. Rates: The tenderers are required to quote the rates against all items of the schedule of quantities in words and figures clearly in triplicate (2<sup>nd</sup> & 3<sup>rd</sup> copies shall necessarily be Xerox/carbon copy of the original) failure in this respect is liable to tender the tender incomplete.
2. The tenderer shall submit along with the tender a list of construction equipment and machinery in their possession and which they shall bring at site for these construction works.
3. If any clarifications regarding specifications, conditions of contract etc. or schedule of quantities is required, the same can be obtained by the Tenderer from the Uranium Corporation of India Limited.
4. In the event of the tender being submitted by a firm (Partnership) it must be signed separately by each member thereof, or in the event of the absence of any partner it must be signed on his behalf by a person holding a power of attorney authorising him to do so, such power of attorney to be produced with the tender, and it must disclose that the firm is duly registered under the India Partnership Act.
5. Receipts for payments on account of a work when executed by a firm (Partnership) must also be signed by the several partners except where the contractors are described in their tender as a firm in which case the receipts must be signed in the name of the firm by one of the partners, or by some other persons having authority to give effectual receipts for the firm.
6. Any person who submits a tender shall fill up the usual prescribed form stating at what rate he is willing to undertake each item of the work. The quantities shown therein are approximate only, being given as an indication of the scope of the work to enable the Tenderer to tender for the different portions of the work in accordance with his estimate of their cost, so that in the event of any increase or decrease in the quantity of any item of the work the actual quantities executed may be paid for at the rate stated for the particular item of work subject only to any adjustments that may be provided for in the General conditions. It is to be clearly understood that no work will be paid for under more than one item or than once under any item.
7. The tenderer is required to deposit as **Earnest Money Rs. 1,00,000/-** (Rupees One Lakh only) in the form of Bank Guarantee issued by SBI Jaduguda/Hartopa or PNB Jamshedpur. In cases the Bank Guarantee is submitted from any other nationalised bank, it must be countersigned by the regional office of the concerned bank. The Earnest Money will be refunded to the unsuccessful tenderers within a reasonable time without any interest. The Earnest Money deposited by the successful tenderer will be retained till the deposit of the Security amount, but shall be forfeited if the contractor fails to deposit the requisite security amount, execute

the agreement/or start the work within reasonable time (to be determined by the Corporation after written acceptance of his tender).

8. **Security Deposit:** The amount of Security Deposit shall be 10% of the value of the Order. Upon acceptance of the tender, the successful tenderer, shall within ten days deposit with the Corporation the Security Deposit 10 % (ten percent) of the value of the Work Order such sum shall be deposited by the contractor in form of DD/ FDR/TDR/ DAC/ BG. The BG if preferred shall be required to be executed as per the BG format enclosed.
9. If after the tender has been accepted, the tenderer fails to pay the Security Deposit as specified above, after written notice to him of such acceptance, the sum deposited by him as Earnest Money may be forfeited. The tenderer shall not be allowed to increase/withdraw his tender within six months (the validity period of the offer) from the date of opening of the tender and if he does so the Earnest Money deposit may be forfeited.
10. The officer inviting tenders shall have the right to reject all or any of the tenders, and will not be bound to accept the lowest.
11. The memorandum, the form of tender and the schedule of materials to be supplied by the corporation and their issue rates should be filled and completed in the office of the Corporation before the Tender Form is issued. If a Form is issued to an intending tenderer without having been so filled in, and complete he shall request corporation to have this done before he complete and delivers his tender.
12. The tenderer shall furnish satisfactory evidence that he has a true appreciation of the scope of the work, the ability and experience to perform the various clauses of work involved, and that he has sufficient capital and plant to enable him to prosecute the same successfully and to complete it in the time named in the contract. In compliance with this, the tenderer shall along with tender furnish a list of major works executed by him during three previous years, the Bank with which he has dealings, the Bankers certificate a copy of the profit and loss account and balance sheet for the year the year proceeding the year in which the tender shall be submitted and income tax and sales tax clearance certificate, for the latest year.
13. Each of the tender document is required to be signed by the person or persons submitting the tender in his/their hand writing in token of his/their having acquainted himself/themselves with the General conditions of Contract, General specification. Special conditions etc. as laid down. Any tender with any of the documents not so signed will be liable to rejection.
14. The tender form must be filled in English and all entries must be made by hand written in ink. All the rate must be filled both in words and figures. If any of the documents is missing or unsigned the tender will be considered invalid. All erasures and alternations made while filling the tender must be attested by dated

initials of the tenderer. Over writing of figures is not permitted to comply with any of these conditions will render the tender invalid. No advice of any change in rate or conditions after the opening of the tender will be entertained.

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### **FORMS**

## **SECTION - IV**

### **FORMS**

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2. Articles of Agreement
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## FORM OF TENDER

To  
The Chairman & Managing Director,  
M/s. Uranium Corporation of India Limited,  
P.O. Jaduguda Mines,  
Dist. Singhbhum (East),  
Jharkhand – 832102

TENDER NOTICE NO. BJTA -E-MRS EXT

NAME OF THE WORK : DESIGN, INSTALLATION & COMMISSIONING OF 33/3.3  
KV MAIN RECEIVING SUB-STATION AT BAGJATA MINE

Dear Sir,

I/We, the undersigned hereby submit, the Tender document for the work as above and hereby under take to execute the complete works as set forth in the Scope of Work, Technical Specifications, Tender Drawings in accordance with the Conditions of Tendering, Special Conditions of Contract, General Conditions of Contract or in default thereof to forfeit any, pay to Uranium Corporation of India Limited, the sum of money mentioned in relevant Tender Documents.

I/We agreed to abide by this tender for the period of \_\_\_\_\_ months from the date fixed for the opening of the same and in default agree that the amount of Earnest Money along with this Tender may be forfeited.

I/We undertake to complete whole works covered under this Tender within a period of \_\_\_\_\_ months from the date of Letter of Acceptance.

I/We have deposited as the Earnest Money a sum of Rs. \_\_\_\_\_ in shape of \_\_\_\_\_ which amount is not to bear any interest and I/We do hereby agree that this sum shall be forfeited by Uranium Corporation of India Limited in the event of accepting my/our tender I/We fail to execute the Contract when called upon to do so.

If this tender is accepted, I/We shall deposit the sum to constitute the Security Deposit required by the relevant terms of the contract.

I/We also undertake, as required to enter into a Contract with Uranium Corporation of India Limited by executing an Agreement in the prescribed Contract Agreement form enclosed along with this Tender Document and till such time the Agreement be not executed, we shall be bound by the terms and conditions of the Tender Document and subsequent letter, minutes of discussions and letter of acceptance.

(Signature of Tenderer with seal)

Name:

Address of the Firm:

Dated:

## ARTICLES OF AGREEMENT

Articles of AGREEMENT made and entered into

this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_

between

\_\_\_\_\_  
(hereinafter referred to as the Corporation which expression shall include its successors and assigns) of the one part and Messrs.

\_\_\_\_\_  
(hereinafter referred to as Contractor which expression shall include its successors and assigns of the other part  
WHEERAS the Corporation is desirous that certain works should be constructed viz.

\_\_\_\_\_  
and has accepted a Tender by the Contractor for the construction completion and maintenance of such works NOW THIS AGREEMENT WITNESSETH as follows:

1. In this Agreement works and expression shall have the same meanings as are respectively assigned to them in the General conditions and Special conditions of Contract hereinafter referred to.
2. The following documents shall be deemed to form and be read and construed as part of this agreement, viz:

- a. Tender Notice No. \_\_\_\_\_  
dated \_\_\_\_\_
- b. The Drawings
- c. The Tender
- d. The General conditions of contract.
- e. The Specifications
- f. The Special Conditions
- g. The Schedule of Quantities
- h. Design Date and Technical Specifications (if any)
- i. General information and Guidance for Tenderers
- j. Any other document specifically mentioned herein as forming a part of the Agreement.

3. In consideration of the Payments to be made by the Corporation to the Contractor as hereinafter mentioned, the contractor hereby covenants with the corporation to construct, complete and maintain the works in conformity in all respects with the provisions of the contract.
4. The Corporation hereby covenants to pay to the Contractor in consideration of the construction completion and maintenance of the works the contract price at the times and in the manner, prescribed by the Contract.
5. The several parts of this contract have been read to us and fully understood by us.

AS WITNESS OUR hand this \_\_\_\_\_ day of \_\_\_\_\_  
20\_\_\_\_ signed by the said.

\_\_\_\_\_  
**Uranium Corporation of India Limited**

\_\_\_\_\_

\_\_\_\_\_

In the presence of

\_\_\_\_\_  
Signed by the said

\_\_\_\_\_  
Contractor

\_\_\_\_\_

In the presence of

## BANK GUARANTEE FORM FOR SECURITY DEPOSIT

Name of the Bank :  
Address of the Bank :  
Guarantee No. :  
Date :  
Date of Expiry :  
Claim Period : 06 (six) months from the date of expiry.  
Limit of Liability : Rs. \_\_\_\_\_

Whereas URANIUM CORPORATION OF INDIA LIMITED (herein after referred to as the CORPORATION) having its registered office at Jaduguda Mines P.O., & Dist. East Singhbhum, Jharkhand – 832102 which expression shall, unless repugnant to the context, includes its legal representatives, successors and assigns, have entered into an agreement (herein after referred to as the Agreement) with

M/s. \_\_\_\_\_ (herein after referred to as the CONTRACTOR) having its registered office at \_\_\_\_\_ which expression shall, unless repugnant to the context, include its legal representatives, Successor or assigns, for \_\_\_\_\_ (Name of work) Letter of Intent/ Work Order No. \_\_\_\_\_ dated \_\_\_\_\_, described in the agreement based on the terms and conditions contained in the Agreement and whereas by the said Agreement Corporation has agreed to pay the Contractor for the Services to be rendered by the Contractor in terms of the said Agreement.

AND WHEREAS, in accordance with the terms of the Agreement, the CONTRACTOR has to furnish Bank Bond for \_\_\_\_\_ (Name of work) for due performance, fulfillment and observance of the terms and conditions of the Agreement and further covenanted with the CORPORATION to make good any deficiencies so as to fulfill in all respects the purposes of for which the Agreement is entered into and in accordance with their operating and other conditions specified and to meet all the requirements specified in regard thereto in the Agreement for the period/periods stipulated in the Agreement.

Now, by this guarantee, we, the CONTRACTOR (an principal) and \_\_\_\_\_ (Name and address of Bank) are held and firmly bound unto CORPORATION in the sum of Rs. \_\_\_\_\_ ( Rupees \_\_\_\_\_ only) for the payment of which the CONTRACTOR and the Surety bound themselves, \_\_\_\_\_ representatives and assigns jointly and severally by these presents.

Now the conditions of this Guarantee is such that if the CONTRACTOR ( as principal ) shall duly, faithfully and punctually perform and observe all the terms, provisions and stipulations of Agreement including covenants, concerning Bank Guarantee stipulated therein on the part of the CONTRACTOR (as principal) to be performed and observed according to the true purpose, intent and meaning thereof or if on default CONTRACTOR the CONTRACTOR shall satisfy and discharge the damages sustained by the CORPORATION thereby, upto the amount of this Bank Guarantee herein, then the obligation herein shall be null and void, but otherwise shall be in full force and effect for a period of \_\_\_\_\_ months i.e. upto \_\_\_\_\_ from \_\_\_\_\_. But no alterations in the terms of the said Agreement made between CORPORATION AND CONTRACTOR and under the Agreement or the extent or the nature of the materials

supplied, completed and maintained thereunder and no allowance of time by the CONTRACTOR or CORPORATION under the Agreement nor any forbearance in respect of any matter of thing concerning the said Agreement on the part of CORPORATION shall in any way release the CONTRACTOR from any liability under the Guarantee herein.

We do hereby undertake to pay the amount due and payable under this Bank Guarantee without any demur, merely on demand from CORPORATION stating that the amount claimed is due by way or the loss or damages caused to or suffered or would be caused to or suffered by CORPORATION by reason of any breach by the said CONTRACTOR ( as principal ) of the terms and conditions obtained in the said agreement or by reason of the said CONTRACTOR's (as principal) failure to comply with any of the conditions with regard to the Agreement set out in this Bank Guarantee. Any such demand made on the CONTRACTOR under this Guarantee.

However, our liability under this Guarantee shall be restricted to an amount not exceeding Rs. \_\_\_\_\_

(Rupees \_\_\_\_\_ only).

We further covenant that the Guarantee herein contained shall remain in full force and effect and that it shall continue to be enforceable till the dues of the CORPORATION under for by virtue of the said Agreement have been fully paid and Corporation's claim satisfied or discharged or till CORPORATION certifies that the terms and conditions of the said Agreement have been fully and properly carried out by said CONTRACTOR (as principal) and discharges the guarantee.

We, the surety, further covenant with CORPORATION that CORPORATION shall have fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Agreement from time to time, to postpone for any time or from time to time, any of the powers exercisable By CORPORATION AGAINST the said CONTRACTOR (as principal) and to forbear or enforce any of the terms and conditions relating to said Agreement and we shall not be relieved from our liability by reason of any such variations, or extension being granted to said CONTRACTOR or for any forbearance, act of omission on the part of CORPORATION, or any indulgence by CORPORATION to the said CONTRACTOR (as principal) or by any such matter or thing whatsoever. Which under the law relating to sureties would but for this provision, have effect of so relieving.

This Guarantee herein contained is not revocable by notice during its currency and will remain in full force until all the undertaking covenants, terms and conditions of Agreement are performed and fulfilled or until it is discharged by notice in writing by CORPORATION.

This Guarantee will remain in force upto \_\_\_\_\_ months from \_\_\_\_\_ i.e. upto \_\_\_\_\_ and will stand automatically cancelled on expiry of the said period unless extended by mutual Agreement. Unless a demand or claim to enforce the claim under this Guarantee is made in writing against the surety within 06 (six) months from the date of expiry of this Guarantee. All the rights of the CORPORATION hereunder against the surety shall be relieved and discharged from all the liabilities hereunder.

IN WITNESS WHEREOF, the CONTRACTOR (as principal) and surety have executed this Guarantee and have affixed their seals on this date \_\_\_\_\_. Now

withstanding anything contained herein before out liability under the present Guarantee is restricted to Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ only) and shall remain in force for a period of \_\_\_\_\_ months i.e. upto \_\_\_\_\_ from \_\_\_\_\_. Unless a suit or action is instituted to enforce the claim under the Guarantee within 06 (six) months from the said date all your rights under the Guarantee shall be forfeited and we shall be relieved and discharged from all liabilities thereunder.

**PRINCIPAL**

For and behalf of (Name of Firm)

**SURETY**

For and behalf of (Name of Bank)

## **SECTION - V**

### **GENERAL CONDITIONS OF CONTRACT**

## **SECTION - V**

### **GENERAL CONDITIONS**

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## **GENERAL CONDITIONS**

### **1. APPLICATION**

Unless otherwise provided in the Contract, these General Conditions shall govern the Contract.

### **DEFINITIONS AND INTERPRETATION**

#### **2.1 Definition of Terms**

In construing the Contract, the following words shall have the meanings herein assigned to them unless there is something in the subject or context inconsistent with such construction:

- a) The 'Owner' / 'Purchaser' / 'Client' / 'Company' / 'Corporation' / 'Employer' shall mean "Uranium Corporation of India Limited" having its Registered and Head Offices at Jaduguda, P.O. Jaduguda Mines, Singhbhum (East), Jharkhand-832102, referred to throughout in the Contract Document by 'Owner' or 'Purchaser' or 'Client' or UCIL or 'Company' or 'Corporation'.
- b) The 'Contractor' is the successful Tenderer who is awarded the Contract by the Owner to perform the Works covered by the Contract and shall be deemed to include the Contractor's, successors, heirs, executors, administrators, representatives or assigns approved by the Purchaser and will be referred to as if of masculine gender and singular number, throughout in these Documents.
- c) The term 'Sub-Contractor' used herein refers to a party or parties having a direct contract with the Contractor to whom any part of the Contract has been sublet by the Contractor with the consent in writing of the Owner.
- d) 'Accepting Authority' shall mean the Chairman and Managing Director of UCIL or his representative appointed by him in writing to act on his behalf.
- e) The 'Engineer'/'Engineer-in Charge' shall mean the officer(s) appointed in writing by the Accepting Authority to act as 'Engineer'/'Engineer-in Charge' from time to time for the particular contract.
- f) The 'Engineer's Representative' shall be the person nominated by the Engineer in writing to act on his behalf.
- g) 'Plant', and/or 'Equipment', and/ or 'Component' shall mean and include plant, stores and materials to be provided and work to be done by the Contractor under the Contract.
- h) 'Works' means the works to be executed by the Contractor in accordance with the Contract, which has also been referred to as 'Contract Work'.
- i) 'Temporary' works means all Temporary works of every kind required in or about the execution completion and maintenance of the works by the Contractor at their own cost and risk.

- j) 'Constructional Plant', 'Contractors Equipment' shall mean all appliances or things of whatsoever nature required in or about the execution, completion and maintenance of the Works or Temporary Works by the Contractor at his own cost and risk (as hereinafter defined) but does not include materials or other things intended to form or forming part of the permanent work.
- k) 'Contract' means the Notice Inviting Tenders, Conditions of Tendering, Tender Form, General Conditions of Contract, Special Conditions of Contract, General Specification, Technical Specifications, Priced Schedule of Items, the Letter of Acceptance, Contract Agreement and Drawings and any other document which may be included at the time of signing of the Contract Agreement. Till formal contract Agreement is executed the Letter of Intent / Letter of Acceptance shall be deemed to be the Contract.
- l) The 'Specification' shall mean the Specification annexed to these General Conditions and any subsequent modifications thereof and the drawings and Schedule attached thereto (if any) and such other specifications as may be approved by the Engineer.
- m) 'Drawings' means the Drawings referred to in the Contract and any modification of such drawings approved in writing by the Engineer and such other Drawings as may from time to time be furnished or approved in writing by the Engineer.
- n) 'Site' means the lands and other places on, under, in or through which the works are to be executed or carried out and any other lands or places provided by the Owner for the Purpose of the Contract.
- o) 'Defects Liability Period' shall mean the period of guarantee as explained under Clause 37.1 of these General Conditions.
- p) 'Month' shall mean calendar month, 'Day' shall mean a period of 24 hours beginning at midnight.
- q) 'Letter of Intent'/'Letter of Acceptance' shall mean the Purchaser's letter conveying his acceptance of the Tender subject to such reservations as may have been stated therein.
- r) 'Approved' or 'to approval' shall mean as approved by or approval of the Consulting Engineer or Owner or Engineer.
- s)
  - i) 'F.O.B.' shall mean delivery free of expenses to the Purchaser on board the vessel at the port of shipment.
  - ii) 'F.O.R. Destination' shall mean delivery free of expenses to the Purchaser on rail wagons at destination Railway Station siding as may be named or in the case of despatched by road free on road carrier delivered at site.
  - iii) The phrase 'F.O.R. Works' shall mean loaded and stored or trimmed, free of expenses to the Purchaser on road carrier or on board rail-wagons at Contractor's siding or at the nearest Railway Station for transportation.



- iv) 'C.I.F.' Port' shall mean Cost Insurance and Freight inclusive delivery free of expenses to the Purchaser at Indian Port of entry.
- v) C.I.F. site shall mean Cost Insurance and Freight inclusive delivery free of expenses to the Purchaser at site.
- t) The 'Contract Sum' shall mean:
  - i) In the case of Lump Sum Contract the sum for which the tender is acceptable.
  - ii) In the case of percentage Rate Contracts the estimated value of the works as mentioned in the tender adjusted by the Contractor's percentage.
  - iii) In the case of Item Rate Contracts the cost of the work arrived at after multiplying of the quantities shown in Schedule of Quantities by the item rates quoted by the Tenderer or as finally accepted for the various items, subject to any variation mentioned in the Contract.
- u) i) Market Rate shall be rate as decided by the Engineer on the basis of the cost of materials and labour at the site where the work is to be executed, plus the percentage mentioned in relevant schedule to cover all overheads and profit.
- ii) "Schedule(s)" referred to in these conditions shall mean the relevant schedule(s) annexed to the tender papers issued by the Purchaser or the standard schedule of rates prescribed by the Purchaser and the amendments thereto issued from time to time.
- iii) 'Urgent Works' shall mean any urgent measures that, in the opinion of the Engineer, become necessary during the progress of works to obviate any risk of accident or failure of which become necessary for security.
- v) i) 'Initial Operation' or 'Reliability Run' shall mean continuous operation of the contract plant and materials under varying load to furnish proof of satisfactory operation for a specified period which shall not be less than four (4) weeks.
- ii) 'Commissioning' shall mean the successful operation of the plant and equipment after all initial adjustments, trials, cleaning and reassembly required at site, if any, have been completed.
- iii) 'Tests on Completion' shall mean such tests as are prescribed by the Specification and/or tests mutually agreed upon by the Purchaser and the Contractor to be made by the Contractor after erection of the equipment to prove satisfactory operation as required by the Specification.
- iv) 'Acceptance Tests' shall mean such tests, as are required to prove the performance guarantees of the plant given by the Contractor before taking over of the plant by the Purchaser.

- w) 'Warranty Period' shall mean the period of guarantee and shall have the same meaning as Defect Liability Period defined in Clause 37.1 of these General Conditions.
- x) 'Security Deposit' or 'Security Bond' shall have the same meaning as Performance Bond as indicated in Clause 11.1 of these General Conditions.

## **2.2 Interpretation**

Words importing persons or parties shall include firms and corporations.

## **2.3 Singular and Plural**

Words importing the singular only also include the plural and vice versa where the context requires.

## **2.4 Headings or Notes**

The Headings and marginal notes in these General Conditions shall not be deemed part thereof or be taken into consideration in the interpretation or construction thereof or of the Contract.

## **2.5 Cost**

The word 'Cost' shall be deemed to include overhead costs whether incurred on or off the site.

# **3.0 LANGUAGE AND SYSTEMS OF MEASUREMENT**

## **3.1 Language**

English shall be the ruling language. Any tender, drawing, technical data, document and/or correspondence which forms the basis of an order or contract or which may be furnished by the Contractor for the Purchaser's approval or information as provided under the said order or contract, shall be in English.

## **3.2 Systems of Measurement**

The metric system of measurements shall be used in all specifications, drawings, designs, documents and/or correspondences. All measuring devices, instruments and appliances shall be designed for working on the metric system.

# **4.0 ENGINEER AND ENGINEER'S REPRESENTATIVE**

## **4.1 Engineer's Duties**

The Engineer shall carry out such duties in issuing decisions, certificates and orders as are specified in the Contract.

## **4.2 Engineer's Representative**

The Engineer's Representative shall be responsible to the Engineer and his duties are to watch and supervise the works and to test and examine any plant, equipment, component, materials or workmanship employed in connection with the Works. The Engineer's Representative shall have no authority to relieve the Contractor of any of his obligations under the Contract nor except as expressly provided in the Contract, to order any work involving delay in completion or any extra payment to the Contractor by the Purchaser nor to make any variation to the works.

#### **4.3 Engineer's Power to Delegate**

The Engineer may from time to time in writing delegate to the Engineer's Representative any of the powers, discretion, functions and/or authorities vested in him and he may at any time revoke any such delegation. The Engineer shall furnish to the Contractor a copy of any such written delegation or revocation. No such delegation or revocation shall have effect until a copy thereof has been delivered to the Contractor. Any written decision, instruction or approval given by the Engineer's Representative to the Contractor in accordance with such delegation shall bind the Contractor and the Purchaser as though it had been given by the Engineer provided always that :

- (a) Any failure of the Engineer's Representative to disapprove any Plant, equipment, component, material or workmanship shall not prejudice the power of the Engineer thereafter to disapprove such plants material or workmanship and to order the rectification thereof in accordance with these Conditions.
- (b) If the Contractor shall be dissatisfied by reason of any decision of the Engineers Representative he shall be entitled to refer the matter to the Engineer who will thereupon confirm, reverse or vary such decision in accordance with Clause 14 (Engineer's Decisions).

#### **4.4 Engineer to Act Fairly**

Wherever by these Conditions the Engineer is required to exercise his discretion, by the giving of a decision, opinion, consent or to express satisfaction or approval or to determine value or otherwise take action which may affect the rights and obligations of either the Purchaser or the Contractor, the Engineer shall exercise such discretion fairly within the terms of the Contract and having regard to all the circumstances.

### **5.0 ASSIGNMENT AND SUB-LETTING**

#### **5.1 Assignment**

The Contractor shall not assign the Contract or any part thereof or any benefit, obligation or interest therein or thereunder without the prior written consent of the Purchaser.

#### **5.2 Sub-Letting**

The Contractor shall not sub-let the whole of the works. Except where otherwise provided by the Contract, the Contractor shall not sub-let any part of the works without the prior written consent of the Engineer. Any such consent, if given, shall not relieve the Contractor from any liability or obligation under the Contract and he shall be responsible for the acts, defaults and neglects of any Sub-Contractor, his

agents, servants or workmen as fully as if they were the acts, defaults or neglects of the Contractor, his agents, servants or workmen. Provided that the restriction contained in this Clause shall not apply to Sub-Contracts for any part of the works of which the makers are named in the Contract.

## **CONTRACT DOCUMENTS**

### **6.1 Documents Mutually Explanatory**

Unless otherwise provided in the Contract, the provisions of General Conditions and Special Conditions shall prevail over those of any other document forming part of the Contract and in case of conflict Special Conditions shall prevail over General Conditions. Subject to the foregoing the several documents forming the Contract are to be taken as mutually explanatory of one another but in the case of ambiguities or discrepancies the same shall be explained and adjusted by the Accepting Authority who shall thereupon issue to the Contractor instructions thereon. Provided always that if in the opinion of the Accepting Authority compliance with any such instructions shall involve the Contractor in any cost which, by reason of such ambiguity or discrepancy the Contractor did not and had reason not to anticipate, the Accepting Authority shall certify and the Purchaser shall pay such additional sum as may be reasonable to cover such cost.

### **6.2 Secrecy**

The Contractor shall take necessary steps to ensure that all persons employed on any work in connection with contract have noticed that the Indian Official Secret Act 1923 (XIX of 1923) and Indian Atomic Energy Act 1962 (XXXIII of 1962) and latest amendment applied to them and shall continue so to apply even after the execution of such works under the Contract.

### **6.3 Governing Laws and Jurisdiction**

This Contract shall be governed by the Indian Laws in force and it shall be deemed to have been executed at Jaduguda, District Singhbhum (East), Jaduguda, India within the ordinary civil jurisdiction of the competent court situated in Ghatsila, District Singhbhum (East), Jharkhand.

### **7.1 Drawings**

The Contractor shall submit to the Engineer for approval.

- (a) Within the times given in the Specification or in the program to be provided under Clause 15 and/ or as given in Special Condition and/ or as given in the technical specifications, such drawings, samples, patterns and models as may be called for therein and in the numbers therein required.
- (b) During the progress of the works within such reasonable time as the Engineer may require such drawings of the general arrangement and details of the works as the Engineer may reasonably require.

Within the times given in the Specification or the program, after receiving such drawings, samples, patterns and models, the Engineer and/ or Consultant shall signify his approval or otherwise. The Contractor shall supply additional copies of approved drawings in accordance with the details set out in the Specification and/ or as specified in the Special Conditions.

If the Engineer and/ or Consultant shall not approve any Drawing, sample, pattern or model so provided, the same shall be forthwith modified to meet the reasonable requirements of the Engineer and/ or Consultant and shall be resubmitted. Approved Drawings shall be signed or otherwise certified by the Engineer and / or Consultant. Drawings where specified to be supplied by the Purchaser shall be as per special conditions.

**7.2 Approved Drawings**

Drawings approved as above described shall not be departed from except as provided in Clause 38 (Variations). Approval of drawing does not relieve the responsibility of the Contractor to achieve the Performance Guarantee.

**7.3 Inspection of Drawings**

The Engineer shall have the right at all reasonable times to inspect at the premises of the Contractor all Drawings of any portion of the works.

**7.4 Foundation Drawings**

The Contractor shall within the times mentioned in the Specifications or in accordance with the program, provide drawings showing the manner in which the Plant is to be affixed together with all information relating to the works required for preparing suitable foundations for providing suitable access for the Plant and any necessary equipment to the point on Site where the plant is to be erected and for making all necessary connections to the Plant (whether such connections or foundation drawings are to be made by the Contractor under the Contract or not).

**7.5 Errors in Drawings**

Subject to Clause 8.1 (Mistakes in information) any expenses resulting from an error or omission in or from delay in delivery of the drawings and information mentioned in Sub-Clause 4 of this Clause shall be borne by the Contractor.

**7.6 Operating and Maintenance Instructions**

The Contractor shall furnish to the Purchaser before the works are taken over, Operating and Maintenance Instructions of all equipment / systems together with Drawings of the Works as completed in sufficient detail to enable the Purchaser to maintain, dismantle, reassemble and adjust all parts of the works. Unless otherwise agreed, the works shall not be considered to be completed for the purposes of taking over under the terms of Clause 36 (Taking Over) until such instructions and drawings have been supplied to the Purchaser.

**8.1 Mistakes in Information**

The Contractor shall be responsible for any discrepancies, errors or omissions in the Drawings and information supplied by him whether they have been approved by the Engineer or not provided that such discrepancies, errors or omissions are not due to incorrect drawings or inaccurate information furnished to the Contractor in writing by the Purchaser or the Engineer.

**8.2 Errors by Contractor**

The Contractor shall at his own expense carry out any alternations or remedial work necessitated by reason of such discrepancies, errors or omission for which he is responsible and modify the drawings and information accordingly and shall bear all costs incurred therein. The performance of his obligations under this Sub-Clause shall be in full satisfaction of the Contractor's liability under Sub-Clause 1 of this Clause and under Clause 7.5 but shall not relieve him of his liability under Clause 35.2 (Delay in Completion) in so far as that liability arises as a result of such discrepancies, errors or omission.

## **OBLIGATIONS OF THE CONTRACTOR**

### **9.1 General Obligations**

The Contractor shall subject to the provisions of the Contract, execute the works with the due care and diligence within the Time for Completion and shall provide all labour, including the supervision thereof and Contractor's Equipment, necessary thereof and all other things whether temporary or permanent nature and for carrying out his obligations under Clause 37 (Defects), so far as the necessity for providing the same is specified in or is reasonably to be inferred from the Contract.

### **9.2 Setting Out**

The Contractor shall be responsible for the accurate setting out of the Works in relation to original points, lines and levels of reference given by the Engineer in writing and for the correctness, subject as above mentioned, of the positions, levels, dimensions and alignment of all parts of the Works and for the provision of all necessary instruments, appliances and labour in connection therewith. If, at any time during the progress of the Works, any error shall appear or arise in the positions, levels, dimensions or alignment of any part of the works, the Contractor, on being required so to do by the Engineer or the Engineer's Representative, shall at his own cost, rectify such error to the satisfaction of the Engineer or the Engineer's Representative, unless such error is based on incorrect data supplied in writing by the Engineer or the Engineer's Representative or as a result of default by another contractor, not being a Sub-Contractor, in which case the cost of rectifying the same shall be borne by the Purchaser. The checking of any setting out or of any line or level by the Engineer or the Engineer's Representative shall not in any way relieve the Contractor of his responsibility for the accuracy thereof. The Contractor shall carefully protect and preserve bench marks, sight rails, pegs and other things used in setting out the works.

### **10.0 Contract Agreement**

The Contractor shall enter into and execute a Contract Agreement (to be prepared and completed by the Contractor) in the form annexed with such modification as may be necessary within 30 days from the issue of Letter of Acceptance. Till the formal contract Agreement is executed the Letter of Acceptance will have the force of Contract Agreement. The Letter of Acceptance and also the Contract Agreement shall be signed on behalf of the Purchaser by the Accepting Authority or his nominee. The Contract Agreement shall be signed on behalf of the Contractor by person(s) holding Power of Attorney on behalf of the Contractor. The Successful Contractor will prepare the bond copies of Contract Agreement at his own cost and after signing of his document will submit 10 (Ten) copies of the same to the purchaser at free of cost.

### **11.1 Performance Bond**

For the performance of the contract the contractor shall furnish a Bank Guarantee of a reputed Scheduled Commercial bank approved by the purchaser in favour of the purchaser, within 14 days from the issuance of letter of intent/acceptance. The amount of such Bank Guarantee shall be equivalent to 10% of the contract sum. The terms and conditions of the Bank Guarantee shall have to be in accordance with the specimen annexed to the tender document and confirmed by the contractor in its techno commercial offer. The cost of the Bank Guarantee shall have to be borne by the

contractor. The Bank Guarantee shall remain valid till expiry of the defect liability period in terms of clause 37.1 herein and issue of final certificate by the engineer.

**12.1 Contractor to Inform Himself Fully**

The Contractor shall be deemed to have inspected and examined the Site and its surroundings and information available in connection therewith and to have satisfied himself fully, before submitting his Tender, as to the form and nature thereof, including the sub-surface conditions, the hydrological and climatic conditions, the extent and nature of work and materials necessary for the completion of the works, the means of access to the Site and the accommodation he may require and, in general shall be deemed to have obtained all necessary information as to risks, contingencies and all other circumstances which may influence or affect his Tender.

If he shall have any doubt as to the meaning of any portion of the Tender documents, he shall set forth the particulars thereof and submit them to the Purchaser in writing for clarification. Any information thus had or otherwise obtained from the Purchaser shall not in any way relieve the Contractor from his responsibility for supplying the plant and equipment and or executing the works in terms of the specification, including all detailed and incidental work and supply of all accessories, apparatus or materials which may not have been specifically mentioned in the Specification or drawings, but otherwise necessary for insuring complete erection and safe and efficient commercial working of the plant and equipment and / or complete execution of the works.

**12.2 Sufficiency of Tender**

The Contractor by tendering shall be deemed to have satisfied himself as to all the conditions and circumstances affecting the Contract Sum, as to the possibility of executing the works as shown and described in the Contract, as to the general circumstances at the site of the works, if access thereto has been made available to him and as to the general labour position at the site and to have determined his prices accordingly. The Contractor shall be responsible for any misunderstanding or incorrect information however obtained except information given in writing by the Purchaser or the Engineer.

**12.3 Import License and Foreign Exchange**

Unless otherwise provided in the Contract, the Contractor shall obtain all import permits or licenses and arrange all foreign exchange required for any part of the Plant or Works.

**12.4 Consents, Way leaves etc.**

The Contractor shall, before the time specified for delivery of any Plant, equipment, component or material to the Site, obtain all consents, way leaves and approvals required in connection with the Regulations and By-laws of local or other authority which shall be applicable to the works.

**13.1 Contractor's Key Personnel**

The Contractor shall furnish the list of Key Personnel, along with details of their experience, proposed to be engaged in the execution of the Contract for approval by



the Engineer. Only the persons approved by the Engineer shall be deployed in the execution of the Contract. Such approval by the Engineer shall not relieve the Contractor of any of his duties or responsibilities under the Contract.

### **13.2 Training**

The Contractor shall during the currency of the Contract when called upon by the Engineer engage and also ensure engagement by sub-contractors and others employed by the Contractor in connection with the works, such number of apprentices as required under the Apprentices Act, 1961 and shall be responsible for all obligations of the Purchaser under the Act including the liability to make payment to Apprentices as required under the Act.

The Contractor shall also be responsible for any other specific training requirement as per the provisions set out in Special Conditions or the specification.

### **14.0 Engineer's Decisions**

The Contractor shall proceed with the works in accordance with the decisions instructions and orders given by the Engineer in accordance with these Conditions, provided always that:

- (a) If the Contractor shall, without undue delay after being given any decision, instruction or order otherwise than in writing, require it to be confirmed in writing, such decision, instruction or order shall not be effective until written confirmation thereof has been received by the Contractor, and
- (b) If the Contractor shall, by written notice to the Engineer within fourteen (14) days after receiving any decision, instruction or order of the Engineer in writing or written confirmation thereof, dispute or question the decision, instruction or order, giving his reasons for so doing, the matter shall be referred to the Engineer who shall within a further period of twenty one (21) days by notice in writing, with reasons therefore, to the Contractor confirm, reverse or vary such decision.

### **15.0 PROGRAM**

#### **15.1 Program to be furnished**

The Contractor shall submit with his Tender, a program in the form of Network in MS Projects or Primavera, according to which he proposes to carry out the works.

Within the time stated in Special Conditions, or if no time is stated within one month of the acceptance of his Tender the Contractor shall submit to the Engineer for his approval a program based on above showing, in such form as may reasonably be required by the Engineer, the order of procedure in which he proposes to carry out the works on site and commissioning thereof. The submission to and approval by the Engineer of such program shall not relieve the Contractor of any of his duties or responsibilities under the Contract.

#### **15.2 Procedure and Method**

After submission to and approval by the Engineer of such program the Contractor shall adhere to the order of procedure and method stated therein unless he obtains the written permission of the Engineer to vary such order or method.

### **15.3 Progress of Works**

The Contractor shall submit Monthly Reports identifying quantitatively the monthly as well as cumulative progress of work against targets in such form as may reasonably be required by the Engineer. If at any time it should appear to the Engineer that the actual progress of the Works does not conform to the Program, the Contractor shall produce, at the written request of the Engineer, a revised program showing the modifications to the approved program necessary to ensure completion of the works within the Time for completion.

Besides this report, regular weekly /monthly meeting are to be conducted with the Contractor as per direction of the Engineer-in-Charge. The documentary evidence in support of the monthly report are required to be produced, as and when asked for.

## **CONTRACTOR'S SUPERINTENDENCE**

### **16.1 Contractor's Representatives**

The Contractor shall employ one or more competent representatives, whose name or names shall have previously been communicated in writing to the Engineer by the Contractor, to superintend the carrying out of the Works on the Site. The said representative, or if more than one shall be employed, then one of such representatives, shall be present on the Site during all working hours and any orders or instructions which the Engineer may give to the said representative of the Contractor shall be deemed to have been given to the Contractor.

### **16.2 Notice of Objection**

The Engineer shall be at liberty by notice in writing to the Contractor to object to any representative or person employed by the Contractor in the execution of or otherwise about the works who shall in the opinion of the Engineer, misconduct himself or be incompetent or negligent. The Contractor shall replace such person from the Works immediately.

### **17.1 Contractor's Equipment**

Except to the extent specified in Special Conditions the Contractor shall at his own expense, provide all Contractor's Equipment, haulage and water and power necessary to execute and complete the works.

### **17.2 Fencing, Lighting, Guarding and Fire Protection**

The Contractor shall be responsible for the proper fencing, lighting, guarding and watching of all the Works under this Contract on the site at his own expense until taken over and for the proper provision during a like period of temporary roadways, footways, guards and fences as far as the same may be rendered necessary by reason of the works for the accommodation and protection of the owners and occupiers of adjacent property, the public and others. No naked light shall be used by the Contractor on the site otherwise than in the open air without specific permission in writing from the Engineer.

The Contractor shall also take all reasonable precautions to prevent fires of any nature in the general area and vicinity of his operation and he shall be responsible for all damages from fires attributable to his own activities or to those of his employees or to the activities of his Sub-Contractors or their employees.

**17.3 Electricity, Water and Space**

The Contractor shall be entitled to use for the purposes of the works such supplies of electricity and water and also space as may be available therefore on the Site and of which details are given in Special Conditions and shall at his own expense, provide any equipment and distribution line necessary for such use and shall pay to the Purchaser for such use such sum as may reasonably be fixed by the Engineer.

**17.4 Opportunities for other Contractors**

The Contractor shall in accordance with the requirements of the Engineer, afford all reasonable opportunities for carrying out their work to any other contractors employed by the Purchaser and their workmen and the workmen of the Purchaser and of any other duly constituted authorities who may be employed in the execution on or near the Site of any work not included in the Contract or of any Contract which the Purchaser may enter into in connection with or ancillary to the Works. If, however, the Contractor shall on the written request of the Engineer or the Engineer's Representative, make available to any such other Contractor, or to the Purchaser or any such authority, any Contractor's Equipment or provide any other service of whatsoever nature the Purchaser shall pay to the Contractor in respect of such use or service such sum or sums as shall in the opinion of the Engineer, be reasonable.

**17.5 Protection Trees**

Trees designated by the Engineer shall be protected from damages during the course of the works and earth level within 1 meter of each such tree shall not be changed. Where necessary, such trees shall be protected by providing temporary fencing.

**17.6 Fossils etc.**

All fossils, coins, articles of value or antiquity and structures and other remains or things of geological or archaeological interest discovered on the site of the works shall as between the Purchaser and the Contractor be deemed to be the absolute property of the Purchaser. The Contractor shall take responsible precautions to prevent his workmen or any other persons from removing or damaging any such article or thing and shall immediately upon discovery thereof and, before removal, acquaint the Engineer's Representative of such discovery and carry out, at the expense of the Purchaser, the Engineer's Representative's orders as to the disposal of the same.

**LIABILITY FOR ACCIDENTS AND DAMAGE**

**18.1 Care of the Works**

The Contractor shall take full responsibility for the care of the works or any Section or Portions thereof until the date stated in the Taking-over Certificate issued in respect thereof under Clause 36 (Taking Over) and in case any damage or loss shall happen to any Portion of the works not taken over as aforesaid, from any cause whatsoever (save and except the damages to works at site caused by the excepted risks as defined in Sub-Clause 2 of this Clause) the same shall be made good by and at the sole cost of the Contractor and to the satisfaction of the Engineer. The Contractor shall also be

liable for any loss of or damage to the works occasioned by him or by any Sub-Contractor in the course of any operations carried out by him or by his Sub-Contractors for the purpose of completing any outstanding work or complying with his obligations under Clause 37 (Defects).

**18.2 Damage to persons and property before taking over**

The Contractor shall indemnify the Purchaser in respect of death or injury to any person and of all damages to any property (other than property forming part of the works not yet taken over) occurring before all the works shall have been taken over and against all actions, suits, claims, demands, costs, charges and expenses arising in connection therewith that shall be occasioned by the negligence of the Contractor or any Sub-Contractor or by defective design (other than a design made, furnished or specified by the Purchaser and for which the Contractor has disclaimed responsibility giving appropriate reasons in writing within a reasonable time after the receipt of the Purchaser's instructions), materials or workmanship but not otherwise. Provided that the Contractor shall not be liable by virtue of this Sub-Clause in respect of damage or injury attributable to defects in any Section or Portion of the Works taken over.

**18.3 Damage to persons and property after taking over**

If there shall occur any loss of or damage or injury to any property (other than property forming part of the works not yet taken over) or person while the Contractor is on the Site for the purpose of making good a defect in any Section or Portion of the Works pursuant to Clause 37 (Defects) or for the purpose of carrying out Tests on Completion of any such section during the Defects Liability Period as provided in Sub-clause 36.4 (Interference with Tests) the Contractor shall be liable as follows :

(a) In respect of loss of or damage to the said Section or portion the Contractor's obligation shall be as defined in Clause 37 (Defects).

(b) In respect of damage or injury to any other property or to any person and of any actions, claims, demands, costs, charges and expenses arising in connection therewith the Contractor shall be liable to the extent that such damage or injury was caused by the negligence of the Contractor or a Sub-Contractor while on the site as aforesaid or by defective materials or workmanship used in making good the said defect but not otherwise.

The said section or portion of the works shall be defined by reference to the Taking Over Certificate issued in respect thereof pursuant to Clause 36 (Taking over).

**18.4 Damage to Persons and Property from a Cause Occurring before taking over**

If there shall occur, after the commencement of the Defects Liability Period in respect of any Section or Portion of the Works, any loss of or damage or injury to any property (other than property forming part of the Works not yet taken over) or person as a result of a cause occurring prior to the commencement of the Defects Liability Period the Contractor's Liability shall be as follows :

(a) In respect of loss of or damage to the said Section or Portion the Contractor's obligations shall be as defined in Clause 37 (Defects).

(b) In respect of damage or injury to any property or to any person and of any actions, claims, demands, costs, charges and expenses arising in connection therewith

the Contractor shall be liable to the extent that such damage or injury was caused by the negligence of the Contractor or a Sub-Contractor or by defective design (other than a design made, furnished or specified by the Purchaser and for which the Contractor has disclaimed responsibility giving appropriate reasons in writing within a reasonable time after receipt of the Purchaser's instructions) materials or workmanship but not otherwise.

**18.5 Claims for damage to persons or Property**

In the event of any claim being made against the Purchaser arising out of the matters referred to in and in respect of which the Contractor may be liable under this Clause, the Contractor shall be promptly notified thereof and may at his own expense conduct all negotiations for the settlement of the same and any litigation that may arise therefrom. The Purchaser shall not, unless and until the Contractor shall have failed to take over the conduct of the negotiations or litigation, make any admission, which might be prejudicial thereto. The conduct by the Contractor of such negotiations or litigation shall be conditional upon the Contractor having first given to the Purchaser such reasonable security as shall from time to time be required by the Purchaser to cover the amount ascertained or agreed or estimated, as the case may be of any compensation damages, expenses and costs for which the Purchaser may become liable. The Purchaser shall at the request of the Contractor, afford all available assistance for any such purpose and shall be repaid all reasonable costs incurred in so doing.

**18.6 Accident or Injury to Workmen**

The Contractor shall indemnify the Purchaser against all actions, suits, claims, demands, costs or expenses arising in connection with death or injuries (other than such as may be the responsibility of the Purchaser, his agents or servants) suffered by persons employed by the Contractor or his Sub-Contractors on the Works, whether at Law or order any Statutes dealing with the question of the liability of employers for injuries suffered by employees.

**19.0 Indirect or Consequential Damage**

Except as provided in Clause 35.1 (Delay in Completion) for a reduction of the Contract sum for delay and except as provided in Clause 37.11 (Gross Misconduct) the Contractor shall not be liable to the Purchaser by way of indemnity or by reason of any breach of the Contract for loss of use (whether complete or partial) of the Works or of profit or of any contract or for any indirect or consequential damage that may be suffered by the Purchaser.

**INSURANCE, REGULATIONS AND PATENT RIGHTS**

**20.1 Insurance of Works (equipment or any other material at site)**

The Contractor shall in the joint names of the Contractor and the Purchaser, insure the all works and keep each part hereof insured for the Contract Sum against all loss or damage from whatever cause arising other than the excepted risks, from the date of shipment or the date on which it becomes the property of the Purchaser, whichever is the earlier, until it is taken over by the Purchaser. The Contractor shall insure against the Contractor's liability in respect of any loss or damage occurring whilst the Contractor is on Site for the purpose of making good a defect or carrying out the Tests on completion during the Defects Liability period or for the purpose of completing any outstanding work and against any loss or damage arising during the Defects Liability

period from a cause occurring prior to taking over. Such insurance shall be effected with an insurer for a sum and in terms to be approved by the Purchaser and the Contractor shall from time to time, when so required by the Engineer, produce the policy and receipts for the premium or premiums or satisfactory evidence of insurance cover. All moneys received under any such policy shall be applied in or towards the replacement and repair of the Works lost, damaged or destroyed by this provision shall not affect the Contractor's liabilities under the Contract. The Contractor shall ensure also the insurance of whole works against theft, fire, damage etc. till taking over by the Purchaser

## **20.2 Third Party Insurance**

The Contractor shall, prior to the commencement of any work on the Site by the Contractor pursuant to the Contract, insure against his liability for damage or injury occurring till the Defects liability period is over to any person (including any employee of the Purchaser or other contractors) or to any property (other than property forming part of the Works) due to or arising out of the execution of the Works. Such insurance shall be effected for an amount with an insurer and in terms to be approved by the Purchaser and the Contractor shall from time to time when so required by the Engineer produce the policy and the receipts for the premiums or satisfactory evidence of insurance cover. The terms of the policy shall include a provision whereby, in the event of any claim being made against the Purchaser in respect of which the Contractor would be entitled to indemnity under the policy, the insurer will indemnify the Purchaser against such claims and any costs, charges and expenses in respect thereof.

## **20.3 Insurance Against Accident etc. to Supervisory Staff**

The Contractor shall insure and shall maintain insurance against his liability under Clause 18.7 (Accident or injury to Workmen) and shall from time to time when so required by the Engineer produce the policy and the receipts for the premiums or satisfactory evidence of insurance cover. The terms of any such policy shall also include the provision to indemnify the Purchaser mentioned in Sub-Clause 2 of this Clause. Provided always that in respect of any persons employed by any Sub-Contractor's obligation under this Sub-Clause shall be satisfied if the Sub-Contractor shall have insured against the liability in respect of such persons in such manner that the Purchaser is indemnified under the policy, but the Contractor shall require such Sub-Contractor to produce to the Engineer when required the policy, the receipt for the premiums or satisfactory evidence of insurance cover.

## **20.4 Damage Notification Period**

All events or occurrences, by which a claim on insurer will result, shall be notifiable within a period of sixty (60) days from the date of receipt Plant, Equipment or Materials at site or from the date of occurrence of the events. This period shall be further extensible as required in the event of Packages of supplies not being opened at specified rates of premium.

## **20.5 Remedy on Failure to Insure**

If the Contractor shall fail to effect and keep in force the insurance referred to in these Conditions the Purchaser may effect and keep in force any such insurance and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount so paid by the Purchaser from any moneys due or which may

become due to the Contractor under the Contract or recover the same as a debt from the Contractor from any other moneys due or becoming due to the Contractor.

**21.0 Compliance with Statutes, Regulations etc.**

The Contractor shall, in all matters arising in the performance of the Contract, conform in all respects with the provisions of any Central or State Statute, Ordinance or other Law or any Regulation or By-Law of any local or other duly constituted authority that shall affect the Contractor in the performance of his obligations under the Contract and shall keep the Purchaser indemnified against all penalties and liability of every kind for breach of any such Statute, Ordinance, Law, Regulation or By-Law.

**22.1 Patent Rights etc.**

The Contractor shall fully indemnify the Purchaser against all claims and proceedings for or on account of infringement of any letters, patent, registered design, copy right, trade mark or trade name or industrial property right protected in the Contractor's country or in India arising by reason of the construction of the Works or by the use of any Plant supplied by the Contractor, but such indemnity shall not cover any use of the Works otherwise than for purpose indicated by or reasonably to be inferred from the Specification or any infringement which is due to the use of any Plant in association or combination with any other plant not supplied by the Contractor.

**22.2 Claims in respect of Patent Rights**

In the event of any claim being made or action brought against the Purchaser arising out of the matters referred to in this Clause, the Contractor shall be promptly notified thereof and may at his own expense conduct all negotiations for the settlement of the same and any litigation that may arise therefrom. The Purchaser shall not, unless and until the Contractor shall have failed to take over the conduct of the negotiations or litigation, make any admission, which might be prejudicial thereto. The conduct by the Contractor of such negotiations or litigation shall be conditional upon the Contractor having first given to the Purchaser such reasonable security as shall from time to time be required by the Purchaser to cover the amount ascertained or agreed or estimated as the case may be of any compensation damages, expenses and costs for which the Purchaser may become liable. The Purchaser shall at the request of the Contractor, afford all available assistance for the purpose of contesting any such claim or action and shall be repaid all reasonable expenses incurred in so doing.

**GENERAL OBLIGATIONS OF THE PURCHASER**

**23.1 Foundations**

If a building structure foundation or approach is by the Contract to be provided by the Purchaser such building structure foundation or approach shall be in condition suitable for the efficient transport, reception, installation and maintenance of the works.

**23.2 Authority for Access**

In the execution of the Works no persons other than the Contractor, Sub-Contractors and his and their employees shall be allowed on the Site except by the written permission of the Purchaser but facilities to inspect the Works at all times shall be

afforded to the Engineer and his representatives and other authorities, officials or representatives of the Purchaser.

**23.3 Access not Exclusive**

The access to and possession of the Site referred to in Sub-Clause 1 hereof shall not be exclusive to the Contractor but only such as shall enable him to execute the Works. In respect of any space allotted to the Contractor for purposes of or in connection with the contract, the Contractor shall be a licensee subject to the following and such other terms and conditions as may be imposed by the Purchaser.

- i) that the Contractor shall pay a nominal license fee of Rs. 0.50(Rupees nil and Paisa fifty only) per year per Sq.m for plant site .
- ii) that such use of occupation shall not confer any right of tenancy of the space to the Contractor.
- iii) that the Contractor shall be liable to vacate the space on demand by the Engineer
- iv) that the Contractor shall have no right to any construction over this land without the written permission of the Engineer. In case the Contractor is allowed to construct any structure the Contractor shall have to demolish and clear the same before handing over the completed work unless agreed to the contrary.

The Contractor shall provide, if necessary, or if required on the site, all temporary access there to and shall alter, adopt and maintain the same as required from time to time and shall take up and clear them away as and when no longer required and as and when ordered by the Engineer and make good all damage done to the site.

**HOURS OF WORK AND RATE OF PROGRESS**

**24.1 Hours of Work**

Unless otherwise provided in the Specification the Contractor shall carry out the Works on the Site during the normal working hours generally recognised in the district. The Contractor may, after consulting with the Engineer, carry out the work at other times if it shall be practicable in the circumstances for work to be so done, and become necessary for the completion of the Works within the Time for Completion at no extra cost to the Purchaser.

**24.2 No Night or Sunday Work**

Unless otherwise provided in the specification no work shall be carried out on site during the night or on Sundays without the consent in writing of the Engineer or the Engineer's Representative except if the work is unavoidable or absolutely necessary for the saving of life or property or for the safety or quality of the works in which case the Contractor shall immediately advise the Engineer or the Engineer's Representative.

**24.3 Rate of Progress**



If for any reason, which does not entitle the Contractor to an extension of time, the rate of progress of the works or any Section is at any time, in the reasonable opinion of the Engineer, too slow to ensure completion by the Time for Completion, the Engineer shall so notify the Contractor in writing and the Contractor shall thereupon take such steps as are necessary and the Engineer may approve to expedite progress so as to complete the works or such Section by the Time for Completion. The Contractor shall not be entitled to any additional payment for taking such steps.

#### 24.4 **Clearance of Site on Completion**

From time to time during the progress of the works the Contractor shall clear away and remove from the Site all surplus materials and rubbish and on completion of the Works all Contractor's Equipment and leave the whole of the Site and Works clean in a workmanlike condition to the satisfaction of the Engineer.

### **LABOUR**

#### 25.1 **Engagement of Labour**

The Contractor shall make his own arrangements for the engagement of all labour local or otherwise giving reasonable regard to local conditions and save in so far as the Contract otherwise provides, for the transport, housing, feeding and payment thereof. Interstate migratory labour will not be allowed unless permitted legally.

#### 25.2 **Return of Labour**

The Contractor shall furnish to the Engineer at the intervals and in the form approved by the Engineer, a distribution return of the number and description by trades of the work people employed on site for the works. The Contractor shall also submit on the 4<sup>th</sup> and 19<sup>th</sup> of every month to the Engineer a true statement showing in respect of the second half of the proceeding month and the first half of the current month (1) the accident that occurred during the said fortnight showing the circumstances under which they happened and the extent of damages and injury caused by them and (ii) the number of female workers who have been allowed Maternity Benefit as provided in the Maternity Benefit Act, 1961 or Rules made thereunder and the amount paid to them.

#### 25.3 **Minimum Wages**

The Contractor shall pay to labour employed by him wages not less than fair wages as defined in the Contract Labour (Regulation and Abolition) Act, 1970 and Rules made there under.

#### 25.4 **Contract Labour (Regulation & Abolition)**

The contractor shall in respect of labour employed by him comply with or cause to be complied with the Contract labour (Regulation & Abolition) Act, 1970 and Rules made thereunder in regard to all matters provided therein.

#### 25.5 **Contractor to Abide by Various Acts.**

The Contractor shall comply with the provisions of the payment of wages Act., 1936, Minimum Wages Act, 1948, Employers Liability Act., 1938, Workmen's Compensation Act, 1923, Industrial Disputes Act, 1947, Maternity Benefit Act., 1961

and Mines Act, 1952, E P F (M) ACT, 1952 or any modifications thereof or any other Law relating thereto and rules frame there under from time to time.

**25.6 Non-observance of Contract Labour Act**

The Engineer shall, on a report having been made by an Inspecting staff as defined under the contract Labour (Regulation) Act., 1970 and rules made thereunder, have the power to deduct the money due to the contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfillment of the conditions of the contract for the benefit of workers, non-payment of wages or of deductions made from his or their wages which are not justified by the terms of the contract or non-observance of the said Act.

**25.7 Indemnity**

The Contractor shall indemnify the Purchaser against any payment to be made under and for observance of the Contract labour (Regulation and Abolition) Act, 1970 and Rules made thereunder without prejudice to his right to claim indemnity from his sub-contractors.

In the event of the Contractor committing a default or breach of any of the provisions of aforesaid Act and rules made thereunder / amended from time to time, or furnishing any information or submitting or filling any Form / Register / Slip under the provisions of the law which is materially incorrect, then on the report of the Inspecting Officer, the Contractor shall without prejudice pay to the Purchaser a sum not exceeding liabilities for such defaults including liquidated damages etc. for every default, breach or furnishing, making, submitting, filling materially, incorrect statement as may be fixed by the Labour Department and the Contractor should indemnify the Purchaser against all such liabilities.

**25.8 Model Rules for Labour Welfare**

The Contractor shall at his own expense comply with or cause to be complied with Model Rules for Labour Welfare as provided under the Rules framed by the appropriate government from time to time for the protection of health and for making sanitary arrangements for workers employed directly or indirectly on the works. In case the contractor fail to make arrangements as aforesaid the Engineer shall be entitled to do so and recover the cost thereof from the contractor.

Failure to comply with Model Rules for Labour Welfare, Safety Code or the provisions relating to report on accidents and to grant Maternity Benefits to female workers shall make the contractor liable to pay to the Purchaser as liquidated damages an amount not exceeding Rs. 50.00 for each default or materially incorrect statement. The decision of the Engineer in such matters based on reports from the Inspecting Officer, shall be final and binding and deductions for recovery of such liquidated damages may be made from any amount payable to the Contractor.

**25.9 Disorderly Conduct**

The Contractor shall at all times take all reasonable precautions to prevent any unlawful riotous or disorderly conduct by or amongst his employees and for the preservation of peace and protection of persons and property in the neighbourhood of the Works against the same.

## **WORKMANSHIP AND MATERIALS**

### **26.1 Quality of Materials and Workmanship and Tests**

All plant, materials and workmanship shall be of the respective kinds specified in the Contract and in accordance with the Engineer's Instructions and shall be subjected from time to time to such tests as the Engineer may direct at the place of manufacture or fabrication, or on the Site or at such other place or places as may be specified in the Contract, or at all or any of such places. The Contractor shall provide such assistance, instruments, machines, labour and materials as are normally required for examining, measuring and testing any work and the quality, weight or quantity of any material used and shall supply samples of materials before incorporation in the works for testing as may be selected and required by the Engineer.

### **26.2 Cost of Samples and Tests**

All samples shall be supplied by the Contractor at his own cost unless otherwise specified. The cost of making any test shall be borne by the Contractor.

### **26.3 Inspection of Operations**

The Engineer and any person authorised by him shall at all times have access to the Works and to all workshops and places where work is being prepared or from where materials, manufactured articles or machinery are being obtained for the Works and the Contractor shall afford every facility for and every assistance in or in obtaining the right to such access.

### **27.1 Inspection and Testing during Manufacture**

The Contractor shall be responsible for all inspections, examinations and testing as required under this contract. The Engineer shall be entitled during manufacture to inspect, examine and witness test on the Contractor's premises during working hours the materials and workmanship and check the progress of manufacture of all plant to be supplied under the Contract and if part of the said plant is being manufactured on other premises the Contractor shall obtain, for the Engineer, permission to inspect, examine and witness test as if the said plant were being manufactured on the Contractor's premises. Such inspection, examination or witness of test if made shall not relieve the Contractor from any obligation under the Contract.

### **27.2 Date for Inspection and Testing**

The Contractor shall notify well in advance and agree with the Engineer the date and the place at which any plant/equipment including system and subsystem will be tested. The Contractor shall furnish beforehand the Quality Assurance Plan & Inspection and Test Report to the Engineer for approval. The Contractor shall forward to the Engineer duly certified copies of test readings of all tests.

### **27.3 Certificate of Testing**

As and when Plant shall have passed the tests referred to in this Clause the Engineer shall furnish to the Contractor's certificate in writing to that effect. Issuance of such certificate shall not relieve the Contractor from any obligation under the Contract.

27.4      **Rejection**

If as a result of such inspection, examination or test for the Plant (other than a Test on Completion under Clause 33) the Engineer shall decide that such Plant is defective or not in accordance with the Contract he shall notify the Contractor accordingly stating in writing his objection and reasons therefore. The Contractor shall with all speed make good the defect or ensure that the Plant complies with the Contract. Thereafter, if required by the Engineer, the tests shall be repeated under the same terms and conditions save that all reasonable expenses to which the Purchaser may be put by the repetition of the tests shall be deducted from the Contract Sum.

28.0      **Delivery**

Unless the Engineer shall otherwise direct, no plant, equipment, component or material shall be delivered to site until the Engineer shall have issued, in respect of such Plant, a certificate under Clause 27.3 (Certificate of Testing). Likewise Plant, Contractor's Equipment, materials or structures fabricated in workshops shall be delivered to site only upon an authorisation in writing applied for and obtained by the Contractor from the Engineer.

The Contractor shall be responsible for the reception on Site of all Plant, Contractor's Equipment, workshop fabricated structures and materials delivered for the purposes of the Contract. Shipping procedures, packing and delivery notes shall be as per instructions of the Engineer unless otherwise set out in the Special Conditions.

29.1      **Examination of Work before Covering up**

No work shall be covered up or put out of view without the approval of the Engineer or the Engineer's Representative and the Contractor shall afford full opportunity for the Engineer or the Engineer's Representative to examine and measure any work which is about to be covered up or put out of view and to examine foundations before permanent work is placed thereon. The Contractor shall give due notice to the Engineer's Representative whenever any such work or foundations is or are ready or about to be ready for examination and the Engineer's Representative shall, without unreasonable delay, unless he considers it unnecessary and advises the Contractor accordingly, attend for the purpose of examining and measuring such work or of examining such foundations. Such waive shall not release the contractor from any obligations under the contract.

29.2      **Uncovering and Making Openings**

The Contractor shall uncover any part or parts of the works or make openings in or through the same as the Engineer may from time to time direct and shall reinstate and make good such part or parts to the satisfaction of the Engineer.

30.1      **Removal of Improper Work and Materials**

The Engineer shall during the progress of the works have power to order in writing from time to time

- (a)      the removal from the Site, within such time or times as may be specified in the order, of any materials which, in the opinion of the Engineer, are not in accordance with the Contract.
- (b)      the substitution of proper and suitable materials and

- (c) the removal and proper re-execution, notwithstanding any previous test thereof or interim payment therefore, of any work which in respect of materials or workmanship is not, in the opinion of the Engineer, in accordance with the Contract.

The rejected material shall lie at the site at the Contractor's risk till removal by the Contractor.

## **30.2 Default of Contractor in Compliance**

In case of default on the part of the Contractor in carrying out such order, the Purchaser shall be entitled to employ and pay other persons to carry out the same and all expenses consequent thereon or incidental thereto shall be recoverable from the Contractor by the Purchaser or may be deducted by the Purchaser from any moneys due or which may become due to the Contractor.

## **31.0 SUSPENSION OF WORKS**

### **31.1 Suspension of work**

In the event the engineer feels necessary, he may issue a written order to the contractor for suspending the work.

If the work is not suspended for the default of the contractor, he will be entitled to extra cost incurred for giving effect to such suspension order. The engineer shall determine the amount of such extra payment and/or extension of time under clause 35.1 to be granted to the contractor, provided the contractor applies for such extra payment and/or extension of time within 14 days from the order of suspension of the work.

If the work is suspended for the default of the contractor, he will be liable to pay the purchaser all consequential losses and damages suffered by it, owing to such suspension. Amount of losses and damages suffered shall be computed by the engineer and shall have to be intimated to the contractor within 14 days from the order of suspension of the work.

However any action under this clause by the engineer shall not prevent the purchaser from exercising any other remedy available to it under the contract.

### **31.2 Force Majeure**

Force majeure shall mean any unforeseen circumstances at site which is beyond the control of the parties to the contract e.g.; Natural disaster/calamities, war, invasion act of foreign enemies, riot and civil war.

If any party considers that any circumstances of force majeure have occurred which may affect performance of its obligation, it shall notify the other party within 14 working days and the other party may accept the contention of the party involving the force majeure closure or reject the contention in writing giving reasons written 14 days thereof.

Upon the occurrence of any circumstances of force majeure the contractor shall endeavour to continue to perform its obligations under the contract as far as possible. The contractor shall not be absolved from its obligations, which arose prior to or after

the period of the force majeure event. The contractor shall notify the engineer of the steps it proposes to take including any reasonable alternative means for performance, which is free from the force majeure circumstances. However, the contractor shall take steps only at the direction of the engineer.

32.0

#### **FORE CLOSURE OF CONTRACT IN FULL OR IN PART**

If at any time after acceptance of the tender, the Corporation shall decide to fore-close or reduce the scope of the works and hence not require the whole or any part of the work to be carried out, the Engineer-in-charge shall give notice in writing to that effect to the Contractor.

- (a) In the event, any action is taken by Purchaser in terms of clause 32.0 bearing above, the Contractor shall be paid at contract rates full amount for works executed at site as per billing schedule and in addition, a reasonable amount as certified by the Engineer-in-charge for the items hereunder mentioned which could not be utilised on the work to the full extent because of the foreclosure.

Any expenditure incurred on preliminary site work e.g. temporary access roads, temporary labour huts, staff quarters and site office, storage, accommodation and water storage tanks.

- (b)
  - i) The Corporation shall have the option to take over Contractor's Materials or any part thereof either brought to site or of which the Contractor is legally bound to accept delivery from suppliers (for incorporation in or incidental to the work), provided however, the Corporation shall be bound to take over the materials or such portions thereof as the Contractor does not desire to retain. For materials taken over by the Corporation, cost of such materials shall, however, take into account purchase price, cost of transportation and deterioration or damage which may have been caused to materials whilst in the custody of the Contractor.
  - ii) For Contractor's materials not retained by the Corporation, reasonable cost of transportation of such materials from site to Contractor's permanent stores or to his other works, whichever is less. If materials are not transported to either of the said places, no cost of transportation shall be payable.
- (c) If any materials supplied by the Corporation are rendered surplus, the same except normal wastage shall be returned by the Contractor to the corporation at rates not exceeding those at which these were originally issued less allowance for any deterioration or damage which may have been caused whilst the materials were in the custody of the Contractor. In addition, cost of transporting such materials from site to the Corporation stores if so required by the Corporation.
- (d) Reasonable compensation for transfer of Tools & Plants from site to Contractor's permanent stores or to his other works, which ever is less. If T & P are not transported to either of the said places, no cost of transportation shall be payable. The Contractor shall if required by the Engineer-in-charge furnish to him books of account, wage books, time sheets and other relevant documents as may be necessary to enable him to certify the reasonable amount payable under this condition.

However, save as provided hereinabove, the Contractor shall have no further claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the works, but which he did not derive in consequence of the fore closure of the whole or part of the works.

### 33.0 **DEFECTS BEFORE TAKING OVER**

If in respect of any Section or portion of the works not yet taken over, the Engineer shall at any time:

- (a) decide that any work done or plant supplied or materials used by the Contractor or any Sub-Contractor is or are defective or not in accordance with the Contract, or that such Section or Portion of the Works is defective or does not fulfil the requirements of the Contract (all such matters being hereinafter in this Clause Called 'defects'), and
- (b) as soon as reasonably practicable give to the Contractor notice in writing of the said decision specifying particulars of the defects alleged and of where the same are alleged to exist or to have occurred, and
- (c) so far as may be necessary place the Plant at the Contractor's disposal, then the Contractor shall with all speed and at his own expense, make good the defects so specified. In case the Contractor shall fail so to do the Purchaser may, provided he does so without undue delay, take at the cost of the Contractor such steps as may in all the circumstances be reasonable to make good such defects. The Contractor shall be entitled to remove and retain all Plant that the Purchaser may have replaced at the Contractor's cost nothing contained in this Clause shall affect any claim by the Purchaser under Clause 35 (Delay in Completion).

### 34.0 **TESTS ON COMPLETION**

#### 34.1 **Notice of Tests**

The Contractor shall submit to and agree with the Engineer initially the complete schedule of Tests on Completion. The Contractor shall give to the Engineer 21 days' notice in writing of the date after which he will be ready to make the Tests on completion as per above schedule. Unless otherwise agreed the tests shall commence within 10 days after the said date on such day or days as the Engineer shall notify the Contractor in writing.

#### 34.2 **Delayed Tests**

If in the opinion of the Engineer the tests are being unduly delayed he may, by notice in writing, call upon the Contractor to commence such tests within 21 days from the receipt of the said notice and the Contractor shall commence the said tests on such days within the said 21 days as the Contractor may fix and of which he shall give notice to the Engineer. If the Contractor fails to make such tests within the time aforesaid the Engineer may himself proceed to make the tests. All tests so made by the Engineer shall be at the risk and expense of the Contractor.

#### 34.3 **Facilities for Tests on Completion**

The Purchaser except where otherwise specified shall provide free of charge subject to the provisions of Sub-Clause 4 of this Clause such labour, materials, electricity, fuel and water as may be requisite and as may be reasonably demanded to carry out such tests efficiently. Lubricants and other consumables, special apparatus and precision instruments as required to carry out such tests efficiently shall be provided by the Contractor free of charge.

34.4 **Repeat Tests**

If any portion of the works fails to pass the tests, tests of the said Portion shall, if required by the Engineer or by the Contractor, be repeated within a reasonable time upon the same terms and conditions, save that all reasonable expenses to which the Purchaser may be put by the repetition of the tests shall be deducted from the Contract Sum.

34.5 **Consequences of failure to pass Tests on Completion**

If the works or any Section thereof shall fail to pass the tests on the repetition thereof under Sub-Clause 4 of this Clause the Engineer shall be entitled :

- (a) to order a further repetition of the tests under the conditions of Sub-Clause, or
- (b) to reject the works or Section thereof in accordance with Clause 33 (Defects before taking over) if the results of the tests show that the works or the Section fail to meet the performance guarantees or the agreed tolerance specified in the Contract, or if there are no such guarantees or tolerances, the results show that the works or the Section are not in accordance with the Contract or
- (c) to issue a Taking Over Certificate, if the Purchaser so wishes, subject to such reduction of the Contract Sum as may be provided in the Contract or failing such provision as may be agreed by the Purchaser and the Contractor.

35.0 **TIME FOR COMPLETION**

35.1 **Extension of Time for Completion**

If by reason of;

- (a) Force Majeure, or
- (b) Delay by any other contractor engaged by the purchaser; or
- (c) Suspension of the works under clause 31.1 or
- (d) Any other cause which in the opinion of the engineer is beyond the reasonable control of the contractor;

The contractor shall within 14 days from the occurrence of the above event causing delay, apply to the engineer in writing for extension of time. The engineer if convinced may on receipt of such notice and supporting details; grant extension of time to the contractor in writing for the completion of the works for a period he feels is reasonable.

35.2 **Delay in Completion**



If the contractor fails to complete the works or sections thereof in accordance with the contract within the time for completion the purchaser shall be entitled on giving to the contractor notice in writing to a reduction of the contract sum as liquidated damages of an amount calculated at ½ % of the contract sum for each week between the time for completion and the actual date of completion but the reduction shall not in any case exceed 5% of the contract sum. Such reduction shall be to the exclusion of any other remedy of the purchaser in respect of the contractor's failure to complete the work, and shall not release the contractor for any of its other obligations under the contract.

**36.0 TAKING OVER**

**36.1 Taking-over Certificate**

As soon as the works have been completed in accordance with the Contract (except in minor respects that do not affect their use for the purpose for which they are intended and save for the obligations of the Contractor under Clause 37 (Defects) and have passed the Tests on Completion, the Engineer shall issue a certificate to the Contractor (herein called a 'Taking-Over Certificate's) in which he shall certify the date on which the Works have been so completed and have passed the said tests and the Purchaser shall be demand to have taken over the works on the date so certified whereupon title to and risk of loss of damage to the works or any Section or Portion thereof shall, subject to the provisions of Clause 18 (Liability for Accidents and Damage) and Clause 37 (Defects), pass to the Purchaser but the issue of a Taking-over Certificate shall not operate as an admission that the Works have been completed in every respect. In the event of the works being divided by the Contract into two or more Sections the Purchaser shall be entitled to take over any Section or Sections before the other or others, and thereupon the Engineer shall issue a Taking-Over Certificate in respect thereof. Save as provided in Sub-Clause 3 of this Clause the Purchaser shall not use the works or any Section or Portion thereof until a Taking-over Certificate has been issued in respect thereof.

**36.2 Taking-over by Portions**

If by agreement between the Purchaser and the Contractor any Portion of the works (other than & section or Sections) shall be taken over before the remainder of the works the Engineer shall issue a Taking-over Certificate in respect of that Portion But this will not relieve the responsibility of the Contractor to establish the Performance Guarantee within the scope of work.

**36.3 User before Taking-over**

If by reasons of any default on the part of the Contractor, a Taking-Over Certificate has not been issued in respect of every portion of the Works within one month after the Time for Completion the Purchaser shall be at liberty to use the Works or any Section or Portion thereof in respect of which a Taking-Over Certificate has not been issued if and so long as the works or the Portion so used as aforesaid shall be reasonably capable of being used provided that the Contractor shall be afforded the earliest possible opportunity of taking such steps as may be necessary to permit the issue of the Taking-over Certificate.

**36.4 Interference with Tests**

If, by reason of any act or omission of the Purchaser or the Engineer, or of some other contractor employed by the Purchaser, the Contractor shall be prevented from carrying out the Tests on Completion then, unless in the meantime the works shall have been

proved not to be substantially in accordance with the Contract, the Purchaser may take over the works and the Engineer shall issue an Interim Taking-over Certificate accordingly; nevertheless the Contractor shall make the said tests during the Defects Liability Period as and when required by the Engineer by 14 days' notice in writing and Clauses 34.2, 34.3, 34.4 and 34.5 (Tests on Completion) shall apply.

**37.0 DEFECTS AFTER TAKING OVER**

**37.1 Defects Liability Period**

In these Conditions the expression 'Defects Liability Period' shall mean the period stated in special Conditions or, if no period is stated, twelve (12) months calculated from the date certified in the Taking-Over Certificate issued in accordance with Clause 36 or, in the event of more than one certificate having been issued by the Engineer under the said Clause, from the respective dates so certified and in relation to the Defects Liability Period. The expression 'The Works' shall be construed accordingly.

**37.2 Making Good Defects**

The Contractor shall be responsible for making good with all possible speed at his expense any defect in or damage to any portion of the Works which may appear or occur during the Defects Liability Period and which arises either :

- (a) from any defective materials, workmanship or design (other than a design made, furnished or specified by the Purchaser and for which the Contractor has disclaimed responsibility giving appropriate reasons in writing within a reasonable time after receipt of the Purchasers instructions) or
- (b) from any act or omission of the Contractor done or omitted during the said period.

**37.3 Notice of Defects**

If any such defect shall appear or damage occur the Purchaser shall forthwith inform the Contractor thereof stating in writing the nature of the defect or damage. The provisions of Clause 37 shall apply to all replacements or renewals carried out by the Contractor to remedy defects and damage as if the said replacements and renewals had been taken over on the date they were completed to the satisfaction of the Engineer.

**37.4 Extension of Defects Liability Period**

The Defects Liability Period shall be extended by a period equal to the period during which the Works (or that Portion thereof in which the defect or damage to which the Clause applies has appeared or occurred) cannot be used by reason of that defect or damage.

**37.5 Delay in Remedying Defects**

If any such defect or damage be not remedied within a reasonable time the Purchaser may proceed to do the work at the Contractor's risk and expense.

**37.6 Removal of Defective Work**

The Contractor may with the consent of the Engineer remove from the Site any Portion of the Works which is defective or damaged if the nature of the defect or damage is such that repairs cannot be expeditiously carried out on the Site.

**37.7 Further Tests on Completion**

If the replacements or renewals are of such a character as may affect the efficiency of the works or any portion thereof, the Purchaser may within one month of such replacement or renewal give to the Contractor notice in writing requiring that Tests on completion be made, in which case such tests shall be carried out as provided in Clause 34 (Tests on Completion).

**37.8 Conditions Applicable**

These General Conditions shall apply to all inspections, adjustments, replacements and renewable and to all tests occasioned thereby carried out by the Contractor pursuant to this Clause.

**37.9 Right of Access**

Until the final certificate of payment shall have been issued, the Contractor shall have, with the permission of the Purchaser, the right of access, during normal working hours, at his own risk and expense, by himself or his duly authorised representatives, whose names shall have previously been communicated in writing to the Engineer, to all parts of the works for the purpose of inspecting the working thereof and to records of the working and performance thereof for the purpose of inspecting the same and taking notes therefrom. Subject to the Engineer's approval, the Contractor may at his own risk and expense make any test which he considers desirable.

**37.10 Contractor to Search**

The Contractor shall, if required by the Engineer in writing, search for the cause of any defect, imperfection or fault under the directions of the Engineer. Unless such defect, imperfection or fault shall be one for which the Contractor is liable under the Contract the cost of the work carried out by the Contractor in searching as aforesaid shall be borne by the Purchaser. But if such defect, imperfection or fault shall be one for which the Contractor is liable as aforesaid, the cost of the work carried out in searching as aforesaid shall be borne by the Contractor.

**37.11 Gross Misconduct**

'Gross Misconduct' means an act or omission on the part of the Contractor implying either a failure to pay due regard to serious consequences which a conscientious and reasonable contractor would normally foresee as likely to ensue, or a deliberate disregard of any consequences of such act or omission.

**38.0 VARIATIONS**

**38.1 Engineer's Power to Vary**

The Contractor shall not alter any of the works except as directed in writing by the Engineer. The Engineer shall have full power, subject to the provision hereinafter contained, from time to time during the execution of the Contract by notice in writing to direct the Contractor to alter, amend, omit, add to or otherwise vary any of the

Works. The Contractor shall carry out such variations and be bound by the same conditions, so far as applicable, as though the said variations were stated in the Specification. Provided that no such variation shall, except with the consent in writing of the Contractor be such as will, with any variations already directed to be made, involve a net addition to or deduction from the Contract Sum of more than fifteen (15) percent thereof. In any case in which the Contractor has received any direction from the Engineer which either than or later will, in the opinion of the Contractor, involve an addition to or deduction from the Contract Sum the Contractor shall as soon as reasonably possible and where practicable, before proceeding therewith, advise the Engineer in writing to that effect. The amount to be added to or deducted from the Contract Sum shall be ascertained and determined in accordance with the rates specified in the schedules of prices, so far as the same may be applicable, and where rates are not contained in the said schedules or are not applicable such amount shall be such sum as is worked out on the basis of prevailing market rates and contractors' overhead.

**38.2 Orders for Variations to be in Writing**

No such variations shall be made by the Contractor without an order in writing of the Engineer. Provided that no order in writing shall be required for increase or decrease in the quantity of any work where such increase or decrease is not the result of an order given under this Clause, but is the result of the quantities exceeding or being less than those stated in the bill of quantities. Provided also that if for any reason the Engineer shall consider it desirable to give any such order verbally, the Contractor shall comply with such order and any confirmation in writing of such verbal order given by the Engineer, whether before or after the carrying out of the order, shall be deemed, to be an order in writing within the meaning of this Clause. Provided further that if the Contractor shall within 7 days confirm in writing to the Engineer and such confirmation shall not be contradicted in writing within 21 days by the Engineer, it shall be deemed to be an order in writing by the Engineer.

**38.3 Claims for Additional Payment for Variations**

The Contractor shall send to the Engineer, once in every month, an account giving particulars (as full and detailed as possible) of all claims for any additional payment to which the Contractor may consider himself entitled and of all extra or additional work ordered by the Engineer which he has executed during the preceding month. No claim for payment (interim or final) will be considered unless included in such account.

**38.4 Variations upto a maximum of (10) Percent**

A maximum variation of 10 percent of total work order value may be allowed after taking approval from the competent authority, if required for completion of the work. The engineer in charge may allow this amount of variation only after taking approval from competent authority. The contractor must agree to do this amount of variation work if required for completion of the work with same rate as stipulated in schedule of rates of work .

**39.0 VESTING OF PLANT AND CONTRACTOR'S EQUIPMENT**

**39.1 Ownership of Plant**

Plant, equipment, component and material supplied or to be supplied pursuant to the Contract shall become the property of the Purchaser at whichever is the earlier of the following times :

- (a) when Plant is appropriated to the Contract ;
- (b) when by virtue of Clause 31 (Suspension of works) the Contractor become entitled to require that the Contract Price of Plant be included in an interim certificate; or
- (c) when plant is delivered pursuant to the Contract.

#### **39.2 Marking of Plant**

Where the property in Plant passes to the Purchaser prior to the delivery of such Plant the Contractor shall so far as is practicable and to the reasonable satisfaction of the Engineer set the Plant aside and mark the Plant as the property of the Purchaser. In the event of the Contractor failing so to set aside and mark the Plant as aforesaid the Engineer shall be entitled to withhold any interim certificate to which the Contractor may otherwise be entitled.

Such Plant shall be in the care and possession of the Contractor solely for the purposes of the Contract and shall not be within the ownership or disposition of the Contractor and any interim certificate issued by the Engineer shall be without prejudice to the exercise of any power of the Engineer contained in the Contract to reject Plant which is not in accordance with the Contract and upon any such rejection the property in the rejected plant shall immediately revert to the Contractor.

#### **40.1 Removal of Contractor's Equipment**

All Contractor's Equipment Constructional Plant, Temporary works and materials provided by the Contractor shall, when brought on to the Site, be deemed to be exclusively intended for the execution of the Works and the Contractor shall not remove the same or any part thereof, except for the purpose of moving it from one part of the Site to another, without the consent in writing of the Engineer, which shall not be unreasonably withheld.

#### **40.2 Loss or damage to Contractor's Equipment**

The Contractor shall be liable for loss of or damage to any of the Contractor's equipment which may happen otherwise than through the default of the Purchaser.

#### **40.3 Other Conditions**

Any other conditions affecting Contractor's equipment shall be set out in Special Conditions.

#### **41.0 CERTIFICATE AND PAYMENT**

##### **41.1 Certificate for Payment**

The Contractor may at the times and in the manner following apply for interim and final certificates for claiming payment as referred to in Clause 42 (Terms of Payment) for Plant delivered to the site and for work executed on the site.

A detail billing schedule indicating break up of works , showing separately, where applicable, delivery, construction, erection and commissioning and value thereof along with sequence of execution shall be submitted by the Contractor immediately after award of the Contract. The Contractor shall get the billing schedule approved by the Purchaser well in advance of submitting any application for interim certificates, otherwise any interim certificate may be withheld.

#### **41.2 Application for Interim Certificates**

Applications for interim certificates may be made to the Engineer in respect ;of each delivered Plant and from time to time as work on the Site Progresses.

Each such application shall state the amount claims and shall set forth in detail, in the order of the schedule of prices, particulars of the work executed on the site and of the Plant delivered to the Site Pursuant to the Contract to a date named in the application and since the period covered by the last preceding certificate, if any.

#### **41.3 Issue of Interim Certificates**

The Engineer shall issue to the Contractor an interim certificate within one month after receiving an application therefore in accordance with Sub-Clause 2 of this Clause which the Contractor was entitled to make.

#### **41.4 Value of Interim Certificates**

Every interim certificate shall certify the total value of plant delivered to the Site or as the case may be of the work duly executed on the site and of the Plant delivered to the site for use in the works pursuant to the Contract up to the date named in the application for the certificate, less the total of any sums previously certified in interim certificate, provided that no sum shall be included in any interim certificate in respect of any works that, according to the decision of the Engineer, does not comply with the Contract, or has been brought and is at the date of the certificate prematurely upon the Site.

#### **41.5 Withholding Interim Certificates**

An interim certificate may not be withheld on account of defects of a minor character which are not such as to affect the use of the works or of any Portion thereof.

#### **41.6 Advance and Progress Payments**

If the Contract provides for progress payments or other payments in advance, before or during manufacture or before delivery details shall be given in Special Conditions and any amounts becoming due to the Contractor in respect thereof shall be included in interim certificates. The making of payments pursuant to this Sub-Clause shall be subject to the Contractor procuring financial assurance by means of the bond or guarantee of an Insurance company or bank or other securities approved by the Purchaser the details and terms of which shall be stated in Special Conditions.

#### **41.7 Effect of Interim Certificates**

No interim certificate shall be relied upon as conclusive evidence of any matter stated therein nor affect or prejudice any right of the Purchaser or the Contractor against the other.

41.8 **Final Certificate of Payment**

Application for the final certificate may be made to the Engineer after the Contractor has ceased to be under any obligation under Clause 37 (Defects) provided that, if a Taking-Over Certificate has been issued in respect of any Section or Portion of the works, the Contractor may apply for a separate final certificate at any time after the said obligation has ceased in relation to such section or portion. There the Contractor has carried out replacements or renewals to the works in compliance with Clause 37 (Defects) the Contractor's obligations shall continue as provided in Sub-Clause 37.3 but the right of the Contractor to apply for a final certificate other than for the replacements or renewals shall not be affected by that fact and after the Contractor has ceased to be under any obligation under Clause 37 (Defects) in respect of the replacements or renewals he may apply for a final certificate in respect thereof.

41.9 **Issue of Final Certificate**

The Engineer shall issue to the Contractor a final certificate within two months after receiving an application thereof which the Contractor was entitled to make.

41.10 **Value of Final Certificate**

A final certificate shall certify the total of all amounts comprised in interim certificates previously issued in respect of the works or the Section or Portion thereof to which the final certificate relates subject to such additions thereto or deductions there from as may be authorised under Sub-Clause 12 of this Clause.

41.11 **Final Certificate Conclusive**

A final certificate shall, save in the case of fraud or dishonesty relating to or affecting any matter dealt within the certificate be conclusive evidence as to the sufficiency of the works and of the value thereof unless any proceedings arising out of the Contract whether under Clause (Arbitration) or otherwise shall have been commenced by either party before the final certificate has been issued or within three months thereafter.

41.12 **Adjustment to Certificates**

If any sum shall become payable to the Contractor under the Contract otherwise than for work executed or Plant delivered the amount thereof shall be included in the next certificate (interim or final) issued by the Engineer and if any sum shall become payable under the Contract by the Contractor to the Purchaser, prior to the issue of the final certificate, whether by deduction from the Contract Sum or otherwise, the amount thereof shall be deducted in the next certificate.

41.13 **Corrections to Certificates**

The Engineer may in any certificate give effect to any correction or modification that should properly be made in respect of any previous certificate.

**PAYMENT CONDITIONS**

42.0 **Terms of Payment**

1. 90% of the Contract price as payment on running account bills commensurate to the progress of the job and after recovery of advance (if any) together with interest, at the rate of 10% of each the progressive bill till the whole recovery of

advance with interest is recovered. The rate of interest will be 12%. Any pending amount arising out of facilities/materials etc. provided on chargeable basis will also be deducted from these bills.

2. i) 5% of the contract price shall be payable after no-load test and successful commissioning. The successful commissioning mean completion of Reliability Run as per NIT.  
ii) If commissioning is delayed by more than 3 months after no-load test for any fault of the Purchaser, then the above will be released.
3. i) Remaining 5% of the contract price shall be payable 1 month of taking over of the plant. The 10% Performance B.G. will get automatically converted to B.G. for Defect Liability Period, as per relevant NIT stipulation.  
ii) If Performance Guarantee test can not be performed for more than 12 months from no-load test whichever is earlier, for any fault of the Purchaser, then the Plant shall be deemed to have been Taken Over and the remaining 5% of the contract price will be payable against a B.G. of equal amount valid till end of the Defect Liability Period i.e. 12 months from the date of aforesaid Taking Over. This B.G. will be in addition to the 10% Performance Bond already obtained as per NIT.
4. Taxes & duties shall be deducted at source as per the statutory requirement.

#### 43.0 **REMEDIES AND POWER**

##### 43.1 **Default of Contractor**

If the Contractor shall become bankrupt, or have a receiving order made against him, or shall present his petition in bankruptcy, or shall make an arrangement with or assignment in favour of his creditors, or shall agree to carry out the Contract under a committee of inspection of his creditors or, being a corporation, shall go into liquidation (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), or if the Contractor shall assign the Contract, without the consent in writing of the Purchaser first obtained, or shall have an execution levied on his goods, or if the Engineer shall certify in writing that in his opinion the Contractor:

- (a) has abandoned the Contract, or
- (b) without reasonable excuse has failed to commence the works or has suspended the progress of the works for twenty-eight days after receiving from the Engineer written notice to proceed, or
- (c) has failed to remove materials from the Site or to pull down and replace work for twenty eight (28) days after receiving from the Engineer written notice that the said materials or work had been condemned and rejected by the Engineer under these conditions, or
- (d) despite previous warnings by the Engineer, in writing is not executing the works in accordance with the Contract, or is persistently or flagrantly neglecting to carry out his obligations under the Contract, or
- (e) has, to the detriment of good workmanship, or in defiance of the Engineer's instructions to the contrary, sub-let any part of the Contract.



Then the Purchaser may after giving fourteen days' notice in writing to the Contractor, enter upon the Site and the Works and expel the Contractor there from without thereby voiding the Contract, or releasing the Contractor from any of his obligations or liabilities under the Contract, or affecting the rights and powers conferred on the Purchaser by the Contract and may himself complete the works or may employ any other contractor to complete the works. The Purchaser or such other Contractor may use without being responsible Contractor for fair wear and tear for such completion so much of the contractor's equipment, Constructional Plant, Temporary Works and materials, which have been deemed to be reserved exclusively for the execution of the Works, under the provisions of the Contract, as he or they may think proper and the Purchaser may at any time, sell any of the said Contractor's Equipment, Constructional Plant, Temporary Works and unused materials and apply the proceeds of sale in or towards the satisfaction of any sums due or which may become due to him from the Contractor under the Contract.

#### 43.2 **Valuation at Date of Forfeiture**

The Engineer shall, as soon as may be practicable after any such entry and expulsion by the Purchaser, fix and determine experts, or by or after reference to the parties, or after such investigation or inquiries as he may think fit to make or institute and shall certify what amount, if any, had at the time of such entry and expulsion been reasonably earned by or would reasonably accrue to the Contractor in respect of work then actually done by him under the Contract and the value of any of the said unused or partially used materials, any Constructional Plant and any Temporary Works.

#### 43.3 **Payment after Forfeiture**

If the Purchaser shall enter and expel the Contractor under this Clause, he shall not be liable, to pay to the Contractor, any money on account of the Contract until the expiration of the Defects liability period and thereafter until the costs of execution and maintenance, damages for delay in completion, if any and all other expenses incurred by the Purchaser have been ascertained and the amount thereof certified by the Engineer. The Contractor shall then be entitled to receive only such sum or sums, if any, as the Engineer may certify would have been payable to him upon due completion by him after deducting the said amount. If such amount shall exceed the sum which would have been payable to the Contractor on due completion by him, then the Contractor shall, upon demand, pay to the Purchaser the amount of such excess and it shall be deemed a debt due by the Contractor to the Purchaser and shall be recoverable accordingly.

#### 44.0 **URGENT REPAIRS**

If, by reason of any accidents or failure, or other event occurring to in or in connection with the works, or any part thereof, either during the execution of the works, or during the Defects liability period, any remedial or other work or repair shall, in the opinion of the Engineer or the Engineer's Representative, be urgently necessary for the safety of the works and the Contractor is unable or unwilling at once to do such work or repair, the Purchaser may employ and pay other persons to carry out such work or repair as the Engineer or the Engineer's Representative may consider necessary. If the work or repair so done by the Purchaser is work which in the opinion of the Engineer, the Contractor was liable to do at his own expense under the Contract, all expenses properly incurred by the Purchaser in so doing shall be recoverable from the Contractor by the Purchaser, or may be deducted by the Purchaser from any moneys due or which may become due to the Contractor. Provided always that the Engineer

or the Engineer's Representative, as the case may be shall as soon after the occurrence of any such emergency as may be reasonably practicable notify the Contractor thereof in writing.

#### **45.0 TERMINATION OF CONTRACT**

##### **45.1 Due to Prolonged Delay**

If even after of the maximum reduction of 5% under clause 35(2), i.e. after expiry of ten weeks, from the scheduled date of completion, the work still remains incomplete, the purchaser may by notice in writing to the contractor, terminate the contract and may get the contract executed itself or by any other party for which the contractor shall be liable to pay the purchaser for all extra cost incurred and consequential losses suffered by purchaser by reason of the failure of the contractor to complete the work.

##### **45.2 For Corrupt and Fraudulent Practice**

If the contractor; fraudulently, offers or give or agree to give to any person in corporation's service or to any other person on his behalf any payment, compensation, consideration, gift or any kind of inducement or reward for doing or forbearing to or for having done or forborne to do any act in relation to the obtaining or execution of this contract for the Corporation, the purchaser by written notice may terminate the contract.

##### **45.3 For attachment of plants, machineries & equipments at site**

The purchaser may terminate the contract in writing if the contractor, suffers any order attachment passed by any court in respect of the plants, equipments, machineries and tools etc. engaged in the site of the purchaser by the contractor and such attachment order continues for a period of more than 21 days.

##### **45.3.1 For Non Performance of terms and conditions of the contract,**

If the contractor fails to perform its duties and obligation as laid down in the contract or despite previous warnings by the Engineer, in writing is not executing the works in accordance with the Contract, or is persistently or flagrantly neglecting to carry out his obligations under the Contract, the Engineer shall give notice in writing to the contractor and direct the contractor to rectify its defect or latches within 30 days from the date of the notice. If even after the expiry of 30 days the contractor fails to rectify its defects/latches the purchaser may terminate the contract in writing.

In the event of termination of the contract as aforesaid in terms of clauses 45(2),(3) and/ or (4) above, the contractor shall be liable to compensate the purchaser for all consequential losses and damages suffered by it.

#### **46.0 DISPUTE AND ARBITRATION**

##### **46.1 Dispute**

If at any time any questions, dispute or difference (hereinafter referred to as a "Dispute") shall arise between the Purchaser and the Contractor, either party shall, as soon as reasonably practicable, give to the other notice in writing of the existence of such Dispute specifying its nature and the point of issue. The parties shall attempt, within a period of sixty (60) days after receipt by one party of a notice from the other

party of the existence of the Dispute, to settle such Dispute amicably in the first instance by mutual discussions between the parties.

**46.2 Arbitration**

Notwithstanding anything contained in this Contract, all questions, disputes or differences whatsoever which is not amicably settled as per clause no 46.1 above, between the parties to the Contract, arising out of or relating to the construction, meaning and operation or interpretation of provision of the Contract or matters related thereto whether during the currency of the Contract or its failure or after the completion of the Contract, shall be referred to the adjudication of Sole arbitrator to be nominated and appointed by the Chairman and Managing Director of the Purchaser. It will be no objection to any such appointment even if the Arbitrator so appointed is an employee of the Purchaser.

The award of the Sole Arbitrator shall be final and binding on the parties and the provisions of The Arbitration and Conciliation Act, 1996 and Rules made there under shall be applicable to the arbitration proceedings under this clause. It is a term of the contract that the party invoking arbitration shall specify the disputes to be referred to arbitration under this clause with details in respect of each of such disputes.

**46.3 Work to continue**

Work under the contract shall be continued by the Contractor during the arbitration proceedings, unless otherwise directed in writing by the Purchaser or the Engineer or unless the matter is such that the works cannot possibly be continued until the decision of the arbitrator is obtained and except as those which are otherwise expressly provided in the contract, no payment due or payable by the purchaser shall be withheld on account of such arbitration proceedings unless it is the subject matter or one of the subject matters thereof.

**47.0 NOTICES**

**47.1 Notices to Contractor**

All certificates, notices or written orders to be given to the contractor by the Purchaser or the Engineer under the terms of the Contract shall be served by sending the same by registered post or fax to or leaving the same with acknowledgement thereof at the Contractor's principal place of business or to such other address as the Contractor shall nominate for that purpose.

**47.2 Notices to Purchaser and Engineer**

Any notice to be given to the Purchaser or to the Engineer under the terms of the Contract shall be served by sending the same by registered post or fax to or leaving the same with acknowledgement thereof at the respective addresses to be nominated for that purpose.

**47.3 Change of Address**

Either party to the Contract or the Engineer may change its nominated address by prior written notice to the others.

**48.0 MISCELLANEOUS**

48.1 **Endorsement of Terms**

The failure of either party to endorse at any time of the provision of the contract or any rights in respect there to or to exercise an option herein provided shall in no way be construed to be waiver of such provisions, rights or option or in any way to affect the validity of this Contract. The exercise by either party of any of its rights herein shall not preclude or prejudice either party from exercising the same or any other right it may have.

## **SCHEDULE - C**

Sl. No.	Category of Labour	Wages per day	Remarks
01.	Un-skilled Labour	Minimum wages to be fixed by Asstt. Labour Commissioner ( C ) Chaibasa from time to time	
02.	Skilled Labour	Minimum wages to be fixed by Asstt. Labour Commissioner ( C ) Chaibasa from time to time	

## **SCHEDULE - F**

### **REFERENCE TO GENERAL CONDITIONS OF THE CONTRACT**

Clause No.		
3 (b)	Accepting Authority	Chairman & Managing Director, UCIL
3 (i)	Market rate percentage addition to overheads and profit	Ten percent
9.	Security Deposit	Ten percent of the contract sum
12.	Date of commencement	As stipulated in L.O.I./work order.
12.	Completion date	06 (six) months from the date of commencement
32.1	Agreed liquidated damage	Up to maximum of 5% of the contract as per clause 35.00.0 Sec. VI.
33.	Defect Liability Period	12 (twelve) months from the date of handing over of the site by the contractor after his rectifying all defects pointed out during joint inspection on virtual completion of the work.
48.	On Account Payment	As indicated in.29.00.0 Sec. VI
9(d)	Refund of Security Deposit	50% of total security deposit after payment of final bill.
34.	Insurance	As directed.
52.1	Authority for appointing arbitrator.	Chairman & Managing Director, UCIL

## **SECTION - VI**

### **SPECIAL CONDITIONS OF CONTRACT**

## **SECTION - VI**

### **SPECIAL CONDITIONS**

#### 1.00.0 General

The special conditions of contract form a part of tender specifications and shall be read in conjunction with General Conditions of contract.

#### 2.00.0 Intent of Specification

The intent of specification is specified in section - VII shall be deemed as part of special conditions of contract.

#### 3.00.0 Scope of work and services

The scope of work and services shall be as specified in Section - VII of this tender document and shall be deemed as part of special conditions of contract.

#### 3.01.0 Extra item of work for completion of offer/work:

An extra item of work or services which are not specially mentioned or have not been foreseen at this stage but are required to complete the work in every respect in accordance with the specification, required for safe operation and guaranteed performance, shall be part the scope of work. The extra items of the work shall be paid for at the rates to be mutually agreed. The time period of contract shall also be extended suitably, if required. The decision of the purchaser shall be final in any such matter regarding extra items.

#### 3.02.0 Extent of contract:

The work to be performed under this contract consists in providing by the contractor within his quoted rates all labour, materials, supervision, constructional plants, equipments, supplies, transportation to or from the site, fuel, electricity, compressed air, water and all incidental items and temporary works not shown or specified in the tender document but reasonably implied or necessary for proper completion, maintenance and handing over of the works, except items specified to be furnished by the owners or others, all in accordance with the stipulation laid in the contract document and additional drawings as may be provided by Engineer during the course of the work.

#### 4.00.0 Plant, equipment, manpower and space requirement:

#### 4.01.0 Plant and equipment to be deployed by contractor:



The optimum plant and equipment requirement shall be indicated by the contractor in proposal exhibit sheets. The plant and equipment shown in the subsequent period shall be additional over previous period. The contractor shall deploy such type of plant equipment those are safe in operation, productive and efficient. The contractor shall supply detailed specification of his plant and equipment with their date of purchase (enclosing copies of invoice) within one month of date of work order.

4.02.0 Manpower to be deployed by the contractor

The optimum manpower requirement per day shall be shown in proposal exhibit sheets. The number of personnel per day against each category/designation shall be shown over the required periods. He shall also supply the list of personnel to be employed along with their qualification and experience prior to commencement of work.

4.03.0 Space allowed to the contractor

The optimum space shall be allowed to the contractor for construction of industrial sheds and residential accommodation considering his requirement as per the proposal exhibit sheets. The allocation of space particularly for residential accommodation shall entirely be on discretion of the company.

The site and adjoining access shall be handed over on time free from all obstructions. These will remain in possession of the contractor and under his control until the expiry of period of work. Any work carried by the company or by other agency may be carried out without hinder the progress and the work of the contractor.

The construction shall be allowed to lay tracks, construct road ways, build offices etc. in the space which will be allocated.

5.00.00 System, Period and Measurement of work :

5.01.0 Metric system of measurement shall be used in all drawings, specifications and also for the preparation of bills.

5.02.00 Period of measurement :

On the 1<sup>st</sup> working day of every calendar month for the work completed during the previous month shall be considered as per of measurement.

5.03.0 Method of measurement :

Whenever the quantities of work are required to be determined according to advance and lead before covering up, measurements shall be taken jointly with authorised representative of the company who shall be present at all times of working hours and entries shall be made on measurement sheets. The contractor shall notify the engineers well in advance for measurements.

5.04.0 Quantities are estimated only :

The quantities set out in the schedule of items are estimated quantities of the works but they are not to be taken as actual and correct quantities of the works to be executed by the contractor in fulfilment of his obligation under the contract.

5.05.0 Contractor to assist in measurements :

The contractor shall except as otherwise stated ascertain and determine by measurement the value of work done in accordance with the contract. He shall when he requires any part or part of works to be measured give notice to the contractor who shall forthwith attend or send a qualified agent to assist the Engineer or Engineer's representative in making such agent then the measurement made by engineer or approved by him shall be taken to the correct measurement of the works.

Except where any general or detailed description of the work in the schedule of items expressly shows to the contrary all measurements shall be made according to the procedure set forth by the Engineer.

6.00.0 Presence of Company's Engineer :

The company will depute its Engineer or authorised representative at all times on the working days to take measurements, to record delays, issue all instructions and approve the work being done by the contractor on behalf of company and provides materials and services. However, no work shall be held up due to the absence of such engineer or representative. If the contractor desires the presence of his engineer or authorised representative on holidays and on weekly days of rest, he shall give notice at least a week before, stating the specific purpose for which the engineer or his authorised representative is required to be present at site.

7.00.0 Contract documents :

7.01.00 Supply and custody of drawings and specifications :

The drawings and specifications shall remain in sole custody of Engineer but two copies there of shall be furnished to the contractor free of cost. The contractor shall provide and make his own expense any further copies required by him. At the completion of the contract, the contractor shall return to the Engineer all drawings and specification provided under this contract.

7.02.0 Requisition for drawings and or specifications :

The contractor shall give adequate notice in writing for any further drawings for specification that may be require for the execution of work under this contract.

- 7.03.0 Drawings to be made available at site :
- One copy of the drawing furnished to be contractor as aforesaid shall be kept by the contractor at the site and the same shall at all reasonable time be available for inspection and use by the Engineer and Engineer's representative and by any other person authorised by Engineer in writing.
- 7.04.0 Additional Drawings :
- The Engineer shall have full power and authority to supply to the contractor from time to time during the progress of work such further drawings and instructions as shall be necessary for the purpose of proper and adequate execution and maintenance of work and the contractor shall carryout and be bound by the same.
- 7.05.0 Revisions of drawings :
- The revision of drawings shall be made as and when necessary during the progress of works subject to approval of Engineer-in-charge.
- 8.00.0 Acceptance test :
- Acceptance test during and after completion of work shall be carried out to satisfy the workmanship and guaranteed performance by way of physical inspection and checking of work as per the technical specifications.
- 9.00.01 Compliance with statues and approval from DGMS :
- 9.01.0 Compliance with statues :
- All work have to be done by the contractor as per the provision of Mines Act 1952, Metalliferous Mine Regulation 1961, Mine Rule 1955, Indian Electricity Act and rules, Minimum wages act and rules, contract labour (regulation and abolition) act 1970 with contract rule 1971, Indian Explosive act & Rules, EPF and MP act 1952 and all other laws applicable to metal mines in regards to the works awarded. The contractor shall comply with all amendments to the above acts.
- 9.02.0 Approval from DGMS for plant and equipment :
- The tenderer shall be responsible for getting approval of installation of all the equipments in Main Receiving Station installed by them under this contract from statutory authorities i.e. DGMS in the case. UCIL shall make formal application with the DGMS it shall be the tenderer's responsibility to obtain approval after all compliance.

- 10.00.0      Taxes, Duties and etc. :
- The contractor shall submit his price proposal in the proposal exhibit sheets including all prevailing taxes, freight, insurance, duties and royalties if any etc. The quoted price shall be inclusive of Service Tax.
- 11.00.0      Foreign technician/collaboration :
- If the contractor desires to employ foreign technician/collaborator, he shall arrange the same by himself at their own cost. The financial liabilities including foreign exchange permit etc. shall be borne by the contractor himself without any obligation to the company.
- N.B. :      Financial liabilities means the expenses of getting foreign exchange permit, if any.
- 12.00.0      Alteration, Addition and Omissions :
- The contractor shall send to the engineer once in every month an account giving full and detailed particulars of the claims for any additional expense to which the contractor may consider himself entitled and of all extra or additional work ordered by the Engineer which he has executed during the preceding month and no claim for payment for any such work will be considered which has not been included in such particulars. Provided always the Engineer shall be entitled to authorise payment to be made for any such work notwithstanding the contractor's failure to comply with this condition if the contractor has at the earliest practicable opportunity notified the Engineer in writing that he intends to make a claim for such work.
- 13.00.0      Services and facilities :
- 13.01.0      Access to work site and land as required as per scope of work will be provided by the company.
- 13.02.0      Materials :
- 13.02.01      The materials will be issued as per details mentioned in schedule - B.
- 13.02.02      The contractor shall draw the materials issued on chargeable basis as well as free of cost from department as stipulated in the contract from time to time depending on the required of the same at the site of work. Drawl of materials surplus to the requirements, is prohibited. If however, after the completion of the works surplus materials which are unused and perfectly in good condition and acceptable to the department are left with the contractor, he should return these surplus acceptable materials given by the department to the contractor.

- 13.02.03 It shall be the contractor's responsibility to incorporate in the works included in the scope of the contract, all the materials issued to him. Any excess quantity of materials issued to beyond their theoretical consumption including the permissible excess consumption to allow for wastage etc. will be charged for at PSL rate plus overhead charges or as decided by corporation as the case may be.
- 13.02.04 Recoveries from the R.A. Bills for the cost of materials issued on chargeable basis, if any, will be made on the basis of actual consumption of these materials at site or work. However full recoveries shall be effected when the concerned items of work are fully completed.
- 13.02.05 The contractor shall construct at his own cost suitable godown at the site of work for storing adequate quantity of cement in weatherproof walls. The cement shall be stacked in rows of two bags each and not exceeding 10 bags in height. A clear walking space of at least 500 mm shall be left in between the two rows as also from the surfaces of side walls. After the completion of works, theoretical cement consumption based on the standard consumption coefficient shall be worked out. Over this theoretical quantities of cement shall be allowed a maximum variation up to +3% (three percent). All the steel scrap and all empty cement bags shall be returned to Jaduguda/Bagjata store. In case of non return of empty cement bags, recovery @ Rs. 5/- per shall be made beyond the normal wastage of 3%.
- 13.02.06 Wastage of steel shall be kept to the minimum. All materials materials issued to the contractor shall have to be accounted for. However, an irrecoverable wastage inclusive of all scrap up to a maximum 5% of the billed weight of reinforcement steel shall only be permitted while accounting for the materials issued to the contractor. Any excess quantity of materials, if not returned by the contractor beyond their theoretical consumption including the permissible excess consumption to allow for wastage etc, will be charged for at double of PSL rate plus overhead charges or as decided by the Corporation as the case may be.
- 13.02.07 The steel materials incorporated in the works shall be measured on the basis of cutting :
- Lengths and weight shall be computed by multiplying the same with standard weight per unit length as per Indian Standard. No claim of any overweight shall be entertained by the client. Only the allowable wastage as indicated in the tender shall be considered for reconciliation.
- 13.02.08 It shall be the responsibility of the contractor to collect chargeable/non-chargeable materials from the company's store at their own cost.
- 13.02.09 The contractor shall furnish the monthly statement showing the material consumed during the period.
- 13.02.10 The materials/machinery issued to the contractor on free of cost/chargeable basis will be under safe custody by providing necessary security

arrangements by the contractor at their own cost. The contractor has to furnish an Indemnity Bond on stamp paper. In case of any theft of material/machinery, damage of machinery during custody of contractor, recovery will be made as decided by the corporation for the same. If any fault on the part of contractor is found for the same, suitable action including termination of contractor also shall be taken against the contractor as decided by corporation.

14.00.0 Government Labour Act :

The contractor has to follow strictly the Government Labour Acts, which are and will be in force during the period of execution of work. All necessary arrangements for Labour's Security Insurance, will have to be made by the contractor at his own cost.

15.00.0 Contract Labour Act :

According to the provision of Contract Labour (Regulation & Abolition) Act of 1970 and Contract (Regulation & Abolition) central rule, 1971, contractors engaging 20 or more contract labour on any day are required to obtain the license from the A.L.C ( C ), Chaibasa. In the event of the breach of aforesaid conditions, the contractor shall be open for action as deemed fit by the concerned labour authorities of the central government.

16.00.0 Final Bills will not be entertained unless the same is accompanied by affidavit in form no. 'M' with particulars in form no. 'N' as per rule 40 (10) of Jharkhand Mineral Concession Rules. Transport challan in form 'F' in original will also be enclosed along with final bill. In case contractors fail to fulfill above stipulation royalty at the prescribed rates i.e. penal rates will be deducted by the company at the time of release of final bill and same will be deposited to the Office of the District Mining Officer, Jamshedpur.

17.00.0 Cement and Reinforcement bars required for construction of contractor's hutments, stores, godown and site office shall be arranged by the contractor at their own cost.

01.00.00 In case of stoppage of work by local people/bandh or any other reasons, no idle charges will be paid by corporation towards Labour, Plant and Machinery etc. to the contractor for this work.

19.00.0 In case payment of labourers engaged for this work, has not been made on stipulated payment day, Corporation shall compel the contractor to stop the work besides taking other suitable steps to make the payment to the workers at risk and cost of the Contractor.

- 20.00.0 Labour License, workmen insurance and execution of agreement should be done by the successful contractor/terderer before commencement of this work without which contractor will not be allowed to start the work.
- 21.00.0 No extension of time will be allowed against this work on the above grounds i.e. non fulfillment of above clauses or delay in implementing of the above clauses.
- 22.00.0 Tenderer shall have to provide the facilities under the provision of Contract Labour (Regulation & Abolition) Act, 1970 - section 16, 17, 18 and 19, chapter V - "Welfare and Health of Contract Labour".
- 23.00.0 Quantity of any individual item may vary to any extent and be excluded altogether. Contractor will carryout all works upto a total variation of  $\pm 15\%$  (fifteen) on the contract price and all quoted rates shall remain firm within this limit.
- 24.00.0 The price quoted should be firm and no escalation on any account whatsoever will be entertained/ paid by the Corporation.
- 25.00.0 All the rates quoted by the tenderer shall be inclusive of necessary staging, scaffolding and all other arrangements which ever be necessary to complete the work at no extra cost to the corporation for any item of the work.
- 26.00.0 Testing of Materials :
- Contractor shall arrange for the testing of materials as and when required and instructed by the Engineer-in-charge or his representative(s). All the materials should conform to IS/CPWD and other relevant/ applicable specifications.
- 27.00.00 Unless specifically mentioned otherwise in the contract, the tenderer shall quote for the finished items and shall provide for the complete cost towards labour, materials, erection and dismantling of necessary scaffolding, levies, all taxes, royalty, transport, storage, repair, rectifications, maintenance till handing over, revenue expenses, contingencies, overheads, profits and all incidental items not specifically mentioned but reasonably implied and necessary to complete the work according to contract.
- 28.00.0 Contractors shall strictly abide by the security rules and regulations enforced by the owner time to time. The contractor shall provide proper identity cards, badges etc. to his employees wherever directed by the Engineer.

29.00.0      Payment of Bills :

Three RA Bills shall be paid

- First RA Bill after completion of design and execution of Civil Works.
- Second RA Bill after Supply, Transportation & Erection of all equipments in the Substation Yard
- Third RA Bill after Testing & Commissioning the Substation, subsequent to the Approval of the DGMS (Electrical).

90% (ninety percent) of the sum certified against completed installation work upon each of the Engineer's certification shall be made by the owner within fifteen days of submission of bills and 10% (ten percent) shall be made after commissioning.

30.00.00      General Requirement:

31.00.0      Notices and payment of fees :

The contractor shall give all notices and pay all fees required to be given or paid by any act of parliament or any regulation or bye-law of any local or other statutory authority in relation to the execution of the works or of any temporary works and by the rules and regulations of all public bodies and companies whose property or rights are or may be affected in any way by the works or any temporary works. The contractor shall conform in all respects with the provisions of any general or local act of parliament and the regulations or bye-laws of any local or other statutory authority which may be applicable to the works or to any temporary works and with such rules and regulations of public bodies and companies as aforesaid and shall keep the owner indemnified against all penalties and liability of every kind for breach of any such act regulation or bye-law.

31.01.0      Convenience of public :

All operations necessary for the execution of the work and for the construction of any temporary works shall so far as compliance with the requirements of the contract permits be carried on so as not to interfere unnecessarily or improperly with the public convenience or the access to use and occupation of public or private roads and footpaths or to or of any other person and the contractor shall save harmless and indemnify the owner in respect of all claims demands proceedings damages costs charges and expenses whatsoever arising out of or in relation to any such matter.



- 32.00.00 Commencement time and delays:
- 32.01.0 Commencement of work and security deposit :
- The contractor shall commence the works as per his programme of work approved by the Engineer after the receipt of Letter of intent or work order, which ever is earlier by him in writing to this effect from the Owner/Engineer and shall proceed with the same with due expedition and without any delay except as may be expressly sanctioned or ordered by the Engineer or be wholly beyond the contractor's control. The contractor shall not be given possession of any site for commencement of execution of the works and unless and until he has paid the Security Deposit.
- 33.00.0 Special conditions of contract supersedes general conditions of contract :
- The special conditions of contract supersedes the general conditions of contract wherever applicable.
- 34.00.0 Completion Time :
- The work shall be completed within 6 (six) months from the zero date. The zero date shall be reckoned from the tenth day of issue of letter of intent/acceptance.
- 35.00.0 Agreed Liquidated Damage:
- Time shall be the essence of the contract. If successful tenderer fails to execute the order within the agreed execution schedule, of 6 (six) months, he shall be liable to pay as agreed liquidated damages a sum @ ½% of the contract value per week or part thereof of delay subject to a maximum of 5%. In case of delay beyond 10 weeks UCIL reserves the right to cancel the order and levy penalties.

## **SECTION - VII**

### **TECHNICAL SPECIFICATIONS**

## SECTION - VII

### TECHNICAL SPECIFICATIONS

#### System Configuration

##### Utilisation of voltage with variation

a) Main Power Circuits (incoming supply)	I)	33,000 volts $\pm$ 10% A.C. (JSEB)
	II)	3.3KV $\pm$ 10% A.C.
b) Control Circuits	I)	240 volts $\pm$ 10% A.C.
	II)	110 volts $\pm$ 10% D.C.
	III)	Any other as required.
c) Lighting Circuit	:	240 volts $\pm$ 10% A.C.
Frequency with variations	:	50 Hz $\pm$ 5%
Combined voltage and frequency variation (absolute sum)	:	$\pm$ 10%

#### Fault level

a) 33,000 volt system R.M.S. value	:	1000 MVA Symmetrical
b) 415 volt system R.M.S. value	:	31 MVA Symmetrical

#### No. of phases & System of grounding

a) 33,000 volt supply	:	3 phase and solidly grounded neutral
b) 415 volt supply	:	3 phase and neutral grounded through NGR
c) 3,300 volt supply	:	3 phase and neutral non effectively grounded (low resistance and solidly grounded neutral.)

### **Codes and Standards**

All electrical equipments and accessories to be furnished, erected and commissioned as covered under this specification, unless otherwise stated, shall be designed, manufactured, tested and erected in accordance with the relevant Indian Standard Specification (ISS), Indian Electrical Rules and any other applicable regulations with latest amendments. In case of any controversy, reference may be made to any other acceptable national standard ensuring equivalent quality of the equipment or relevant International Standard, in which case, the most stringent one shall be followed.

The successful tenderer shall be responsible for obtaining necessary approval and making whatever additional/modifications considered necessary by the Electrical Inspectors and other authorities to bring the installation in conformity with the above Rules/Regulations.

## **SECTION - VII**

### **TECHNICAL SPECIFICATION**

#### **BRIEF DESCRIPTION OF THE PROJECT**

UCIL is going to extend Main Receiving Station at Bagjata Mine, which is about 11 kms away from Musaboni by road.

To supply the power to this project, two 33 KV lines has been drawn from Musaboni sub-station (JSEB), which is 11 kms from Bagjata.

These two lines are terminated at Main Receiving sub-station (MRS) at Bagjata, where one no. of 33KV/415volts, 1600KVA transformer has been installed. Power from this transformer is brought to indoor type 415 volts main LT distribution panel.

In this phase, UCIL will install two no. of 33/3.3KV, 2000KVA transformer in the switchyard and 30 panel 3.3KV VCB board along with auxiliaries like ACDB, DCDB, Batteries and Battery Charger, Remote Control and metering panel for Transformer and 33 KV incomer in indoor.

#### **CONTRACTOR'S SCOPE OF DESIGN :**

The design of all structures and civil foundation of various equipment of switchyard is in the scope the contractor. The contractor has to submit complete design along with drawings for UCIL approval before supply and erection.

#### **SCOPE OF WORK :**

1. Installation of earthing pit and earth connection of all the equipments, topping of pebbles size not more than (3 inches x 2 inches) with at least 10" thick layer in the switchyard.
2. Designing and construction of civil foundation for the installation of various switchyard equipment.
3. Designing, supply, fabrication and erection of galvanised steel structures for the installation of various switchyard equipments and lighting protections.
4. Installation of all switchyard equipment like 2 X 2 MVA transformer with NGR, double break isolator, L.As, VCBs, CT, PTs, etc. in the switchyard and two numbers of relay and control panel.
5. Testing and commissioning of all installed indoor and outdoor equipments.
6. Dehydration and filtration of transformer oil.
7. Laying, installation, termination, testing and commissioning of all HT/LT cables in lengths as per site and system requirement.

The schedule of items enclosed in the tender documents to be read along with enclosed drawing.

To clear the ambiguity of scope of supply, UCIL's scope of supply and the contractor's scope of supply of items is separately mentioned below :

### **UCIL SCOPE OF SUPPLY :**

All the equipment, cables, accessories as given in schedule – B

#### **Contractor's scope of supply of items/equipments**

1. All Galvanised Steel structural materials for installation of various equipments of the switchyard.
2. Galvanised Steel nuts and bolts, washers etc. for fixing of various equipments, foundation and various structures of the switchyard.
3. GI flat 50 X 6 mm for earthing.
4. All clamps and connectors for the switchyard equipments, bus bar, ACSR conductors etc.
5. Cable glands, sockets, ferrules, cable markers, cable route markers, cable tags etc.
6. Control Cables
7. Steel item for fabrication and erection of equipment cable tray.
8. Aluminium bus bar (3")
9. Cement, Sand, Chips, Reinforcement Steel, Peebles etc.
8. DCDB
9. LT outdoor type marshalling box.
10. 33 KV Bus post insulator.
11. Lighting arrestor and surge counter.
12. Supply of material for earth pit (As per IS:3043).
13. Supply of 40 mm dia MS rod for earthing grid.
14. Other steel item/ structural steel.
15. Any other material or consumables not specifically mentioned but required for completion of the work including fabrication, erection, testing and commissioning.

#### **However The following are also within the bidder's Scope of Work :**

1. All installation work shall be done as per latest IS specification and Indian Electricity Rule 1956 as per installation procedure enclosed along with this tender document latest as per instruction of Engineer-In-Charge.
2. Preparation of complete drawing of the system and statutory clearance from DGMS for commissioning of the system.  
However, for preparation of drawings, cable schedules for the whole system, to the extent drawing, which are enclosed with this tender document.
3. Before submitting the offer, the contractor is advised to visit Bagjata Mines Main Receiving sub-station.
4. Design and construction of cable trench in switchyard, fabrication and fixing of cable tray inside the cable trench will be in the scope of the contractor. Design, supply and fabrication of supporting structure for equipment erection will be within the scope of the contractor.
5. Shifting of the equipments from UCIL store at Jaduguda to site and their security till commissioning and handing over.
6. The following are also within the contractor's scope of work :-
  - (i) The scope of work includes assembly of switchyard/control panel or any other equipment if supplied in sections. All alignments, levelling, grouting, bolting,

- tack welding, base channel fixing, adjustment as per manufacturer's recommendation, oil conditioning, testing and other necessary works for the satisfactory and trouble free operation of the completely assembled equipment shall be treated to be under the scope of work of the tenderer. The tenderer shall furnish and install the floor steel for supporting the panels.
- (ii) In some cases, if minor modifications have to be carried out at site in wiring of different equipment to meet the requirement of desired control scheme, the tenderer shall have to do the same without any additional cost to the purchaser.
  - (iii) All equipments should be earthed by 50 x6 mm GI flat. All equipments shall be connected with two distinctly separate earthing conductors. The contractor shall provide earthing conductors from the earthing grid riser of the purchaser to the equipment.
  - (iv) The testing of the equipment shall be done in the presence of the purchaser's engineer. The field testing shall be done as per the latest edition of relevant standards. The tenderer shall provide competent personnel to conduct all testing and shall provide all labour and testing equipments required.
  - (v) The tenderer shall be responsible for any damage to equipment during transportation, erection, testing and commissioning due to improper procedure test operation and shall replace or restore to original condition of any damaged, equipment or material.
7. Arranging of testing equipments, welding machine, and other tools and tackles will also be within the scope of the contractor.
  8. Supply and fixing of consumables and erection hardware like nuts, bolts, washers, cable glands, lugs, welding rods etc. will also be within the scope of the contractor. It is to be noted that G.I. foundation bolts on which main structure will be erected will be not less than 500mm long. Supply and fixing of G.I. bolts will also be within the scope of the contractor.
  9. Painting of structure and equipments wherever necessary will be done with two coats of primer and two coats class "A" paint ( make : Berger/Asian/J&N ) shall be within the scope of the contractor.
  10. Any work which is not specifically mentioned in this tender document but required to complete the work, shall be deemed to have been included to the scope of work.
  11. The contractor shall quote their price in the schedule of items included in this tender document.

### **Erection & Commissioning of different equipments in switch yard.**

1. Earthing Pit : Scope of Work – Erection and Commissioning

Earthing pit is to be installed in 33KV switchyard of approximate length 35 mtr. and width 20 mtr. with 50 mm dia x 3.0 mtr. long earth pipe electrodes and risers as per drawing so that every structure and equipment are to be earthed with 50 x 6 mm GI flat. The GI flats are to be welded to risers and finally welding joints are to be covered by black bituminous compound. The excavation and back filling of soil for installation of earthing grid is in the scope of the contractor.

Finally pebbles of size not less than 3" X 2" are to be filled in 10" thick layer above soil after backfilling. The pebbles shall be supplied by the contractor.

2. Lightning Arrestors : Scope of work – Supply, Erection and Commissioning  
Three sets of lightning arrestor (each set having 3 lightning arrestors and three surge counters) are to be supplied, erected and commissioned in the switchyard. The lightning arrestors are to be connected to separate earth risers by means of 50 x 6 mm GI flat. The lightning arrestors shall be installed along with surge counter.

The structure on which lightning arrestors are to be erected will be of GS structure as per drawing. Design and construction of R.C.C. foundation is in the scope of the contractor.

3. Current Transformer : Scope of work – Erection and Commissioning  
Total 12 nos. of single phase current transformer are to be erected and commissioned in the switchyard. Necessary G.S. structure is to be made as per drawing by the contractor. Design and construction of R.C.C. foundation is in the scope of the contractor.
4. Potential transformer : Scope of work – Erection and Commissioning  
Total 06nos. of 33KV/ $\sqrt{3}$ /110V/ $\sqrt{3}$ /110V/ $\sqrt{3}$  are to be erected and commissioned in the switchyard on high level, height not less than 6 mtr.

Necessary G.S. structure is to be made as per drawing by the contractor. Design and construction of R.C.C. foundation is in the scope of the contractor.

5. Isolators :- Scope of work – Erection and Commissioning  
Total 6 nos. of double break 33 KV, 630 Amps isolators are to be erected and commissioned in the switchyard. Out of 5 isolators, two will be manual operated and rest three will be manual and motorised operated with earth switch.

One motorised operated and two manual operated isolators are to be installed at high level, height not less than 6 mtr. Necessary G.S. structure is to be made as per drawing by the contractor. Design and construction of R.C.C. foundation is in the scope of the contractor.

6. Marshalling Box : Scope of work – Supply, Erection and Commissioning

02 nos. Marshalling Box, whose dimension and other details as per drawing is to be supplied, installed and commissioned in the switchyard. Single phase AC and 3 phase 4 wire AC distribution of different equipment will be through the Marshalling Box and control cables of isolators, VCB etc. shall run to their destination through Marshalling Box for their remote operation, interlocks, indication etc.

7. Transformer and NGR :Scope of work - Erection and Commissioning

2 x 2 MVA 33/3.3KV transformers with NGR are to be installed and commissioned in the switchyard. The transformers primary side is of bushing type hence required height as per I.E. rule is to be maintained. Necessary testing, filtration, etc as required are to be done at site as per the instruction of Engineer-In-Charge.

Design and construction of R.C.C. foundation is in the scope of the contractor.

8. Vacuum Circuit Breaker : Scope of work - Erection and Commissioning



Three numbers of 36 KV, vacuum circuit breakers are to be installed in the switchyard. These VCBs are electrically operated from local as well as remote. Necessary G.S. structure is to be made as per drawing by the contractor. Design and construction of R.C.C. foundation is in the scope of the contractor.

9. Relay and Control Panel : Scope of work - Erection and Commissioning

Two nos. of relay and control panel will be installed in the control room. 33 KV motorised operated isolators and 33 KV VCBs are to be operated and necessary protections of transformer primary should be from these panel.

Erection of these panel over pre constructed cable trench and termination of cables is in the scope of the contractor.

10. Cables : Scope of work – Supply, Erection and Commissioning

Control and power cables of different sizes are to be laid in fabricated metallic cable tray in R.C.C. cable trench. The fabrication of cable tray and construction of cable trench in the switchyard is in the scope of the contractor. Proper cable tags, suitable brass double compression gland, and proper lugs are to be used by the contractor for LT control and power cable and HT termination kit of HT 3.3 KV cables.

11. 33 KV Bus : Scope of work – Supply, Erection and Commissioning  
33 KV Aluminium tubular bus having dia 75 mm and 5 mm wall thickness shall be supplied, and installed.

Aluminium tubular bus of Electrical grade as required shall be installed on 33KV Bus post insulators mounted on GS structure. The 75 mm dia bus along with couplers/sockets shall be supplied by the contractor. In addition, various equipments shall be connected by 75 mm dia Aluminium tube.

12. ACSR Conductor : Scope of work - Erection and Commissioning  
At few places where it is not possible to use 75 mm dia Aluminium bus, 'ACSR' conductor shall be installed by the contractor due to the flexible nature of the ACSR conductor for connections to various equipments.

13. Bus Post Insulator : Scope of work – Supply, Erection and Commissioning

Total 30 nos. of bus post insulator will be supplied and erected on GS structure. Necessary G.S. structure is to be made as per drawing by the contractor. Design and construction of R.C.C. foundation is in the scope of the contractor.

### Technical Specification of LT outdoor Marshalling Box

Floor mounting free standing outdoor type Marshalling Box suitable for distribution of 3 phase, 4 wire 415 volts AC, 50 Hz power to various equipment.

#### a) ENCLOSER

1. Shall be made of sheet steel not less than 2.5 mm thick.
2. Shall be weather proof.
3. Shall be provided with two hinged doors one at front and one at back with locking knobs facilities. The doors shall be open through 180°.
4. Shall have proper vermin proof and dust tight arrangement.
5. Shall be provided with detachable cable gland plate at bottom.
6. Earthing pad shall be provided for connection of earthing strip of size 25x3 mm. Provision for double point earthing shall be made.
7. Main cable entry to be provided suitable for entry of 3½Cx35/50 sq. mm PVC armoured cable.
8. Canopy for rain protection shall be provided on top of box.

#### b) ACCESSORIES

All accessories are to be mounted properly in suitable channel inside the box. The MCBs shall be mounted on a DIN channel covered by a MS plate with cutout for MCBs knobs. This shall be covered by a hinged door on the front.

Sl. No.	Item	Make	Rating	Quantity
01.	Main Incomer MCB 3 pole	Indokopp/Standard	63 Amp.	01 no.
02.	3 pole miniature circuit breaker	Indokopp/Standard	06 Amp.	12 nos.
03.	3 pole miniature circuit breaker	Indokopp/Standard	10 Amp.	10 nos.
04.	3 pole miniature circuit breaker	Indokopp/Standard	16 Amp.	10 nos.
05.	Connector/Terminal	ELMEX	Suitable for 2.5 sq. mm control cable	300 nos.
06.	Bus-bar (R, Y, B & N) with proper colour code		Suitable size	

Wiring of MCBs from Bus-bar to individual connector through good quality of copper cable of suitable rating with ferrule marking and suitable lugs at both ends are to be done.

Painting : - Two coats of red oxide primer and two coats of synthetic enamelled paint after chemical treatment. Paint shade should be light gray 631 of IS-5.

## **DESIGN**

The entire design of the yard substation shall be in the scope of the bidder and shall comprises of the following:

1. Foundation designs for structurals.
2. Foundation design for transformer inclusive of catchment and soak pit.
3. Ground mat for earthing.
4. Design of structures for all equipments, outdoor overhead bus bars etc. To be installed in the substation yard.
5. Cable trench and layout design for cable trenches in the yard connected to the substation building , this shall include design of ladder type cable trays in concrete lined cable trench with concrete covers.
6. Equipment earthing design using 50 x 6mm G.I flats for all equipments.
7. Design of the earth mat / earth grid as per IS 3043 for the entire sub-station.
8. Design of the layout of the yard sub-station with the positioning of all specified components.
9. Design of any other items required for the completion of the sub-station.

## **ASPECTS & DESIGN CRITERIA**

1. All the designs shall be as per the latest I.E. rules and comply with the I.S Codes
2. All heights and clearances shall be furnished in the design drawings giving the relevant I.E rule clause and I.S code.
3. The site conditions given in this documents must be taken in to consideration while making the designs
4. The 33 KV yard substation shall be designed for a fault level of 1000 M.V.A
5. The over head aluminium bus bars shall be minimum 75 mm diameter with a minimum wall thickness of 5 mm. All couplings and connection shall be done using heavy-duty clamps & connectors of approved type. The engineer in charge on submission of a sample shall give the approval.
6. All connections from the overhead tubular bus bars to equipment connection points shall be made using flexible copper ribbon connectors with solid copper terminals. All connection between Aluminium and copper conductor shall be thorough suitable bi-metal washer to ensure proper conductivity.
7. All welds on the 50 x 6mm G.I flats for earthing shall be done using low hydrogen welding electrodes.

## **SUBMISSION OF DRAWINGS FOR APPROVAL (FOR DESIGN PART)**

The following drawings with calculation shall be furnished by the accepted bidder after 21 days of the placement of L.O.I

1. General layout of the yard complete with the location all structures, equipment, cable trenches.
2. Drawings of individual structures and assembly.

3. Drawing of all the foundations including civil construction drawings and specifications.
4. Foundation drawings of the 2 X 2000 K.V.A transformer complete with oil catchment and oil soak pit for the dimensions of the transformer the engineer-in-charge may be contacted and the dimensions of the actual transformer may be taken by the contractor.
5. Baffle wall for transformer.

### **ERECTION, TESTING & COMMISSIONING**

The Erection of all the equipments as per the approved design shall be under the scope of this contract. The erection of equipments supplied by the purchaser (UCIL) shall also be in the scope of the tenderer.

Laying, terminating, connecting of all power cables, control cables, earthing systems shall be in the scope of the bidder. This shall also include the earthing of cable trays.

### **BASIC CRITERIA FOR THE WORK**

1. All installation work shall be done as per latest IS specification and Indian Electricity rule 1956 as per installation procedure enclosed with this tender document latest as per instruction of Engineer - in - charge.
2. Preparation of complete drawing of the system and statutory clearance from DGMS for commissioning the system.  
However, for preparation of drawings, cable schedules for the whole system, to the extent drawings which are enclosed with this tender document.
3. Before submitting the offer, the contractor is advised to visit Bagjata Main Receiving Sub-station. The dimension of the structure of each equipment of Bagjata switch yard will be similar to that of the corresponding equipment of Bagjata switch yard. Measuring dimensions, making drawings, supply and fabrication of structures and their erection will also be within the scope of the contractor.
4. Shifting of equipments from UCIL store at Jaduguda/Bagjata to site and their security till commissioning and handing over.
5. The following are also within the contractor's scope of work:
  - (a) The scope of work includes assembly of switchgears/control panels or any other equipment, if supplied in sections. All alignments levelling, grouting, bolting, tack welding, base channel fixing, adjustments as per manufacturer recommendation, oil conditioning, testing and other necessary works for the satisfactory and trouble free operation of the completely assembled equipment shall be treated to be under the scope of work of the tenderer. The tenderer shall furnish and install the floor steel for supporting the panels.
  - (b) In some cases, if minors modifications have to be carried out at the site in wiring of different equipment to meet the requirement of the desired control scheme, the tenderer shall have to do the same without any additional cost to the purchaser.

- (c) All equipments should be earthed by 50 X 6 mm flat, for illumination 14 SWG GI wire shall be run along with the lighting and power cables. All equipments shall be connected with two distinctly separate earthing conductors. The contractor shall provide earthing conductors from the earthing grid riser to the equipment.
  - (d) The testing of equipment shall be done in presence of purchaser's Engineer. The field testing shall be done as per the latest edition of relevant standards. The tenderer shall provide competent personnel to conduct all testing and shall provide all labour and testing equipments required.
  - (e) The tenderer shall be responsible for any damage during transportation, erection, testing, and commissioning due to improper procedure, damaged equipment/material.
  - (f) The total design of the outdoor portion of the substation including construction of foundations, erecting the structures and all equipments related to the substation shall be in the scope of the Bidder.
6. Arranging of testing equipments, welding machine, and other tools and tackles will also be within the scope of the contractor.
  7. Supply and fixing of consumables and erection hardware like, nuts, bolts, washers, cable glands, lugs, welding rods etc. will also be within the scope of the contractor. It is also to be noted that GI foundation bolts on which main structure will be erected will not be less than 500 mm long. Supply and fixing of GI bolts will also be within the scope of the contractor.
  8. Painting of structure and equipments wherever necessary will be done with two coats of primer and two coats class A paint (Make : Berger/Asian/J&N) shall be within the scope of the contractor.
  9. Any work, which is not specifically mentioned in this tender document but required to complete the work, shall be deemed to have been included in the scope of work.

#### 10. **Cable Trench**

The cable trench in the outdoor yard part of the sub-station shall be in the scope of this contract. The yard cable trench should be connected to the existing trenches in yard and in the indoor portion of the sub-station constructed inside the building.

The cable trenches shall be concrete lined cable trenches with concrete covers and shall have ladder type cable trays mounted on the side walls of the cable trench , the ladder type of cable trays shall be formed out of ISA 50x50 X 6 MS angles with 25 mm x 6 mm MS flats. The exact size ,depth of the trenches and the number of racks of cable trays shall be designed by the contractor and approved by the purchaser.

However the minimum depth of the cable trench in which power cables are housed shall be 1100 mm. and the minimum depth of the cable trenches with only control cables in them shall be 500 mm., the width of these cable trenches shall be as per the approved design.

## **SCHEDULE - B**

### **UCIL's scope of supply of items/equipments:**

SL. No.	Item Description	Quantity	Unit
1	33 KV single pole P.T. (33KV/ $\sqrt{3}$ /110v/ $\sqrt{3}$ )	6	Nos.
2	33KV single pole C.T. (150/5/5 Amps.)	6	Nos.
3	33KV single pole C.T. (50/5/5 Amps.)	6	Nos.
4	33KV triple pole motorised isolator with earth switch	3	set
5	33KV triple pole isolator manual operation only	2	set
6	33 KV triple pole VCB (1600 Amps.)	3	Nos.
7	Relay, Control & Metering panel	2	set
8	ACSR Sheep / DOG conductor	75	mtr.
9	Cables a) 185 mm <sup>2</sup> , 3 core, 3.3/6.6KV grade wire armoured Al./Cu. Conductor b) 25 mm <sup>2</sup> , 3 core, 1.1KV grade wire armoured Al./Cu. Conductor c) 6 mm <sup>2</sup> , 4 core, 1.1KV grade wire armoured Cu. Conductor	250 150 100	mtr.
10	2000 KVA, 33/3.3KV Power transformer	2	No.
11	Battery Charger	1	No.
12	Battery (2 volt, for D.C. Supply)	55	nos.

**SECTION - VIII**

**PROPOSAL EXHIBIT SHEETS**

## **SECTION - VIII**

### **PROPOSAL EXHIBIT SHEETS**

1.00.0

#### **INSTRUCTION TO TENDERER**

The tenderer shall fill in the technical information and data required in the following schedules and submit the same along with the proposal.

1.01.0

#### **PROPOSAL**

	Schedules	Particulars
1.01.01	I	Key information about the proposal.
1.01.02	II	Scope of work and service & method of working.
1.01.03	III	Plant & equipment schedule.
1.01.04	IV	Space requirement for infrastructure and facilities.
1.01.05	V	Manpower schedule and organisation chart.
1.01.06	VI	Drawing and data submission schedule.
1.01.07	VII	Deviation, if any from the specification.
1.01.08	VIII	Experience list.
1.01.09	IX	Time schedule of work.
1.01.10	X	Price schedule.
1.01.11	XI	Declaration sheet.



## **SCHEDULE - I**

### **KEY INFORMATION ABOUT THE PROPOSAL**

Tenderer shall furnish the following information:

1. Tenderer's complete company name  
With address :
2. Tenderer's proposal no. :
3. Tenderer's proposal date. :
4. Tenderer's proposal validity from date of  
Opening of tender :
5. Name and designation of the officer of the  
tenderer to whom all references shall be  
made for expedition technical co-ordination :

## **SCHEDULE - II**

### **SCOPE OF WORK AND METHOD OF WORKING**

#### **1.00.00 SCOPE OF WORK AND SERVICES**

Tenderer is to note that scope of work and services under this specification shall be as per Section - VII

The tenderer shall confirm whether the scope of work and services offered by him is strictly in accordance with the tender document or has deviation (s) from tender documents by putting 'Yes or No' against the following and shall be signed by his authorised representative.

1.01.0	The scope of work and services offered under the proposal is in compliance with Section-VII of tender document in all respects	:	Yes/No
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1.02.0	The deviation from tender document in respect of scope of work and services are mentioned in Schedule - VII of proposal exhibit sheet with this offer	:	Yes/No
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#### **2.00.0 Method of working**

Tenderer has to give brief description of his proposed method of working mentioning plants, equipments deployment, manpower requirement.

## **SCHEDULE -III**

### **PLANT AND EQUIPMENT SCHEDULE**

Tenderer is to provide the list of proposed plant and equipment to be engaged at site along with brief description of specification and indicate the number required for this contract.

Particular of plant and equipment	Brief specification	Nos. required	Remarks
1. Transformer oil filtration machine.			
2. Testing equipments :			
a) Primary Injection Kit.			
b) Secondary Injection Relay Testing Kit.			
c) Multimeter.			
d) Megger			
e) Clamp-on-type Ammeter			
f) Earth Resistance Tester			
g) Continuity Tester			
h) HV Test set			
i) Any other as required for the successful completion of the work.			
3. Welding Machine			
4. Hydraulic Crimping Tool			
5. Crane			
6. Truck			
7. Chain Pulley Block with Accessories			
8. Tools & Tackles as required			
9. Any other			

## **SCHEDULE - IV**

### **SPACE REQUIREMENT FOR INFRASTRUCTURE AND FACILITIES**

Tenderer is to provide the requirement of space for proposed infrastructure and facilities for this work.

Particulars of Infrastructure and facilities	Area required
--	---------------

## **SCHEDULE - V**

### **MANPOWER SCHEDULE AND ORGANISATION CHART**

Tenderer is to provide the list of proposed personnel and their numbers (with leave, sick and absentism) to be employed by him (mentioning whether foreigner/on company's roll/locally recruited) for the work.

1. **MANPOWER SCHEDULE**

Sl. No.	Particulars	No. Required during Contract
a)	Officer	
b)	Office Staff	
c)	Work shop staff	
d)	Field staff	

2. **ORGANISATION CHART**

## **SCHEDULE - VI**

### **DRAWING AND DATA SUBMISSION SCHEDULE**

Tenderer shall submit the drawings, data, for the Design portion of the Sub-station.

1. GENERAL LAYOUT DRAWING
2. EQUIPMENT LAYOUT DRAWING OF THE YARD
3. DESIGN OF FOUNDATIONS AND STRUCTURALS FOR YARD EQUIPMENT
4. BILL OF MATERIALS FOR ERECTION
5. SCHEDULE OF ERECTION ACTIVITY
6. SCHEDULE OF SUPPLY
7. LIST OF PRE COMMISSIONING TESTS TO BE CARRIED OUT.
8. SUBMISSION OF FINAL AS BUILT DRAWINGS.
9. DESIGN, DATA AND DRAWINGS OF ALL GALVANISED STEEL STRUCTURE.
10. DRAWINGS OF MARSHALLING BOX.

The submission dates for the above shall be clearly stipulated in the offer and shall be adhered to in the event of an Order.

The zero date for the start of the above activities shall be the date 10<sup>th</sup> (tenth) day after the issue of LOI.

## **SCHEDULE - VII**

### **LIST OF DEVIATIONS IF ANY.**

Note: The Technical & Commercial deviations shall be listed separately.

## **SCHEDULE - VIII**

### **EXPERIENCE LIST**

Tenderer shall furnish his similar experience in the following format :

1. Name of the work :
2. Name of the project :
3. Name and designation of project authority :
4. Scope of work in brief :
5. Collaboration with any overseas company/firm if any :
6. Duration and date of commissioning/completion of Work/project :
7. Contract price :
8. Any other relevant information to prove the capability of the contractor :



## **SCHEDULE - IX**

### **TIME SCHEDULE OF WORK**

Tenderer shall indicate tentative time schedule of work under this specification from zero date as per format given below :

Sl. No.	Particulars	Time period in weeks from zero date
1.	Mobilization	From _____th week to _____th week
2.	Drawing & Design	From _____th week to _____th week
3.	Erection of 33KV switchyard equipments	From _____th week to _____th week
4.	Erection of indoor equipments	From _____th week to _____th week
5.	Erection of other equipments	From _____th week to _____th week
6.	Testing and Precommissioning	From _____th week to _____th week
7.	Commissioning	From _____th week to _____th week

## SCHEDULE - X

### PRICE SCHEDULE

#### PART -2

Schedule of items and rates for installation and commissioning of MRS at Bagjata.

**2 (A) (i) DESIGNING OF THE SUB-STATION :Rs.\_\_\_\_\_**

**2 (A) (ii) HT/LT EQUIPMENTS.**

SL. No.	Item Description	Qty	Unit	Unit Rate (Rs.)		Amount (In Rs.)	
				Supply	Erection	(In figure)	(In words)
1	Erection of 33KV single pole P.T. (33KV/ $\sqrt{3}$ / 110V/ $\sqrt{3}$ / 110V / $\sqrt{3}$ ) on galvanized steel structure in 33 KV switchyard	6	nos.				
2	Erection of 33KV single pole C.T. (150/5/5 Amps.) on galvanized steel structure in 33 KV switchyard for main incomer.	6	nos.				
3	Erection of 33KV single pole C.T. (50/5/5 Amps.) on galvanized steel structure in 33 KV switchyard for 2 X 2MVA transformer.	6	nos.				
4	Erection of 33KV triple pole isolator of following types on G.I. structure and post insulator in switchyard.		Nos.				
	a) Motorised isolator with earth switch 2 X 2MVA transformer.	4	set				
	b) Manual isolator without earth switch for P.T.	2	set				
5	Supply & erection of 33KV bus post insulator on G.I. structure in switchyard	30	nos.				
6	Erection of 33 KV triple pole VCB (1600 Amps.) on G.I. structure in switchyard.	3	nos.				
7	Erection of Relay, Control & Metering panel in indoor over cable trench.	2	set				

SL. No.	Item Description	Qty	Unit	Unit Rate (Rs.)		Amount (In Rs.)	
				Supply	Erection	(In figure)	(In words)
8	Erection of 110 volts, 120 AH Battery set (2v X 55) in indoor over pre-constructed wooden rack inclusive of supply of battery connectors.	1	set				
9	Erection of Battery charger in indoor over cable trench	1	no.				
10	Supply & erection of DCDB.	1	no.				
11	Supply, laying & installation of 1.1 KV grade control cable for the full sub-station as per bidder's design duly approved by the purchaser.	1	lot				
12	Supply, Fabrication and erection of galvanized steel structure including supply of GI nuts, bolts and washers etc. Required for fixing of structure and equipment.	13	MT				
13	Termination of control cable inclusive of termination kits, lugs, cable glands etc.	1	Lot				
14	Laying of Power cables						
	a) 185 sq. mm 3 core 3.3 KV wire armoured Al. conductor cable	250	RM				
	b) 25 sq. mm 4 core 1.1 KV grade wire armoured Cu. conductor cable	150	RM				
	c) 6 sq. mm 4 core 1.1 KV grade wire armoured Cu. Conductor	200	RM				
15	Termination of Power cables including supply of kits, lugs, connectors, cable gland etc.						
	a) 185 sq. mm 3 core, 3.3KV grade double wire armoured Al. Conductor	10	set				
	b) 25 sq. mm 3.5 core 1.1KV grade wire armoured Cu. Conductor cable	4	set				
	c) 6 sq. mm 4 core 1.1KV grade wire armoured Cu. Conductor cable	20	set				
16	Supply & erection of equipment earthing system by 50 X 6 mm GI flat.						

SL. No.	Item Description	Qty	Unit	Unit Rate (Rs.)		Amount (In Rs.)	
				Supply	Erection	(In figure)	(In words)
	a) Switchyard	2	MT				
	b) All HT/LT equipments (Indoor & Outdoor)	1	MT				
17	Supply & erection of 75 mm. diameter and 5mm wall thickness (minimum) Aluminium (Electrical grade) Tubular bus bar on post insulators as required.	200	RM				
18	Supply & installation of clamps and connectors for all 33KV equipment connections in switchyard as required.	1	lot				
19	Supply & erection of 33 KV single pole lightning arrestor, station class, 10KA on G.I. structure in switchyard.	9	nos.				
20	Installation of ACSR/DOG conductor in switchyard for 33KV equipment connection.	100	RM				
21	Supply & erection of LT outdoor type marshalling box in switchyard as per attached drawing.	2	no.				
22	Supply of materials & construction of earth pit (As per IS : 3043) as per the direction of the Engg.-in-charge.	10	nos.				
23	Supply, erection & connection of surge counter for lightening arrestor	9	nos.				
24	Supply & installation of earthing grid by						
	i) 40 mm dia MS rod	6	MT				
	ii) Excavation & back filling for above.	200	m <sup>3</sup>				
	iii) Fabrication and erection for above	6	MT				
25	Erection of 2 MVA, 3-phase, 33/3.3 KV power transformer	2	No.				

SL. No.	Item Description	Qty	Unit	Unit Rate (Rs.)		Amount (In Rs.)	
				Supply	Erection	(In figure)	(In words)
26	Erection of 3.3KV power distribution board consisting of 30 nos. of VCB panels in indoor over cable trench. This includes supply and erection of cross channels, all civil work associated with erection of panel.	1	set				
27	Dismantling of existing steel structure with bus bars and foundation	2	Nos.				
28	Testing and Commissioning of all the above mentioned equipments/ the substation as a whole.	1	lot				
TOTAL :-							

(in words)Rs.

## 2 (B) CONSTRUCTION OF SWITCHYARD FOR ENTIRE CIVIL WORK AT BAGJATA

Sl. No.	Description of Item	Quantity	Unit	Rate Rs. P.	Amount Rs. P.
1. a)	Earth work in excavation in pit, drain upto any depth and removing the spoils/rubbish to a suitable distance as directed lead not to exceed 150 mtr. and u- to any lift including levelling, dressing of bottom to proper grade and camber and removing the shrubs and roots of trees complete as per specification and direction of Engineer-in-charge. All kinds of soil	300.00	Cu.m		
2.	Return earth filling by available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming(allow for breadding up lumps, shrinkage etc.) watering lead upto 50 metre and lift up to 1.5 m complete as directed by the Engineer-in-charge.	200.00	Cu.m		
3.	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and sapling of girth upto 30 cm. measured at a height of 1.0 metre above ground level and removal of rubbish up to a distance of 50 mtr. outside the periphery of the area cleared.	1000.00	Sq.m.		
4.	Supply and transporting of good earth for filling within 5Km. Radius.	100.00	Cu.m		
5.	Supplying and filling in plinth with locally available clean and coarse sand under floors including, watering ramming, consolidating and dressing complete.	160.00	Cu.m		
6.	Providing and laying plain cement concrete 1 : 3 : 6 (1 Cement : 3 Sand : 6 aggregate) with approved quality of stone metal of 20mm down grade nominal size and coarse granular sand of approved quality in foundation and plinth including mixing cement concrete in mixer, placing in position, vibrating and curing including shuttering work complete as per direction of engineer-in-charge and as per specification including cost of all materials and labour.	100.00	Cu.m		

Sl. No.	Description of Item	Quantity	Unit	Rate Rs. P.	Amount Rs. P.
7.	Rough dressed random rubble stone masonry with stone Boulders in cement mortar 1 : 6 ( 1 Cement : 6 coarse sand ) in foundation and super structure upto floor two level including cost of all materials , labour but including cost of cement but including scaffolding and removing of the scaffolds, curing from all leads of water, raking out joints complete as per direction of Engineer-in-charge and as per specification.	50.00	Cu.m		
8.	Providing cement plaster 20mm thick with cement mortar 1 : 6 ( 1 cement : 6 Fine sand) of thickness upto 20mm including curing as per direction of Engineer-in-charge and as per specification including cost of all materials and labour.	100.00	Sq.M		
9.	Providing and applying 3mm thick Neat cement punning all complete including cost of cement	20.00	Sq.M		
10.	Brick work with bricks of class designation 75 in superstructure with cement mortar 1:6 (1 cement: 6 coarse sand) including all materials, labour, scaffolding, raking out joints, curing as per specification and direction of the Engineer-in-charge.	5.00	M <sup>3</sup>		
11.	Providing and laying reinforced cement concrete work 1:1.5:3 (1 Cement : 1.5 coarse sand : 3 graded stone aggregate using 20 mm down screened and washed) including machine mixing, placing in position and mechanically vibrating in bases of footing, column, walls, plinth beam, floor and like upto plinth including preparing of the top surface finishing curing including the cost of cement and excluding shuttering and reinforcement etc. complete in all respects as per specification and direction.	100.00	Cu.m		

Sl. No.	Description of Item	Quantity	Unit	Rate Rs. P.	Amount Rs. P.
12.	Providing and laying reinforced cement concrete work 1:1.5:3 (1 Cement : 1.5 coarse sand : 3 graded stone aggregate using 20 mm down screened and washed) including machine mixing, placing in position and mechanically vibrating in columns, pillars etc.to any level and anywhere and like including preparing of the top surface finishing curing including the cost of cement, excluding shuttering and reinforcement etc. complete in all respects as per specification and direction.	10.00	Cu.m		
13.	Providing hoisting and fixing up to floor five level precast reinforced cement concrete work in string courses, bands , coping, bed plates, anchor blocks, plain window sill and the like including the cost of required centering, shuttering, finishing smooth with 6 mm thick cement plaster 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	15.00	Cu.m		
14.	Steel reinforcement (for reinforced cement concrete work) including transporting, decoiling, straightening, derusting, placing, cutting to requisite length, hooking, bending to correct shape, placing in proper position and binding with 16 gauge black annealed wire at every intersection and removal of loose rust and applying a coat of cement wash if necessary complete in all respects as per drawing and as directed in foundation & superstructure but including the cost of steel reinforcement.	8000.00	Kg		
15.	Hire and labour charges for providing and fixing straight shuttering for concrete works to anywhere at any level (including staging) including strutting, propping etc. and removal of form or striking out after completion of works as directed and specified by the Engineer-in-charge.				
	a) Foundations, plinth beams, footings, bases of columns etc.  b) Columns, pillars	350.00  150.00	Sq.m  Sq.m		



Sl. No.	Description of Item	Quantity	Unit	Rate Rs. P.	Amount Rs. P.
16.	Transporting (within 1 K.M.) waste rock boulder (Free of cost) Preparing and leveling bed and supply and filling the joints with locally available coarse sand including watering and ramming etc complete.	150.00	Cu.m		
17.	Providing and applying water proofing cement paint of approved brand and manufacturers and of required shade three or more coats to give an even shade on new work as directed and specified by the Engineer-in-charge.	200.00	Sq.m		
18.	Supplying and applying three (3) or more coats of white wash to walls, ceiling etc. at all levels including preparation of surfaces, cleaning etc. complete with all materials, labour, scaffolding, tools and tackles etc. complete as per following composition, specifications and directions of Engineer-in-charge. <u>COMPOSITION:</u> i) Water @ 5 litres per Kg. Of lime for making cream ii) Fevicol DDL @ 4gm. Per litre of lime cream.	200.00	Sq.m		
19.	Structural steel work welded in built up sections, trusses and framed work including cutting, hoisting, fixing in position as required including painting upto two coats of approved paints over a priming coat of approved steel primer all complete in all respect as per direction of the Engineer-in-charge including the cost of structural steel.	4.00	MT		
<b>Total :-</b>					

Total Rs. =

(in figure)

(In words) Rs.

**Grand Total = 2 (A)(i) + 2(A)(ii) + 2 (B) = Rs.**

(in figures)

(In words)

## **SCHEDULE - XI**

### **DECLARATION SHEET**

I \_\_\_\_\_ hereby certify that all the data and information as furnished in this proposal are correct and true covered by our formal proposal no. \_\_\_\_\_, dated \_\_\_\_\_. I hereby certify I am authorised representative of tenderer whose name appears above my signature.

Tenderer's Name :

Authorised Representative's Signature :

Authorised Representative's Name :

Contractor's Intent : The contractor hereby agrees fully to comply with the requirement and intent of this specification for the period indicated.

Authorised Representative's Signature :

## **SECTION - IX**

### **DRAWINGS**

## **SECTION -IX**

### **DRAWING**

The following drawing shall form a part of tender specification and read in conjunction with the same.

<b>Particulars</b>	<b>Drawing No.</b>
Proposed Single line diagram of Switchyard at Bagjata Mine.	BGT/ELECT/MRS EXTN/02
Plan of Switch Yard.	BGT/ELECT/MRS EXTN/01
Marshalling Box Single Line Diagram	BGT/ELECT/MRS EXTN/03
Earthing layout	BGT/ELECT/MRS EXTN/04

#### **NOTE:**

**The above drawings are for Tender Purpose only and are meant to serve as notional guidelines for the Design portion of the Scope as given in the Tender Document.**

## **SECTION - X**

### **SAFETY OF CONTRACTOR'S EMPLOYE**

## **APPENDIX - I**

### **CLASSIFICATION OF ACCIDENTS**

#### Type - A

1. Fatal Injuries.
2. Serious Injuries such as fracture, dislocation, severe burns etc necessitating hospitalisation.
3. Any Injury to give or more person.
4. Accidents resulting in damage by fire explosion etc.

#### Type - B

1. Minor Injury which result in laceration, abrasion, contusion etc.
2. Disabling Injuries but not requiring hospitalisation.

## APPENDIX - II

**(FORM - A)**

# ACCIDENT INVESTIGATION REPORT

Name of the contractor and project :

Nature of contract :

Name of the Engineer-In-Charge :

Name of Injured person :

Age :

Date &amp; time of accident occurred :

Nature of job :

What was the injured person doing on the time of accident :

Description of accident in detail :

What was defective or in wrong condition  
that was responsible for the accident :

What was wrong with working methods/instructions :

What steps should be taken to prevent recurrence of such accident :

Name of the witness : 1.  
2.

Safety Representative's remarks with signature and date :

### **APPENDIX - III**

#### **(FORM - B)**

SUMMARY OF ACCIDENTS FOR THE MONTH OF :

Name of the Project :

Name of the safety representative  
of the project :

Name of the contractor :

Name of the sub - contractor :

Total No. of persons working in the project :

Male :

Female :

Engineers :

Supervisors :

Labourers :

Total no. of accidents  
(including Type - A & Type - B) :

Disabling injuries :

Non - disabling injuries :

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	No.	No. of days lost/charged
Agency :		
Machine :		
Handling material :		
Fall of person :		
Hand tools :		
Fire/explosion :		
Collapse of excavation/structure :		
Electrical shock/burn :		
Miscellaneous :		
Remarks :		

Signature of Safety Representative