



cmpdi
A Mini Ratna Company

The information given in this document is not to be communicated either directly or indirectly to the press or to any person not holding any official position in CIL/Government.

TENDER DOCUMENT
FOR

**SUPPLYING, INSTALLATION, TESTING AND
COMMISSIONING OF 11 kV VCB PANEL
SWITCHBOARD BY REPLACING EXISTING
SWITCHBOARD AND ASSOCIATED WORKS AT
11 kV SUB-STATION, CMPDI COMPLEX,
RI-IV, NAGPUR**



March, 2017
Central Mine Planning and Design Institute Ltd.
(A Subsidiary of Coal India Ltd.)
Regional Institute-IV, Jaripatka,
Nagpur - 440014 (Maharashtra)

e-TENDER NOTICE



CORPORATE INDEX NO. U14292JH1975GOI001223

CMPDI/RI-IV/E&M/2016-17/

Date: 03.03.2017

e-TENDER NOTICE

FOR THE WORK

Supplying, Installation, Testing and Commissioning of 11 kV VCB panel switchboard by replacing existing switchboard and associated works at 11 kV Sub-Station, CMPDI COMPLEX, RI-IV, NAGPUR.

TENDER NOTICE NO. : 14 of 2016-17

DATE: 03.03.2017

1. Tenders are invited on-line on the website <http://coalindiatenders.nic.in> from the eligible bidders having Digital Signature Certificate (DSC) issued from any agency authorized by Controller of Certifying Authority (CCA), Govt. of India and which can be traced up to the chain of trust to the Root Certificate of CCA for the following work:

Description of work	Estimated Cost of Work (In Rs.)	Earnest Money (In Rs.)	Period of Completion (In days)
Supplying, Installation, Testing and Commissioning of 11 kV VCB Panel Switchboard by replacing existing Switchboard and associated works at 11 kV sub-station, CMPDI complex, RI-IV, Nagpur.	₹ 2025680.00	₹ 20257.00	120 Days

2. **Time Schedule of Tender:**

Sl.No.	Particulars	Date	Time
a.	Tender Publication date		
b.	Document download start date		
c..	Document download end date		
d.	Bid Submission start date		
e.	Bid submission end date		
f.	Start date for seeking Clarification on-line		
g.	Last date for seeking Clarification on-line		
h.	Part-I Opening date		

Please visit
<http://coalindiatenders.nic.in>
for dates

For details of qualification requirements, bid security and complete tender document, visit our website www.cmpdi.co.in. or <http://eprocure.gov.in/cppp> www.publishtender.gov.in Detailed tender notice is available at <https://coalindiatenders.nic.in>.

NOTE: End user portal agreement of CIL is applicable for CMPDI also. The auto extension of submission of bid shall be applicable as per details mentioned in clause no. 15 of NIT.

Sd/-
HOD (E&M)
C M P D I L, RI-IV, NAGPUR

Copy to :

1. GM (E&M), CMPDI, HQ, Ranchi.
2. HOD (E&MI), CMPDIL, RI-I, II, III, V, VI, VII.
3. GM (E&M), WCL, HQ, Coal Estate, Nagpur.
4. Dy.G.M.(GSD), WCL, Coal Estate, Nagpur
5. Staff Officer (E&M), WCL, Nagpur Area, Jaripatka, Nagpur
6. OIC CMPDI Camps Murpar, Anandwan and Durgapur
7. HOD (Finance), RI-IV, CMPDI, Nagpur.
8. Secy. to RD: for RD's information please
9. Notice Boards in RI-IV, CMPDI, Nagpur

With a request to Display
on Notice Boards

SECTION – I

DETAILED TENDER NOTICE

CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED
(A Subsidiary of Coal India Limited)
Regional Institute-IV, Jaripatka, Nagpur - 440014
Maharashtra, INDIA

DETAILED E -TENDER NOTICE

FOR THE WORK

SUPPLYING, INSTALLATION, TESTING AND COMMISSIONING OF 11 kV VCB PANEL SWITCHBOARD BY REPLACING EXISTING SWITCHBOARD AND ASSOCIATED WORKS AT 11 kV SUB-STATION, CMPDI COMPLEX, RI-IV, NAGPUR.

Contact No: (A): Ph.: 91-712-2807242, FAX: 91-712-2633234/2643231

e-mail: rdri4.cmpdi@coalindia.in

(B): For procedure of bid submission: Phone: 0651 -2233058

TENDER NOTICE NO. : 14 of 2016-17

DATE: 03.03.2017

Tenders are invited on-line on the website <http://coalindiatenders.nic.in> from the eligible bidders having Digital Signature Certificate (DSC) issued from any agency authorized by Controller of Certifying Authority (CCA), Govt. of India **and which can be traced up to the chain of trust to the Root Certificate of CCA for the following work:**

1. Brief Scope of Work:

Description of work	Estimated Cost of Work (In Rs.)	Earnest Money (In Rs.)	Period of Completion (In days)
Supplying, Installation, Testing and Commissioning of 11 kV VCB Panel Switchboard by replacing existing Switchboard and associated works at 11 kV sub-station, CMPDI complex, RI-IV, Nagpur	₹ 2025680.00	₹ 20257.00	120

2. Time Schedule of Tender :

Sl.No.	Particulars	Date	Time
a.	Tender Publication date		
b.	Document download start date		
c..	Document download end date		
d.	Bid Submission start date		
e.	Bid submission end date		
f.	Start date for seeking Clarification on-line	Please visit http://coalindiatenders.nic.in for dates	
g.	Last date for seeking Clarification on-line		
h.	Part-I Opening date		

3. Deposit of Earnest Money:

₹ 20257.00 (INR only) as Earnest Money can be deposited ONLINE.

In Online mode the bidder can make payment of EMD either through net-banking from designated Bank/s or through NEFT/RTGS from any scheduled Bank. In case of payment through net-banking, the money will be immediately transferred to the designated bank Account of CMPDIL (Pool Account). In case of payment through NEFT/RTGS the bidder will have to make payment as per the Challans generated by system on e-Procurement portal and

the amount will be deposited in the Pool Account. Bidder will be allowed to submit his/ her bid only when the EMD is successfully received in POOL Account and the information flows from Bank to e-Procurement system. The qualification in bid will also be subject to the receipt and acceptance of EMD within schedule date and time as mentioned in the NIT. CMPDIL/CIL shall not be responsible for non-receipt of EMD.

Note: It is advised that the bidder shall proceed for EMD payment online atleast one day before the 'End date and time of Bid Submission' to avoid any system related complications or issues in the payment gateway.

4. Availability of tender documents:

Detailed tender notice & Tender documents including terms and conditions of works shall be available on e-tendering portal <https://coalindiatenders.nic.in> and Tender Notice shall be available at websites www.cmpdi.co.in or <http://eprocure.gov.in/cppp>.

5. Clarification of Bid:

The bidder may seek clarification on-line within the specified period. However, the management will clarify as far as possible to the relevant queries.

6. User Portal Agreement:

The bidders have to accept the on-line user portal agreement which contains the acceptance of all the Terms and Conditions of NIT and tender document, undertakings and the e-Procurement system through <https://coalindiatenders.nic.in> in order to become an eligible bidder. This will be a part of the agreement.

7. Pre-Bid Meeting:

The pre-bid meeting shall be held in the office of H.O.D. (E&M). CMPDI, RI-IV/ Tender Inviting Authority with address on the scheduled date & time, if specified in the NIT. The purpose of the pre-bid meeting is to clarify the issues and to answer the questions on any matter that may be raised at that stage. Nonattendance of the pre-bid meeting will not be a cause for disqualification of bidder and it shall be presumed that the bidder does not require any clarification. The management shall not circulate proceedings of the pre-bid meeting.

8. General Instructions for Submission of Tender:

A bidder should strictly comply with the following instructions:

(a) Bidders are required to submit offers on line giving reference to this Tender Notice No. and date, containing offers in two parts.

(b) Two Parts of the bid should contain the details as follows: -

Part-I: Letter of Bid, Information regarding Eligibility Criteria, Financial Turnover, Confirmatory Documents as mentioned in NIT at Clause no. 11 (e).

Part-II Prices, only in the Excel format as indicated in the tender document.

9. Eligible Bidders:

The invitation for bid is open to all bidders including an individual, proprietorship firm, partnership firm, company registered under Companies Act, any legal entity or Joint Ventures having eligibility to participate as per eligibility criteria stipulated in clause No.10 of NIT and having Digital Signature Certificate (DSC) issued from any agency authorized by Controller of Certifying Authority (CCA), Govt. of India **and which can be traced up to the chain of trust to the Root Certificate of CCA.**

Note: Joint Venture: Two or three companies/contractors may participate in the tender as Joint Venture (JV). Joint Ventures must comply with the following requirements:

- i) The minimum qualification requirements for Joint Venture: The qualifying criteria parameter e.g. experience of the individual partners of the J.V will be as deliberated under clause No 10 (A) towards fulfillment of qualification criteria related to experience, financial resources etc. of the individual partners of the J.V. will be added together and the total criteria should not be less than as spelt out in the qualification criteria.
- ii) The formation of joint venture or change in the Joint Venture character/ partners after submission of the bid and any change in the bidding regarding Joint Venture will not be permitted.
- iii) Joint Venture Agreement should legally bind all partners jointly and severally.
- iv) The pre-qualification of a Joint Venture does not necessarily pre-qualify any of its partners individually or as a partner in any other Joint Venture or association. In case of dissolution of a Joint Venture, each one of the constituent firms may pre-qualify if they meet all the pre-qualification requirements, subject to written approval of the employer.
- v) The JV Agreement must include the relationship between joint venture partners in the form of JV Agreement to legally bind all partners jointly and severally for the proposed agreement which should set out the principles for the constitution, operation, responsibilities regarding work and financial arrangements, participation (percentage share in the total) and liabilities (joint and several) in respect of each and all of the forms in the joint venture. Such Joint Venture Agreement must evidence the commitment of the parties to bid for the facilities applied for (if pre-qualified) and to execute the contract for the facilities if their bid is successful.
- vi) One of the partners responsible for performing a key component of the contract shall be designated as Lead Partner. This authorization shall be evidenced by a Power of Attorney signed by legally authorized signatories of all the partners.
- vii) The JV Agreement must provide that the Lead Partner shall be authorized to incur liabilities and receive instructions for and on behalf of any and all partners of the Joint Venture and the entire execution of the contract shall be done with active participation of the Lead Partner.
- viii) The contract agreement should be signed by each Joint Venture Partners.
- ix) An entity can be a partner in only one Joint Venture. Bid submitted by Joint Venture including the same entity as partner will be rejected.
- x) The JV agreement may specify the share of each individual partner for the purpose of execution of this contract. This is required to fulfill eligibility and also for the purpose of apportioning the value of the contract to that extent to individual partner for subsequent submission in other bids if he intends to do so for the purpose of the qualification in that Bid.

10. **Eligibility Criteria:**

- A. Work Experience:** The intending tenderer must have in its name as a prime contractor experience of having successfully completed similar works during last 7 (seven) years ending last day of month previous to the one in which bid applications are invited (i.e. eligibility period) should be either of the following:

Three similar completed works each costing not less than the amount equal to 40% of the estimated cost.

Or

Two similar completed works each costing not less than the amount equal to 50% of the estimated cost.

Or

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

(In case the bidder is not a prime contractor but a sub-contractor, the bidder's experience as subcontractor will be taken into account if the contract in support of qualification is a

sub-contract in compliance with the provision of such sub-contract in the original contract awarded to prime contractor.)

The work experience of the bidder for those works only shall be considered for evaluation purposes, which are completed on or before the last day of month previous to one in which e-Tender has been invited (i.e. e-Publication date of NIT). The experience of incomplete/ongoing works as on the last date of eligibility period will not be considered for evaluation.

While considering the value of completed works, the full value of completed works will be considered whether or not the date of commencement is within the said 7 (seven) years period.

The cost of completed works shall be given a weightage to bring them at current price level by adding 5% for each completed year (total number of days/365) after the end date of experience (date of completion of work) till one year before the last day of month previous to one in which e-Tender has been invited.

The definition of similar work shall be as follows:

ELECTRICAL WORKS:

High Voltage (3.3 kV and above) Switchgear/Apparatus Supplying/Installation/Erection/Commissioning works.

In respect of the above eligibility criteria the bidders are required to furnish the following information online:

- i). Start date & end date of each qualifying experience (similar work)
- ii). Agreement Number/Work Order Number of each experience
- iii). Work Order Issuing authority of each experience
- iv). Percentage (%) share of each experience (100% in case of an individual/proprietorship firm or a partner in a partnership firm and the actual % of share in case of a Joint Venture)
- v). Executed Value of work against each experience.
- vi) Confirmation in the form of Yes/No regarding submission of similar work experience certificate as defined in the NIT.

Note: In case the bidder is a Joint Venture, the work experience of any one, two or three of the individual partners of JV may be furnished as the work experience of the bidder. Joint Venture, shall be allowed for participation in the bid with estimated cost above Rs. 2.0 Crores.

The above qualification criteria shall be fulfilled by JV in the following manner.

The qualifying criteria parameter e.g. experience of the individual partners of the J.V will be as deliberated hereinafter towards fulfillment of qualification criteria related to experience.

- a) In case of completion of single work of similar nature costing, not less than the amount equal to 80% of the estimated cost put to tender:-
 - i) Any of the JV partner shall have the experience of having completed successfully a single work of similar nature equal to 80% of the estimated cost put to tender. Or
- b) In case of completion of two works of similar nature each costing not less than the amount equal to 50% of the estimated cost put to tender :-
 - i) Any one partner can match the above requirement, Or
 - ii) At least two partners should each have completed at least one work of similar nature each costing not less than the amount equal to 50% of the estimated cost put to tender, Or

- c) In case of completion of three works of similar nature, each costing not less than the amount equal 40% of the estimated cost put to tender:
 - i) Any one partner can match the above requirement, Or
 - ii) Any two partners shall match the above requirement through completion of at least one work of similar nature each costing not less than the amount equal 40% of the estimated cost put to tender, Or
 - iii) All the three partners shall match the above requirement through completion of at least one work of similar nature each costing not less than the amount equal 40% of the estimated cost put to tender.

However, during fulfillment of any of the above criteria one of the partner, who is the lead partner shall have:

- i) More than 50 (fifty)% share in J.V. and
- ii) Experience of having completed successfully a single work of similar nature equal to at least 40% of estimated cost put to tender

In case the bidder is a Joint Venture, the work experience of any one, two or three of the individual partners of JV may be furnished as the work experience of the bidder.

B. Financial Turnover: Average annual financial turnover during the last 3 (three) years ending 31st March of the previous financial year should be at least 30% of the estimated cost.

(The "Previous Financial Year" shall be computed with respect to the e-Publication date of NIT).

If any bidder does not furnish the turnover value for any financial year out of the last 3 financial years, the turnover for that financial year shall be taken as 'Zero' and the average annual financial turnover shall be calculated accordingly.

The intending bidder must submit documentary evidence in support of above in the form of certificate from Chartered Accountant or audited balance sheet or suitable acceptable documents.

If the audited balance sheet for the immediately preceding year is not available in case of tender notified before 30th September, audited balance sheet/ profit and loss statement and other financial statement of the three financial years immediately preceding the previous financial year may be adopted for evaluating the credentials of the bidder.

Financial turnover shall be given simple weightage of 5% per year to bring them at current price level, while evaluating the qualification requirement of the bidder. Such weightage shall be considered from the end date of financial year. Updating will be considered for full or part of the year (total no. of days / 365) i.e. considering 365 days in a year, till the last day of month previous to one in which bid has been invited.

Joint Ventures shall meet the above eligibility requirement, in the following manner:

The qualifying criteria parameter e.g. financial resources (Turnover) of the individual partners of the J.V. will be added together, for the relevant financial year, and the total should not be less than as spelt out above.

C. Permanent Account Number (PAN): The bidder should possess Permanent Account Number (PAN) issued by Income Tax department, Govt. of India.

In respect of the above eligibility criteria the bidders are required to furnish the following information online:

Confirmation regarding possessing of Permanent Account Number (PAN) issued by Income Tax Department, Govt. of India in the form of Yes/No.

Note: In case the bidder is a Joint Venture, the PAN Number of each individual partner of JV will be furnished.

D. VAT/Sales Tax Registration on Works Contract: The bidder should possess a VAT/Sales Tax Registration on works contract issued by Sales Tax department of any Indian State/UT.

In respect of the above eligibility criteria the bidders are required to furnish the following information online:

Confirmation regarding possessing of VAT/ Sales Tax Registration on Works Contract issued by Sales Tax Department of any Indian State in the form of Yes / No.

Note: In case the bidder is a Joint Venture, the TIN / Sales Tax Registration Number of each individual partner of JV will be furnished.

E. Service Tax (Not Applicable for Exempted Services):

The bidder should be either a Small Service Provider and exempted from service tax registration and / or exempted from payment of service tax but a Body Corporate.

OR

Small Service Provider and exempted for service tax registration and / or exempted from payment of service tax but not a Body Corporate.

OR

A Body Corporate.

OR

Other than above three categories.

In respect of above eligibility criteria the bidder is required to furnish the following information online:

i) Confirmation in the form of Yes/No regarding possessing of required document as enlisted in NIT with respect to Service Tax status of the bidder.

Scanned copy of documents to be uploaded by bidders in support of information / declaration furnished online by the bidder against Eligibility Criteria as Confirmatory Document.

Any one of the following documents depending upon the status w.r.t. Service Tax as declared by the Bidder in the BOQ sheet:

a) Status: Small Service Provider and exempted from Service Tax Registration and/or exempted from payment of Service Tax but a Body Corporate:

Document: 1. A Certificate from practicing Chartered Accountant having a membership number that the bidder is a Small Service Provider and exempted for Service Tax Registration and/or exempted from payment of Service Tax and

2. The Certificate of Incorporation.

b) Status: Small Service Provider and exempted from Service Tax Registration and/or exempted from payment of Service Tax but not a Body Corporate.

Document: A Certificate from a practicing Chartered Accountant having membership number that the bidder is a Small Service Provider and exempted from Service Tax Registration and/or exempted from payment of Service Tax.

c) Status: A Body Corporate

Document: Service Tax Registration Certificate issued by Central Excise and Custom Department, Govt. of India.

d) Status: Other than above three categories

Document: Service Tax Registration Certificate issued by Central Excise and Custom Department, Govt. of India.

[In case of JV a Certificate from a practicing Chartered Accountant having membership number confirming the status of JV w.r.t. to Service Tax].

Note: In case the work/service is awarded to a Joint Venture participating in the tender they have to submit VAT, PAN and Service Tax Registration (as applicable in the tender and for the bidder status) on the name of the Joint Venture after Award of Work/Service at the time of execution of agreement before the payment of first running on account bill.

F. Legal Status of the bidder:

The bidder should possess any one of the following document:

1. Affidavit or any other document to prove proprietorship/individual status of the bidder.
2. Partnership deed containing name of partners.
3. Memorandum & Article of Association with certificate of incorporation containing name of bidder.
4. Joint Venture agreement containing name of partners and lead partner, Power of Attorney to the Lead Partner and share of each partner.

G. Digital Signature Certificate (DSC):

If the bidder himself is the DSC holder bidding on-line then no document is required. However, if the DSC holder is bidding online on behalf of the bidder then the Power of Attorney or any sort of legally acceptable document for the authority to bid on behalf of the bidder is to be submitted.

H. Banning :

The bidder would give a declaration that they have not been banned or delisted by any Govt. or Quasi Govt. agencies or PSUs. If a bidder has been banned or delisted by any Govt. or Quasi Govt. agencies or PSUs, this fact must be clearly stated and it may not necessarily be a cause for disqualification. If the declaration is not given, the bid will be rejected as non-responsive. The declaration/information should be furnished in the Undertaking to be submitted as per Clause 10.J.

I. Electrical Contractor License:

The bidder should possess a valid Electrical Contractor License issued by Govt. Deptt. of any Indian State.

In respect of the above eligibility criteria the bidders are required to furnish the following information online:

Confirmation regarding possessing of valid Electrical Contractor License issued by the Licensing Authority of any Indian State in the form of Yes/No.

J. An **UNDERTAKING for genuineness of the information furnished online and authenticity of the documents uploaded online in support of his eligibility etc. as per the format given in the bid document at Section – VI (Annexure – II).**

11. Methodology of Submission of Bid and its Evaluation:

- a. In order to submit the Bid, the bidders have to get themselves registered online on the e-Procurement portal (<https://coalindiatenders.nic.in>) with valid Digital Signature Certificate (DSC) issued from any agency authorized by Controller of Certifying Authority (CCA), Govt. of India and which can be traced up to the chain of trust to the Root Certificate of CCA. The online Registration of the Bidders on the portal will be free of cost and one time activity only. If the bidder is an individual person then he should register himself under "Individual" category and if the bidder is a proprietorship firm/partnership firm/Joint Venture/ Company then registration should be under "Corporate" category. The registration should be in the name of bidder, whereas DSC holder may be either bidder himself or his duly authorized person.

- b. The bidders have to accept unconditionally the online user portal agreement which contains the acceptance of all the Terms and Conditions of NIT including General and Special Terms & Conditions and other conditions, if any, along with on-line undertaking in support of the authenticity of the declarations regarding the facts, figures, information and documents furnished by the Bidder on-line in order to become an eligible bidder. No conditional bid shall be accepted.

NOTE: End user portal agreement of CIL is applicable for CMPDI also.

c. **General Technical Evaluation :**

The bidder has to fulfil / comply to all the terms of 'General Technical Evaluation' (GTE).

- d. **Letter of Bid:** The format of Letter of BID as given in the NIT at Section- VI (Annexure – I) will be downloaded by the bidder and will be printed / typed on their letter head. This document will be signed by the bidder or authorized person of bidder or DSC holder bidding online with authorization from bidder and the scanned copy of the same will be uploaded during bid submission in Cover-I. The content of the "Letter of Bid" uploaded by the bidder must be the same as per the format downloaded from website and it should not contain any other information.

If there is any change in the contents of Letter of Bid uploaded by bidder as compared to the format of Letter of BID uploaded by the department with NIT document, then the bid will be rejected.

The Letter of Bid will be digitally signed by DSC holder submitting bid online and it does not require any physical signature. However, if the Letter of Bid (LoB) bears the physical signature in addition to the original signature of DSC holder, it will be accepted without questioning the identity of people signing the Letter of Bid.

e. **Confirmatory documents:**

All the confirmatory documents as enlisted in the NIT in support of online information submitted by the bidder are to be uploaded in Cover-I by the bidders while submitting his/her bid (Refer Table below). The bidder will have to give an undertaking online that if the information/ declaration/ scanned documents furnished in support of the same in respect of Eligibility Criteria are found to be wrong or misleading at any stage, they will be liable to punitive action. Any other document uploaded which is not required as per the terms of the Tender Document shall not be considered.

The bidders will upload the scanned copy of the following specified documents in support of the information/ declarations.

Sl. No.	Eligibility Criteria	Scanned copy of documents (self certified) to be uploaded by bidder in support of information/ declaration furnished online by the bidder against Eligibility Criteria (CONFIRMATORY DOCUMENT)
1.	Work Experience (Ref. Clause No 10 (A) of NIT)	Satisfactory Work Completion Certificate issued by the employer against the experience of similar work containing all the information furnished by bidder on-line.
2.	Financial Turnover (Ref. Clause No 10 (B) of NIT)	Financial Turnover certificate for last 3 (three) financial years issued by a Practicing Chartered Accountant having a membership number with Institute of Chartered Accountants of India. (In case of JV, turnover certificate for each individual partner of JV)
3	Permanent Account Number (Ref. Clause No 10 (C) of NIT)	PAN card issued by Income Tax department, Govt. of India (In case of JV/consortium. PAN card for each Indian partner of JV/ Consortium and Verifiable Tax Registration Certificate of

		respective country for each foreign partner of JV/ Consortium itself)
4	VAT/Sales Tax Registration (Ref. Clause No 10 (D) of NIT)	VAT/Sales Tax Registration Certificate on works contract issued by Sales Tax Department of any Indian State (In case of JV/ Consortium. VAT/Sales Tax Registration Certificate for each Indian partner of JV partner of JV/ Consortium or JV/ Consortium itself)
5	Service Tax (Not applicable for Exempted Services (Ref. Clause No 10 (E) of NIT)	<p>Any one of the following documents depending upon the status w.r.t. Service Tax as declared by the Bidder in the BOQ sheet:</p> <p>a) Status: Small Service Provider and exempted from Service Tax Registration and/or exempted from payment of Service Tax but a Body Corporate; Document: 1. A Certificate from practicing Chartered Accountant having a membership number that the bidder is a Small Service Provider and exempted for Service Tax Registration and/or exempted from payment of Service Tax and, 2. The Certificate of Incorporation.</p> <p>b) Status: Small Service Provider and exempted from Service Tax Registration and/or exempted from payment of Service Tax but not a Body Corporate.; Document: A Certificate from a practicing Chartered Accountant having membership number that the bidder is a Small Service Provider and exempted from Service Tax Registration and/or exempted from payment of Service Tax.</p> <p>c) Status: A Body Corporate: Document: Service Tax Registration Certificate issued by Central Excise and Custom Department, Govt. of India.</p> <p>d) Status: Other than above three categories: Document: Service Tax Registration Certificate issued by Central Excise and Custom Department, Govt. of India. [In case of JV a Certificate from a practicing Chartered Accountant having membership number confirming the status of JV w.r.t. to Service Tax]</p>
6.	Legal Status of the bidder (Ref. Clause No 10 (F) of NIT)	<p>Any one of the following document :</p> <ol style="list-style-type: none"> 1. Affidavit or any other document to prove proprietorship/Individual status of the bidder. 2. Partnership deed containing name of partners 3. Memorandum & Article of Association with certificate of incorporation containing name of bidder 4. Joint Venture agreement containing name of partners and lead partner, Power of Attorney to the Lead Partner and share of each partner.
7.	Digital Signature Certificate (DSC) (Ref. Clause No 10 (G) of NIT)	If the bidder himself is the DSC holder bidding on-line then no document is required .However, if the DSC holder is bidding online on behalf of the bidder then the Power of Attorney or any sort of legally acceptable document for the authority to bid on behalf of the bidder
8.	Valid Electrical Contractor License (Ref. Clause No 10 (I) of NIT)	Electrical Contractor License issued by Govt. Dept. of any Indian State

9	Undertaking (Ref. Clause No 10 (J) of NIT)	An undertaking regarding genuineness of the information furnished by him on-line and authenticity of the scanned copy of documents uploaded by him on-line in support of his eligibility, as per the format given in the bid document at Section- VI (Annexure -II).
10	Any other document to support the qualification information as submitted by bidder on-line.	
Note: Only one file in .pdf format can be uploaded against each eligibility criteria. Any additional/other relevant documents to support the information/declaration furnished by bidder online against eligibility criteria may also be attached by the bidder in the same file to be uploaded against respective eligibility criteria.		

f. Price Bid:

The Price bid containing the Bill of Quantity will be in the .xls format (password protected) and will be uploaded during tender creation. This will be downloaded by the bidder and he will quote the rates for all items on this Excel file. Thereafter, the bidder will upload the same Excel file during bid submission in Cover-II. The bidder will have to quote for all the tendered items and the L-1 will be decided on overall quoted value (i.e., cost to company). The Price bids of the tenderers will have no condition. The Price Bid which is incomplete and not submitted as per instruction given above will be rejected. Any alteration/modification in the excel format may lead to rejection of the bid.

Tenderers should quote their rates excluding the impact of service tax. Applicable Service Tax payable by the tenderer/ Service Provider will be reimbursed on production of documentary evidence towards payment of such Service Tax to the Government Exchequer.

The Tenderer (Service Provider) will have to raise Service Tax Invoice for claiming the reimbursable amount of Service Tax paid by him / them. Such bills should necessarily contain Contractor's Service Tax Registration Number with details of Range / Division / Commissionerate address with documentary evidence of payment of Service Tax to the Government Exchequer.

In case of any default / delay in payment of Service Taxes, wrong claim of CENVAT credit etc. by the Contractor / Service Provider, the CMPDI would not be responsible and in no case any such claim of the Contractor / Service Provider will be entertained by CMPDI.

Note: Prior to quoting the rates in the BOQ file, the bidder will select the appropriate status from the following list given in the BOQ:-

- I). Status: Small Service Provider and exempted from Service Tax Registration and/or exempted from payment of Service Tax but a Body Corporate:
- II). Status: Small Service Provider and exempted from Service Tax Registration and/or exempted from payment of Service Tax but not a Body Corporate:
- III). Status: A Body Corporate:
- IV). Status: Other than above three categories:

The rates quoted by the bidder will be excluding Service Tax and service tax component (to be paid by CMPDI and the bidder) will appear as a separate entity. The component of service tax will be taken by the system based on the status of bidder selected by the bidder during bid submission and with the pre-defined business logic given in the BOQ file by the department. This file will be digitally signed and uploaded by the bidder in Part-II/ Cover-II.

METHODOLOGY FOR CALCULATION OF L-1:

The competitiveness of the bidders (L-1 Bidder) will be decided on the basis of "Cost to the Company". The system for decision of L-1 bidder will be as follows:

[NOTE: For the purpose of knowing whether CENVAT Credit for this tendered work is available to CMPDIL or not, please refer to cell number 'A7' of the BOQ uploaded before quoting your price.]

Case-1: Works / Services which are not covered under Reverse Charge Mechanism (RCM) – Works / Services which are not covered under RCM, the Cost to Company will be calculated as under:

A. When CENVAT CREDIT is available to CMPDIL:

Quoted Price (Without impact of Service Tax)

Add: (1) Swatchha Bharat Cess (SBC), if applicable.

B. When CENVAT CREDIT is not available to CMPDIL:

Quoted Price (Without impact of Service Tax)

Add: (1) Service Tax, if applicable,

(2) Swatchha Bharat Cess (SBC), if applicable,

(3) Krishi Kalyan Cess (KKC), if applicable.

Present rate of Service Tax, SBC & KKC are 14%, 0.5% and 0.5% respectively.

Case-2: Works / Services which are covered under Reverse Charge Mechanism (RCM)

– Works / Services which are covered under RCM, the Cost to Company will be calculated as under:

A. When CENVAT CREDIT is available to CMPDIL:

Quoted Price (Without impact of Service Tax)

Add: (1) Share of Swatchha Bharat Cess (SBC) payable by the Bidder, if applicable,

(2) Share of Swatchha Bharat Cess (SBC) payable by CMPDIL.

B. When CENVAT CREDIT is not available to CMPDIL:

Quoted Price (Without impact of Service Tax)

Add: (1) Service Tax payable by the bidder, if applicable,

(2) Swatchha Bharat Cess (SBC) payable by the bidder, if applicable,

(3) Krishi Kalyan Cess (KKC) payable by the bidder, if applicable.

(4) Service Tax payable by CMPDIL,

(5) Swatchha Bharat Cess (SBC) payable by CMPDIL,

(6) Krishi Kalyan Cess (KKC) payable by CMPDIL.

Present rate of Service Tax, SBC & KKC are 14%, 0.5% and 0.5% respectively.

Contract value will be:

Quoted Price (Without Impact of Service Tax)

Add: Share of Service Tax, SBC, KKC payable by the bidder.

The applicable share of Service Tax for works contract, (under reverse charge mechanism w.e.f. 01.07.2012, amended vide Notification No.14/2015-Service Tax, dated 19th May, 2015 and amended vide Notification No.22/2015-ST dated 6th November, 2015 regarding Swatch Bharat Cess) is given below:

Type of Works/ Services Contract	% value of work on which service tax is payable by both the bidder & CMPDI.	STATUS OF THE BIDDER			
		I). Small Service Provider and exempted from Service Tax Registration and/or exempted from payment of Service Tax but a Body	II). Small Service Provider and exempted from Service Tax Registration and/or exempted from payment of Service Tax but not a Body	III). A Body Corporate	IV).Other than 03 (three) categories i.e. (I), (II) and (III) as mentioned in tabular format

		Corporate		Corporate					
		Effective Rate of Service Tax in %		Effective Rate of Service Tax in %		Effective Rate of Service Tax in %		Effective Rate of Service Tax in %	
		Bidder	CMPDI	Bidder	CMPDI	Bidder	CMPDI	Bidder	CMPDI
1	2	3	4	5	6	7	8	9	10
a) Original works									
(i). all new constructions;									
(ii). All types of additions and alterations to abandoned or damaged structures on land that are required to make them workable.	40	Nil	Nil	Nil	7.50	15.00	nil	7.50	7.50
(iii). Erection, commissioning or installation of plant, machinery or equipment, or structures, whether pre-fabricated, or otherwise;									
b). Maintenance or repair or reconditioning or restoration or servicing of any goods	70	Nil	Nil	Nil	7.50	15.00	Nil	7.50	7.50
c). Other works contract [other than (a) and (b) above] including maintenance, repair, completion and finishing services such as glazing, plastering, floor and wall tiling, plastering, installation of electrical fitting of an immovable property	70	Nil	Nil	Nil	7.50	15.00	Nil	7.50	7.50
d). All Services other than Reverse Charge Mechanism Services including Works contract.	100	Nil	Nil	Nil	Nil	15.00	Nil	15.00	Nil
e). Services exempted from Service Tax							Nil		

The applicable service tax in this tendered work will be calculated on labour component as per Govt. Service Tax rules.

g. Cost of Bidding :

The bidder shall bear all costs associated with the preparation and submission of his bid and the Employer will in no case be responsible and liable for those costs.

h. Clarification of Bid :

The Bidder may seek clarification online within the specified period. The identity of the Bidder will not be disclosed by the system. The Department will clarify as far as possible the relevant queries of Bidders. The clarification given by the Department will be visible to all the Bidders intending to participate in the tender. The clarification may be asked from the next day of e-Publication of NIT. The last date for seeking clarification by Bidders/ the last date of giving clarification on-line will be as per the TIME SCHEDULE OF TENDER as available on the website : <https://coalindiatenders.gov.in> No other mode of seeking clarification shall be entertained.

12. All bids are to be submitted on-line on the website <https://coalindiatenders.nic.in>. No bid shall be accepted off-line.

13. Tender Status :

It will be bidder's responsibility to check the status of their Bid online regularly, after the opening of bid till award of contract. Additionally, information shall also be sent by system generated e-mail and SMS at nodal points (Date of bid opening, Requisition for clarification on Confirmatory document from L-1 bidder, award of work etc.). No separate communication will be required in this regard. Non-receipt of e-mail and SMS will not be accepted as a reason for non-submission of Confirmatory documents within prescribed time. The Tender Status will be in public domain and anyone visiting the site can view it by identifying the tender.

14. It is the bidder's responsibility to comply with the system requirement i.e., hardware, software and internet connectivity at bidder's premises to access the e-tender portal. Under any circumstances, CMPDI shall not be liable to the bidders for any direct/ indirect loss or damage incurred by them arising out of incorrect use of the e-tender system or internet connectivity failures.

15. Auto Extension of Critical Date:

If number of bids received online is found to be less than 03 (three) on end date of bid submission then the following critical dates of the Tender will be automatically extended initially for a period of 02 (two) days ending at 17.0 hrs and if the number of bids still remains less than 03 (three) then for another 05 (five) days ending at 17.00 hrs.

- Last date of submission of Bid.
- Last date of receipt of EMD
- Date of opening of Tender

If any of the extended Dates falls on Holiday i.e. a non-working day as defined in the e-Procurement Portal then the same is to be rescheduled to the next working day. This extension will also be applicable in case of receipt of zero bid.

Notes:

1. The validity period of tender should be decided based on the final end date of submission of bids.
2. The auto extension shall work on the basis of number of bids received only. It may so happen that any of these bid s may be eventually rejected during Tender opening, Technical evaluation or further process of evaluation resulting the total number of valid bids becoming less than 03(three).
3. After two extensions, the tender shall be opened irrespective of available number of bids on the extended date of opening of tender.

16. Opening of bids:

Tender (Cover-I and Cover-ii) will be decrypted and opened online by the "Bid Openers" with their Digital Signature Certificates on the prescribed date & time of Tender Opening. After opening of the bids, GTE, BOQ and all other documents uploaded by the eligible bidders get opened and comparative statement of prices will be generated by the system.

- A. After opening of Price-bid, the documents submitted by L-1 bidder in cover I as enlisted in the NIT will be downloaded by the Evaluator and shall be put up to the Tender Committee. The tender Committee will examine the uploaded documents against information/ declarations furnished by the L1 bidder online. If it confirms to all of the information/ declarations furnished by the bidder online and does not change the eligibility status of the bidder then the bidder will be considered eligible for award of Contract.
- B. In case the Tender Committee finds that there is some deficiency in uploaded documents by L1 bidder then the same will be specified online by Evaluator clearly indicating the

omissions/shortcomings in the uploaded documents and indicating start date and end date allowing 10 days (10 x 24 hours) time for online re-submission by L1 bidder. The L1 bidder will get this information on their personalized dash board under "Upload confirmatory document" link. Additionally, information shall also be sent by system generated email and SMS, but it will be the bidder's responsibility to check the updated status/ information on their personalized dash board regularly after opening of bid. No separate communication will be required in this regard. Non-receipt of e-mail and SMS will not be accepted as a reason of non-submission of documents within prescribed time. The bidder will upload the scanned copy of all those specified documents in support of the information/declarations furnished by them online within the specified period of 10 days. If the L1 bidder fails to submit the specified document/s in 10 (ten) days, 10 more days (10 x 24 hours) of time may be given by Evaluator clearly indicating the omissions / shortcomings in the uploaded documents and indicating start date and end date for submission of such document/s.

- C. The tender will be evaluated on the basis of documents uploaded by L-1 bidder online. The L-1 bidder is not required to submit hard copy of any document through offline mode. Any document submitted offline will not be given any cognizance in the evaluation of tender.
 - D. In case the L-1 bidder submits requisite documents online as per NIT, then the bidder will be considered eligible for award of Contract.
 - E. In case the L-1 bidder fails to submit requisite documents online as per NIT or if any of the information/ declaration furnished by L-1 bidder online is found to be wrong by Tender Committee during evaluation of scanned documents uploaded by bidder, which changes the eligibility status of the bidder, **then his bid shall be rejected and EMD of L-1 bidder will be forfeited.**
 - F. In case the L1 bidder is technically eligible but rejection is due to high rate quoted by him/ her then the tender shall be cancelled and retendered.
 - G. In case the L1 bidder is rejected due to noncompliance of confirmatory documents then the L2 bidder will become L-1 bidder and confirmatory documents of this bidder shall be evaluated by TC and the process shall be followed as mentioned in clause no. A to E above.
 - H. The process as mentioned at Clause. G shall be repeated till the work is either awarded or all the eligible bidders are exhausted.
 - I. In case none of the bidder complies the technical requirement, then re-tender will be done (with the same or different quantity, as per the instant requirement).
 - J. It is responsibility of Bidders to upload legible/ clearly readable scanned copy of all the required documents.
17. The tenderer shall closely study all specifications in detail, which govern the rates for which he is tendering.
18. **Currencies of Bid and Payment:**
The unit rates and prices shall be quoted by the Bidder entirely in Indian Rupees (INR) only.
19. **One Bid per Bidder:**
Each Bidder shall submit only one Bid, either individually, or as a partner in a partnership firm or a partner in a Joint Venture or a public limited firm. A Bidder who submits or participates in more than one Bid (other than as a sub-contractor or in cases of alternatives that have been permitted or requested) will cause all the proposals with the Bidder's participation to be disqualified.
20. **Bid Validity:**

The rates offered in part II shall be valid for **120** (one hundred twenty) days from the End date of bid submission.

In exceptional circumstances, prior to the expiry of original time limit, the Employer may request the bidders to extend the period of validity for a specified additional period. The employer's request and the bidder's responses shall be made in writing. A bidder may refuse the request without forfeiting his bid security. A bidder agreeing to the request will not be required or permitted to modify his bid but will be required to extend the validity of his bid security/ EMD (if submitted in the form of BG) for a period of 90 days beyond the extended validity of the bid.

The tenderer shall not, during the said period or within the period extended by mutual consent, revoke or cancel his tender or alter the tender or any terms/ conditions thereof without consent in writing of the company. In case the tenderer violates to abide by this, the Company will be entitled to take action as per Clause no. 20 (Modification and Withdrawal of Bid) of NIT.

21. Modification and Withdrawal of Bid:

Modification of the submitted bid shall be allowed on-line only before the deadline of submission of tender and the bidder may modify and resubmit the bid on-line as many times as he may wish.

Bidders may withdraw their bids on-line within the end date of bid submission and their EMD will be refunded. However, if the bidder once withdraws his bid, he will not be able to resubmit the bid in this tender. No withdrawal / modification is allowed after end date and time of bid submission. For withdrawal of bid after the end date of bid submission, the bidder will have to make a request in writing to the Tender Inviting Authority. Withdrawal of bid may be allowed till issue of work order / LOA with the following provision of penal action:

1. The EMD will be forfeited and
2. The bidder will be debarred for 1 (one) year from participating in tenders in CIL/Subsidiary.

The Price-bid of all eligible bidders including this bidder will be opened and action will follow as under:

- i) If the bidder withdrawing his bid is other than L-1, the tender process shall go on.
 - ii) If the bidder withdrawing his bid is L-1, then re-tender will be done.
- Penal action against clauses above will be enforced from the date of issue of such order.
- iii) The standard procedure to handle withdrawal of bid after end date of submission shall be as follows:

Standard Operating Procedure (SOP) for managing the cases of Withdrawal of Bids in e-Procurement System of CIL/ Subsidiary.

I. The Mode of Withdrawal :

A. Online Withdrawal of Bids:

- a. The system of online withdrawal is available on the portal upto end date of bid submission, where any bidder can withdraw his/her bid which will attract no penal action.
- b. The system of online withdrawal beyond end date of bid submission and till award of contract is not available. The bidder can withdraw their bid only offline, which may be considered except some exceptional cases as mentioned in clause below, either with or without imposition of penalty.

B. Offline Withdrawal of Bids:

- a. A partner of bidder (in case of JV and partnership firms) whose DSC is registered on the e-Procurement portal can access the portal for online withdrawal but when there is a split in the Business relationship, the partners whose DSC is not registered on the portal do not have the option of online withdrawal of bid. Hence such partners may opt to use offline method of withdrawal of his/her offer (or express his dissociation from the bidder organization).

- b. Offline withdrawal of bid, beyond end date of bid submission and till award of contract, may be considered by the tender committee.
- 22.** The Company reserves the right to postpone the date of receipt and opening of tenders or to cancel the tenders without assigning any reason whatsoever.
- 23.** The Company reserves its right to allow Public Enterprises purchase preference facility as admissible under prevailing policy.
- 24. Subletting / Sub-vending:**
Subletting any part or whole of the contract to any Firms/ Individuals/ Teams is not permitted and be present in all dealings with Principal Employer & no dealings through representatives on Power of Attorney will be permitted. Any deviation in this regard may be considered a Breach-of-Contract and shall be dealt with as per company regulations.
- 25.** The Company does not bind itself to accept the lowest tender and reserves the right to reject any or all the tenders without assigning any reasons whatsoever and to split up the work between two or more tenderers or accept the tender in part and not in its entirety.
- 26. Refund of EMD:**
 - a) If EMD is paid by the bidder in online mode (Direct Debit / NEFT/RTGS) then the EMD of rejected bidders will be refunded directly to the account from where it had been received (except the cases where EMD is to be forfeited).
 - b) No claim from the bidders will be entertained for non-receipt of the refund in any account other than the one from where the money is received.
 - c) If the refund of EMD is not received by the bidder in the account from which the EMD has been made due to any technical reason then it will be paid through conventional system of e-payment. For this purpose, if required, Tender Inviting Authority will be obtain the Mandate Form from the Bidder.
 - d) In case the tender is cancelled then EMD of all the participating bidders will be refunded unless it is forfeited by the department.
 - e) If the bidder withdraws his/her bid online (i.e. before the end date of submission of tender) then his/her EMD will be refunded automatically after the opening of tender.
 - f) The EMD of successful bidder (on Award of Contract) will be retained by CMPDIL and will be adjusted to Performance Security Deposit. However, EMD deposited by the L-1 bidder in the form of BG will be discharged when the bidder furnishes the required Performance Security Deposit (PSD) and signs the agreement.
- 27. Refund of Security Deposit (Applicable as per Clause 4.10 of General terms and Conditions given at Section – II of NIT).**
For this particular work 10% as security deposit (performance security and retention money) deposited /deducted from the bills of the contractor shall be refunded to him after expiry of guarantee period, which will be 1 (one) year from the date of commissioning of equipment/ completion of work and / or rectification of any defect which may be detected in the individual equipment for the whole system under the contract, whichever is later.
In addition, all types of manufacturers guarantee/ warranty wherever applicable are to be issued/ revalidated in the name of the owner by the contractual agency and will be covered with relevant counter guarantee. Bank guarantee furnished against Performance Security and Retention Money shall be validated for a period 90 days beyond the guarantee period.

28. Site Visit:

The Bidder, at the Bidder's own responsibility, cost and risk, is encouraged to visit and examine the site of works and its surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract for execution of the works. The cost of visiting the site shall be at the Bidder's own expense.

It shall be deemed that the tenderer has visited the site/area and got fully acquainted with the working conditions and other prevalent conditions and fluctuations thereto whether he actually visits the site / area or not and has taken all the factors into account while quoting his rates.

29. Change in Constitution of the Contracting Agency: Prior approval in writing of the company shall be obtained before any change is made in the constitution of the contracting agency, otherwise it will be treated as a breach of Contract.

30. Canvassing in connection with the tenders in any shape or form is strictly prohibited and tenders submitted by such tenderers who resort to canvassing shall be liable for rejection.

31. The work should be completed within 120 days and the date of commencement of the work will be reckoned from the actual date of handing over the site for this purpose.

32. On completion of the work all rubbish, debris, brick bats etc. shall be removed by the contractor(s) at his/their own expense and the site cleaned and handed over to the company and he/they shall intimate officially of having completed the work as per contract.

33. The Bidder, whose Bid has been accepted, will be notified of the award on-line and also by registered post by the employer prior to expiration of the bid validity period. The L-1 bidder will get the information regarding award of work on their personalised dash-board on-line.

34. Every tenderer is expected, before quoting his rates, to go through the requirements of materials/workmanship under specification/requirements and conditions of contract and to inspect the site/area of the proposed work at his own cost.

It shall be deemed that the tenderer has visited the site/area and got fully acquainted with the working conditions and other prevalent conditions and fluctuations thereto whether they actually visited the site/area or not and have taken all the above factors into account while quoting his rates.

35. Bid Prices:

The Bidders shall offer for the whole work based on the priced Bill of Quantities submitted by the bidder, However, the employer reserves the right to allot part of the work at their discretion and no claims, whatsoever, shall be entertained in this regard.

The Bidder shall fill-in rates and prices for all the items of the work described in the Bill of Quantities. The Rates and prices quoted by the Bidder shall be fixed for the duration of the contract and shall not be subject to variations on any account except to the extent variations allowed as per the conditions of the contract of the bidding document.

36. (a) All duties, taxes (excluding Service tax) and other levies, payable by the contractor under the contract or for any other cause as applicable on the last date of submission of tender shall be included in the rates, prices and the total bid price submitted by the bidder. All incidentals, overheads etc. as may be attendant upon execution and completion of works shall also be included in the rates, prices and total bid price submitted by the bidder.

However, such duties, taxes, levies etc. which is notified after the last date of submission of tender and / or any increase over the rate existing on the last date of submission of tender shall be reimbursed by the company on production of documentary evidence in support of payment actually made to the concerned authorities. Any decrease in duties, taxes, levies etc. as above shall be recovered by the Company.

The company reserves the right to deduct/withhold any amount towards taxes, levies, etc. and to deal with such amount in terms of the provisions of the Statute or in terms of the direction of any statutory authority and the company shall only provide with certificate towards such deduction and shall not be responsible for any reason whatsoever.

- (b) Service tax applicable for this work /service will be paid by the Contractor, hence the service tax applicable for this work/service should be shown separately in the BOQ/ Price Bid to be quoted by the bidder.

- 37.** In case the works/service is awarded to a joint venture participating in the tender they have submit VAT, PAN and Service Tax registration (as applicable in the tender and for the bidder status) on the name of the Joint Venture after award of the Works/ Service at the time execution of agreement / before the payment of first running on account bill.
- 38.** The company reserves the right to postpone the date of receipt and opening of tenders or to cancel the tenders without assigning any reason whatsoever.
- 39.** The Company reserves its right to allow Public Enterprises purchase preference facility as admissible under prevailing policy.
- 40.** This Tender Notice shall be deemed to be part of the Contract Agreement. 'The General Terms & Conditions', Additional Terms & Conditions, Special Terms & Conditions (if any), Technical Specifications, drawings (if any) and any other document uploaded on portal as NIT document forms an integral part of this NIT and shall also form a part of the Contract agreement.

41. Notification of Award and Signing of Agreement:

The Bidder, whose Bid has been accepted, will be notified of the award on-line and also by registered post by the Employer prior to expiration of Bid validity period. The L-1 bidder will get the information regarding award of work on their personalized dash-board on-line. The letter (hereinafter and in the Conditions of Contract called the "Letter of Acceptance") will state the sum that the Employer will pay the Contractor in consideration of the execution and completion of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price").

The notification of award will constitute the formation of the Contract, subject only to the furnishing of a Performance Security / Security Deposit in accordance with Clause of General Terms & Conditions of the tender document.

The Agreement will incorporate all agreements between the Employer and the successful Bidder within 28 days following the notification of award along with the Letter of Acceptance.

- 42.** Matters relating to any dispute or difference arising out of this tender and subsequent contract awarded based on this tender shall be subject to the jurisdiction of District Court of Nagpur, where the subject work is to be executed.

43. Non – disclosure / Confidentiality Clause:

The bidder will not at any time during the pendency of contract or afterwards, disclose to any person any information as to documents, components, parts, information, drawings, data, sketches, plans, programs, specifications, techniques, processes, software, inventions and other materials, both written and oral, of a secret, confidential or proprietary nature, including without limitation any and all information relating to finance, invention, research, design or development of information system and any supportive or incidental subsystems, and any and all subject matter claimed in or disclosed by any patent application prepared or filed by or on behalf of CMPDIL, in any jurisdiction, and any amendments or supplements thereto. The bidder should understand that breach of this clause would constitute a serious offence for which appropriate legal action may be taken to ensure enforcement of confidentiality clause.

CMPDI, also desires that the bidder shall hold in trust and confidence, and not disclose to others or use for its own benefit or for the benefit of others, any Proprietary Information which is disclosed to the bidder by CMPDIL at any time during the agreement/ award of work/ execution of work and thereafter. The bidder shall disclose Proprietary Information received under the contract to person within its organization only if such person (i) have a need to know and (ii) are bound in writing to protect the Confidentiality of such Proprietary Information. This clause shall survive and continue after expiration or termination of the contract and shall bind the contractor, its employees, agents, representatives, successors, heirs and assigns.

Sd/-
HOD (E&M)
CMPDI, RI-IV, NAGPUR

SECTION – II

GENERAL TERMS AND CONDITIONS

1. Definitions

- i) "**Employer**" or "Company" or 'Owner" wherever occurs in the conditions, means the Coal India Limited or any of its subsidiaries represented by the appropriate authority or his authorized representatives or any other officer specially deputed for the purpose who will employ the contractor.
- ii) "**Principal Employer**" wherever occurs means the officer nominated by the Company to function on its behalf.
- iii) The word "**Contractor/ Contractors**" wherever occurs means the successful tenderer/ tenderers who has/have deposited the necessary Earnest money and has/have been given written intimation about the acceptance of tender and shall include legal representative of such individual or persons composing a firm or a company or the successors and permitted assignees of such individual, firm or Company, as the case may be and any constitutional, or otherwise change of which shall have prior approval of the employer.
- iv) "**Site**" means the land and places including any building and erection thereon, over, under, in or through which the Permanent works or Temporary works designed by the Engineer in Charge are to be executed and any other lands and places provided by the Employer for working space or any other purpose as may be specifically designated in the Contract as forming part of the site.
- v) The term "**Sub-Contractor**" as employed herein, includes those having a direct contract with Contractor either on piece rate, item rate, time rate or any other basis and it includes one who furnishes work to a special design according to the plans or specifications of this work but does not include one who merely supplies materials.
- vi) "Accepting Authority" shall mean the management of the company and includes an authorized representative of the company or any other person or body of persons empowered in this behalf by the company.
- vii) "**Engineer-in-charge**" shall mean the officer nominated by the company in the E&M Engineering cadre/ discipline who is competent to direct supervisors and authorised to be in charge of the works for the purpose of this contract. The Engineer-in-Charge /Designated Officer in Charge who is of an appropriate seniority, will be responsible for supervising and administering the contract, certifying payments due to the contractor, valuing variations to the contract, awarding extension of time and valuing compensation events. The Engineer-in-Charge /Designated Officer in Charge may further appoint his representatives i.e. another person/Project Manager or any other competent person and notify to the contractor who is directly responsible for supervising the work being executed at the site, on his behalf under their Delegation of Powers of the company. However, overall responsibility, as far as the contract is concerned, will be that of the Engineer-in-Charge/Designated Officer in Charge.

- viii) The "**Contract**" shall mean the notice inviting tender, the tender as accepted by the Company, the work order issued to the contractor, and the formal contract agreement executed between the company and the contractor together with the documents referred to therein including general terms and conditions, special conditions, if any, scope of work, frozen terms & conditions/technical parameters/scope of work and revised offer, if any, specifications, drawings, including those to be submitted during progress of work, schedule of quantities with rates and amounts.
- ix) A "**Day**" shall mean a day of 24 hours from midnight to midnight.
- x) The "**Work**" shall mean the works required to be executed in accordance with the contract/work order or parts thereof as the case may be and shall include all extra or additional, altered or substituted works or any work of emergent nature, which in the opinion of the Engineer-in-charge, become necessary during the progress of the works to obviate any risk or accident or failure or become necessary for security.
- xi) "**Schedule of Rates**" referred to in this conditions shall mean the standard schedule of rates prescribed by the company and the amendments issued from time to time.
- xii) "**Contract amount**" shall mean:
 - a) in the case of turnkey/ lump sum contracts the total sum for which tender is accepted by the company.
 - b) in the case of other types of contracts the total sum arrived at based on the individual rate(s)/percentage rate(s) quoted by the tenderer for the various items shown in the "Schedule of Quantities" of the tender document as accepted by the Company with or without any alteration as the case may be.
- xiii) "**Written notice**" shall mean a notice or communication in writing and shall be deemed to have been duly served if delivered in persons to the individual or to a member of the contractors firm or to an office of the company for whom it is intended, or if delivered at or sent by registered mail/e-mail to the last business address known to him who gives the notice.
- xiv) "**The constructional plant**" means all appliances, tools, plants or machinery or whatsoever nature required in or about the execution, completion or maintenance of the works but does not include materials or other things intended to form part of the permanent work.
- xv) "**Letter of Acceptance of Tender**" means letter giving intimation to the tenderer that his tender has been accepted in accordance with the provisions contained in that letter.

- xvi) **"Department"** means the E & M Engineering Department of Coal India Limited or any of its subsidiary companies/units represented by the appropriate authority.
- xvii) **"Act of insolvency"** means as it is designed by Presidency Town Insolvency Act or Provincial Insolvency Act or any act amending such originals.
- xviii) The words indicating the singular only also include the plural and vice-versa where the context so requires.
- xix) "Drawings"/"Plans" shall mean all:
 - a) drawings furnished by the owner with the bid document , if any, as a basis for proposals,
 - b) working drawings furnished by the Owner after issue of letter of acceptance of the tender to start the work,
 - c) subsequent working drawings furnished by the owner in phases during progress of the work, and
 - d) drawings, if any, submitted by the contractor as per provision of the contract and duly approved by the owner.
- xx) "Codes" shall mean the following, including the latest amendments, and/or replacements, if any :
 - a) Bureau of Indian Standards relevant to the works under the contract and their specifications.
 - b) Indian Electricity Act and Rules and Regulations made there under.
 - c) Indian Mines Act and Rules and Regulation made there under.
 - d) Any other Act, rule and regulations applicable for employment of labour, safety provisions, payment of provident fund and compensation, insurance etc.

2. **Contract Documents:**

The following documents shall constitute the contract documents:

- i) Articles of Agreement.
- ii) Letter of Acceptance of Bid/ Work Order indicating deviation, if any from the conditions of contract incorporated in the tender document issued to the bidder.
- iii) Notice Inviting Tender and Instructions to Bidders.

- iv) Conditions of Contract including General Terms & Conditions of contract, Additional Terms and Conditions, Special Terms and Conditions and Commercial Terms & Conditions etc. – as applicable.
- v) Frozen terms and conditions/ technical parameters and revised offer, if any..
- vi) Specifications/ scope of work, if any.
- vi) Schedule of quantities (or Bill of Quantities) along with accepted rate.
- vii) Contract drawings and work programme.
- viii) Safety Code etc. forming part of the tender.
- ix) Integrity Pact (if applicable).

- 2.1** The contractor shall enter into and execute contract agreement in the prescribed form. The cost of the stamp papers for the contract agreement shall be borne by the contractor. Two sets of contract document/agreements shall be prepared and signed by both the parties. One of the sets shall be stamped "Original" and the other "Duplicate". The duplicate copy will be supplied to the contractor free of cost and the original is to be retained by the company. For additional copy, cost to be charged.

All additional copies should be certified by the Engineer -in -Charge.

The contractor shall keep copy of these documents on the site/place of work in proper manner so that these are available for inspection at all reasonable times by the Engineer-in-charge, his representatives or any other officials authorised by the company for the purpose.

- 2.2** The contract document shall not be used by the contractor for any purpose other than this contract & the contractor shall ensure that all persons employed for this contract strictly adhere to this and maintain secrecy, as required of such documents.
- 2.3** The local court, where the subject work is to be executed shall have exclusive jurisdiction in all matter arising under the contract.
- 2.4** The Contract Agreement will specify major items of supply or services for which the contractor proposes to engage sub-contractor/sub-vendor. The contractor may from time to time propose any addition or deletion from any such list and will submit proposals in this regard to the Engineer-in-Charge/ Designated Officer in charge for approval well in advance so as not to impede the progress of work. Such approval of the Engineer-in-Charge/Designated Officer in charge will not relieve the contractor from any of his obligations, duties and responsibilities under the contract.
- 2.5** Acceptance of Offer

“Letter of Acceptance”- is an acceptance of offer by the company. The tenderer should acknowledge the receipt of the order within 10 days of mailing of LOA and any delay in acknowledging the receipt will be treated as a breach of contract and compensation for the loss caused by such breach will be declared by the company by forfeiting EMD.

3. Discrepancies in contract documents & Adjustments thereof

The documents forming part of the contract are to be treated as mutually explanatory of one another and in case of discrepancy between schedule of quantity, the specifications and/or drawing, the following order of preference shall be observed;

- a) Description in Bill of Quantities of work.
 - b) Particular specification and special conditions, if any
 - c) Drawings.
 - d) General specifications
 - e) BIS specification
- 3.1** In the event of varying or conflicting provision in any of the document(s) forming part of the contract, the Accepting Authority's decision/clarification shall hold good with regard to the intention of the document or contract as the case may be.
- 3.2** Any error in description, quantity or rate in Bill of Quantities or any omission there from, shall not vitiate the contract or release the contractor from discharging his obligations under the contract including execution of work according to the Drawings and Specifications forming part of the particular contract document.

4. Security Deposit:

- 4.1** Security Deposit shall consist of two parts;
- a) Performance security to be submitted at award of work and
 - b) Retention Money to be recovered from running bills.

The security deposit shall bear no interest

- 4.2** Performance Security should be 5% of contract amount and should be submitted within 28 days of issuance of LOA by the successful bidder in any of the form given below :-
- a Bank Guarantee in the form given in the bid document from any Scheduled bank. The BG issued by outstation bank shall be operative at its local branch at Nagpur or branch at Bank Guarantee against Performance Security shall be applicable if the amount of Performance Security exceeds Rs. 5.0 lakhs.
 - Govt. Securities, FDR or any other form of deposit stipulated by the owner and duly pledged in favour of owner.

- Demand Draft drawn in favour of CMPDIL, REGIONAL INSTITUTE-IV, NAGPUR on any Scheduled Bank payable at its Branch at NAGPUR

The Earnest Money/Bid Security deposited in the form of Bank Guarantee shall be discharged when the Bidder has signed the Agreement and furnished the required Performance Security/ 1st part of security deposit.

The bid security deposited in the form of Demand Draft/cash may be adjusted against the Performance security (1st part of security deposit) at bidder's option.

If performance security is provided by the successful bidders in the form of bank guarantee it shall be issued either –

- a)* at Bidder's option by a nationalized/Scheduled Indian Bank or
- b)* by a foreign bank located in India and acceptable to the employer.

The validity of the Bank Guarantee shall be for a period of one year or ninety days beyond the period of contract/ extended contract period (if any), whichever is more.

Failure of the successful bidder to comply with the requirement as above shall constitute sufficient ground for cancellation of the award of work and forfeiture of the bid security/ earnest money.

In addition to the above, penal measures, the bidder will not be allowed to participate in the re-tendering process. The bidder may also be debarred from participating in future tenders in the subsidiary for minimum period of 12 months.

- 4.3. 5% Performance security should be refunded within 14 days of the issue of defect liability certificate (taking over certificate with a list of defects).
- 4.4. All running on account bills shall be paid at 95% (ninety five percent) of work value (**excluding service tax, if any**). The balance 5% shall be treated as retention money and will be second part of security deposit.

Retention Money may be refunded against equivalent Bank Guarantee, on written request of the contractor, on its accumulation to a minimum amount of Rs.5 lakhs subject to the condition that amount of any Bank Guarantee except last one shall not be less than Rs. 5 lakhs.

However, Bank Guarantee against retention money shall be with suitable validity based on nature of work which shall be 90 days beyond the defect liability period, but in no case less than the period of one year.

Bank Guarantee is to be submitted in the format prescribed by the company.

Bank Guarantee shall be irrevocable and will be from Scheduled Banks as elaborated at Cl.4.2.

- 4.5 Retention Money should be refunded after issue of No Defect Certificate.

- 4.6 The Company shall be at liberty to deduct/appropriate from the security deposit such sums as are due and payable by the contractor to the company as may be determined in terms of the contract, and the amount appropriated from the security deposit shall have to be restored by further deduction from the contractors subsequent on account running bills, if any.
- 4.7 **REFUND OF SECURITY DEPOSIT:** The refund of security deposit shall be subject to company's right to deduct/ appropriate its due against the contractor under this contract or under any other contract.

On completion of the entire work and issue of defect liability certificate, (taking over certificate with a list of defects) by the Engineer-in-charge, one half of the security deposit remaining with the company (Performance Security) shall be refunded as elaborated at Cl.No.4.3.

The other half (Retention Money) shall be refunded to the contractor after issue of No Defect Certificate by the Engineer-in-Charge on the expiry of Defect Liability Period of Six months, subject to the following conditions:

- a) Any defect/ defects in the work, if detected after issue of defect liability certificate(Taking over certificate with the list of defects) is / are rectified to the satisfaction of the Engineer-in-charge within the said defect liability period of six months or its due extension till completion of the rectification works as required.
- b) In the case of building work/other work of similar nature, the refund shall be made on the expiry of the said six months period or at the end of one full monsoon period i.e. June to September, whichever is later in point of time and any defects such as leakage in roof, effloresces in walls, dampness, defects in drainage etc. should be rectified to the satisfaction of Engineer-In-Charge.

NB: In case of Maintenance contracts, that ends with successful completion of work, where question of Defect Liability Period does not arise (e.g. sweeping/cleaning, horticulture, tank cleaning, jungle cutting, grass cutting, grass cutting, surface dressing etc), the performance security and retention money (second part of bid security) cab be released simultaneously after completion of work and taking over by department.

- 4.8 **Additional performance security:** (applicable for item rate as well as percentage rate tenders):
- Additional performance security shall be applicable if the bid price is below 15% of the justified price, finalized by the owner. The amount of such additional performance security shall be the difference between 85% of the owner's justified price and quoted price.
- Justified price shall be finalized by the owner on the basis of prevalent market rate of materials and labour analysed as per standard analysis of rate of CPWD/NBO, and shall be binding on the bidder.

Additional performance security shall be furnished by bidder along with normal performance security.

Failure to submit such additional performance security may result into termination of the contract.

The additional performance security will not carry any interest and shall be released in the following manner.

- i) 30% of Additional performance security will be released after 60% of the total work is completed.
- ii) 50% of Additional performance security will be released after 80% of the total work is completed.
- iii) 100% of Additional performance security will be released after total work is completed.

Additional performance security may be furnished in the shape of BG or any of the forms as applicable for performance security.

4.9 Refund of Security Deposit regarding Specialized Items of Works (shall be applicable only when relevant item exists in the contract and shall be for 10% of value of such items in the contract or for 10% of value of contract with such specialized items only).

- a) For some specialized items of work such as anti-termite, waterproofing work, kiln seasoned and chemically treated wooden shutters, or any other item of work deemed as such specialized by Engineer-in-Charge that are entrusted to specialized firms or contractor who associate specialized agencies, the contractor/ firm executing the work should be asked to give a specific guarantee that they shall be responsible for removal of any defects cropping up in these works executed by them during the guarantee period. The form of guarantee to be executed by the contractors shall be as enclosed.
- b) 10% of the security (performance security and retention money) deposited/deducted from the bills of the contractors, relevant to the item(s), shall be refunded to him after expiry of Guarantee period.. The security amount relevant to the item(s) of work, may be released after 12 months of completion of work, against equivalent BG and furnishing Guarantee as at (a) above.

4.10 Refund of security deposit for contracts with supply, installation and commissioning of equipment i.e. with Mechanical and Electrical Works (shall be applicable only when relevant item exists in the contract).

For some specializes contracts like Pump House, Intake well etc. there may be Civil works as well as Mechanical and Electrical works. For such works 10% as security deposit (performance security and retention money) deposited / deducted from the bills of the contractor shall be refunded to him after expiry of guarantee period, which will be one year from the date of commissioning of equipment/ completion of work and / or rectification of any defect which may be detected in the individual equipment for the whole system under the contract, whichever is later.

In addition, all types of manufacturers guarantee/ warranty wherever applicable are to be issued/ revalidated in the name of the owner by the contractual agency and will be covered with relevant counter guarantee. Bank guarantee furnished against Performance Security and Retention Money shall be validated for a period 90 days beyond the guarantee period.

5. Deviations/Variations in Quantities and Pricing

The quantities given in the "Schedule of Quantities" are based on estimates and are meant to indicate the extent of the work and to provide a uniform basis for tendering and any variation either by addition or omission shall not vitiate the contract.

- 5.1** The company through its Engineer-in-Charge or his representative shall, without radically changing the original scope and nature of the work, under contract, have power to make any alterations in or additions to or substitution of the original specifications, drawings, designs and instructions that may appear to be necessary or advisable during the progress of the work.
The contractor shall be bound to carry out the works in accordance with the instructions given to him in writing by the Engineer-in-Charge or his representative on behalf of the company. Such altered or additional or substituted work, which shall form part of the original contract, shall be carried out by the contractor on the same terms and conditions in all respects on which they agreed to do the main work and at the same rate/rates as are specified in the contract/ work-order.
- 5.2** The right is reserved to cancel any items of work included in the contract agreement or portion thereof in any stage of execution if found necessary to the work and such omission shall not be a waiver of any condition of the contract nor invalidate any of the provisions thereof.
- 5.3** If the additional, altered or substituted work includes any class of work for which rate/rates is/are not specified in the contract/work order, rates for such items shall be determined by the Engineer In Charge as follows:
 - a)** In the case of percentage tenders, if the rate for the item of work executed is available in the company's approved SOR, it will be paid at the schedule rate plus or minus the accepted percentage as per contract.
However, if the extra item is not available in company's approved SOR, then the rate(s) for such items shall be dealt as at (c) below.
 - b)** In case of item rate tenders, the rate for extra item shall be derived from the rate for similar item or near similar item of work available in the agreement schedule of work or by analysis of rates as at (c) below and the lower rate out of the above two shall be considered.

In case of composite item rate tenders, where two or more schedule of quantities for similar item description may form part of the contract, the applicable rate shall be taken from the Schedule of Quantities of that particular part in which the deviation is involved, failing that at lowest applicable rate for similar item of work in the other schedule of quantities.

For deviation of rates based on analysis, the same shall be done by analysis on prevalent market rate of materials and labour based on standard norms of analysis of rate of C.P.W.D/N.B.O.

- c) In the case of extra item(s) that are completely new, and are in addition to the items contained in the contract, the contractor may within 15 days of receipt of order or occurrence of the item(s) claim rates, supported by proper analysis. The Engineer-in-Charge shall determine the rate(s) by analysis based on prevalent market rate of materials and labour and on standard norms of analysis of rate of CPWD/NBO.
- d) In case of combined tender with partly item rate for non-schedule items & partly percentage tenders for SOR items, the rate for extra item shall be derived as at (b) & (c) above in case of non-schedule items rates and in case of percentage rates for SOR items the rate for extra item shall be derived as at (a) above.

In case of any difference between the contractor and the Engineer-In Charge as to the fixation of rates, the matter shall be referred to the accepting authority of the company i.e. GM(E&M) of the company or Staff Officer(E&M) for the work awarded at Company Hqrs. level and Area level respectively, whose decision shall be final and binding on the contractor.

- 5.4 Alteration in the quantities shall not be considered as a change in the condition of the contract nor invalidate any of the provision thereof provided that a deviation estimate / revised estimate / supplementary agreement for the item(s) involved is made. Such approval shall be from appropriate authority.
- 5.5 Payment for such deviated items (additional/ altered / substituted items of work of the agreement schedule) shall be made in the contractors running on account bills, till the revised estimate/ deviation estimate regularizing these items are sanctioned by the competent authority of the company, at the provisional rates and shall not exceed :
 - a) 75% of the rate recommended by the Engineer-In-Charge to the accepting authority of the company i.e. GM(E&M) of the company or SO(E&M) of the Area , if the rate is directly available in the SOR of the company/ if the rate is derived from available rate of BOQ..
 - b) 50% of the rate recommended by the Engineer-In-Charge to the accepting authority of the company, i.e. GM(E&M) of the company or SO(E&M) of the Area , if it is analysed item rates based on prevalent market rates of materials and labour following CPWD/NBO norms.

Total payment for such extra items of work shall not exceed 10% of work order/agreement value/ approved deviation estimate value. Also total payment including extra items of work shall not exceed the work order/agreement/ approved deviation estimate value.

5.6 PROVISIONS FOR DEALING WITH VARIATIONS IN RESPECT OF ABNORMALLY HIGH RATE AND ABNORMALLY LOW RATE ITEMS.

The abnormally high rate items are those whose quoted rates are more than 20% of the justified rates decided by the owner.

The abnormally low rate items are those whose quoted rates are less than 20% of the justified rates decided by the owner.

In case of Item Rate Tenders, the revision of rates for (i) abnormally high rate items and (ii) abnormally low rate items, shall become operative under the following circumstances:-

For increase in quantity of more than 25% in respect of works executed below plinth level and 10% in respect of works executed above plinth level.

Quantity variation beyond the limit mentioned above shall be dealt by arriving at new rate based on prevalent market rate of materials and labour analysed as per standard analysis of rate of CPWD/NBO. Payment of extra quantity over the permitted quantity as explained above would be made on the basis of the new analysed rate.

The variation in quantity of abnormally low rate items for item rate tenders shall not be permitted below 25% for the items below plinth level and below 10% for the items above plinth level of the agreement schedule quantity, but in exceptional cases with written consent of Engineer-in-Charge arising out of technical necessity.

The above provisions shall be applicable for item rate tenders only and not applicable for percentage rate tenders for works based on standard schedule of rates of the company.

For the purpose of operation, the following works shall be treated as works related to foundation, unless otherwise defined in the contract.

- a) For Buildings: All works up to 1.2 metres above ground level or up to floor 1 level whichever is lower.
- b) For abutments, piers and well steining : All works up to 1.2m above the bed level.
- c) For retaining walls, wing walls, compound walls, chimneys, overhead reservoirs / tanks and other elevated structures: all works up to 1.2 metres above the ground level.
- d) For reservoirs / tanks (other than overhead reservoirs / tanks): All works up to 1.2 metres above the ground level.
- e) For basement : all works up to 1.2m above ground level or up to floor 1 level whichever is lower.

For Roads, all items of excavation and filling including treatment of sub base

- 5.7 The time for completion of the originally contracted work shall be extended by the company in the event of any deviation resulting in additional cost over the awarded value, if requested by contractor as follows:-
- (i) in the proportion which the additional cost of the altered, additional or substituted work (in value) bears to the original tendered value plus.
 - (ii) 25% of the time calculated in the (i) as explained above or such further additional time as may be considered reasonable by the Engineer-in-Charge.
- 5.8 The company through its Engineer- In- Charge or his representative, on behalf of the company, shall have power to omit any part of the work in case of non-availability of a portion of the site or for any other reason and the contractor shall be bound to carry out the rest of the work in accordance with the instructions given by the Engineer- In- Charge. No claim from the Contractor shall be entertained/ accepted on these grounds.
- 5.9 In the event of any deviation being ordered which in the opinion of the contractor changes radically the original scope/nature of the contract, the contractor shall under no circumstances suspend the work, either original or altered or substituted, and the dispute/disagreement as to the nature of deviation and the rate/rates to be paid for such deviations shall be resolved separately with the company as per the procedures/ norms laid down hereafter.

6. Time for Completion of Contract, Extension thereof, Defaults and Compensation for Delay

Time is the essence of the contract and as such all works shall be completed within the time stipulated in the contract/ work order. The work shall, throughout the stipulated period of contract, be carried out with all due diligence on the part of the contractor.

Immediately after the contract is concluded i.e. LOA / Work Order is issued, the Engineer-in-Charge and the contractor shall agree upon a detailed time and progress chart prepared based on BAR CHART/ PERT CPM techniques on the basis of a construction schedule submitted by the contractor at the time of executing contract showing the order in which the work is proposed to be carried out within the time specified in the LOA /work order.

For the purpose of this detailed time and progress chart, the work shall be deemed to have commenced on the expiry of 10* (ten) days from the issue of Letter of Acceptance of Tender or 7(seven) days after handing over the site of work or handing over reasonable number of working

drawings to the contractor or the period of mobilization allowed in the work order for starting the work in special circumstances, whichever is later.

* For Specialized Works/ High Value Works (above Rs. 5 crores), the period shall be 30 days.

6.1 If the contractor, without reasonable cause or valid reasons, commits default in commencing the work within the aforesaid time limit, the company shall, without prejudice to any other right or remedy, be at liberty, by giving 15 day's notice in writing to the contractor to commence the work, failing which to forfeit the Earnest Money deposited by him and to rescind the Letter of Acceptance of Tender/Work Order and also to debar the contractor to take part in the future re-tender.

The Company may debar such defaulting Contractors from participating in future Tenders for a minimum period of 12(twelve) months.

6.2 If the contractor fails to complete the work and clear the site on or before the date of completion or extended date of completion, he shall without prejudice to any other right or remedy available under the law to the company on account of such breach, pay as compensation (Liquidated Damages):

i) @ half percent ($\frac{1}{2}\%$) of the contract amount/Revised Contract amount whichever is less, per week of delay.

OR

ii) $\frac{1}{2}\%$ of the contract-value of group of items/ revised completion value of group of items whichever is less, per week of delay, for which a separate period of completion is originally given.

The aggregate of such compensation/ compensations shall not exceed:

i) 10% (ten) percent of the total amount of the contract/ Revised contract amount, whichever is less.

OR

ii) 10% of the contract-value of group of items/ revised completion value of group of items whichever is less, for which a separate period of completion is originally given.

The amount of compensation may be adjusted or set off against any sum payable to the contractor under this or any other contract with the company.

6.2.1 The company, if satisfied, that the works can be completed by the contractor within a reasonable time after the specified time of completion, may allow further extension of time at its discretion with or without the levy of L.D. In the event of extension granted being with L.D, the company will be entitled without prejudice to any other right or remedy available in that behalf, to recover from the contractor as agreed damages equivalent to half percent of the contract value of the works for each week or part of the week subject to a ceiling as described at Cl.6.2.

- 6.2.2** The company, if not satisfied that the works can be completed by the contractor, and in the event of failure on the part of the contractor to complete work within further extension of time allowed as aforesaid, shall be entitled, without prejudice to any other right, or remedy available in that behalf, to rescind the contract.
- 6.2.3** The company, if not satisfied with the progress of the contract and in the event of failure of the contractor to recoup the delays in the mutually agreed time frame, shall be entitled to terminate the contract.
- 6.2.4** In the event of such termination of the contract as described in clauses 6.2.2 or 6.2.3 or both, the company, shall be entitled to impose penalty/LD as deliberated at Clause 10. Additionally the contractor shall be debarred from participating in the future tenders for a minimum period of 12 months.
- 6.3** The company may at its sole discretion, waive the payment of compensation on request received from the contractor indicating valid and acceptable reasons if the entire work is completed within the date as specified in the contract/work order or as validly extended date without stipulating any compensation for delay.
- 6.4** Extension of date of completion: On occurrences of any events causing delay as stated here-under, the contractor shall intimate immediately in writing to the Engineer-in-Charge.
- a) Force Majeure:
- i) Natural phenomena like unprecedented flood and draught, earthquakes & epidemics.
 - ii) Political upheaval, civil commotion, strikes, lockouts, acts of any Govt. (domestic/foreign) including but not limited to war, proprieties, and quarantine embargoes.

The successful bidder/ contractor will advise in the event of his having to resort to this clause by a registered letter duly certified by the local chamber of commerce or statutory authorities, the beginning and end of the cause of delay, within fifteen days of the occurrence and cessation of such Force Majeure condition.

In the event of delay due to Force Majeure for more than one month the contract may be terminated at the discretion of the company. Termination under such circumstances will be without any liability on either side.

For delays arising out of Force Majeure, the bidder / contractor will not claim extension in completion date for a period exceeding the period of delay attributable to the clauses of Force Majeure and neither company nor bidder / contractor shall be liable to pay extra cost (like increase in rates, remobilization advance, idle charges for labour and materials etc.) provided it is mutually established that Force majeure conditions did actually exists.

b) Serious loss or damage by fire and abnormally bad weather.

- c) Non-availability of stores which are the responsibility of the company to supply as per contract.
- d) Non-availability of working drawings in time, which are to be made available by the company as per contract during progress of the work.
- e) Delay on the part of the contractors or tradesmen engaged by the company not forming part of the contract, holding up further progress of the work.
- f) Non-availability or breakdown of tools and plant to be made available or made available by the company.
- g) The execution of any modified or additional items of work or excess quantity of work.
- h) Any other causes which, at the sole discretion of the company, is beyond the control of the contractor.

6.4.1 A **HINDRANCE REGISTER** shall be maintained by both department and the contractor at site to record the various hindrances, as stated above, encountered during the course of execution. Hindrance register will be signed by both the parties. The contractor may also record his observations in the Hindrance Register. In case the contractor has a different opinion for hindrance and a dispute arises then the matter would be referred to the EIC and or the next higher authority whose decision would be final & binding on the contractor & the decision to be communicated within 15 days.

6.4.2 The contractor shall request the company in writing for extension of time within 15 days of happening of such event causing delay stating also, the period for which extension is required. The company may, considering the genuinity of the request, give a reasonable extension of time for completion of the work. Such extension shall be communicated to the contractor in writing by the company through the Engineer-in- Charge within 1(one) month of the date of receipt of such request.

6.4.3 The opinion of the Engineer-in-charge, whether the grounds shown for the extension of time are or are not reasonable, is final. If the Engineer-in-charge is of the opinion that the grounds shown by the contractor are not reasonable and declines to the grant of extension to time, the contractor cannot challenge the soundness of the opinion.

The opinion of the Engineer-in-charge that the period of extension granted by him is proper or necessary is not, however, final. If the contractor feels that the period of extension granted is inadequate he can appeal to the GM(E&M)/ CM(E&M) of the company for consideration on the question whether the period of extension is or is not proper or necessary.

6.4.4 Provisional extension of time may also be granted by the Engineer-in- Charge during the course of execution, on written request for extension of time within 15 (fifteen) days of happening of such events as stated above,

reserving the company's right to impose/ waive penalty at the time of granting final extension of time as per contract agreement.

- 6.4.5** When the period fixed for the completion of the contract is about to expire, the question of extension of the contract may be considered at the instance of the Contractor or the Department or of both. The extension will have to be by party's agreement, express or implied.

In case the contractor does not apply for grant of extension of time within 15 (fifteen) days of the hindrance occurring in execution of the work and the department wants to continue with the work beyond the stipulated date of completion for reason of the work having been unavoidably hindered, the Engineer-in-charge can grant extension of time even in the absence of application from the contractor.

Such extension of time granted by the Engineer-in-Charge is valid provided the contractor accepts the same either expressly or implied by his actions before and subsequent to the date of completion. Such extension of time shall be without prejudice to Company's right to levy compensation under the relevant clause of the contract.

The contractor shall however use his best efforts to prevent or make good the delay by putting his endeavors constantly as may be reasonably required of him to the satisfaction of the Engineer-in-Charge.

7. **Material Supply & other facilities**

The contractor shall at his own expense, provide all materials required for the work, unless otherwise specified, and the rates quoted by the contractor shall be for finished work inclusive of all materials required for completion of the work as specified in the contract.

* The company may, of its own or at the request of the contractor, supply such materials as may be specified, if available, at rate/rates to be fixed by the Engineer-in-charge.

- 7.1 For the materials which the company has agreed to supply for the contract, the contractor shall give in writing of his requirements in accordance with the agreed phased programme to the Engineer-in-charge sufficiently in advance. The value of materials so supplied shall be set off or deducted from the payment to be made for the items of work in which such materials have been consumed, or from any sum then due or to become due to the contractor thereafter.

- 7.2* The company will supply steel both reinforcement and structural and cement at the following rates inclusive of all taxes. The contractor shall bear all the cost for transportation; handling and storage from the issuing store of the company to contractor's work site store.

- i) Reinforcement Steel *:-

- a) M.S. Round: Rs.
- b) Tor Steel: Rs.
- c) Structural Steel: Rs.
- ii) Cement * : Rs.

[* delete whichever is not applicable]

- 7.3** If the steel is issued by the department, the wastage of steel shall be the barest minimum. The wastage allowed from theoretical quantity will be upto a maximum of 5% to cover the wastage due to cutting into pieces, bending and other factors. No cut pieces or scrap less than 2 mtr. in length will be taken by the department. Efforts should be made to use the cut pieces of 2 mtr. or above length as far as possible. If the wastage of steel is more than the permissible variation mentioned above the cost of excess wastage made by the contractor shall be recovered at double the issue rates indicated above, or 115% of prevailing market rate including sales tax and general tax during the period of work, whichever is more. No allowances shall be entertained on account of Rolling Margin for the steel either issued by the department or procured by the contractor.
- 7.4** If the cement is issued by the department, the variation of 5% will be permitted over the theoretical consumption of cement for value of work up to Rs.10.00 lakhs and 3% for value of work above Rs.10.00 cement consumed in excess or less than the specified quantity shall be made at double the issue rate or 115% of prevailing market rate including sales tax and general tax during the period of work, whichever is more.
- 7.5** In case the department is not able to supply cement/steel as per the provisions of the contract, the Engineer-in-Charge may allow, with the approval of GM/HOD(Civil) of the company, the contractor in writing for procurement of cement/ steel from the approved sources and the extra on this account including transport charges, if any, over the issue rate shall be reimbursed to the contractor on production of authentic documents. Transportation of cement/ steel from the place of purchase to the site of work and proper storage of cement/steel at site shall be contractor's responsibility. He should maintain proper account of cement/steel issued/procured by him and should allow inspection of his godown and his cement/steel account by the concerned Engineer-in-charge or any other authorized officers of the company. Contractor should draw materials from the company on the basis of actual requirement as assessed by the Engineer-in-Charge on "as and when required" basis.
- 7.6** Recovery of cost of materials issued on sale A/c will be made as per actual consumption basis but the Engineer-in-Charge will have the discretion for making full recovery while processing a particular bill or asking for the return of the balance materials if the work is not progressing satisfactorily. The contractor shall keep accurate record of materials issued by the company,

maintain proper account for the materials received and consumed in the work and shall be open to check by the Engineer-in-Charge or his authorized representative. The contractor shall ensure that such materials are consumed for the contract works only and the Register for the aforesaid account shall be signed both by the representatives of Engineer In Charge and the contractor.

- 7.7** All materials, tools and plants brought to site by the contractor including the materials supplied by the company shall be deemed to be held in lien by the company and the contractor shall not have the right to remove the same from the site, without the written permission of the Engineer-in-Charge. The company shall not however be liable for any loss, theft or damage due to fire or other cause during this period of lien, the responsibility for which shall lie entirely on the contractor.
- 7.8** The contractor shall bear the cost of loading, transportation to site, unloading, storing under cover as required etc. as may be necessary for the use and keeping the materials in good condition.
- 7.9** Any surplus materials issued by the company, remaining after completion or termination of the contract, shall be returned by the contractor at his cost to the place of issue and the Engineer-in-Charge shall accept the same at the rate not exceeding the rate at which these were originally issued taking into consideration the deterioration or damage, if any, that may have been caused during the custody of the contractor. In the event, the contractor fails to return the surplus materials out of those supplied by the company, the Engineer-in-Charge may, in addition to any other liability which the contractor would incur in this regard, by giving notice in writing require the contractor to pay the amount at double the issue rate for such unreturned surplus materials or 115% of the prevailing market rate including Sales Tax & General Tax during the period of work, whichever is more.
- 7.10** On completion or on termination of the contract and on complete recovery of secured advance paid by the company, if any, in respect of materials brought to site, the contractor with due permission of the Engineer-in-Charge shall be entitled to remove at his expenses all surplus materials originally supplied by him and upon such removal, the same shall become the property of the contractor.
- 7.11** All charges on account of octroi, terminal or sales tax and other duties on materials obtained for the works from any source (excluding materials supplied by the company) shall be borne by the contractor.
- 7.12** The contractor shall arrange necessary electricity at his own cost for the work and his own establishment. However, if available and feasible the company may arrange electricity at one point near the

work site and necessary recovery of cost of energy consumed will be made at rates prescribed by the company from time to time. Energy meter for this purpose shall be provided by the contractor.

- 7.13** The contractor shall arrange necessary water for the work and his own establishment and nothing extra will be paid for the same. Such water used by the contractor shall be fit for construction purposes. However, if available and feasible the company may arrange water, at the written request of the contractor, to the extent possible, at one point near the work site for which recovery @ 1% of the contract value of work done will be made from the contractor's bills. The contractor shall make his own arrangement of water connection and laying of pipe lines from main source of supply. Department do not guarantee to maintain uninterrupted supply of water. No claim of damage or refund of water charges will be entertained on account of such break down.
- 7.14** Explosives, detonators and other inflammable materials shall not be used in the execution of the work at site by the contractor without prior written permission of the Engineer-in-Charge. Transportation and storage of such materials shall be done in specified manner in accordance with the law in force. The contractor shall also obtain license under such laws for, transportation, storage, use and all other operations, connected with the handling of the same.

8. Quality Assurance - Materials and Workmanship

The contractor shall carry out and complete the work in every respect in accordance with the contract and shall ensure that the work conforms strictly to the drawings, specifications, (as enclosed or in absence of enclosed specifications current CPWD/BIS specifications) instructions of the Engineer- In- Charge. The Engineer- In- Charge may issue, from time to time, further drawings, detailed instructions/ directions in writing to the contractor. All such drawings, instructions/directions shall be consistent with the contract documents and should be reasonably inferable therefrom, along with clarifications/ explanations thereof, if necessary. However, the contractor will be solely responsible for design and erection of temporary structures required in connection with the work.

- 8.1 For Quality Assurances of all the Electrical Engineering Works the norms/ guidelines laid down by the company herein and elsewhere will form part of the contract for the purpose of quality of works.
- 8.2. The contractor shall be responsible for correct and complete execution of the work in a workman like manner with the materials as per specification which shall be subject to the approval of the company. All work under execution in pursuance of the contract shall be open to inspection and supervision by the Engineer- In- Charge or by his authorised representative or any other official of higher rank or any other person authorised by the company in his behalf & the contractor shall allow the same.

- 8.3. All materials to be provided by the contractor shall be in conformity with the specifications/schedule of work as per the contract and the contractor shall furnish proof, if so required by the Engineer-In-Charge to his satisfaction that the materials do so comply.
- 8.4. The contractor shall immediately after the award of work draw up a schedule giving dates for submission of samples as required or necessary as per the specification for approval of Engineer-In-Charge who shall approve, if found acceptable, promptly so that there is no delay in the progress of the work of the contractor or of the work of any of the sub-contractor.

On receipt of samples as per schedule, the Engineer- In- Charge shall arrange to examine/test with reasonable promptness ensuring conformity of the samples with the required specification and complying with the requirements as per contract documents keeping in view that the work shall be in accordance with the samples approved by him. The contractor shall be bound to furnish fresh sample, if disapproved by the Engineer-in-Charge, for his approval. The contractor shall not start bringing materials at the site unless the respective samples are approved. Materials conforming to approved samples shall only be brought to site. However, Engineer-in-Charge's approval for any sample, design/drawings (permanent/temporary structures) shall not alter contractor's full responsibility whatsoever for the performance and safety of the executed job.

Samples are to be supplied by the contractor at his own cost. The cost involved in tests shall be borne by the contractor. If any test is ordered by the Engineer-In-Charge which is to be carried out by any independent person or agency at any place other than the site even then the cost of materials and testing charge etc. shall be borne by the contractor. If the test shows that the materials are not in accordance with the specifications, the said materials shall not be used in the work and removed from the site at contractors cost.

- 8.5. The company, through the Engineer-In-Charge, shall have full powers to reject any materials or work due to a defect therein for not conforming to the required specification, or for materials not being of the required quality and standard or for reasons of poor workmanship or for not being in accordance with the sample approved by him. The contractor shall forthwith remedy the defect/replace the materials at his expense and no further work shall be done pending such rectification/replacement of materials, if so instructed by the Engineer- In- Charge.

In case of default on the part of the contractor, the Engineer-In-Charge shall be at liberty to procure the proper materials for replacement and/or to carry out the rectifications in any manner considered advisable under the circumstances and the entire cost & delay for such procurement/rectification shall be borne by the contractor.

- 8.6 The Engineer-In-Charge shall be entitled to have tests carried out for any materials, according to the standard practice followed for such tests, other than those for which satisfactory proof has already been furnished by the contractor who shall provide at his expense all facilities which the Engineer In Charge may require for the purpose. All such expenses borne by the contractor are not to be paid separately by the employer and shall be assumed covered in accepted prices.

The cost of any other tests, if so required by the Engineer-In-Charge, shall be borne by the company. However, if the test shows the workmanship or materials not to be in accordance with the provision of the contract or the instruction of Engineer- In- Charge the cost shall be borne by the contractor.

- 8.7 Access to the works: The Engineer-in-charge and any person authorised by the company 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 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.

8.8 **Inspection of works:**

- i) No work shall be covered up or put out of view without the approval of the Engineer-in-charge or the Engineer-in-charge's representative or any other officer nominated by the company for the purpose and the contractor shall afford full opportunity for the EIC or EIC's representative or any other officer nominated by the company for the purpose 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-in-charge's representative whenever any such work or foundations is ready or about to be ready for examination and the Engineer-in-charge'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 foundations.
- ii) The contractor shall uncover any part or parts of the works or making openings in or through the same as the Engineer-in-Charge may from time to time direct and shall reinstate and make good such part or parts to the satisfaction of Engineer-in-charge.

If any such part or parts have been covered up or put out of view after compliance with the requirement of sub-clause above and are found to be executed in accordance with the contract, the expenses of uncovering, making openings in or through and making good the same shall be borne by the Employer, but in any other cases all costs shall be borne by the contractor.

8.9 **Removal of Improper Work and Materials:**

- i) The Engineer-in-charge shall during the progress of the works have power to order in writing from time to time :
 - a) The removal from the site, of any materials which in the opinion of Engineer- in-charge, are not in accordance with the contract/ work order/ approved sample.
 - b) The substitution with proper and suitable materials.
 - c) The removal and proper re-execution, notwithstanding any previous test thereof or interim payment there from, of any work which in respect of materials or workmanship is not in accordance with the contract.
 - ii) In case of default on the part of the contractor in carrying out such order, the Engineer-in -charge shall be entitled to employ and pay other agency to carry out the same and all expenses consequent thereon shall be recoverable from the contractor or may be deducted from any amount due or which may become due to the contractor.
- 8.10 Devaluation of Work :** In lieu of rejecting work done or materials supplied not in conformity with the contract/work order/approved samples , the Engineer-in-charge or any other officer nominated by the company for the purpose may allow such work or materials to remain, provided the Engineer-In-Charge/ the officer nominated by the company is satisfied with the quality of any materials, or the strength and structural safety of the work, and in that case shall make such deduction for the difference in value, as in his opinion may be reasonable.
- 8.11 Final Inspection of Work:** The Engineer-in-charge and any other officer nominated by the company for the purpose shall make final inspection of all work included in the contract/work order, or any portion thereof, or any completed structure forming part of the work of the contract, as soon as practicable after notification by the contractor that the work is completed and ready for acceptance. If the work is not acceptable to the Engineer-in-charge at the time of such inspection, he shall inform the contractor in writing as to the particular defects to be remedied before final acceptance can be made.
- 8.12 Defects appearing after acceptance:** Any defects which may appear within the defect liability period and arising, in the opinion of the Engineer-in-charge, from lack of conformance with the drawings and specifications, shall, if so required by the Engineer-in-charge in writing, be remedied by the contractor at his own cost within the time stipulated by the Engineer-in-charge. If the contractor fails to comply, the Engineer-in-charge may employ other persons to remedy the defects and recover the cost thereof from the dues of the contractor.
- 8.13 Site Order Book :** A Site Order Book is a Register duly certified by the Engineer-in-charge regarding number of pages it contains, each page being numbered, name of work, name of contractor, reference of contract/ work order and the aforesaid certificate should be recorded on its first page.

Site Order Books shall be maintained on the sites of works and should never be removed there from under any circumstances. It shall be the property of the company. The Engineer-in-Charge or his authorised representative shall duly record his observations regarding any work which needs action on the part of the contractor like, improvement in the quality of work, failure to adhere to the scheduled programme etc. as per contract/work order. The contractor shall promptly sign the site order book and note the orders given therein by the EIC or his representative and comply with them. The compliance shall be reported by the contractor in writing to EIC in time so that it can be checked.

The Site Order Book will be consulted by the Engineer-In-Charge at the time of making both running on account and final bills of the contractor. A certificate to this effect should be given in the Measurement books by the Engineer-In-Charge or his representative.

8.14 Samples and Testing of Materials: All the materials to be procured by the contractor and to be used in work shall be approved by the Engineer-in-Charge in advance, and shall pass the tests and analysis required by him, which will be as specified in the specifications of the items concerned and or as specified by BIS, IRC/MORTH and other standard specifications acceptable to the Engineer-in-Charge. The method of sampling and testing shall be as per the relevant BIS, IRC/MORTH and other relevant standards and practices. Minor minerals like sand, stone chips etc. shall be conforming to relevant BIS standards. All bought out items including Cement and Steel shall be procured from such manufacturers who hold valid license conforming to relevant BIS standards for manufacturing of such items.

8.15 Storage of Materials: Materials shall be so stored as to ensure the preservation of the quality and fitness for the work. When considered necessary by the Engineer-in-charge, they shall be placed on wooden platforms or other hard, clean surfaces and not directly on the ground.

Materials shall be placed under cover when so directed and the contractor shall erect and maintain at his own cost temporary weather-proof sheds at the work site for the purpose. Stored materials shall be so located as to facilitate prompt inspection. All stored materials shall be inspected at the time of use in the work, even though they may have been inspected and approved before being placed in storage or during storage.

8.16 Defective Materials: All materials not conforming to the requirements of the specifications shall be considered as defective, and all such materials, whether in place or not shall be rejected. They shall be removed immediately by the contractor at his expenses and replaced with acceptable material.

No rejected material, the defects of which have been subsequently corrected, shall be used on the work until approval in writing has been given by the Engineer- In- Charge. Upon failure on the part of the contractor to comply with any instruction of the Engineer-in-charge made

under the provisions of this article within the time stipulated by the Engineer-in-charge, the Engineer-in-charge shall have authority to remove and replace defective material and recover the cost of removal and replacement from the contractor.

Further all such defective material lying at site not removed and replaced within 30 days after issue of notice by the Engineer-in-charge, if the Engineer-in-charge so decides, shall dispose off such material in any manner without any further written notice to the contractor.

9. Measurement and Payments :

Except where any general or detailed description of the work in the Bill of Quantities or specifications of the contract/ work order provides otherwise, measurement of work done shall be taken in accordance with the relevant standard method of measurement published by the Bureau of Indian Standards (BIS) and if not covered by the above, other relevant Standards/practices shall be followed as per instructions of the Engineer-in-Charge.

- 9.1** All items of work carried out by the contractor in accordance with the provision of the contract having a financial value shall be entered in the Measurement Book as prescribed by the company so that a complete record of the measurements is available for all the works executed under the contract and the value of the work executed can be ascertained and determined therefrom. Measurements of completed work / portion of completed work shall be recorded only in the Measurement Books.
- 9.2** Measurement shall be taken jointly by the Engineer-in-Charge or his authorised representative and by the contractor or his authorised representative.
- 9.3** Before taking measurements of any work, the Engineer-in-Charge or the person deputed by him for the purpose shall intimate the contractor to attend or to send his representative to attend the measurement. Every measurement thus taken shall be signed and dated by both the parties on the site on completion of the measurement. If the contractor objects to any measurements, a note to that effect shall be made in the Measurement Book / Log Book and signed and dated by both the parties.
- 9.4** The measurement of the portion of work/items of work objected to, shall be remeasured by the Engineer-in-Charge himself or the authority nominated by the company for the purpose in the presence of the contractor or his authorised representative and recorded in the M.B. which shall be signed and dated by both the parties. Measurements so recorded shall be final and binding upon the contractor and no claim whatsoever shall thereafter be entertained.

In case the contractor or his authorised representative does not attend to the joint measurements at the prefixed date and time after due notice, the

measurements taken by the Engineer-in-Charge or his representative shall be final and binding on the contractor.

Measurement of the extra items of work or excess quantities of work duly authorised in writing by the Engineer-in-Charge shall also be taken and recorded in the M.B. based on the existing items in the SOR of the company and if such items do not exist in the company's SOR, the description of the work shall be as per actual execution. Payment for such extra items will be based on the rates to be derived as described in the relevant clauses of the contract/ work-order

- 9.5** No work shall be covered up or put out of view without the approval by the Engineer-in-Charge and recording of measurements and check measurement thereof duly accepted by the contractor. The contractor shall provide full opportunity to the Engineer-in-Charge or his representative to examine and measure all works to be covered up and to examine the foundations before covering up.

The contractor shall also give notice to Engineer-In-Charge whenever such works or foundations are ready for examination and the Engineer In Charge shall without unreasonable delay arrange to inspect and to record the measurements, if the work is acceptable and advise the contractor regarding covering of such works or foundations.

- 9.6** In case of items which are claimed by the contractor but are not admissible according to the department, measurements of such items, will be taken by for record purposes only and without prejudice so that in case it is subsequently decided by the department to admit the contractor's claims, there should be no difficulty in determining the quantities of such work. A suitable remark should, however, be made against such measurements to guard against payment in the ordinary way.

- 9.7** **Payments:** The running on account payments may be made once in a month or at intervals stipulated in the work order/ contract agreement.

9.7.01 Running on account bill/bills for the work executed/ materials supplied in accordance with the work order/ contract shall be prepared on the basis of detailed measurements recorded as described hereinbefore and processed for payments.

9.7.02 Payment of on account bill shall be made on the Engineer-in-Charge's certifying the sum to which the contractor is considered entitled by way of interim payment for the following:

- a) The work executed as covered by the bill/bills after deducting the amount already paid, the security deposit and such other amounts as may be deductible or recoverable in terms of the work order/ contract.
- b) (i) Payment for excess quantity of work done with the written instructions of the Engineer-in-Charge for items already appearing in the bill of quantities of work with approved rates, will be made along with the on

account bills only upto 10% of the quantity provided in the agreement subject to overall value of work not exceeding the agreement value.

(ii) The GM(E&M) of the company and / or the Staff Officer(E&M) of the Area may authorise interim payment for excess work done upto 20 % of the quantity of work provided in the Bill of Quantity of the work awarded from Company level and Area level respectively subject to overall value of work done does not exceed the contract value. This however, shall not be applicable for High Value Items.

- c) Extra items of work executed will be paid on specific written authorisation of GM(E&M) of the company or Staff Officer (E&M) of the Area provided that the value of such extra items of work when added together is not more than 10% of the contract value and the total gross payment including excess quantity does not exceed the contract value.

Balance amount on account of excess quantity and extra items of work executed shall be paid after the deviation estimate / revised estimate regularising the extra items and excess quantities of work is sanctioned by the competent authority of the company with the concurrence of the Finance Department of the company.

- d) On the Engineer-In-Charge's certificate of completion in respect of the work covered by the contract / final measurements of the work certified by the Engineer-in-Charge or his representative.

9.7.03 The measurements shall be entered in the M.B for the work done upto the date of completion and evaluated based on the approved rates for the items in the contract agreement/sanctioned revised estimate. In case of extra items of work, the rates shall be derived as stated in the relevant clause of the contract.

The payments shall be released against the final bill subject to all deductions which may be made on account of materials supplied, water supply for construction, supply of electricity and any other dues payable by the contractor to the company, and further subject to the contractor having given to the Engineer- In-Charge a no claim certificate.

The contractor shall indemnify the company against proof of depositing royalty on account of minor minerals used in the work before the final bill is processed for payments. The final payment to be made will also be subject to Clause-4.6 & 4.7 of the General Terms & Conditions of the contract.

9.7.04 Any certificate given by the Engineer In Charge for the purpose of payment of interim bill/bills shall not of itself be conclusive evidence that any work/materials to which it relate is/are in accordance with the contract and may be modified or corrected by the Engineer-in-Charge by any subsequent certificate or by the final certificate.

9.7.05 The company reserve the right to recover/enforce recovery of any over payments detected after the payment as a result of post payment audit or technical examination or by any other means, notwithstanding the fact that the amount of disputed claims, if any, of the contractor exceeds the amount of such overpayment and irrespective of the facts whether such disputed claims of the contractor are the subject matter of arbitration or not.

The amount of such over payments shall be recovered from subsequent bills under the contract, failing that from contractor's claim under any other contract with the company or from the contractor's security deposit or the contractor shall pay the amount of over payment on demand. In case of contractor's non-payment on such demand, the same should be realised from the contractor's dues, if any, with Coal India Limited or any of its subsidiaries.

9.7.06 The contractors are required to execute all works satisfactorily and according to the specifications laid down in the contract/ work order. If certain items of work, executed by the contractor, are below specifications, the contractor should re-do them according to the specifications and instructions of EIC and if the contractor fails to rectify the defect within the time and in the manner specified by the EIC, the work shall be got re-done or rectified by the department at the risk and cost of the contractor. Engineer-In-Charge may accept such work of below specifications provided the department is satisfied with the quality of such works and the strength/ structural safety of such works. In that case Engineer-in-Charge shall make such deductions for the difference in value, as in his opinion is reasonable and is approved by the accepting authority of the company i.e.GM/HoD(E&M) of the company in this case or any other officer nominated by GM/HoD(E&M) for the purpose.

9.7.07 Payment Stage: The payment stage involved will be as under:

- i) Signature of Foreman Inchage (E&M) / Foreman(E&M) in MB's both in pages recording measurements, abstract of bill & the duly filled in bill form.
- ii) Signature of Sr. Officer (E&M)/Asst. Manager (E&M) with appropriate check measurements in the MB's and the bill form.
- iii) Signature of Dy. Manager/ Manager (E&M) with appropriate check measurements in MB's and the bill form.
- iv) Signature of Engineer-in-Charge as per definition as at clause 1(vii) of the General Terms and Conditions, as a token of acceptance for payment of the bill. The EIC may sign in the abstract of the bill in the MB & the bill form. In between stage iii) and iv) accountal checking may be made by the concerned Accounts Officer/ Accountant.

(In case of non-availability of officials as at (i) above, company may authorize suitable executives for the work outlined at (i). Further for check measurement also company may authorize Executives based on availability.

9.7.08 Secured Advance: Secured advance can be paid for items of materials required for execution of the work and covered under categories A & B and supplied by the contractor at work site, supported by necessary vouchers, challans, test certificates etc. after execution of indemnity bond as per prescribed Form of the company on non-judicial stamp paper of prescribed value.

This advance shall be recovered in four equal installments or as per consumption whichever is higher. Engineer-In-Charge shall recover at his discretion all or any part of secured advance paid, if in his opinion the work is not progressing satisfactorily or the security of these materials at site is not adequately taken care of by the contractor. Secured advance shall be payable for contracts of value above Rs.10.00 lakhs only.

Secured advance for structural steel sections, reinforcement steel and cement, collected at site, will be paid upto 75% of the corresponding stock yard prices of SAIL for the corresponding steel items and Govt. approved/ D.G.S.D. prices for cement, if the same exist.

In case of non-availability of Govt. approved prices of cement & steel and for the materials falling under Category - A and B the secured advance will be paid at the basic rate available in the approved schedule of rates of the company plus or minus the overall percentage on which the work was awarded, provided such rate is not more than 60% of the quoted rate of the contractor for the actual work.

At any point of time the outstanding recoverable secured advance shall not be more than 10% of the contract value.

Items against which secured advance can be granted:

Category-A

Civil:

1. Bricks
2. Stone and brick aggregate
3. Stones
4. Finished products of brass, iron and steel such as doors & windows frames, wire mesh, gate, GI Sheets.
5. Pre-cast R.C.C. products such as pipes, jali, water storage tanks etc.
6. Doors & Window fittings.
7. Pipes and sanitary fittings of CI, SCI & HCl

Electrical:

1. Steel conduits
2. G.I. Pipes
3. I.C. Boards
4. Switchgears (Air circuit breakers and Air break switches)
5. C.I. Boxes.
6. A.C.S.R. Conductors
7. A.C. Plant & Machinery
8. Pumps
9. Generating sets (without oil)

Items against which secured advance can be granted:

Category- B

Civil:

1. Glazed tiles, terrazzo tiles and similar articles.
2. Marble slabs
3. Asbestos cement products
4. Finished timber products such as doors, windows, flush doors, particle boards (subject to mandatory test being satisfactory) etc.
5. Bitumen in sealed drums
6. Bitumen felt
7. Polythene pipes and fittings and tanks
8. Sanitary fittings and pipes of S.W., porcelain and chinaware materials
9. Laminated / Safety, one way vision, and bullet proof glasses.
10. Chemical required for anti-termite treatment (in sealed drums)
11. Paints, varnishes, distempers, pigment, spirits etc.

Electrical:

1. Transformers
2. Oil-filled switch gears.
3. L.T. & H.T. Cables
4. Fans
5. Storage and Dry Batteries
6. Insulation tapes
7. Epoxy cable compounds
8. Electric light fittings
9. Wooden battens, casing & capping and wooden boards
10. Flexible wires
11. PVC materials
12. Oil and lubricants
13. Rubber materials
14. Glass wool, thermocole & other insulating materials
15. Porcelain H.T. and L.T. insulators.

In addition to indemnity bond, for materials listed under Category-B, the contractor shall be required to provide necessary insurance cover of equivalent value of materials.

Items against which no secured advance shall be granted:

Civil:

1. Glass products other than those indicated in Category-B.
2. Sand and moorum
3. Chemical compounds other than those indicated in Category-B.

Electrical:

1. Glass gloves and shades
2. Bulbs and tubes
3. Petrol and diesel
4. Freon and other refrigeration gases.

- 9.8** Income tax deduction @ 2% (Two percent) of the gross value of each bill or at the rate as amended from time to time, shall be made unless exempted by the competent authority of the Income Tax Department

Sales tax on works contract shall be payable by the contractor. If, however, the company is asked to make deduction from the contractor's bills, the same shall be done and a certificate to this effect shall be issued to the contractor for dealing with the State Govt. and the company does not take any responsibility to do anything further in this regard.

- 9.9** No interest shall be payable on the amounts withheld, under the terms of the Contract Agreement/Work-order.

10. Termination, Cancellation, Suspension and Foreclosure of Contract:

The company shall, in addition to other remedial steps to be taken as provided in the conditions of contract be entitled to cancel the contract in full or in part, if the contractor :-

- a) makes default in proceeding with the works with due diligence and continues to do so even after a notice in writing from the Engineer-in-Charge, then on the expiry of the period as specified in the notice

Or

- b) commits default/breach in complying with any of the terms and conditions of the contract and does not remedy it or fails to take effective steps for the remedy to the satisfaction of the Engineer-in-Charge, then on the expiry of the period as may be specified by the Engineer-in-Charge in a notice in writing.

Or

- c) obtains a contract with the company as a result of ring tendering or other non-bona-fide methods of competitive tendering

Or

- d) shall offer or give or agree to give any person in the service of the company or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for act/acts of favour in relation to the obtaining or execution of this or any other contract for his company.

Or

- e) fails to complete the work or items of work with individual dates of completion, on or before the date/dates of completion or as extended by the company, then on the expiry of the period as may be specified by the Engineer-in-Charge in a notice in writing.

Or

- f) transfers, sublets, assigns the entire work or any portion thereof without the prior approval in writing from the Engineer-in-Charge. The Engineer-in-Charge may by giving a written notice, cancel the whole contract or portion of it in default.

10.1 The contract shall also stand terminated under any of the following circumstances:

- a) If the contractor being an individual in the case of proprietary concern or in the case of a partnership firm any of its partners is declared insolvent under the provisions of Insolvency Act for the time being in force, or makes any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors amounting to proceedings for liquidation or composition under any Insolvency Act.
- b) In the case of the contractor being a company, its affairs are under liquidation either by a resolution passed by the contractors company or by an order of court, not being a voluntary liquidation proceedings for the purpose of amalgamation or reorganization, or a receiver or manager is appointed by the court on the application by the debenture holders of the contractor's company, if any.
- c) If the contractor shall suffer an execution being levied on his/their goods, estates and allow it to be continued for a period of 21 (twenty-one) days.
- d) On the death of the contractor being a proprietary concern or of any of the partners in the case of a partnership concern and the company is not satisfied that the legal representative of the deceased proprietor or the other surviving partners of the partnership concern are capable of carrying out and completing the contract. The decision of the company in this respect shall be final and binding which is to be intimated in writing to the legal representative or to the partnership concern.

10.2 On cancellation of the contract or on termination of the contract, the Engineer-in-charge shall have powers:

- a. To take possession of the site, any materials, constructional plant, equipment, stores etc. thereon and carry out balance work through any means or through any other agency.
- b. To give the contractor or his representative of the work 7 (seven) days notice in writing for taking final measurement for the works executed till the date of cancellation or termination of the contract.

The Engineer-in-Charge shall fix the time for taking such final measurement and intimate the contractor in writing. The final measurement shall be carried out at the said appointed time notwithstanding whether the contractor is present or not. Any claim as regards measurement which the contractor is to make shall be made in writing within 7 (seven) days of taking final measurement by Engineer-In-charge as aforesaid and if no such claim is received, the contractor shall be deemed to have waived all claims regarding above measurements and any claim made thereafter shall not be entertained.

- c. After giving notice to the contractor to measure up the work of the contractor and to take such whole or the balance or part thereof, as shall be unexecuted out of his hands and to give it to another contractor or take up departmentally, to complete the work. The contractor whose contract is terminated shall not be allowed to participate in future bidding for period of minimum twelve months.

In such an event, the contractor shall be liable for loss/damage suffered by the employer because of action under this clause and to compensate for this loss or damage, the employer shall be entitled to recover higher of the following:

- i) Forfeiture of security deposit comprising of performance guarantee and retention money and additional performance security, if any, at the disposal of the employer.
Or
- ii) 20% of value of incomplete work. The value of the incomplete work shall be calculated for the items and quantities remaining incomplete (as per provision of agreement) at the agreement rates including price variation as applicable on the date, when notice in writing for termination of work was issued to the contractor.

The amount to be recovered from the contractor as determined above, shall, without prejudice to any other right or remedy available to the employer as per law or as per agreement, will be recovered from any money due to the contractor on any account or under any other contract and in the event of any shortfall, the contractor shall be liable to pay the same within 30 days. In case of failure to pay the same the amount shall be debt payable.

In the event of above course being adopted by the Engineer-in-charge, the contractor shall have no claim to compensation for any loss sustained by him by reasons of his having purchased

materials, equipment or entered into agreement or made advances on any account or with a view to the execution of work or performance of the contract. And in case action is taken under any of provision aforesaid, the contractor shall not be entitled to recover or to be paid any sum for any work thereof or actually performed under this contract unless and until the engineer-in-charge has certified in writing the performance of such work and value payable in respect thereof and he shall only be entitled to be paid the value so certified.

The need for determination of the amount of recovery of any extra cost/expenditure or of any loss/damage suffered by the company shall not however arise in the case of termination of the contract for death/demise of the contractor as stated in 10.1(d).

10.3 Suspension of Work:

Suspension of work – The Company shall have power to suspend the work. The contractor shall on receipt of the order in writing of Engineer-in-charge (whose decision shall be final and binding on the contractor), suspend the progress of work or any part thereof for such time in such manner as the Engineer-in-Charge may consider necessary so as not to cause any damage, or endanger the safety thereof for any of the following reasons:

- a) on account of any default on the part of the contractor, or
- b) for proper execution of the works, or part thereof, for reasons other than the default of the contractor or,
- c) for safety of the works, or part thereof .

The contractor shall, during such suspension properly protect and ensure the works to the extent necessary and carry out the instruction of the Engineer-in-charge. If the suspension is ordered for reasons (b) & (c), the contractor shall be entitled to an extension of time equal to the period of every such suspension plus 25%. This shall also be applicable for completion of the item or group of items of the work for which a separate period of completion as specified in the contract and of which the suspended work forms a part .

The contractor shall carry out the instructions given in this respect by the Engineer-In Charge & if such suspension exceeds 45 (forty five) days, the contractor will be compensated on mutually agreed terms.

10.4 Foreclosure of contract:

If at any time after acceptance of the tender the company decides to abandon or reduce the scope of work for any reason whatsoever the company, through its Engineer-in-Charge, shall give notice in writing to that effect to the contractor and contractor shall act accordingly in the matter. In the event of abandonment, the contractor shall have no claim to any payment of compensation or otherwise whatsoever, other than those mentioned below:-

- a) to pay reasonable amount assessed and certified by the Engineer-in-Charge of the expenditure incurred, if any, by the contractor on preliminary works at site e.g. temporary access roads, temporary construction for labour and staff quarters, office accommodation, storage of materials, water storage tanks and water supply for the work including supply to labour/ staff quarters, office etc.
- b) to pay the contractor at the contract rates full amount for works executed and measured at site up to the date of such abandonment.
- c) to pay for the materials brought to site or to be delivered at site, which the contractor is legally liable to pay, for the purpose of consumption in works carried out or were to be carried out but for the foreclosure, including the cost of purchase and transportation and cost of delivery of such materials. The materials to be taken over by the company should be in good condition and the company may allow at its discretion the contractor to retain the materials in full or in part if so desired by him and to be transported by the contractor from site to his place at his own cost with due permission of the EIC.
- d) to take back the materials issued by the company but remaining unused, if any, in the work on the date of abandonment/reduction in the work, at the original issue price less allowance for any deterioration or damage caused while in custody of the contractor.
- e) to pay for the transportation of tools and plants of the contractor from site to contractor's place or to any other destination, whichever is less.

10.4.01 The contractor shall, if required by the Engineer-in-Charge, furnish to him books of accounts, papers, relevant documents as may be necessary to enable the Engineer-in-Charge to assess the amounts payable in terms of clauses 10.4(a) (c) & (e) of the contract. The contractor shall not have any claim for compensation for abandonment of the work, other than those as specified above.

11. Carrying out Part Work at Risk & Cost of Contractor.

If the progress of the work or of any portion of the work is unsatisfactory, the Engineer-in-Charge, after giving the contractor 15 days' notice in writing, without cancelling or terminating the contract, shall be entitled to employ another Agency for executing the job or to carry out the work departmentally or contractually through tendering / limited tendering process, either wholly or partly, debiting the contractor with cost involved in engaging another Agency or with the cost of labour and the prices of materials, as the case may be. The certificate to be issued by the

Engineer-in-Charge for the cost of the work so done shall be final and conclusive and the extra cost, if any, shall be borne by the contractor. However, when this clause is invoked, penalty will not be applicable other than on account of delayed completion.

The value of the work taken away shall be calculated for the items and quantities taken away at the agreement rates including price variation as applicable on the date, when notice in writing for taking away part work was issued to the contractor. The contractor, from whom part work is being taken out, shall not be allowed to participate in the tendering process if any.

If the expenses incurred by the department is less than the amount payable to the contractor at his agreement rates, the difference shall not be payable to the contractor.

In the event of above course being adopted by the Engineer-in-Charge, the contractor shall have no claim to compensation for any loss sustained by him by reasons of having purchased or procured any materials or entered into any engagements or made any advance on any account or with a view to the execution of the work or the performance of the contract.

12. Completion Certificate / Defect Liability Certificate

Except in cases where the contract provides for "Performance Test" before issue of Defect Liability certificate, in which case the issue of Defect Liability certificate shall be in accordance with the procedure specified therein, the contractor shall give notice of completion of work, as soon as the work is completed, to the Engineer-in-Charge. The Engineer-in-Charge and or any other Officer, nominated for the purpose by the company, shall within 30 (thirty) days from the receipt thereof, inspect the work and ascertain the defects/deficiencies, if any, to be rectified by the contractor as also the items, if any, for which payment shall be made at reduced rate.

If the defects, according to the Engineer-in-Charge are of a major nature and the rectification of which is necessary for the satisfactory performance of the contract, he shall intimate in writing the defects and instruct the contractor to rectify the defects/remove deficiencies within the period and in the manner to be specified therein. In such cases Defect Liability Certificate will be issued by the EIC after the above rectifications are carried out/ deficiencies are removed by the contractor to the satisfaction of EIC.

In the event there are no defects or the defects/ deficiencies are of a minor nature and the Engineer-in- Charge is satisfied that the contractor has already made arrangements for rectification, or in the event of contractor's failure to rectify the defects for any reason whatsoever, the defects can be rectified by the company departmentally or by other means and the 50% of the security deposit of the contractor shall be sufficient to cover the cost thereof, he shall issue the Defect Liability Certificate (Taking Over Certificate with list of defects) indicating the date of completion of the

work, defects to be rectified, if any, and the items, if any, for which payment shall be made at reduced rate indicating reasons there for and with necessary instructions to the contractor to clear the site/place of work or all debris/ waste materials, scaffoldings, sheds, surplus materials etc. making it clean.

- 12.1** In cases where separate period of completion for certain items or groups of items are specified in the contract, separate Defect Liability certificate for such items or groups of items may be issued by the Engineer-in-Charge after completion of such items on receipt of notice from the contractor only in the event the work is completed satisfactorily in every respect.

Refund of security deposit and payment of final bill shall, however, be made on completion of the entire contract work, but not on completion of such items of work.

- 12.2** Before the date fixed for completion of work, the work as well as the site of work are to be made clean after removal of rubbish, scaffolding, surplus materials, temporary structures etc.
- 12.3** In case of contractor's failure to clear the site, the EIC shall have right to get the work done. The cost thereof shall be recovered from the final bill of the contractor.

13. Additional Responsibilities of the Contractor(s)

The cost on account of the "Additional Responsibilities of the Contractors" under this clause is deemed to be included in the tendered rates.

- i) The company reserves the rights to let other contractors also work in connection with the Project and the contractor/contractors shall co-operate in the works for the introduction and stores and materials and execution of his/their works.
- ii) The contractor/contractors shall keep on the work site during the progress a competent and experienced Resident Engineer exclusively for the work and necessary assistants who shall represent the contractor(s). The contractor shall employ, on the site in connection with the execution and maintenance of the work, technical and managerial staff as mentioned below.

SL.NO	Value of Work	Manpower Requirement
1	More than 10 Crores	One Resident Engineer (Degree Holder), One Engineer (Degree Holder), Two Engineers (Diploma Holder)
2	5 Crores to 10 Crores	One Resident Engineer (Degree Holder), Two Engineers (Diploma Holder)

3	2 Crores to 5 Crores	One Resident Engineer (Diploma Holder), One Engineer (Diploma Holder)
4	50 lakhs to 2 crores	One Resident Engineer (Graduate/ Diploma Holder)

For works below Rs. 50 lakhs, the deployment of manpower shall be as assessed by Engineer.

The contractor shall intimate the Engineer-in-Charge in writing the names, qualifications, experience and full postal address of each and every technical personnel employed at site by him.

The contractor(s) shall not be allowed to execute the work unless he/they engage the required technical staff at site as stated above. The delay on this account, if any, shall be the contractor's responsibility.

Important instructions shall be confirmed to the contractor(s) in writing. If the contractor/contractors in course of the works finds/find any discrepancy between the drawing, forming part of the contract documents and the physical conditions of the locality or any errors or omissions in drawings except those prepared by himself / themselves and not approved by the Engineer-in-Charge. It shall be his/their duty to immediately inform the engineer in-Charge in writing and the Engineer in-Charge shall verify the same. Any work done after such discovery and without intimation as indicated above will be done at the risk of the contractor/contractors.

iii) The contractor / contractors shall employ only competent, skillful and orderly men to do the work. The Engineer-in-Charge shall have the right to ask the contractor/ contractors to remove from the work site any men of the contractor/contractors who in his opinion is undesirable and the contractor/contractors will have to remove him within 3 (three) hours of such orders.

The contractor shall employ apprentices in the execution of the contract work as required under Apprentices Act.

The contractor shall further be responsible for making arrangements at his own cost, or accommodation and social needs of the staff and workers under his employment.

iv) Precautions shall be exercised at all times by the contractor(s) for the protection of persons (including employees) and property. The safety required or recommended by all applicable laws, codes, statutes and regulations shall be observed by the contractor(s). In case of accidents, the contractor(s) shall be responsible for compliance with all the requirements imposed by the Workmen's Compensation Act or any other similar laws in force, and the contractor(s) shall indemnify the company against any claim on this account.

All scaffoldings, ladders and such other structures which the workmen are likely to use shall be examined by the Engineer-in-Charge or his authorised representative whenever they want and the structure must be strong, durable, and safe and of such design as required by Engineer-in-Charge.

In no case any structure condemned by the Engineer In Charge or his authorised representatives shall be kept on the work and such structure must be pulled down within three hours of such condemnation and any certificate or instructions, however, shall in no way absolve the contractor/contractors from his/their responsibility, as an employer, as the company shall in no way be responsible for any claim.

The contractor / contractors shall at all times exercises reasonable precautions for the safety of employees in the performance of his/their contract and shall comply with all applicable provisions of the safety laws drawn up by the State Govt. or Central Govt. or Municipalities and other authorities in India. The contractor/contractors shall comply with the provision of the safety hand book as approved and amended from time to time by the Government of India.

v) The contractor / contractors shall familiarise themselves with and be governed by all laws and rules of India and Local statutes and orders and regulations applicable to his/ their work.

vi) The contractor shall maintain all records as per the provision made in the various statutes including Contract Labour (Regulation & Abolition) Act, 1970 and the Contract Labour (Regulation & Abolition) Central Rules,1971, Minimum Wages Act, Workmen Compensation Act etc. and latest amendment thereof. Such records maintained by the contractor shall be opened for inspection by the Engineer-in-Charge or by the nominated representative of the Principal Employer.

vii) The contractor/ contractors shall provide facilities for the sanitary necessities of all persons employed on the work shall be constructed and maintained in the number, manner and place approved or ordered by the Engineer-in-Charge. The contractor/contractors shall vigorously prohibit committing of nuisance at any other place. Cost of all works under this item shall be covered by the contractor/contractor's tendered rates.

viii) The contractor/contractors shall furnish to the Engineer-in-Charge or his authorised representative with work reports from time to time regarding the contractor / contractors organisation and the progress made by him / them in the execution of the work as per the contract.

ix) All duties, taxes (excluding Service Tax only) and other levies, octroi, royalty, building and construction workers cess (as applicable in States), whether local, municipal, provincial or central pertaining to the contract payable by the Contractor under the Contract (during the period of contract)or for any other cause as applicable on the last date of submission of Bid, shall be included in the rates, prices and the total bid price submitted by the bidder. All investments, operating expenses, incidentals, overheads, lifts, carriages, tools and plants etc. as may be

attendant upon execution and completion of works shall also be included in the rates, prices and total Bid price submitted by the bidder.

However, such duties, taxes, levies etc. which is notified after the last date of submission of tender and / or any increase over the rate existing on the last date of submission of tender shall be reimbursed by the company on production of documentary evidence in support of payment actually made to the concerned authorities.

Similarly, if there is any decrease in such duties, taxes and levies the same shall become recoverable from the contractor. The details of such duties, taxes and other levies along with rates shall be declared by the bidder in the Price bid.

The item wise rate quoted shall be exclusive of service tax (share of service provider). Service tax (share of service provider) will be paid extra, if payable. Payment of service tax (share of service provider) by the service aviler (i.e. CIL/Subsidiary), to the service provider would be made only on the latter submitting a Bill/invoice in accordance with the provision of relevant service tax rules .CENVAT credit is to be availed by paying authority as per rule.

Payment/deposit of service tax (share of service provider) is the responsibility of service provider.

The rates and prices quoted by the Bidder shall be fixed for the duration of the contract and shall not be subject to variations on any account except to the extent variations allowed as per the conditions of the contract of the bidding document.

The company reserves the right to deduct/withhold any amount towards taxes, levies, etc. and to deal with such amount in terms of the provisions of the Statute or in terms of the direction of any Statutory authority and the company shall only provide with certificate towards such deduction and shall not be responsible for any reason whatsoever.

In the case of collection of minor minerals in area (both virgin and non-virgin),, acquired by the Company under the Coal Act, the contractor will have to produce a royalty clearance certificate from the District Authorities before full and final payment.

x) The contractor / contractors shall make his / their own arrangement for all materials, tools, staff and labourer required for the contract, which shall include cost of lead, lift, loading, unloading, railway freight, recruiting expenses and any other charges for the completion of the work to entire satisfaction of the company.

xi) The contractor / contractors shall make their own arrangement for carriage of all materials to the work site at his/their own cost.

xii) The work shall not be sublet to any other party, unless approved by Engineer-in-Charge, in writing.

xiii) a) No fruit trees or valuable plants or trees with trunk diameter exceeding 150mm shall be pulled, destroyed or damaged by the contractor/contractors or any of his/their employees without the prior permission of the company, failing which the cost of such trees or plants shall be deducted from the contractor/contractors dues at the rate to be decided by the company. The rates quoted are supposed to include clearance of shrubs and jungles and removal of such trees upto 150 mm dia., as will be permitted by the Engineer-in-Charge in writing.

b) Anything of historical or other interest or of significant value unexpectedly discovered on the site is the property of the employer. The Contractor is to notify the Nodal Officer or his nominee of such discoveries and carry out the Nodal Officer or his nominee's instructions for dealing with him.

xiv) The contractor / contractors shall not pay less than the minimum wages to the labourers engaged by him/them as per Minimum Wages Act or such other legislation or award of the minimum wage fixed by the respective State Govt. or Central Govt. as may be in force. The contractor/contractors shall make necessary payments of the provident fund for the workmen employed by him for the work as per the laws prevailing under provisions of CMPF and allied scheme and Miscellaneous Provisions Act, 1948 or Employees Provident Fund and Miscellaneous Provisions Act 1952 as the case may be.

xv) All accounts shall be maintained properly and the company shall have the right of access and inspection of all such books of accounts etc., relating to payment of labourer considered necessary and the company may arrange for witnessing the payment to the labourer by its representatives.

xvi) The contractor shall in additions to any indemnity provided by the relevant clauses of the agreement or by law, indemnify and keep indemnified for the following :

a) The company or any agent or employee of the company against any action, claim or proceeding relating to infringement or use of any patent or design right and shall pay any royalties or other charges which may be payable in respect of any article or material included in the contract.

However, the amount so paid shall be reimbursed by the company in the event such infringement has taken place in complying with the specific directions issued by the company or the use of such article or material was the result of any drawing and/or specifications issued by the company after submission of tender by the contractor. The contractor must notify immediately after any claim being made or any action brought against the company, or any agent or employee of company in respect of any such matter.

b) The company against all claims, damages or compensation under the provisions of payment of Wages Act, 1938, Minimum Wages Act,

1948, Employer's Liability Act, 1938, The Workmen's Compensation Act, 1923, Industrial Dispute Act, 1947, Mines Act as applicable, Employees State Insurance Act 1948 and Maternity Benefit Act, 1961, Acts regulating P.F. or any modification thereof or any other law relating thereto and rules made there under from time to time, as may be applicable to the contract which may arise out of or in consequence of the construction or maintenance or performance of the work under the contract and also against costs, charges and expenses of any suit, action or proceedings arising out of any accident or injury.

c) The company against all losses and claims for injuries or damages to any third party or to any property belonging to any third party which may arise out of or in consequence of the construction or maintenance or performance of the work under the contract and against all claims/demands proceedings/damages, cost charges and expenses whatsoever in respect of or in relation thereto.

xvii) The contractor is under obligation to hand over to the company the vacant possession of the completed building structures failing which the Engineer-in-Charge can impose a levy upon the contractor upto 5% of the total contract value for the delay in handing over the vacant possession of the completed works after giving a 15 (fifteen) days notice to the contractor.

xviii) **INSURANCE:** The contractor shall take full responsibility to take all precautions to prevent loss or damage to the works or part thereof for any reasons whatsoever (excluding act of God e.g. flood, riots, war, earthquake, etc.) and shall at his own cost repair and make good the loss/damage to the work so that on completion, the work shall be in good order and condition and in conformity with the requirements of the contract and instructions of the Engineer-In-Charge.

The contractor/contractors shall take following insurance policies during the full contract period at his own cost:

a) In case of construction works without limiting the obligations and responsibilities under the contract, the contractor shall take insurance policy for the total value of work for the period from commencement to completion including defect liability period against risk of loss/ damage to the extent as permissible under the law of insurance. The contractor shall arrange insurance in joint names of the company and the contractor. All premium and other insurance charges of the said insurance policy shall be borne by the contractor.

The terms of the insurance policy shall be such that all insurance claims and compensations payable by the insurers, shall be paid to the Employer and the same shall be released to the contractor in installments as may be certified by the Engineer-in-Charge for the purpose of rebuilding or replacement or repair of the works and/or goods destroyed or damaged for which payment was received from the insurers. Policies and certificate of insurance shall be delivered by the

contractor to the EIC for his approval before the starting date. Alterations to the terms of insurance shall not be made without the approval of EIC.

- b) Where any company building or part thereof is used, rented or leased by the contractor for the purpose of storing or using materials of combustible nature, the contractor shall take separate insurance policy for the entire building and the policy shall be deposited with the company.
- c) The contractor shall at all times during the tenure of the contract indemnify the company against all claims, damages or compensation under the provision of the Workmen's Compensation Act and shall take insurance policy covering all risk, claims, damages, or compensation payable under the Workmen's Compensation Act or under any other law relating thereto.
- d) The contractor shall ensure that the insurance policy/ policies is/are kept alive till full expiry of the contract by timely payment of premiums and it/they shall not be cancelled without the approval of the company and a provision is made to this effect in all policies, and similar insurance policies are also taken by his sub-contractors if any. The cost of premium shall be borne by the contractor and it shall be deemed to have been included in the tendered rate.
- e) In the event of contractor's failure to effect or to keep in force the insurance referred to above or any other insurance which the contractor is required to effect under the terms of the contract, the company may effect and keep in force any such insurance and pay such premium/premiums as may be necessary for that purpose from time to time and recover the amount thus paid from any moneys due to the contractor.

THE CLAUSE 13 (xviii) SHALL BE APPLICABLE FOR WORKS OF ESTIMATED VALUE OF OVER Rs. 50 LAKHS.

- xix) **Setting Out:** The contractor shall be responsible for the contract and proper setting out of the works and correctness of the position, reduced levels, dimensions and alignment of all parts of the work including marking out the correct lay out in reference to the permanent bench mark and reference points. Only one permanent bench mark and basic reference lines shall be marked and shown to the contractor as basic data.

The contractor shall have all necessary instruments, appliances and labour in connection therewith. If at any time during the progress of work any error is detected in respect of the position, levels, dimensions or alignment of any part of the work, the contractor on being required to do so by the Engineer-in-Charge or his representative shall at the expenses of the contractor rectify such errors to the satisfaction of Engineer-in-Charge unless such error is due to incorrect data supplied by the Engineer-in-Charge.

xx) On receipt of Letter of Acceptance of Tender / Work Order the contractor shall forthwith Register and obtain License from the competent authority under the Contract Labour (Regulation & Abolition) Act 1970, the Contract Labour (Regulation & Abolition) Central Rules, 1971 and submit certified copies of the same to the Engineer-in-Charge and the Principal Employer.

xxi) The contractor shall be registered with the concerned State/Union Territory (UT) Govt. and the Central Govt. in respect of Sales Tax Act and the certificate having details of Registration No., period of validity etc. should be submitted to the Engineer-in-Charge.

xxii) The contractor shall, in connection with works, provide and maintain, at his own cost, all lights, security guards, fencing when and where necessary as required by the Engineer-in-Charge for the purpose of protection of the works, materials at site, safety of workmen and convenience of the public.

xxiii) All materials (e.g. stone, moorum and other materials) obtained in the course of execution of the work during excavation and dismantling etc. shall be the property of the company and the same may be issued to the contractors, if required for use in the works at the rates to be fixed by the Engineer-in-Charge.

xxiv) Unless otherwise specifically provided for, dewatering of excavation pits, working areas etc. shall be the contractor's responsibility and is to be carried out at his own cost as per instructions of EIC. The rates quoted by the contractor shall be deemed to include the dewatering costs.

xxv) Approval by the Nodal Officer/Engineer-in-Charge or his nominee: The contractor shall submit specifications and drawings showing the proposed temporary work to the Nodal Officer/Engineer-in-Charge or his nominee, who is to approve them if they comply with the specifications and drawings.

The contractor shall be responsible for design of Temporary Works.

The Nodal Officer/Engineer-in-charge or his nominee's approval shall not alter the contractor's responsibility for design of the Temporary Works.

14 Defects Liability Period:

In addition to the defect/s to be rectified by the contractor as per terms of the contract/ work order, the contractor shall be responsible to make good and remedy at his own expense the defect/s mentioned hereunder within such period as may be stipulated by the Engineer-in-Charge in writing:

- a) Any defect/defects in the work detected by the Engineer In Charge within a period of 6 (six) months from the date of issue of defect liability certificate/completion certificate.

b) In the case of building works or other works of similar nature any defect in the work detected by the Engineer In Charge within a period of 6 (six) months from the date of issue of defect liability certificate/completion certificate or before the expiry of one full monsoon period i.e. June to September whichever is later in point of time.

14.1 A programme shall be drawn by the contractor and the Engineer-in-Charge for carrying out the defects by the contractor detected within the defect liability period and if the contractor fails to adhere to this programme, the Engineer-in-Charge shall be at liberty to procure proper materials and carry out the rectifications in any manner considered advisable under the circumstances and the cost of such procurement of materials and rectification work shall be chargeable to the contractor and recoverable from any of the pending dues of the contractors.

The defect liability period can be extended by the company on getting request from the contractor only for valid reasons.

There will be no defect liability period for works like Grass Cutting, Jungle Cutting, Surface Dressing & any other work of similar nature to be decided by the Engineer-in-Charge.

15 Operating and Maintenance Manual:

If "as built" drawings and/or Operating and Maintenance Manual are required the contractor shall supply them by the dates as per instruction of the Engineer-in-charge.

If the contractor does not supply the drawings and/or Manual by the dates as stated above, or they do not receive the Nodal Officer or his nominee's approval, the Nodal Officer or his nominee shall withhold the amount as stated in the agreement.

16 Settlement of Disputes/Arbitration :

It is incumbent upon the contractor to avoid litigation and disputes during the course of execution. However, if such disputes take place between the contractor and the department, effort shall be made first to settle the disputes at the company level.

The contractor should make request in writing to the Engineer-in-Charge for settlement of such disputes/claims within 30 (thirty) days of arising of the cause of dispute/claim failing which no disputes/claims of the contractor shall be entertained by the company.

Effort shall be made to resolve the dispute in two stages.

In first stage dispute shall be referred to Area GM or GM/HoD(E&M). If difference still persist the dispute shall be referred to a committee

constituted by the owner. The committee shall have one member of the rank of Director of the company who shall be chairman of the committee.

If differences still persist, the settlement of the dispute shall be resolved in the following manner:

Disputes relating to the commercial contracts with Central Public Sector Enterprises/ Govt. Departments (except Railways, Income Tax, Custom and excise duties)/ State Public Sector Enterprises shall be referred by either party for Arbitration to the PMA (Permanent Machinery of Arbitration) in the department of Public Enterprises.

In case of parties other than Govt. Agencies, the redressal of the dispute may be sought in the Court of Law.

SECTION – III

S A F E T Y C O D E

ADDITIONAL SAFETY MEASURES TO BE TAKEN BY THE CONTRACTORS

- 1) Before any demolition work is commenced and also during the process of the work,
 - a) All roads and open areas adjacent to the work site shall either be closed or suitably protected.
 - b) No electric cable or apparatus which is liable to be source of danger or a cable or apparatus used by the operator shall remain, electrically charged.
 - c) All practical steps shall be taken to prevent danger to persons employed from risk of fire or explosion or flooding.
- 2) All necessary personal safety equipment as considered adequate by the Engineer-in-charge should be kept available for the use of the persons employed on the site and maintained in a condition suitable for immediate use and the contractor should take adequate steps to ensure proper use of equipment by those concerned.
- 3) When workers are employed on electrical installations which are already energized, insulating mats, wearing apparel, such as gloves, sleeves and boots as may be necessary should be provided. The worker should not wear any ring, watches and carry keys or other materials which are good conductors of electricity.
- 4) Every person who is working on an electric supply line or apparatus or both shall be provided with tools and devices such as gloves, rubber shoes, safety belts, ladders, earthing devices, helmets, line testers and the like for protecting him from mechanical and electrical injury.
- 5) Before starting any work on the existing installation, it should be ensured that the electric supply to that portion in which the work is undertaken is preferably cut off. Precautions like displaying "Men at Work" caution boards on the controlling switches, removing fuse carrier from these switches, and these fuse carriers being kept with the person working on the installation, etc. should be taken against accidental energisation. 'Permit to Work' should be obtained from the person authorized by the department. No work on H.T main should be undertaken unless it is made dead and discharged to earth with an earthing lead of appropriate size. The discharge operation shall be repeated several times and the installation connected to earth positively before any work is started.
- 6) Before energizing on an installation after the work is completed, it should be ensured that all tools have been removed and accounted, no person is present inside any enclosures of the switch board etc., any earthing connection made for doing the work has been removed, 'Permit to Work' is received back duly signed by the person to whom it was issued in token of having completed the work and the installation being ready for re-energising and "Men at Work" caution boards removed.
- 7) All safety devices mentioned or described herein shall be maintained in safe conditions and no equipment shall be altered or removed while it is in use.. Adequate washing facilities shall be provided near places of work.
- 8) These safety provisions shall be brought to the notice of all concerned by display on Notice Board at a prominent place at the work spot. The persons responsible for compliance of the safety codes shall be named therein by the contractor.
- 9) To ensure effective enforcement of the rules & regulations relating to safety precautions, the arrangements made by the contractor shall be open to inspection by the Labour Officer, Engineer-In-charge of the department or their representatives.
- 10) Notwithstanding the above clauses from (1) to (10), there is nothing in these to exempt the contractor from the operation of any other Act or rules in force in Republic of India.
- 11) All necessary precautions should be taken to prevent any mishap during loading , unloading and shifting of equipment.

SECTION - IV

INFORMATIONS & GENERAL TECHNICAL REQUIREMENTS

1.0 GENERAL :

- 1.1 CMPDI, RI-IV is situated in Nagpur city at a distance of about 7 kilometer from the railway station . The CMPDI complex houses residential buildings and offices inside it. There is a 11 kV sub-station having 2 nos. of 250 kVA , 11 kV/433 V Transformer and distribution panels for supplying power to residential colony, the offices and other utilities. Power is received at the sub-station from MSEDCL overhead line tapping point through a cable. The transformers are connected to primary controlling switch by PILCDWA cables. Standby XLPE cable, aluminium conductor, 70 sq. mm. has been laid for connecting to MSEDCL metering point and between transformers and primary controlling OSFUs. The present work includes mainly i) dismantling of existing Switchboard consisting of 11 kV OCB (Oil Circuit Breaker) as Incomer OCB and 2nos. 11 kV OSFUs (Oil Switch Fuse Unit) as Outgoings and ii) supplying, installation, testing and commissioning of new VCB (Vacuum Circuit Breaker) Panel Switchboard comprising of 1 no. VCB Panel as Incomer and 2 nos. VCB Panels as Outgoings. One 125 kVA DG set is available to cater the load of office in case of disruption of supply from MSEDCL.

1.2 Scope of Work:

The scope of this tender package is briefly as under:

- i) Dismantling of existing Switchboard consisting of 1 no. incomer OCB, MEI make and 2 nos. of outgoing OSFUs, MEI make.
- ii) Arrangement of charging transformer for continuation of electric supply using existing OCB/OSFU after dismantling.
- iii) Supplying, installation, testing and commissioning of 11 kV VCB Panel Switchboard comprising of 1 no. incomer and 2 nos. outgoings.
- iv) Provision of earthing for VCB Panes/Transformers etc.
- v) Provision of earth pits with all materials and accessories.
- vi) Provision of Bus Bars for distribution of power from transformer secondary.

1.3 System Configuration:

- a) 433 V power supply system :
 - i) Supply system voltage : $433 \pm 10\%$, 3 Phase & neutral
 - ii) Supply system frequency : 50 Hz
 - iii) System neutral : Solidly earthed
- b) Utilisation Voltages :
 - i) Lighting : 230 V single phase
 - ii) Power sockets : 230 V single phase
- c) Sub-station:
 - i) Incoming supply to transformer : 11 kV, 3 Phase, 50Hz
 - ii) Transformer outgoing supply : 433 V, 3 Phase, 50 Hz
 - iii) Neutral earthing : Solidly grounded

2.0 GENERAL TECHNICAL REQUIREMENTS:

2.1 General Information:

The successful tenderer shall execute the work as per the Bill of Quantity (BOQ) specified in the NIT and the relevant specifications. The work shall have to be completed and made operative in detail. Any item or material which may not have been specifically mentioned but incidental to or necessary for completing an item of work shall be provided by the bidder without any additional charge to CMPDI.

2.2 General guidance for supply & installation and standards to be followed :

i) The electrical equipment/installations / design shall be in accordance with the requirements of the following, wherever applicable :

- a) The Indian Electricity Rules, 1956 updated & amended till recently
- b) The Indian Electricity Act, 2003
- c) Relevant standard set by Bureau of Indian Standard (BIS)/International Electrical Commission (IEC).
- d) Specification for Electrical Works 2008, PWD (Electrical Wing), Maharashtra
- e) Any other relevant rule/special rule.

ii) QUALITY OF MATERIALS:

All materials and equipments supplied by the contractor shall be new of the best quality obtainable and shall comply with the respective Indian Standard Specifications wherever applicable. They shall be of such design, size and materials as to satisfactorily function under the rated conditions of operation and to withstand the environmental conditions at site.

iii) WORKMANSHIP :

Good workmanship and neat appearance are the pre-requisites for compliance with the various sections of these specifications. The entire work of manufacture/fabrication, assembly and installation shall conform to sound engineering practice.

iv) PROPER SUPERVISION/SKILLED WORKMEN:

The work shall be carried out under direct supervision of a person holding a certificate of competency issued under IER, 1956 as applicable and in accordance with the statutory rules and regulations in force. The relevant I.S.I. Code of practice shall be followed wherever applicable. The contractor shall engage suitably skilled/licensed workmen for execution of work under the supervision of supervisor.

iv) DRAWINGS :

The tender drawing indicate the schematic layout 11 kV sub-station at CMPDI complex and a Single Line diagram of existing and proposed HT electricals. Exact position of VCB Panel/Switchboard, cable routes etc. shall be got approved by the Engineer-in-charge before the commencement of the work. Wherever required, detailed drawings shall be prepared and got approved.

V) EARTHING :

Except for equipment provided with double insulation, all non-current carrying metal parts of electrical installations are to be earthed properly. All metal conduits, cable sheaths, switchgear, distribution boards etc. shall be bonded together and connected to an efficient earth electrode.

vi) TESTING:

After completion of work, the Contractor shall have to carry necessary IR test and earth test with megger & earth tester and the test report of the same shall be submitted. All other tests required before commissioning of the HT Panel/Switchboard shall be carried out.

vii) Approval :

The Contractor should obtain the necessary approval required for charging of the High Voltage Switchgear/Apparatus installed by him from the Licensing Authority . The contractor shall carry out all modifications and rectification as demanded by the authority.

viii) Inspection

The VCB Panels will be inspected by CMPDI's representative at manufacturer's works before despatch to ascertain the conformity of the panel to NIT / work order specifications.

ix) Guarantee/ Defect Liability Period

The 11 kV VCB Panel Switchboard supplied under this contract shall be guaranteed against all types of defects (manufacturing or workmanship) for a period of one year from the date of commissioning and successful operation of the system. Any defect in the system/ sub-assemblies found within the guarantee period shall be rectified /replaced by the tenderer free of cost.

- x) Temporary arrangement for supply :** As the work involves replacement of existing 11 kV Switchboard, arrangement is required to be made for temporary charging of the 250 kVA, 11 kV/433 V Transformer to ensure minimum disruption of electric supply.

SECTION - V

TECHNICAL SPECIFICATIONS FOR 11 kV VCB PANEL SWITCHBOARD

1.1 SCOPE

These specifications cover the supplying, installation, testing and commissioning of 11 kV VCB Panel Switchboard.

The HV Switchboard shall have 1 no. 11 kV, 630 A, 25 kA VCB Panel as Incomer and 2 nos. 11 kV, 630 A, 25 kA VCB Panels as Outgoing connected with independent bus bar arrangement. The manufacturer of the panel must possess Type test certificates from CPRI or any other Govt. approved laboratory and also type test certificate for internal arc withstanding from high power laboratories (CPRI etc.). The HV panel should be manufactured at the same factory of VCB manufacturer. Inspection of Switchboard will be done at manufacturer's factory.

Any other item not specifically mentioned but required for safe and normal operation and as per Act/ Statute must be included in the scope of supply.

1.2 H.V.PANEL

1.2.1 The HV (High Voltage) Panel Switchboard shall be of indoor type, having the incoming and outgoing switch gears as per IS 13118-1991 of VCB, IEC 62271-100 for Breakers and - 200 for Panel/IS 3427 of Switchboard and the latest revisions of relevant standards. The standards mentioned above and hereafter are not to be considered exhaustive and reference to a particular standard does not relieve the supplier of the necessity of providing the goods and services complying with other relevant standards.

The HV panel shall have free standing, floor mounted, metal clad, fully compartmentalised having draw-out type floor mounted VCB suitable for indoor use and of the specified rating, efficiently earthed system having a fault level of minimum 25 kA for 3 sec and voltage rating of 12 kV and comprising of housing for VCB, mechanical interlocks to prevent insertion or withdrawal of VCB in its closed position, with metallic automatic safety shutters covering the fixed main contacts when VCB is withdrawn, with earthing rails for earthing of circuit breaker carriage in service and test position, isolating plugs and VCB trolley with vacuum interrupters and self aligning finger type isolating contacts suitable for horizontal draw out and horizontal isolation. The interrupter shall be leak free. The VCB trolley shall remain inside the cubicle even in the Test position. The complete breaker assembly should have their interchangeability with breakers of identical ratings. VCB should have spring charging motor rated for 230V AC. Tripping coil and closing coil are rated for 24V DC. The draw-out type VCB should come out directly on the floor when racked out from panel. Cassette type breaker or separate VCB lifting truck is not acceptable.

1.2.2 **Rating:** All panels assembled to form a board shall be suitable for the nominal operation voltage and rupturing capacity as specified. They should be rated as specified with a minimum of 630 Amps and suitable for operation on 11 kV, 3 phase, 50 Hz system. Type test certificate for the breaking capacity of the panel shall be supplied.

1.2.3 **General Construction :** Separately earthed compartments shall be provided for circuit breakers, bus bars, relay and instruments, CT & PT and cable boxes, fully and effectively segregating these from one another so that fault in any one compartment do not cause damage to equipment (s) in other compartment(s).

The housing shall be of bolted construction to ensure compact and rigid structure. The panels shall be bolted together to form a continuous flush front switch gear suitable for front operation of board and for extension at both ends.

Housing Fabrication Details:

The panels shall be fabricated using sheet steel of min 2.5 mm. for load bearing & 2 mm. for non load bearing parts, indoor, floor mounted, self supporting, made up of vertical panels of uniform height. Each unit of the switchgear shall have necessary internal sheet metal barriers to form separate compartments for VCB, Buses, instruments and relays, cable connections etc.

The panel shall be totally enclosed, dust, weather and vermin proof. However, openings for natural ventilation shall be provided, if necessary. These shall be louvered and provided with wire mesh, if required. Wire mesh for compartments shall be such as to protect against objects of 1 mm. and above.

Panel should have ingress protection rating of IP-4X.

The panels shall be extensible at both the ends by addition of vertical sections in future. Ends of the bus bars shall be suitably drilled for this purpose. Panels at extreme ends shall have openings, which shall be covered with plates screwed to the panel.

The size of the panel shall be restricted approximately to 2300 mm. height, 600 mm. width and depth to 1600 mm. Each shipping section shall be provided with suitable lifting hooks.

All compartments shall be front operated. The panel shall be single front type. For draw out modules, only handles of switchgears, knobs, cutouts for lamps and meters shall be arranged on the front doors to permit operation w/o opening the doors. Relay of circuit breaker shall be mounted on the front doors of the compartments.

1.2.4 General Design Aspects: The HV panel shall be designed such that the switchgear, instruments, relays, bus bars, small wiring etc. are arranged and mounted with due consideration for the followings:

- (i) Facility for inspection, maintenance and repairs of testing terminals and terminal boards for ease of external connection.
- (ii) Minimum noise and vibrations
- (iii) Risk of accidental contact and danger to personnel due to live connections.
- (iv) Mountings at approachable height.

1.3 CIRCUIT BREAKER :

General

1.3.1 The circuit breakers along with CT, PT, Control and Relay Panels shall be suitable for indoor installation with vacuum as interrupting medium incorporating separate interrupters of 630 A rating on each phase mounted on single frame. There shall be common drive mechanism actuating for interrupters, which must work in synchronism.

1.3.2 The entire circuit breaker with its operating mechanism shall be mounted on a horizontal draw out type chassis/ trolley inserted into a floor standing sheet steel enclosure suitable for withstanding electromagnetic/ electro-dynamic forces of both symmetrical and asymmetrical faults.

1.3.3 The circuit breakers shall be suitable for solidly grounded neutral system.

1.3.4 General Arrangements: The circuit breaker panels shall be complete with the following:

- (i) Racking in /Racking out mechanism.
- (ii) Isolating plugs and sockets.
- (iii) Mechanical inter-locks and safety shutters.
- (iv) Mechanical ON/OFF indicator.
- (v) Minimum of 5 NO and 5 NC Auxiliary contacts directly operated by the circuit breaker.
- (vi) Suitable tripping arrangement.

1.3.5 Type: The circuit breaker shall be of horizontal isolation , horizontal drawout pattern.

1.3.6 Breaker Truck: The breaker carriage shall be fabricated from steel, providing a sturdy vehicle for the circuit breaker and its operating and tripping mechanism. The carriage shall be mounted on wheels, moving on guides, designed to align correctly and allow easy movement of the circuit breaker and for removing the carriage for inspection and maintenance purposes. Vacuum Interrupters shall be hermetically sealed and shall be designed for minimum contact erosion, fast recovery of di-electric strength, maintenance free vacuum interrupter, suitable

for auto re-closing. The drive mechanism shall preferably be provided with facility for pad locking at any position namely, "Service", "Test" and "Fully Isolated". It should be possible for testing the circuit breaker for its operation without energizing the power circuit in the "Testing" position. The contacts shall be made only after the breaker is inserted into service position. Interlocking should prevent contacts from being disconnected if circuit breaker is tried to be moved from service position.

1.3.7 General Features: Single break contacts are to be provided in sealed vacuum interrupter.

1.3.8 Rating: The circuit breaker shall be continuously rated as specified with a minimum rated current of 630 Amps. with voltage rating and breaking capacity as specified.

1.3.9 Operating Mechanism:

a) General:

The operating mechanism shall be of the stored energy type with the anti pumping device mounted as standard. Built-in anti-pumping arrangement should be in the VCB. The operating mechanism of the circuit breaker shall be motor wound spring charged type. It shall be mechanically and electrically trip free. All working parts in the mechanism shall be of corrosion resistant material. Self-lubricating, wearing resistant bearings shall be provided in the mechanism.

b) The spring operating mechanism shall be with spring charging motor, opening and closing springs with limit switches and all accessories necessary for automatic charging. In normal operation, recharging of the spring shall commence immediately and automatically upon completion of the closing operation so that a complete sequence of closing and opening operation should be possible. All the poles of the breaker shall operate simultaneously. It shall operate in principle in such a way that the closing spring after each closing operation are automatically charged by the motor and locked in the charged position by a latch.

c) It shall be possible to hand charge the operating spring with the circuit breaker in either the open or closed position conveniently from the ground level. Closure whilst a spring charging operation is in progress shall be prevented and release of the springs shall not be possible until they are fully charged.

d) The state of charge of the operating springs shall be indicated by a mechanical device showing 'SPRING CHARGED' when closing spring is fully charged and operation is permissible and 'SPRING FREE' when closing spring is not fully charged and the operation is not possible.

e) Closing action of the circuit breaker shall charge the opening spring ready for tripping.

f) The motor for charging spring shall be 230 Volt AC. It shall be protected by MCB.

g) Auxiliary power supply:

The operating mechanism shall be suitable to operate with the following auxiliary power supplies.

i) 230 V 50 Hz single phase for spring charging motor AC.

ii) DC supply 24 Volts – For close and open coils.

h) The DC supply shall be from power pack unit

1.3.10 Interlocking Requirement:

i) It should not be possible to move the VCB trolley from the isolated to the service position unless low voltage control supply plug & socket connections are made.

ii) It should not be possible to disconnect the low voltage plug & socket as long as VCB trolley is in service position.

iii) It should not be possible to withdraw the VCB trolley without disconnecting the low voltage plug & socket.

iv) It should not be possible to move the VCB trolley from the isolated to the service position or vice-versa with VCB in 'ON' condition.

v) It should not be possible to switch on the VCB when the VCB trolley is in between isolated & service position (except in test position).

- vi) It should not be possible to open the door of the VCB compartment when VCB is ON or to have access to any part of the draw-out assembly which is live when VCB is in service.
- vii) The safety shutters should be metallic, earthed & lockable.

1.3.11 External auxiliary supply shall be made available for charging motor and heater operation.

1.3.12 The VCB shall be complete with:

Independent spring closing, spring tripping, vacuum restrike free, trip free, stored energy type and with breaker "CLOSE / OPEN" & spring "CHARGED / DISCHARGED" indication.

Electrical closing coil suitable for 24V DC supply.

Shunt trip coil suitable for 24V DC supply.

Closing coils shall operate satisfactorily in the control voltage range of 85 – 110% and tripping coil shall operate in the control voltage range of 70 – 110%.

Breaker operated auxiliary switch with 5 NO and 5 NC contacts.

1.4 Indications:

a) Incoming panel should have following indications by means of LED lamp.

1. Spring charged.

2. R,Y,B phase (3 LED lamps)

3. Breaker on & Breaker off

4. Trip indication

5. Trip circuit healthy indication.

b) Outgoing panel should have following indications by means of LED lamps.

1. Spring charged.

2. Breaker on & Breaker off.

3. Trip indication.

4. Trip circuit healthy indication.

c) The following facilities shall be provided in the circuit breaker local control cabinet:

ON/NEUTRAL/OFF control switch or ON and OFF push buttons. The push button shall be momentary contact type with rear terminal connections. The close push button shall be of green colour and the open push button red colour.

d) MECHANICAL EMERGENCY TRIP DEVICE: suitable for manual operation in the event of failure of electrical supplies. The device shall be accessible without opening any access doors and distinctly labeled. It shall be shrouded and protected against inadvertent operation.

1.5 BUS BAR SECTION:

1.5.1 General Requirements : The panels shall be single bus bar pattern with air insulated encapsulated bus bars housed in a separate compartment, segregated from other compartments.

Material: The bus bars shall be of high conductivity electrolytic copper (rectangular cross section) rated as specified with a minimum rated current of 630 Amps. The bus bar shall be sized for carrying the rated and short circuit current without over-heating.

Busbars shall be supported on insulators made of non hygroscopic, non-inflammable materials.

Buses shall have uniform cross section throughout the length of the panel upto incoming feeder terminal. Bus bars housed in a separate chamber shall be accessible for inspection. Compartments should be open and bus bars should be extended without any partition or bushings in busbar chamber. A suitable body earth electrode shall be provided on the panel.

The bus bars shall be provided with heat shrinkable PVC insulating HT sleeve of high dielectric strength, which should be non-inflammable & self-extinguishing type and in fast colours to indicate

phases. The sleeves shall be rated to withstand the system line-to-line voltage for 1 minute. All bus bar joints and tap- off connections from the main horizontal bus bars shall be suitably shrouded. The bus bars shall be adequately supported on insulators in adequate numbers and size to avoid sag in bus bars and these shall be capable of withstanding stresses due to short circuit currents of associated switchgear. Minimum clearance should be as per relevant IEC/IS standard.

1.6 CURRENT TRANSFORMER (CT):

1.6.1 General Requirements: Accommodation shall be provided in the circuit breaker panel to mount one set of three numbers dual core dual ratio CTs for metering and protection purposes.

1.6.2 Rating:

Double ratio, double core, wound type, epoxy resin cast dry type current transformer (CT) with following specifications.

Current transformers shall generally conform to IS: 2705. The short time withstanding rating should be that of the breaker or the switchboard. The design and construction shall be robust to withstand thermal and dynamic stresses during short circuits. Secondary terminals of CTs shall be brought out suitably to a terminal block which will be easily accessible for testing and terminal connections.

They shall be mounted on the stationary part of the switchgear. Protective core shall have an accuracy class of 5P and an accuracy limit factor of not less than 10. Metering core of CTs shall have an accuracy class of 1.0. The VA rating should be 7.5 VA for each core.

CT ratio (Amp): As per BOM.

1.6.3 1 set consisting of 3 CTs shall be mounted in each of the 3 VCB Panels.

1.7 VOLTAGE TRANSFORMER/POTENTIAL TRANSFORMER (PT):

1.7.1 General Requirements:

PT mounting will be at front bottom and inside the compartment of VCB section and fully draw out type.

The potential or voltage transformers shall generally conform to IS: 3156. The draw out mechanism shall disconnect the PT from the main bus bars. The primary connections shall be disconnected before the PT or its primary fuses becomes accessible. Three nos. single phase PTs should be connected in star. Neutral point of the star connected PTs both on primary and secondary sides shall be earthed. The PTs shall have voltage factor of 1.5 for 30 seconds.

Three nos. single phase draw out type PT with transformation ratio 11 kV / rt 3/ 110 Volts/rt 3 AC, burden 50 VA. Voltage transformer shall be dry type, cast resin encapsulated construction with current limiting HRC fuses on primary and secondary sides for protection. PT would be required with incoming VCB only.

1.8 PROTECTION AND TRIPPING ARRANGEMENT:

The incoming & outgoing VCB Panels shall have following relays:

- i) Numerical Relay with self monitoring feature shall contain all protections as necessary for safe operation of VCB such as over current, earth fault and short circuit etc. shall be provided for incoming and outgoing VCBs. The relay shall have minimum 3 element (2 Phases + EF) Over current IDMT with instant trip. The OC (Over Current) and EF (Earth Fault) relay shall be with instantaneous high set.
- ii) Overcurrent protection shall have adjustable setting for current from 50% to 200% and earth fault from 10% to 40% or 20% to 80%.
- ii) Numerical type Master trip & Trip Circuit Supervision Relay.

1.9 Auxiliary Wiring:

Wiring for all controls, protection, metering, signaling etc. inside the panel board shall be done using 1100 V FRLS PVC insulated copper conductor cable. The size of copper conductors shall be 2.5 sq.

mm. for CT wiring with colour code: RYB and 1.5 sq. mm. for PT & all other control wiring. Colour code: Grey for auxiliary DC circuits and Black for auxiliary AC circuits.

The wiring shall be securely fixed and neatly arranged to enable easy tracing of wires. Identification tags shall be fitted to all wire terminals to render identification easy and to facilitate checking in accordance with IS 375. The wiring shall preferably enclosed in plastic / PVC channels. Wiring between HV breakers or cable compartments to relay and metering shall be routed through flexible conduits. Shorting links shall be provided for all CT terminals.

All control wiring shall be provided with necessary sockets / lugs at both the ends. Each termination shall be identified at both the ends by PVC ferrules having numbers corresponding to control circuit diagram.

Control cable shall enter the switchgear from the bottom. Supporting facilities shall be provided for clamping the control cables. All inter-panel wiring shall be taken through PVC sleeves or suitable grommets by the switchgear vendor. For inter-panel wiring between the shipping sections, wires in rolls of required length, connected at one point, shall be supplied with the panel for connection at site. Breaker tripping and closing device shall be fed with 24V DC voltage.

1.10 Terminal blocks:

1.10.1 Terminal blocks with adequate electrical clearance shall be provided for terminating the panel wiring and outgoing connections. The termination shall be made by crimping lugs or bare conductors with insulating sleeves at ends. The arrangement can be horizontal or vertical as per standard practice adopted by the manufacturer. All terminals must be numbered and wired termination provided with numbered ferrules for identification. All circuit breaker auxiliary contacts including spare contacts shall be wired to the terminal blocks. 10% spare terminals shall be provided on each terminal block.

Sufficient terminals shall be provided on each terminal blocks to ensure that not more than one outgoing wire is connected per terminal. Terminal strips shall preferably be separated from power circuits by metal barriers or enclosures.

1.10.2 Engraved core identification plastic ferrules marked to correspond with the panel wiring diagram shall be fixed at both ends of each wire.

1.11 METERING INSTRUMENT, PANEL ACCESSORIES (DIGITAL):

1.11.1 **Instrument Panels:** The relays, meters and instruments shall be preferably of flush mounting type at a maximum height of 1800 mm.

1.11.2 Instrumentation:

(i) A Digital Voltmeter of required range with inbuilt selector switch shall be provided at incomer panel.

(ii) An Ammeter of required range with inbuilt selector switch shall be provided at both incomer and outgoing panels.

(iii) Digital Multifunction meter, with LCD display for measurement and monitoring of Multifunctional Electrical parameters such as voltage, current, active power, frequency, power factor, active energy, reactive power, etc. to be provided for incoming only.

(iv) The panel assembly shall take care of following requirements

(i) Lamp indication shall be provided to indicate ON/OFF (By red/green respectively) of switch gear.

(ii) Panel illuminating lamp.

(iii) Mechanical indication for spring charge status.

(iv) Lamp indicating tripping at fault status.

(v) Healthy trip supply shall be indicated by clear lamp.

(vi) Separate fuses/MCBs shall be provided for lamps, heaters, voltmeters and other instrumentation etc. on each panel.

(vii) Anti-condensation space heater shall be provided and shall be suitable for operation on 230 V, 1 phase, 50 Hz AC for each panel.

1.12 CABLE BOXES:

Cable boxes shall be situated in a compartment at the rear/ side of the housing.

Power connection:

The incoming and outgoing power connections shall be suitable for XLPE/PILCDWA Cables. Ample space for connection of these cables shall be provided at the rear of the switchboard. The power cable shall enter or go out from the switchboard from minimum 3 mm. thick removable gland plate situated at bottom of line / cable chamber.

The switchboard shall be supplied complete with supports for clamping outgoing and incoming cables. The head room available between cable gland plate and terminal lugs shall preferably not be less than 550 mm.

In case, the standard depth panel cannot accommodate the specified no. of cables, a rear extension panel of uniform height shall be provided. An earth strip shall also be brought to this extension panel.

1.13 Earthing:

All metal parts not intended for carrying current or not alive shall be connected to duplicate earthing system and suitable electroplated brass earthing terminals shall be provided on each circuit breaker panel. Suitable identification mark for the earth terminals shall be provided adjacent to the terminal. Each panel shall be connected with 2 separate and distinct earthing.

No riveted joints in the earth conducting path shall be permissible and only bolted joints of adequate size shall be provided with nuts, bolts and plain spring washers. The surface of the joints shall be perfectly flat without any unevenness to ensure that there is no contact resistance.

An earth busbar of copper strip shall be provided inside the local control cabinet to which all earthing connections must be made. The earth bus bar shall be terminated into two electroplated brass earthing terminals of adequate size with nuts, bolts and washers for connecting to earth continuity conductor.

All cubicles shall be earthed to an earth bus running throughout the length of the switchboard. The entire panel board shall have a common tinned copper earth bar of suitable section with 2 earth terminals in each panel for effectively earthing metallic portion of the panels.

All doors and movable parts shall be connected to the earth bus with flexible connections. Provisions shall be made to connect the earthing bus to the plant earthing grid at two ends. All non-current carrying metallic parts of the equipment and components shall be earthed.

The earth bus shall be brought back to the cable compartment and earthing bolts shall be provided to ground cable armour. The mating surfaces of all bolted parts shall be zinc-passivated to ensure continuity between them. Integral earthing switch for earthing of line / cable side to be provided for each panel.

1.14 Painting.

All metal surfaces shall be thoroughly cleaned and degreased to remove all scales, rust, grease and dust. Fabricated structures shall be pickled and treated to remove any traces of acid as per 7/9 tank treatment process. The under surface shall be made free from all imperfections before undertaking the final coat.

After preparation of the under surface, the panel shall be spray painted with final two coats of powder coated paint. The colour shade of the final paint shall be Grey unless otherwise specified. The finished panels shall be dried in stoving ovens in dust free atmosphere. Panel finish shall be free from imperfections like pin holes, orange peels, run off paint etc.

1.15 Name Plates.

The nameplates for all incoming and outgoing feeders shall be provided on front doors of the panel. Nameplates shall be provided for each equipment (lamp, push buttons, switches, relays, auxiliary contactors etc.) mounted on the switchboard. Special warning plates shall be provided on all removable covers or doors giving access to high voltage bus bars or cables. Nameplates shall be fixed by screws only and not by adhesives. Special danger plates shall be provided as per requirement.

Inside the panels, stickers shall be provided for all components giving identification number as per detailed wiring diagram.

1.16 Circuit Diagram:

A duplicate copy of the circuit wiring diagram shall be affixed to the inner side of the door of the switchgear compartment. Labels shall be provided inside the compartment to describe the functions of the various items of equipment.

1.17 The scope of supply shall include the panel mounting foundation bolts, nuts and washers necessary for making the supporting.

Breaker Spring charging handle

Breaker Trolley Racking in/out handle

1.18 Installation:

All the VCB Panels shall be erected by using suitable size of MS channel, foundation bolts.

The installation work shall cover assembly of panels lining up, grouting of units, connecting the power cables etc. In multi panels switch board after connecting up the bus bars, all joints shall be insulated with HV insulation tape or with approved insulation compound. A common earth bar shall be run preferably at the back of the switch board connecting all the sections for connecting the earth system. All protection, indications & metering connections and wiring shall be completed. All relay instruments and meters shall be mounted and connected with appropriate wiring.

1.19 TESTING AND COMMISSIONING:

Type and routine tests

The circuit breaker shall be subjected to routine and type tests in accordance with the standards listed in this specification with the latest amendments. The tests shall include but not limited to the following. Procedure for testing and commissioning of relay shall be in general in accordance with good practice.

All routine megger tests shall be performed. Checks and test shall include the following.

- (i) Operation checks and lubrication of all moving parts.
- (ii) Interlock function checks.
- (iii) Continuity checks of wiring, fuses etc. as required.
- (iv) Insulation tests.
- (v) Trip test and protection gear tests.
- (vi) The complete panel shall be tested with 5000 V megger for insulation between poles and poles to earth. Insulation test of secondary of CTs and VT to earth shall be conducted using 500V megger.
- (vii) All other tests as required by the Inspector shall be conducted.

1.20 Drawings/Catalogue/Certificates:

- i) General arrangement drawing of the panels.
- ii) Schematic Circuit diagram (power and control circuits)
- iii) Manufacturer's test certificate for all routine tests.
- iv) Manufacturer's test certificate for relays.
- v) Operation, maintenance and parts catalogue.
- vi) Copies of type test certificate by CPRI.

ANNEXURE- A

Technical Parameters For 11 kV VCB PANEL

Sl.No.	Particulars	Details
1	Applicable Standard	IS 13118 , IEC 6227—100 & -200, IS 3427, IS 12729
2	Number of panels	3 (Incoming=1 plus outgoing=2)
3	Enclosure	Single front
4	Protection of Enclosure	IP 4X
5	Class	Indoor
6	Interrupting medium	Vacuum
7	Nominal system voltage	11 kV
8	Rated normal current	630 A
9	Rated Voltage	12 kV
10	Frequency	50 Hz
11	Phase	3
12	Number of breaks per phase	1
13	Number of poles	3
14	Bus Bar system	Copper
15	Rated short circuit breaking current (rms)	25 kA
16	Short time current for 3 sec	25 kA
17	Rated short circuit making current(peak)	62.5 kA
18	Rated Insulation Level	
(i)	Rated one minute normal power frequency withstand voltage	28 kV rms
(ii)	Rated Impulse withstand voltage	75 kV peak
19	Rated operating sequence	O – 0.3 sec – CO – 3 min - CO
20	Operating mechanism	Motor operated spring charged
	Manual/ Electrically operated	Manual and Electrical with closing and shunt trip coil.
21	Protection to be provided : (Overcurrent , Earth fault and Short circuit)	Numerical OC/EF Relay having minimum 3 element (2 Phases + EF) Over current IDMT with instant trip. The OC and EF relay shall be with instantaneous high set. The minimum setting range shall be 50 to 200% for O/C, 10 to 40% or 20 to 80% for E/F and instantaneous high O/C setting of 400 to 1600% and E/F setting of 100 to 400%.
23	Meters to be provided	Digital Ammeter with inbuilt selector switch, Digital Voltmeter with inbuilt selector switch, Numerical Multi function meter
24	Indications on control panel	ON, OFF, TRIP, TRIP CIRCUIT HEALTHY, SPRING CHARGED and R,Y,B Phases.
25	Terminal Arrangement	
	Incoming	11 kV, 3 x 70 sq. mm. aluminium conductor armoured XLPE/PILCDWA cable.
	Outgoing	11 kV, 3 x 70 sq. mm. aluminium conductor armoured XLPE/PILCDWA cable.
26	Current Transformer	Cast resin insulated type
	Incoming Panel	
	Rated Transformation ratio	50-25 / 5- 5 A

	Accuracy class	Core 1 : 1 (metering) Core 2 : 5P10 (protection)
	Rated output	7.5 VA for each core
	Outgoing Panel	
	Rated Transformation ratio	40 -20/ 5-5 A
	Accuracy class	Core 1 : 1 (metering) Core 2 : 5P10 (protection)
	Rated output	7.5 VA for each core
27	Voltage Transformer	Cast resin insulated type
	Rated Transformation ratio	11000/rt3/110/rt3 Volts
	Accuracy class	1 /3P
	Rated output	50 VA / phase
28	Power pack	Input : 110 V AC, Output ; 24 V DC
29	Control supply for relay and meter	24 V DC
30	VCB make	GE, BHEL, L&T, ABB, SIEMENS, AREVA or Equivalent

ANNEXURE - B

BILL OF MATERIAL: For 11 kV, 630 A, 25 kA 1 I/C + 2 O/G VCB Panel Switchboard

Sr. No.	Particulars	Incomer	Outgoing
	Number of Feeder	1	2
		Qty. (for 1 no. Incomer VCB Panel)	Qty. (for 1 no. Outgoing VCB Panel)
1	Vacuum Circuit Breaker		
	11 kV, 630 A, 25 kA for 3 sec with spring charging motor for 230 V AC, Tripping coil and closing coil rated for 24 V DC	1	1
2	Current Transformers		
i)	50-25/5-5 A, CI 1/5P 10, 7.5 VA for each core	3	
ii)	40-20/5-5 A, CI 1/5P 10, 7.5 VA for each core		3
3	Potential Transformer with fuses		
	11000/rt3/110/rt3 V, CI 1/3P, 50 VA	3	
4	Relay		
i)	Numerical OC/EF Relay	1	1
ii)	Trip Circuit Supervision Relay	1	1
iii)	Master Trip Relay	1	1
5	Meters		
i)	Digital Voltmeter	1	
ii)	Digital Ammeter	1	1
iii)	Multifunction meter	1	
6	Miscellaneous		
i)	Fuses	As per requirement	As per requirement
ii)	Powerpack : 110 V AC to 24 V DC	1	
iii)	Panel Illumination Lamp	1	1
iv)	Plug and socket	1	1
v)	L/R switch	1	1
vi)	TNC switch	1	1
vii)	Thermostat	1	1
viii)	Panel space heater assembly	1	1
ix)	Emergency Push Button	1	1
x)	Indicating Lamp	8	5

Note: Mechanical Interlock shall be provided along with the panel.

SECTION - VI

ANNEXURES.

PROFORMA FOR LETTER OF BID TO BE UPLOADED BY BIDDER DURING SUBMISSION OF BID ONLINE:

FORMAT OF “Letter of Bid”

LETTER HEAD OF BIDDER (As enrolled on the e-Procurement Portal of CIL)

To
The Tender Committee
M/s Central Mine Panning & Design Institute Ltd.,
Regional Institute – IV, Jaripatka,
NAGPUR – 440014

Sub: Letter of Bid for the work “.....”

Ref.:1.NIT No.”.....”

2. Tender Id No.”.....”

Dear Sir,

This has reference to above referred bid. I/we have read and examined the conditions of contract, Scope of Work, technical specifications, BOQ and other documents carefully.

I/We am/are pleased to submit our bid for the above work. I/We hereby unconditionally accept the bid conditions and bid documents in its entirety for the above work and agree to abide by and fulfill all terms and conditions and specifications as contained in the bid document.

I/We hereby submit all the documents as required to meet the eligibility criteria as per provision of bid-notice/document.

I/We hereby confirm that the bid complies with the Bid validity, Bid security and other documents as required by the Bidding documents.

If any information furnished by me/us towards eligibility criteria of this bid is found to be incorrect at any time, penal action as deemed fit may be taken against me/us for which I/we shall have no claim against CMPDIL.

Until a formal agreement is prepared and executed, this bid and your subsequent Letter of Acceptance/ Work Order shall constitute a binding contract between us and CMPDIL.

Should this bid be accepted, we agree to furnish Performance Security within 28 days of issue of letter of acceptance and commence the work within 10 days of issue of letter of acceptance. In case of our failure to abide by the said provision CMPDIL shall, without prejudice to any other right or remedy, be at liberty to cancel the letter of acceptance/ award and to forfeit the Earnest Money and also debar us from participating in future tenders for a minimum period of 12 months.

(This document is digitally signed by the DSC holder authorized by the bidder and therefore no physical signature is required).

ANNEXURE - II

PROFORMA FOR UNDERTAKING TO BE SUBMITTED BY BIDDER/S (ON BIDDER'S LETTER HEAD) FOR GENUINENESS OF THE INFORMATION FURNISHED ONLINE AND AUTHENTICITY OF THE DOCUMENTS UPLOADED ONLINE IN SUPPORT OF HIS ELIGIBILITY :

FORMAT OF UNDERTAKING

I/We,.....,
Proprietor/Partner/Attorney/Director/Accredited Representative of M/s
....., solemnly declare that

1. I/We am/are submitting bid for the work against NIT No./Tender ID Dated.....and I/We offer to execute the work in accordance with all the terms, conditions and provisions of the bid.
2. Myself/Our Partners/Directors don't has/have any relative as employee of (Name of the Company).
3. All information furnished by us in respect of fulfillment of eligibility criteria and qualification information of this Bid is complete, correct and true.
4. All copy of documents, credentials and documents submitted along with this bid are genuine, authentic, true and valid.
5. I/We authorize department to check references/ clarifications from our Bankers.
6. *I/We have submitted particulars of existing Sales Tax / VAT Registration, if applicable. We also undertake that Certificate of Registration with appropriate Sales Tax/ VAT Authority where the work will be executed shall be arranged before any payment is made to us.
7. We hereby undertake that we shall register and obtain license from the competent authority under the contract labour (Regulation & Abolition Act) as relevant, if applicable.
8. *I/We hereby confirm that we have registration with CMPF/EPF Authorities. We shall make necessary payments as required under law.
Or
I/We hereby undertake that we shall take appropriate steps for registration as relevant under CMPF/ EPF authorities, if applicable. We shall make necessary payments as required under law.
9. *I/Wehave not been banned or delisted by any Govt., or Quasi Govt. Agencies or PSUs (In case of JV all partners are covered).
Or
*I/Wehave been banned by the organization named "....." for a period of..... year/s. effective from..... to (in case of JV, name(s) of the JV Partner(s)).
10. If any information and document submitted is found to be false/ incorrect at any time, department may cancel my/ our Bid and action as deemed fit may be taken against me/us, including termination of the contract, forfeiture of all dues including Earnest Money and banning /delisting of our firm and all partners of the firm etc.

*Delete whichever is not applicable

ANNEXURE - III

MANDATE FORM FOR ELECTRONIC FUND TRANSFER / INTERNET BANKING

PAYMENT

To

**Central Mine Planning & Design Institute Limited,
Regional Institute-IV, Jaripatka, Nagpur-440014**

Sub. : Authorization for release of payment due from **Central Mine Planning & Design Institute Limited, Regional Institute, Nagpur** through Electronic Fund transfer / Internet Banking.
(SBI-NET)

Ref.: Order No. _____ Date _____ and / or Tender / Enquiry / Letter No. _____ Date _____

(Please fill in the information in CAPITAL LETTERS, Please TICK wherever it is applicable).

1. Name of the Party : _____

2. Address of the Party : _____

City _____ PIN Code _____
E- Mail Id _____
Permanent Account Number _____

3. Particulars of Bank

Bank Name				Branch Name			
Branch Place				Branch City			
PIN Code				Branch Code			
MICR No.							
(9 Digits code number appearing on the MICR Band of the cheque supplied by the Bank. Please attach Xerox copy of a cheque of your bank for ensuring accuracy of the bank name, branch name and code number)							
RTGS CODE							
Account Type	Savings	Current			Cash Credit		
Account Number (as appearing in the Cheque Book)							

4. Date from which the mandate should be effective.

I hereby declare that the particulars given above are correct and complete. If any transaction is delayed or not effected for reasons of incomplete or incorrect information. I shall not hold Central Mine Planning & Design Institute Limited responsible. I also undertake to advise any change in the particulars of my account to facilitate updation of records for purpose of credit of amount through SBI Net. I agree to discharge responsibility expected of me as a participant under the scheme. Any bank charges levied by the bank for such e-transfer shall be borne by us.

Place:

Date:

Signature of the party / Authorized Signatory.

Certified that the particulars furnished above are correct as per our records.

Banker's Stamp:

Date : _____

(Signature of the Authorized official from the Banks)

ANNEXURE - IV

PROFORMA FOR EXECUTION OF AGREEMENT

AGREEMENT NO._____ Dt._____

This Agreement is made on this _____ day of _____ 20.... between the Central Mine Planning and Design Institute Limited, REGIONAL Institute-IV, Nagpur, a Company Registered under the Indian Companies Act, 1956 having its Registered Office at Gondwana Place, Kanke Road, Ranchi (hereinafter called the ' COMPANY' which expression shall, unless repugnant to the subject or context, include its successors and assignees) of the one part and (Name of the contractor) carrying on business as a (Partnership / proprietorship / Ltd. Co. etc.) firm under the name and style _____ (hereinafter called the "said Contractor" which expression shall, unless the context requires otherwise include them and their respective heirs, executors, administrators and legal representatives) of the other part.

And whereas the Company invited tender for the work of _____ against Tender Notice No. _____.

And whereas the said Contractor / Firm submitted tender for the said work and deposited a sum of Rs. _____ as Earnest Money and whereas the ten.

NOW THIS AGREEMENT WITNESS AND IT IS HEREBY AGREED AS FOLLOWS:-

- 1) In this agreement words and expressions shall have the same meaning as are respectively assigned to them in the tender papers hereinafter referred to.
- 2) The following documents which are annexure to this agreement should be deemed to form and be read and construed as part of this agreement viz.
 - i) Annexure-A Tender Notice (Page to
 - ii) Schedule-A General Terms & Conditions. Special Conditions and General Technical Specifications (Page to) and Safety Code.
 - iii) Schedule-B The probable Quantities and Amount (Page to
 - iv) Schedule-C Negotiation letters –
 - iv) Schedule-D Letter of Acceptance / Work Order (Page to
 - v) Schedule-E Drawings (Page....to....)
- 3) In consideration for the payment of the sum of Rs. (W/O value; both in words and figures) or such other sum as may be arrived at under the clause of the specification relating to Payment by item's measurements at unit prices by the Company, the said Contractor shall, subject to the terms & conditions contained herein execute and complete the work as described and to the extent of probable quantities as indicated in Schedule B with such variations by way of alteration, addition to or reduction from the said works.

- 4) The company has received a sum of Rs.....towards Performance Security Deposit (1st part of Security Deposit) in the form of Demand Draft/ Certified Cheque/ B.G/ other form.

5) The said contractor hereby covenants with the company that the company shall deduct at 5% of R/A Bills as Retention Money (2nd part of Security Deposit) to make the total Security as 10% (ten percent) of contract value as per terms and conditions of the tender contract..

IN WITNESS WHEREOF THE parties herein have set their hands and seals the date and year above written:

1. Partner Signature

2. Partner Signature

On behalf of
M/s.....
The Contractor, as one of the
constituted attorney,

In the presence of –

1. Name : Signature

Address :

Occupation :

Signed by Sri on Signature
behalf of
(name of Company) in presence of :

1. Name : Signature
2. Address :

ANNEXURE -V
BANK GUARANTEE PROFORMA FOR EARNEST MONEY
DEPOSIT/BID SECURITY
(TO BE STAMPED IN ACCORDANCE WITH STAMP ACT)

(TO BE ISSUED BY ANY NATIONALISED/ SCHEDULED BANK
AUTHORISED BY RBI TO ISSUE A BANK GUARANTEE)

To:

**Central Mine Planning & Design Institute Limited,
Regional Institute-IV, Jaripatka, Nagpur-440014**

WHEREAS _____ *[name and address of Bidder]* (hereinafter called "the Bidder") shall be submitting its Bid dated _____ *[date of the Bid]* for the work. _____ *[name of the work]* (hereinafter called "the Bid").

KNOW ALL MEN by these present that we, _____ *[name of the bank]* of _____ *[name of the country]* _____ having our registered office at *[address of the bank]* (hereinafter called "the bank"), are bound unto the **Central Mine Planning & Design Institute Limited, Regional Institute, Nagpur-440014** (hereinafter called "the Employer") for the sum of *[amount of the Guarantee in words and figures]* for which payment well and truly to be made to the said Employer the Bank binds itself, his successors and assigns by these presents.

SEALED with the Common Seal of the said bank this _____ day of _____ 20__.

THE CONDITION of this obligation are:

1. If the Bidder withdraws its Bid during the period of Bid Validity specified by the Employer on the bid form ; or
2. If the Bidder withdraws having been notified of the acceptance of its bid by the Employer during the period of Bid Validity :
 - (a) Fails or refuses to execute the Contract Agreement when required ; or
 - (b) Fails or refuses to furnish the Performance Security (if any) in accordance with the Bid conditions.

We, _____ *[name of the bank]* undertake to pay to the Employer up to the above amount upon receipt of its first written demand, without the Employer having to substantiate its demand, provided that in its demand the Employer will note that the amount claimed by it is due to it owing the occurrence of 1 or both of the 2 (a) or (b) specifying the occurred condition or conditions.

This guarantee will remain in full force up to and including the date _____ and any demand in respect thereof should reach the Bank not later than the date of expiry of this guarantee.

For and on behalf of the Bank

Signature _____
Name _____
Designation _____

Common Seal
of Bank _____

ANNEXURE - VI

BANK GUARANTEE PROFORMA FOR PERFORMANCE SECURITY / GUARANTEE

(TO BE STAMPED IN ACCORDANCE WITH STAMP ACT)

*(TO BE ISSUED BY ANY NATIONALISED/ SCHEDULEDBANK
AUTORISED BY RBI TO ISSUE A BANK GUARANTEE)*

To

**Central Mine Planning & Design Institute Limited,
Regional Institute-IV, Jaripatka, Nagpur-440014**

In consideration of the **Central Mine Planning & Design Institute Limited, Regional Institute, Nagpur-440014**, having its Registered office at **CMPDIL, Gondwana Place, Kanke Road, Ranchi – 834 031** (hereinafter called to as the “Employer” which expression shall unless repugnant to the context or meaning thereof, include all successors, administrators and assigns) having awarded to _____ *[Name & Address of the Contractor]* (hereinafter called to as “Contractor” which expression shall unless repugnant to the context of meaning thereof include its successors, administrators, executors and assigns) the work _____ *[Name of the Work]* by issue of Letter of Award No. _____ *[Work Order / Letter of Intent No.]* and the same having been unequivocally accepted by the Contractor resulting into a Contract Agreement dated _____ valued at _____ *[value of Work Order]* (hereinafter called ‘the Contract’) and the Employer having agreed to accept Performance Bank Guarantee of _____ *[indicate figure]%* of the Contract Sum _____ *[amount in figures and words]* from a Nationalized / Scheduled Bank for due performance of the work executed by the Contractor as per the terms & conditions contained in the said Contract.

We, _____ *[name of the Bank]*, of _____ *[address of the Bank]* (hereinafter called to as “Bank” which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) do hereby guarantee and undertake to pay the Employer immediately on demand and or, all money payable by the Contractor to the extent of

_____ *[amount of guarantee in figures and words]*, at any time from _____ to _____ without any demur, reservation, recourse, contest or protest and/or without any reference to the Contractor. Any such demand made by the Employer on the Bank shall be conclusive and binding notwithstanding any difference between the Employer and the Contractor or any dispute pending before any Court, Tribunal, Arbitrator or any other authority. We agree that the Guarantee herein contained shall be irrecoverable and shall continue to be enforceable as per the terms & conditions contained in the said Contract.

The Employer shall have the fullest liberty without affecting in any way the liability of the Bank under this Guarantee, from time to time, to extend the validity of time of Performance of the Contract by the Contractor. The Employer shall have the fullest liberty without affecting this Guarantee, to postpone, from time to time, the exercise of any powers vested in them or of any right which they might have against the Contractor, and to exercise the same at any time in any manner, and either to enforce or to forebear or to enforce any covenants contained or implied in the Contract, between the Employer and the Contractor or any other course or remedy or security available to the Employer. The Bank shall not be released of its obligations under these presents

by any exercise by the Employer of its liberty with reference to matter aforesaid or any of them or by reason of any other act of forbearance or other acts of omission or commission on the part of the Employer or any other indulgence shown by the Employer or by any other matter or thing whatsoever which under law would, but for this provision, have the effect of relieving the Bank. The Bank also agrees that the Employer at its option shall be entitled to enforce this Guarantee against the Bank as a Principal Debtor in first instance, without proceeding against the Contractor and notwithstanding any security or other Guarantee that the Employer may have in relation to the Contractor's liabilities.

Dated this _____ day of _____ at _____

For and on behalf of the Bank

Signature _____

Name _____

Designation _____

Common Seal of Bank _____

ANNEXURE – VII

To be Submitted by Bidder on Non-Judicial Stamp Paper of Rs.10/- duly attested by Notary Public.

**GUARANTEE TO BE EXECUTED BY THE CONTRACTOR FOR REMOVAL OF DEFECTS
AFTER COMPLETION IN RESPECT OF 11 KV VCB PANEL SWITCHBOARD INSTALLATION
AND COMMISSIONING WORK.**

This agreement made this day oftwo thousand
between M/s (hereinafter called the Guarantor of the one part) and the other
CMPDIL.

Whereas this agreement is supplementary to the contract (hereinafter called the contract) dated....
Made between the Guarantor of the one part and subsidiary the other part, whereby the
contractor, inter alia, undertook to render the 11 kV VCB Panel Switchboard in the said contract
rectified, completely during the guarantee period of one year after completion of work.

Whereas the Guarantor agreed to give guarantee to the effect that the said 11 kV VCB Panel
Switchboard will remain under Guarantee for years to be reckoned from the date after
the completion of work.

During the period of guarantee the Guarantor shall make good all defects and for this matter, shall
replace at his risk and cost such parts as may be damaged/not functioning, he shall replace the
parts/rectify at his cost to the satisfaction of the Engineer- in-charge, and shall commence the
works of such rectification within 7 (seven) days from the date of issuing notice from the Engineer-
in-charge calling upon him to rectify the defects, failing which the work shall be got done by the
department by some other contractor at the Guarantor's cost and risk, and in the latter case the
decision of the Engineer-in-charge as to the cost recoverable from the Guarantor shall be final and
binding.

That if the Guarantor fails to rectify defects etc. or commits breaches hereunder then the
Guarantor will indemnify principal and his successors against all loss, damage, cost, expense or
otherwise which may be incurred by him by reason of any default on the part of the Guarantor in
performance and observance of this supplemental agreement. As to the amount of loss and / or
damage and / or cost incurred by the subsidiary, the decision of the Engineer-in-charge will be
final and binding on the parties.

In witness whereof these presents have been executed by the obligator and by
..... For and on behalf of the CMPDIL on the day, month and year first above written.

Signed, sealed and delivered by Obligator in the presence of –

1)

2)

Signed for and on behalf of CMPDIL byin the presence of –

1)

2)

* In the above document CMPDIL is represented by CMPDIL, RI-IV, Nagpur.

