



सीएमपीडीआई *cmpdi*

*A Mini Ratna Company*

## TENDER DOCUMENT

FOR

**CONSTRUCTION OF SUB-STATION BUILDING  
WITH ELECTRICAL EQUIPMENTS AND  
COMPONENTS INCLUDING SHIFTING OF  
EXISTING SUBSTATION AT IICM, RANCHI**



**JANUARY, 2022**

**CENTRAL MINE PLANNING AND DESIGN INSTITUTE LTD.**

**(A SUBSIDIARY OF COAL INDIA LTD.)**

**HEAD QUARTERS, KANKE ROAD, RANCHI-834008 (JHARKHAND)**



**cmpdi**  
A Mini-Ratna Company

सेन्ट्रल माईन प्लानिंग एण्ड डिजाइन इन्स्टीट्यूट लिमिटेड  
(कोल इण्डिया लिमिटेड की अनुषंगी कम्पनी / भारत सरकार का एक लोक उपक्रम)  
गोन्दवाना प्लेस, काँके रोड, राँची - 834 031, झारखंड (भारत)  
**Central Mine Planning & Design Institute Limited**  
(A Subsidiary of Coal India Limited / Govt. of India Public Sector Undertaking)  
Gondwana Place, Kanke Road, Ranchi - 834 031, Jharkhand (INDIA)  
Corporate Identity Number (CIN): U14292JH1975GOI001223

NIT संख्या.:01 of 2022-23

दिनांक: 03.01.2022

## विदा सूचना

### Notice Inviting Tender

1. Tenders are invited on-line under single cover system on the website <https://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	Location	Estimated Cost of Work (Including GST) (In Rs.)	Earnest Money (In Rs.)	Period of Completion (In Days)
Construction of Substation building with all Electrical equipment's/ components including shifting of existing Substation at IICM, Ranchi.	IICM Complex, Kanke Road, Ranchi	Rs. 94,23,968.26/-	Rs. 1,17,800	150 days

Estimate of tender is primarily based on CPWD DSR 2018(excluding GST, CP&OH on GST and Labour cess on item rate considering multiplying factor 0.8767857143). The contractor is advised to quote the price **based on percentage above/below and item rate** as per current market rate excluding the impact of GST.

(i). For Site visit of location of work, the prospective bidder(s) may contact .....

Tender inviting authority	Contact Person(s)/Tender Dealing Officer(s)
General Manager(Civil) CMPDIL, Kanke Road, Ranchi-834008	Shri Rakesh, Dy Mgr(Civil) CMPDIL(HQ), Kanke Road, Ranchi-834008 M-9644594972 Shri Sourabh Panda, AM(Civil) CMPDIL(HQ), Kanke Road, Ranchi Ranchi-834008 M-7360049567

### 2. Time Schedule of Tender:

Sl. No	Particulars	Date	Time
a.	Tender e-Publication date	As per <a href="https://coalindiatenders.nic.in/nic">https://coalindiatenders.nic.in/nic</a> .	
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.	Date of Pre-bid meeting (if any)		
i.	Bid Opening date		

Tender Inviting Authority

# CHAPTER -1



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सेन्ट्रल माईन प्लानिंग एण्ड डिजाइन इन्स्टीट्यूट लिमिटेड  
(कोल इण्डिया लिमिटेड की अनुषंगी कम्पनी / भारत सरकार का एक लोक उपक्रम)

गोन्दवाना प्लेस, काँके रोड, राँची - 834 031, झारखंड (भारत)  
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Corporate Identity Number (CIN): U14292JH1975GOI001223

NIT संख्या.:01 of 2022-23

दिनांक: 03.01.2022

### निविदा सूचना

#### Notice Inviting Tender

1. Tenders are invited on-line under single cover system on the website <https://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:

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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.	Date of Pre-bid meeting (if any)	
i.	Bid Opening date	

**Note:** The auto extension of submission of bid shall be applicable as per details mentioned in clause No.14 of NIT.

**3. ~~Earnest Money Deposit(EMD): (As per CIL Guidelines regarding Bid security/ Earnest money, performance Security and Additional Performance Security ref no- CIL/GM(CMC)2020/1133 dt25.11.2020 modified clause is valid for the NIT till 31.12.2021)~~**

**EMD** 1.25% of estimated value.

In place of a Bid security, Bidders shall have to sign a Bid securing declaration (As per Annexure –X) accepting that if they withdraw or modify their Bids during the period of validity, or if they are awarded the contract and they fail to execute the agreement, or to submit a performance security before the deadline as per NIT/ Tender document / Letter of award or any other default made by the bidder till execution of agreement as defined in the NIT/Tender Document , they will be banned for two years from being eligible to submit Bids in CIL and its subsidiaries.

This banning shall be done under the provisions of the NIT and online blocking of the bidder shall be done in CIL e-Procurement portal.

In case of JV/Partnership firm, the banning shall also be applicable to all individual partners of JV/Partnership firm.

The bidder will have to make the payment of EMD through ONLINE mode only.

**3.1** 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(s).

**NET-BANKING:** In case of payment through net-banking the money will be immediately transferred to CIL/ Subsidiary's designated Account.

**NEFT/RTGS:** In case of payment through NEFT/RTGS from any scheduled bank(s), the bidder will have to make payment as per the Challan(s) generated by system on e-Procurement portal. The payment of EMD through NEFT/RTGS mode should be made well ahead of time to ensure that the EMD amount is transferred to CIL/ Subsidiary account before submission of bid.

**3.1.1** The Bidder will be allowed to submit his/her/their bid only when the EMD is successfully received in CIL/ Subsidiary's designated account and the information flows from Bank to e-Procurement system.

**3.1.2** In online payment of EMD, if the payment is made by the bidder within the last date and time of bid submission but not received by CIL/ Subsidiary within the specified period due to any reason(s) whatsoever then the bid will not be accepted. However, the EMD will be refunded back to the bidder.

**3.1.3** Micro and Small Enterprises (MSEs) as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprises (MSME) will be exempt from the payment of earnest money (applicable only for Services tenders).

In case of exemption of EMD, the scanned copy of document (attested by notary public) in support of exemption will have to be uploaded by the bidder during bid submission. However, this option is to be enabled only in those cases where the exemption of EMD to some bidders is allowed as per NIT.

**3.2** If the bidder defaults in satisfying Techno-commercial criteria, full EMD will be forfeited.

**4. Pre-bid Meeting:**

The pre-bid meeting if applicable shall be held in the office of Tender Inviting Authority, 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. Non-attendance at 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 circulate proceedings of the pre-bid meeting, if held.

**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://coalindiaticenders.nic.in> in order to become an eligible bidder. This will be a part of the agreement.

**7. Eligible Bidders:**

The invitation for bid is open to all bidders including an individual, proprietorship firm, partnership firm, company, having eligibility to participate as per eligibility criteria stipulated in clause No.8 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 shall not be allowed for participation in the bid with estimated cost of work put to tender up to Rs. 2.00 (two) crores.*

**8. Eligibility Criteria:**

**A. Work Experience:**

The Intending bidder must have in its name or proportionate share as a member of Joint Venture/Partnership firm experience of having successfully **completed similar** works, as a prime contractor, 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 any of the following :-

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

Or

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

Or

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

Experience for those works only shall be considered for evaluation purposes, which match eligibility requirement stipulated above, on or before the last day of month previous to one in which tender has been invited(publication date of NIT). The experience of incomplete/ongoing works as on last date of eligibility period will not be considered for evaluation. If the referred work includes construction as well as maintenance after construction, the experience of such work may be considered as 'acceptable' if the construction part is completed as on the last date of 'eligibility period', even if maintenance work is ongoing, and the certificate issued clearly stipulates the same .

In all the above cases, while considering the value of completed works, the full value of completed work be considered whether or not the date of commencement is within the said 7(seven) years period. The date of completion of work should be during last 7(seven) years ending last day of month previous to the one in which bid applications are invited.

Cost of previous completed works shall be given a 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 after end date of completion. 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.

In case the bidder is not a prime contractor, but a sub-contractor, the bidder's experience as sub-contractor will be taken into account, against suitable document that the contract in support of qualification is a sub-contract in compliance with the provision of such sub-contracts in the original contract awarded to prime contractor. The document may be issued by owner/Govt. department on behalf of the owner.

**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 fulfilment 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:-

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 two work by one partner and one work by other partner 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 fulfilment of any of the above criteria one of the partners, 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

**The definition of Similar work shall be as follows:**

**Installation and commissioning of (6.6 KV or more) Substation including civil construction works.**

In respect of the above eligibility criteria the bidders are required to furnish the following information on-line:

- i) Description of qualifying experience (similar nature)
- ii) Work order Number /Agreement Number of each experience
- iii) Name & address of Employer/Work Order Issuing authority of each experience
- iv) Percentage (%) share of each experience (in case the experience has been earned by the bidder as a partner in a joint venture firm/partnership firm then the proportionate value of experience in proportion to actual share of bidder in that joint venture firm/partnership firm will be considered against eligibility else it shall be taken as 100%).
- v) Executed Value of work against each experience
- vi) Start date & end date of each qualifying experience (similar nature)

Note:

- a) In case the bidder is a Joint Venture, work experience as above may be furnished as the work experience of the bidder.
- b) Confirmation in the form of Yes/No regarding submission of similar work experience as defined in the NIT.

NOTE: If a bidder participates as a Joint Venture (JV), the benefits as per Public Procurement Policy for MSEs Order-2012 shall not be applicable for them.

- B. Financial Turnover:** Average annual financial turnover during the last 3 (three) years ending 31<sup>st</sup> March of the previous financial year (31.03.2020) should be at least 30% of the estimated cost put to tender.

(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.

Financial turnover 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 of respective financial year (i.e. 31<sup>st</sup> March) till the last day of month previous to one in which e-tender has been invited.

In respect of the above eligibility criteria the bidders are required to furnish the following information on-line :

- i) Annual turnover of each of the last 3 (three) years ending 31<sup>st</sup> March of the previous financial year.
- ii) Name of the Chartered Accountant issuing the Profit and Loss A/c or the Turnover certificate.
- iii) Membership Number of the Chartered Accountant.
- iv) Date of certificate issued by Chartered Accountant.

Note:

- a) In case the bidder is a Joint Venture, the turnover of the individual partners of the JV will be added together for each financial year and is to be furnished as the turnover of the bidder for that particular financial year. However, the information against Sl. No.(ii) & (iii) above will be given w.r.t. the lead partner of JV only.
- b) In case of JV, if financial turnover of all the partners is not submitted; the JV will not be disqualified and instead the required turnover will be calculated assuming zero value for partner/partners who has/have not submitted the financial turn over certificate.

NOTE: The uploaded Turnover Certificate and / or Profit & Loss A/c statement issued by CA should



possess Unique Document Identification Number (UDIN). UDIN Generation date should be before the bid submission end date.

NOTE: If a bidder participates as a Joint Venture (JV), the benefits as per Public Procurement Policy for MSEs Order-2012 shall not be applicable for them.

- C. Permanent Account Number (PAN):** The bidder should possess valid 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 on-line :

- i) 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 of JV, PAN card for each Indian partner of JV and Verifiable Tax Residency Certificate of respective country for each foreign partner or JV itself.

- D. Goods and Services Tax (Not Applicable for Exempted Services)**

The bidder should be either GST Registered Bidder under regular scheme

**OR**

GST Registered Bidder under composition scheme

**OR**

GST unregistered Bidder

**In respect of the 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 GST status of the bidder.

**Note:**

- i) *In case of JV a Certificate from a practicing Chartered Accountant having membership number with Institute of Chartered Accountants of India confirming the status of JV w.r.to GST in compliance with relevant GST rules or GST Registration Certificate of JV.*
- ii) In case the work/service is awarded to a Joint Venture participating in the tender they have to submit PAN, GST registration (as applicable in the tender and for the bidder status) etc. in the name of the Joint Venture after Award of Work/Service before the payment of first running on account bill.
- iii) If turnover of bidder exceeds exemption/threshold limit, the bidder must have GST registration as per GST Act and rules.
- iv) During the execution of the contract if the GST status of the bidder changes, then the payment of GST, if any, to the contractor will be made as per the GST status declared by the bidder during tender stage based on which cost to company has been ascertained or at actuals, whichever is lower.

NOTE: If a bidder participates as a Joint Venture (JV), the benefits as per Public Procurement Policy for MSEs Order-2012 shall not be applicable for them.

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

- E. Purchase Preference under 'Make in India' Policy for "Local supplier".**

Purchase Preference under 'Make in India' Policy for "Local supplier". (NOT APPLICABLE WHERE ESTIMATED COST PUT TO TENDER IS LESS THAN 5 LAKHS.)

Public Procurement (Preference to Make in India) vide Order No. P-45021/2/2017-PP (BE-II) dated 16.09.2020, issued by Govt. of India as amended from time to time shall be applicable.

Accordingly, provisions of these guidelines are to be modified suitably. In terms of the above said policy, only 'Class-I Local Supplier' and 'Class-II Local Supplier' shall be eligible to bid and purchase preference shall be given to only 'Class-I Local Supplier'.

The definitions of 'Local Supplier', 'Local Content' and 'Margin of Purchase Preference' as per above mentioned Order are as follows:-

- A. 'Local Content' means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.
- B. 'Class-I Local Supplier' means a supplier or service provider whose goods, services or works offered for procurement, meets the local content minimum 50% as prescribed for 'class -I local supplier' under said order.
- C. 'Class-II Local Supplier' means a supplier or service provider whose goods, services or works offered for procurement, meets the local content minimum 20% as prescribed for 'class -II local supplier' under said order.
- D. 'Non-Local supplier' means a supplier or service provider, whose goods, services or works offered for procurement, has local content less than that prescribed for "class-II local supplier" under said order
- E. 'Margin of Purchase Preference' means the maximum extent to which the price quoted by a "Class-I local supplier" may be above the L1 for the purpose of purchase preference. The margin of purchase preference is 20%

Note:- L1 means the lowest tender or lowest bid or the lowest quotation received in a tender, bidding process or other procurement solicitation as adjudged in the evaluation process as per tender or other procurement solicitation.

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

Note: -

I. If the estimated value of Procurement is less than Rs. 10 crores, all the Bidders at the time of bidding shall submit either self-certification indicating the percentage of local content in the offered items.

II. If the estimated value of procurement is more than Rs. 10 crores, all the Bidders shall submit along with its bid a certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practicing chartered account (in respect of suppliers other than companies) giving the percentage of local content.

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

## 9. **Submission of Bid:**

- a. (i). In order to submit the Bid, the bidders have to get themselves registered online on the e-Procurement portal of CIL (<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. The registration should be in the

name of bidder, whereas DSC holder may be either bidder himself or his duly authorized person. The bidder is one whose name will appear as bidder in the e-Procurement Portal.

- (ii). 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, Integrity Pact 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 allowed/accepted.

- b. **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 bidder while submitting his/her/their bid.

	<b>Eligibility Criteria</b>	<b>Scanned copy of documents to be uploaded by bidder(s) in support of information/declaration furnished online by the bidder against Eligibility Criteria (CONFIRMATORY DOCUMENTS)</b>
<b>1</b>	<b>2</b>	<b>3</b>
1	Work Experience (Ref. Clause No.8(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. In case of Sub-contractor suitable document as per provision of eligibility, if applicable.  Work order, BOQ and/or TDS may be sought during clarification or along with deficient documents as per clause 13(B).  (In case of JV, Satisfactory Work Completion Certificate against individual partner(s) including Lead Partner of JV as applicable as per details mentioned in clause No. 8.
2	Financial Turnover (Ref. Clause No.8(B) of NIT)	Financial Turnover certificate <u>having a Unique Document Identification Number (UDIN) with Institute of Chartered Accountants of India</u> 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.8(C) of NIT)	PAN card issued by Income Tax department, Govt. of India.  (In case of JV, PAN card for each Indian partner of JV and Verifiable Tax Residency Certificate of respective country for each foreign partner or JV itself)
4	Goods and Services Tax (GST) Status of Bidder <b>(Not Applicable for Exempted Services)</b> (Ref. Clause No. 8(D) of NIT and BOQ)	The following documents depending upon the status w.r.to GST as declared by Bidder in the BOQ sheet:  a) Status: <u>GST Registered Bidder under regular scheme</u> Document: GST Registration Certificate (i.e. GST identification Number) issued by appropriate authority of India.  b) Status: <u>GST Registered Bidder under composition scheme</u> Document: GST Registration Certificate (i.e. GST identification Number) issued by appropriate authority of India.  c) Status: GST unregistered bidder:  Document: A Certificate from a practicing Chartered Accountant having membership number with Institute of Chartered Accountants of India certifying that the bidder is GST unregistered bidder in

		<p>compliance with the relevant GST rules of. India.</p> <p>[In case of JV a Certificate from a practicing Chartered Accountant having membership number with Institute of Chartered Accountants of India confirming the status of JV w.r.t GST in compliance with relevant GST rules or GST Registration Certificate of JV]</p> <p><b>Note:</b></p> <p><i>i) If turnover of bidder exceeds exemption/threshold limit, the bidder must have GST registration as per GST Act and rules.</i></p>
5	Legal Status of the bidder	<p><u>Document(s) covered under any one of the following sub-head(s):</u></p> <ol style="list-style-type: none"> <li>1. Affidavit or any other document to prove proprietorship/Individual status of the bidder.</li> <li>2. Partnership deed containing name of partners.</li> <li>3. Memorandum &amp; Article of Association with certificate of incorporation containing name of bidder.</li> <li>4. Joint Venture agreement as per format in Annexure-IX containing name of partners and lead partner, Power of Attorney to the Lead Partner and share of each partner.</li> <li>5. <del>In case of MSME, copy of documentary evidence, issued by their registering authority whether they are small enterprise or micro enterprise as per provisions of Public Procurement Policy for Micro and Small Enterprise (MSEs) Order, 2012 with latest guidelines/clarifications provided by MoMSME (Applicable for Service Nature of tenders only).</del></li> </ol>
6	Digital Signature Certificate (DSC)	<p>If the bidder himself is the DSC holder bidding on-line then no document is required.</p> <p>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.</p>
7	Local supplier status of the Bidder	<ol style="list-style-type: none"> <li>I. If the estimated value of Procurement is less than Rs. 10 crores, all the Bidders at the time of bidding shall submit self-certification indicating the percentage of local content in the offered items.</li> <li>II. If the estimated value of procurement is more than Rs. 10 crores, all the Bidders shall submit along with its bid a certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practicing chartered account (in respect of suppliers other than companies) giving the percentage of local content.</li> </ol>
8	<ol style="list-style-type: none"> <li>a. Undertaking by Bidder/s on his/her/their Letter Head 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 <b>Annexure II</b>.</li> <li>b. In case of partnership firm/Joint Venture, undertaking as per <b>Annexure-XIII</b>, is also to be submitted and signed by all the Partners of the Partnership Firm / Joint Venture (JV) firm.</li> <li>c. Duly signed and witnessed Integrity Pact in the prescribed format <b>Annexure-X</b> if applicable.</li> </ol> <p>Note: In case of JV, Integrity Pact shall be signed by all the partners.</p> <ol style="list-style-type: none"> <li>d. Certificate by Bidder/s on his/her/their Letter Head as per the format given at <b>Annexure XIV</b> is to be uploaded.</li> </ol> <p>(In case of JV, Certificate to be uploaded in the Letter Head of JV)</p>	

	e.The contractor shall provide the undertakings that " I/We undertake that no benefit under the Pradhan Mantri Rojgar Protsahan Yojna (PMRPY), has been availed. In the event of availing any benefit under the Pradhan Mantri Rojgar Protsahan Yojna (PMRPY), I/We will declare it to [ CMPDI] before any payment is released by [CMPDI] with respect to this Contract."
9	Letter of Bid by Bidder/s on his/her/their Letter Head as per <b>Annexure- I</b> . <i>(In case of JV, Letter of Bid to be uploaded in the Letter Head of JV)</i>
10	Valid Electrical license for HT/LT lines and installation of Electrical equipments issued by Jharkhand State Government or central government which should be applicable in Jharkhand State.
11	Any other document to support the qualification information as submitted by bidder on-line. Note: If the bidder is not having any document for uploading in this link, a blank document maybe uploaded by the bidder.
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.	

- c. Letter of Bid(LoB): Letter of Bid (LoB):** The format of Letter of Bid (as given in the NIT) will be downloaded by the bidder and will be printed on Bidder's letter head and the scanned copy of the same will be uploaded during bid submission in cover-I. This will be the covering letter of the bidder for his submitted bid. 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, which contradicts the content and spirit of the original format of LoB.

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 digital signature of DSC holder, it will be accepted without questioning the identity of person signing the Letter of Bid.

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 LoB shall be requested under the head Confirmatory documents and subsequently accepted or rejected as applicable. However inclusion of any additional redundant information by the Bidder in the submitted Letter of Bid(LOB), which does not contradict the content and spirit of original format of LOB uploaded by department will not be a cause of rejection of his/her bid.

- d. Price bid:** The Price bid containing the Bill of Quantity will be in Excel format and will be downloaded by the bidder and bidder will quote the rates for all items on this Excel file. Prior to quoting the rates in the BOQ file, the bidder will select the appropriate status from the following drop down list given in the BOQ:-

- I. Status: GST Registered Bidder under regular scheme
- II. Status: GST Registered Bidder under composition scheme
- III. Status: GST unregistered bidder

The rates quoted by the bidder will be excluding GST and GST component (to be paid by CIL / Subsidiary and/or the bidder) will appear as a separate entity. The component of GST 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 after ascertaining the correctness of facts and figures.

Thereafter, the bidder will upload the same Excel file during bid submission in cover-II. The Price-bid (excluding GST) will be in Item Rate or Percentage Rate or Mixed Rate[combination of Item Rate and Percentage Rate] BOQ format and the bidder will have to quote for all the tendered items. The Price Bid of the tenderers will have no condition. The price bid which is incomplete and not submitted as per instruction given in this document is liable for rejection.

### **System for decision of L1 bidder**

The L1 bidder will be decided based on Overall Quoted Value (i.e. cost to the Company). The system for decision of L1 bidder will be as per following 02(two) cases:-

#### **Case – 1: Supply for which INPUT TAX CREDIT (ITC) is not available to the Company.**

For calculation of Overall Bid Value, the GST [CGST, SGST/UTGST, IGST and GST (compensation to state tax)] to be paid by the bidder **or** by CIL/ Subsidiary taken by the system will be added to decide the L1 i.e the ranking of the Bidders will be decided based on rates quoted by the bidders plus GST. This value of the bidder will be “the Cost to Company”.

Then share of GST to be deposited by CIL/ Subsidiary, if any will be deducted from overall bid value to arrive at the Contract value. The Price-bids of the tenderers shall have no condition. The Price Bid which is incomplete and not submitted as per instruction given above is liable for rejection.

#### **Case – 2: Supply for which INPUT TAX CREDIT (ITC) is available to the Company.**

For calculation of Overall Bid Value, the GST [CGST, SGST/UTGST, IGST and GST (compensation to state tax)] to be paid by the Bidder **or** by CIL/ Subsidiary taken by the system will be ignored to decide the L1 i.e the ranking of the Bidders will be decided based on rates quoted by the bidders excluding GST. This value of the bidder will be “the cost to Company”.

Then share of GST to be paid by bidder shall be added with overall bid value to arrive at the Contract value. The Price-bids of the tenderers shall have no condition. The Price Bid which is incomplete and not submitted as per instruction given above is liable for rejection.

**Note: The bidder should select their GST category as per clause no. 8.D of NIT.**

The Tax Invoice raised by the supplier must be in compliance of relevant GST Acts, rules & notifications made thereunder and should bear the GSTIN number for the supply to CMPDIL HQ as given below:

State	Unit / HQ	City	GSTIN (Provisional ID)
Jharkhand	CMPDI HQ	Ranchi	20AAACC7475N1ZI

In addition to above, if any other tax/duties are levied over supply of such goods or services in future, it shall be paid extra.

E-way Bill: The e-way bill required in connection with supply of goods or services, if any, shall be arranged by the supplier. However, the e-way bill will be arranged by CMPDIL if the supplier/Vendor is unregistered one or if provisions of the relevant Act and the rules made there under specifically states that the e-way bill is required to be issued by recipient of goods.)

TDS: The TDS, if applicable, shall be made at applicable rate from the payment made or credited to the supplier.

#### **10. Bid Submission:**

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

#### **11. System Requirement:**

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 website. Under any circumstances, CIL/ Subsidiary shall not be liable to the bidders for any direct/indirect loss or damages incurred by them arising out of incorrect use of the e-tender system or internet connectivity failures.

#### **12. Opening of Technical Bid:**

Tender will be decrypted and opened online by the “Bid Openers” with their Digital Signature Certificates on/after the prescheduled date & time of Tender Opening.

- 12.1** The Technical bid (Cover-I) will be opened one day after the Bid submission end date or next working day whichever is later. Technical bid (Cover-I) will be decrypted and opened online by the “Bid Openers” with their Digital Signature Certificates after the prescheduled date & time of Tender Opening.
- 12.2** The e-Procurement System will evaluate the Technical bids automatically on the basis of relevant data provided by bidder through a form in an objective and structured manner while submitting bid. If the parameter given by bidder in objective and structured manner does not confirm to required eligibility criteria as specified in the tender document then the bid will be auto rejected.
- 12.3** All the documents uploaded by bidder(s) including i.e. Letter of Bid & ~~EMD-exemption documents (if any)~~ and the Evaluation sheets generated by the system online shall be downloaded after opening of Technical bid (Cover-I). After decryption and opening of Technical bid (Cover-I) the “technical bid opening summary” will be uploaded on the same day.

**13. Tender Evaluation:**

- A.** After opening of Technical bid, the documents submitted by bidder(s) 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 bidder(s) 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 opening of price bid.
- B.** In case the Tender Committee finds that there is some deficiency in uploaded documents corresponding to the information furnished online or in case corresponding document have not been uploaded by bidder(s) 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 7 days (7 x 24 hours) time for online re-submission by bidder(s). The bidder(s) will get this information on their personalized dashboard 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(s) 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 7 days. No further clarification shall be sought from Bidder.
- C.** It is responsibility of Bidders to upload legible/clearly readable scanned copy of all the required documents as mentioned above.
- D.** The tender will be evaluated on the basis of documents uploaded by bidder(s) online. The bidder(s) is/are 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.
- E.** In case the bidder(s) submit(s) requisite documents online as per NIT, then the bidder(s) will be considered eligible for opening of Price Bid.
- F.** Seeking clarification shall be restricted to confirmation of submitted document/online information only and it should be only for one time for a period of upto 7 days. The clarification shall be taken in online mode in the e- Procurement portal of CIL only.
- G.** In case bidder(s) fails to confirm the online submitted information(s)/ declaration(s) by the submitted documents as (B) above, their/his bid shall be rejected; however, if the confirmatory documents do not change eligibility status of the bidder in connection his submitted online information(s)/declaration(s), then his/their bid will be accepted for opening of Price Bid.
- H.** After Technical evaluation of tender, “Technical Evaluation Summary” will be uploaded by the evaluator and price bid shall be opened on/after preschedule date and time mentioned in the NIT online in the e- Procurement portal of CIL. However, in case there is any extension of date and time of price bid opening, it shall be notified online and price bid shall be opened online on e-Procurement portal of CIL after rescheduled date and time.
- I.** In case none of the bidder(s) complies the technical eligibility criteria as per NIT, then bidder(s) will be rejected online and re-tender (if required) will be done (with the same or different quantity, as per the instant requirement).

- J. If L1 bidder backs out (i.e. Techno commercially established L1 bidder), the bidder will be banned for (02) two years from being eligible to submit Bids in CIL and its subsidiaries from date of issue of such letter. This banning shall be done under the provisions of the NIT and online blocking of the bidder shall be done in CIL e-Procurement portal the EMD will be forfeited and the bidder will be debarred for **minimum one (1) year** from participating in tenders in CIL/ Subsidiary.

**Note:** In case If the defaulter L1 bidder is a Joint Venture (JV) firm, penal action against the JV will also be applicable to all the partners of JV.

- K. -Preference to Make in India (as applicable) vide Order No. P-45021/2/2017-PP (BE-II) dated 16.09.2020, issued by Govt. of India as amended from time to time shall be applicable. (NOT APPLICABLE WHERE ESTIMATED COST PUT TO TENDER IS LESS THAN 5 LAKHS.)

In terms with the above said policy, Class-I local suppliers and Class-II local suppliers shall be eligible to bid. Non-local supplier is not eligible to bid. The purchase preference shall be given to Class-I local supplier only.

In terms of the above said policy, purchase preference shall be given to Class-I local suppliers in the following manner :

- I. In the procurement of works which are divisible in nature, the following procedure shall be followed :-
  - i) Among all qualified bids, the lowest bid will be termed as L-1. If L-1 is from a Class-I local supplier, the contract for full quantity will be awarded to L-1 at L-1 price by the Purchaser.
  - ii) If L-1 is not a Class-I local supplier, 50% of the order quantity shall be awarded to L-1. Thereafter, the lowest bidder among the Class-I local suppliers will be invited to match the L-1 price for the remaining 50% quantity subject to Class-I local supplier's quoted price falling within the margin of purchase preference, and the contract for that quantity shall be awarded to such local supplier subject to his matching the L-1 price. In case such lowest eligible Class-I supplier fails to match the L-1 price or accept less than the offer quantity, the next higher Class-I local supplier within the margin of purchase preference shall be invited to match the L-1 price for remaining quantity and so on, and contract shall be awarded accordingly. In case some quantity is still left uncovered on Class-I local supplier, then such balance quantity may also be ordered on L-1 bidder.
- II. In the procurement of works which are not divisible, and in procurement of services where the bid is evaluated on price alone, the following procedure shall be followed:-
  - i) Among all qualified bids, the lowest bid will be termed as L-1. If L-1 is from a Class-I local supplier, the contract will be awarded to L-1.
  - ii) If L-1 is not from a Class-I local supplier, the lowest bidder among the Class-I local suppliers, will be invited to match the L-1 price subject to Class-I local supplier's quoted price falling within the margin of purchase preference, and the contract shall be awarded to such Class-I local supplier subject to matching the L-1 price.
  - iii) In case such lowest eligible Class-I local supplier fails to match the L-1 price, the Class-I local supplier with the next higher bid within the margin of purchase preference shall be invited to match the L-1 price and so on and contract shall be awarded accordingly. In case none of the Class-I local suppliers within the margin of purchase preference matches the L-1 price, then the contract may be awarded to the L-1 bidder.

**Note:** The confirmation from the bidder regarding matching of L1 price may be taken in confirmatory document link of e-Procurement portal by recycling 'Any other document' link.

**Verification of local content :**



I The 'Class-I local supplier' / 'Class-II local supplier' at the time of tender, bidding or solicitation shall be required to indicate percentage of local content and provide self-certification that the item offered meets the local content requirement for 'Class-I local supplier' / 'Class-II local supplier', as the case may be. They shall also give details of the locations(s) at which the local value addition is made.

II. If the estimated value of procurement is more than Rs. 10 crores, all the Bidders shall submit along with its bid a certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practicing chartered account (in respect of suppliers other than companies) giving the percentage of local content.

III. CIL/ Subsidiary may constitute committees with internal and external experts for independent verification of auditor's / accountant's certificates on random basis and in the case of complaints.

IV. False declarations will attract banning of business of the bidder for a period up to two years and with process in line with clause 19 of GTC.

V. A local supplier who has been debarred by any procuring entity for violation of above order shall not be eligible for preference under this Order for procurement by any other procuring entity for the duration of debarment. The debarment for such other procuring entities shall take effect prospectively from the date on which it comes to the notice of other procurement entities.

**L. ~~Procurement from Micro and Small Enterprises (MSEs) (APPLICABLE FOR SERVICE NATURE OF TENDERS)~~**

- i) ~~Subject to meeting terms and conditions stated in the tender document including but not limiting to prequalification criteria, 25% of the work will be awarded to MSE as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprises (MSME) for the tendered work/item. Where the tendered work can be split, MSE quoting a price within a price band of L1 + 15% shall be awarded at least 25% of total tendered work provided they match L1 price. In case the tendered work cannot be split, MSE shall be awarded full work provided their quoted price is within a price band of L1 + 15% and they match the L1 price.~~
- ii) ~~In case of more than one such MSEs are in the price band of L1 + 15% and matches the L1 price, the work may be shared proportionately if the job can be split. If the job cannot be split, then the opportunity to match the L1 rate of the tender shall be given first to MSE who has quoted lowest rate among the MSEs and the total job shall be awarded to them after matching the L1 price of the tender. If the MSE who have quoted lowest rate among the MSEs in the price band of L1 + 15% do not agree to match the rate of L1 of the tender, then the MSE with next higher quoted rate in the price band of L1 + 15% shall be given chance to match the rate of L1 for award of the complete job. This process to be repeated in till work is awarded to MSE or MSE bidders are exhausted.~~
- iii) ~~Out of the 25% target of annual procurement from micro and small enterprises 3(three) percent shall be earmarked for procurement from micro and small enterprises owned by women. In the event of failure of such MSEs to participate in the tender process or meet the tender requirements and L1 price, 3(three) percent sub-target so earmarked shall be met from other MSEs.~~
- iv) ~~Out of the 25% target of annual procurement from micro and small enterprises 4(four) percent shall be earmarked for procurement from micro and small enterprises owned by Scheduled Caste & Scheduled Tribe entrepreneurs. In the event of failure of such MSEs to participate in the tender process or meet the tender requirements and L1 price, four percent sub-target so earmarked shall be met from other MSEs.~~
- v) ~~To qualify for entitlement as SC/ST owned MSE, the SC/ST certificate issued by District Authority must be submitted by the bidder in addition to certificate of registration with anyone of the agencies mentioned in paragraph (I) above. The bidder shall be responsible to furnish necessary documentary evidence for enabling CIL/ Subsidiary to ascertain that the MSE is owned by SC/ST. MSE owned by SC/ST is defined as:~~

- ~~In case of proprietary MSE, proprietor(s) shall be SC /ST~~
  - ~~In case of partnership MSE, The SC/ST partners shall be holding at least 51% shares in the enterprise.~~
  - ~~In case of Private Limited Companies, at least 51% share shall be held by SC/ST promoters.~~
  - ~~In case of Public Limited Companies, at least 51% share shall be held by SC/ST entrepreneurs at any given point of time.~~
- vi) ~~Classification of Micro and Small Enterprise are as under:-~~
- a. ~~Micro Enterprise Enterprise where the investment in plant and machinery or equipment does not exceed one crore Rupees and turnover does not exceed five core rupees.~~
- b. ~~Small Enterprise Enterprise where the investment in plant and machinery or equipment does not exceed ten crore Rupees and turnover does not exceed fifty core rupees.~~
- vii) ~~The MSEs should be registered with District Industries Centers (DICs)/ Khadi & Village Industries Commission (KVIC)/ Khadi & Village Industries Board (KVIB)/ Coir Board/ NSIC/ Directorate of Handicrafts and Handloom or any other body specified by Ministry of Micro, Small & Medium Enterprises (MoMSME) are eligible for availing benefits under the Public Procurement Policy for Micro and Small Enterprise (MSEs) Order, 2012 as amended from time to time.~~
- viii) ~~The MSEs are required to submit copy of documentary evidence, issued by their registering authority whether they are small enterprise or micro enterprise as per provisions of Public Procurement Policy for Micro and Small Enterprise (MSEs) Order, 2012 with latest guidelines/clarifications provided by MoMSME.~~
- ix) ~~The existing MSE enterprises registered prior to 30<sup>th</sup> June 2020, shall continue to be valid for a period up to 31.03.2021 only. Mandatorily bidders need to have "Udyam Registration Certificate" after 31.03.2021 for availing benefits under the Public Procurement Policy for Micro and Small Enterprise (MSEs) Order, 2012 as amended from time to time.~~
- x) ~~If MSE Bidder withdraws his offers after last date of bid submission or fails to sign the Agreement or commence the work as per Conditions of Contract then such Bidder shall be banned for a minimum period of 1(One) year in line with provisions of Banning of Business.~~

#### 14. **Auto Extension of Critical Date**

In case of Open Tenders, 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 only once for a period of 04 (Four) days ending at 17.00 hrs:

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

If the extended Date falls on Holiday i.e. a non-working day as defined in the e-Procurement Portal, then the same will be rescheduled to the next working day.

This extension will be also 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 bids 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.

## 15.

### 15.1 **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 / Private Limited Company. 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.

### 15.2 Conflict of Interest.

A Bidder may be considered to have a Conflict of Interest with one or more parties in this bidding process, if:

- a) they have controlling partner(s) in common; or
  - b) they receive or have received any direct or indirect subsidy / financial stake from any of them; or
  - c) they have the same legal representative / agent for purposes of this bid; or
  - d) they have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder; or
  - e) a Bidder or any of its affiliate participated as a consultant in the preparation of the design or technical specification of the contract that is the subject of the bid; or
  - f) in case of a holding company having more than one Subsidiary/Sister Concern having common business ownership / management only one of them can bid. Bidders must proactively declare such sister/common business / management in same / similar line of Business;
- all such Bidders having a Conflict of Interest, shall be disqualified.

## 16. **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 at any stage 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 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) At the option of bidder, the EMD of successful bidder (on Award of Contract) will be retained by CIL/ Subsidiary and will be adjusted to Performance Security Deposit.

## 17. **Site Visit:**

17.1 The bidder, at the Bidder's own responsibilities, cost and risk, is encouraged to visit and examine the Site of Works and its surrounding, approach road, soil condition, investigation report, existing works, if any, connected to the tendered work, drawings connected to the work, if / as available 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.

17.2 It shall be deemed that the Bidder has visited the Site/Area and got fully acquainted with the working conditions and other prevalent conditions and fluctuations thereto whether

he/she/they actually visits the Site /Area or not and has taken all the factors into account while quoting his/her/their rates.

- 17.3 The Bidder is expected, before quoting his rate, to go through the requirement of materials/workmanship, specification, requirements and conditions of contract.
- 17.4 The Bidder, in preparing the bid, shall rely on the site investigation report referred to in the bid document (if available), supplemented by any information available to the Bidder.

**18. Taxes and Duties:**

All duties, taxes (excluding Goods and Services Tax (GST) & GST Compensation Cess (if applicable) only) and other levies, royalty, building and construction workers cess (as applicable in States) payable by the bidder/Contractor under the 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. Applicable GST, if any, either payable by bidder or by company under reverse charge mechanism shall be computed by system in BOQ sheet as per predefined logic.

All investments, operating expenses, incidentals, overheads, leads, 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 Bid and/or any increase over the rate existing on the last date of submission of Bid 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.

The item wise rate quoted by bidder shall be inclusive of all taxes, duties & levies but excluding GST & GST Compensation Cess, if applicable. The payment of GST and GST Compensation Cess by service availer (i.e. CIL/Subsidiary) to bidder/contractor (if GST payable by bidder/contractor) would be made only on the latter submitting a Bill/invoice in accordance with the provision of relevant GST Act and the rules made there under and after online filing of valid return on GST portal. Payment of GST & GST Compensation Cess is responsibility of the service provider/contractor.

Further, any GST credit note required to be issued by the bidder / contractor under the GST provisions should be issued within the time limit prescribed under the GST law.

However, in case bidder/contractor is GST unregistered bidder/dealer or GST registered under composition scheme in compliance with GST rules, the bidder/dealer shall not charge any GST and/or GST Compensation Cess on the bill/invoice. In case of unregistered dealer/bidder, GST, if applicable will be deposited by CIL/Subsidiary directly to concerned authorities in terms with GST provisions.

Input tax credit is to be availed by CIL/Subsidiary as per rule.

If CIL/Subsidiary fails to claim Input Tax Credit(ITC) on eligible Inputs, input services and Capital Goods or the ITC claimed is disallowed due to failure on the part of supplier/vendor of goods and services in incorporating the tax invoice issued to CIL/Subsidiary in its relevant returns under GST, payment of CGST & SGST or IGST, GST (Compensation to State ) Cess shown in tax invoice to the tax authorities, issue of proper tax invoice or any other reason whatsoever, the applicable taxes & cess paid based on such Tax invoice shall be recovered from the current bills or any other dues of the supplier/vendor along with interest and penalty, if any.

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 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.

Further, where any damages or compensation becomes payable by either the Company or the bidder / contractor pursuant to any provision of this Agreement, appropriate GST wherever applicable as per the GST provisions in force shall also apply in addition to such damages or compensation.

Note:

During the execution of the contract if the GST status of the bidder changes, then the payment of GST, if any, to the contractor will be made as per the GST status declared by the bidder during tender stage based on which cost to company has been ascertained or at actuals, whichever is lower.

**19. 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 or liable for those costs.

**20. Technical Specifications:**

The tenderer shall closely study all specifications in detail, which govern the rates for which he is tendering.

**21. Currencies of Bid and Payment:**

The unit rates and prices shall be quoted by the Bidder entirely in Indian Rupees only.

**22. Handing Over of Site:**

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.

**23. Deployment of Manpower and Machineries:**

The tenderer(s) will deploy sufficient number and size of equipments/machineries/vehicles and the technical/ supervisory personnel required for execution of the work.

**24. 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.

**25. Canvassing in Tender:**

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.

**26. Letter of Acceptance (LOA)/Work Order/Agreement:**

The Bidder, whose Bid has been accepted, will be notified /communicated by the Employer electronically online on the e-procurement portal of CIL/ Subsidiary 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. On receipt of Letter of Acceptance (LOA)/Work Order of the tender issued by the Company, the successful tenderer shall execute contract agreement in the company's prescribed form for the due fulfilment of the contract. Failure to enter into the required contract within the specified period in the work order shall entail cancellation of LOA/work order and ~~forfeiture of the Earnest Money~~ in addition, the bidder will be banned for (02) two years from being eligible to submit Bids in CIL and its subsidiaries from date of issue of such letter. This banning shall be done under the provisions of the NIT and online blocking of the bidder shall be done in CIL e-Procurement portal. ~~In addition, the department may debar the bidder from participating in future bids for at least 12 months as per Guidelines of Banning of Business.~~

**27. Bid Validity:**

The validity period of the tenders shall be 120(One Hundred Twenty) days from the end date of bid submission. The validity period of tender shall be decided based on the final end date of submission of bids.

In exceptional circumstances, prior to expiry of the 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.

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.28 (Modification and Withdrawal of Bid) of NIT.

**28. 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 online 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 that particular tender. 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:

- a. If the request of withdrawal is received before online notification for opening of price bid, the EMD will be forfeited and bidder will be debarred for 1 (one) year from participating in tenders in CIL/Subsidiary. the bidder will be banned for (02) two years from being eligible to submit Bids in CIL and its subsidiaries from date of issue of such letter. This banning shall be done under the provisions of the NIT and online blocking of the bidder shall be done in CIL e-Procurement portal. The Price-bid of remaining bidders will be opened and the tender process shall go on.
- b. If the request of withdrawal is received after online notification for opening of price bid, the EMD will be forfeited and the bidder will be debarred for minimum 1 (one) year from participating in tenders in CIL/Subsidiary. the bidder will be banned for (02) two years from being eligible to submit Bids in CIL and its subsidiaries from date of issue of such letter. This banning shall be done under the provisions of the NIT and online blocking of the bidder shall be done in CIL e-Procurement portal. 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.

**Note :**

- i. In case of clause (a) & (b) above, a letter will be issued to the bidder by Tender Inviting Authority with the approval of Tender Accepting Authority (When TAA is CMD then with the approval of concerned Director and in case the TAA is above CMD (i.e. FDs/Empowered Committee/Board) then with the approval of CMD. In case TAA is below CMD, then approval of respective TAA is required), stating that the EMD of bidder is forfeited, and this bidder is debarred for 1 (one) year (in case of clause-a) OR minimum one (1) year (in case of clause-b) from participating in tenders in CIL/Subsidiary the bidder will be banned for (02) two years from being eligible to submit Bids in CIL and its subsidiaries from date of issue of such letter. This banning shall be done under the provisions of the NIT and online blocking of the bidder shall be done in CIL e-Procurement portal. This letter will be circulated to all Areas of the Subsidiary and the updated list will be maintained by all Tender Inviting Authority/Evaluators.
- ii. Penal action against clause (a) & (b) above will be enforced from the date of issue of such order. The standard operating procedure to handle withdrawal of bid after end date of submission shall be as Clause no 14 of Chapter I.

**29. Standard Operating Procedure for Withdrawal of Bid:**

**I. The Mode of withdrawal: -**

**A. Online Withdrawal of Bids:**

- a. The system of online withdrawal is available on the portal up to end date of bid submission, where any bidder can withdraw his/her bid which will attract no penal action from department side.
- b. The system of online withdrawal beyond end date of bid submission and till award of contract is also available but not fully functional and under development stage. Once it is developed and implemented only online withdrawal shall be considered except for some exceptional cases as mentioned in clause below.

**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 disassociation from the bidder organization).
- b. Till a fully functional system of online withdrawal of bid (beyond end date of bid submission and till award of contract) is not developed and implemented, offline withdrawal shall also be considered.

**II. Acceptance of withdrawal by Tender Committee:**

- A.** Every case of withdrawal under Clause I-(A) (b) and Clause I-(B) shall be put up to Tender Committee for deliberation and further course of action.
- B.** The Tender Committee shall apply its due diligence to decide:
  - a. Whether the request for withdrawal of offer has been received from right source and authentic. For this purpose a letter is to be sent by registered post/speed post to the bidder on the address as given by him in the enrollment page of e-Procurement portal, allowing 10 days' time to confirm the withdrawal. If the bidder does not confirm the withdrawal within the stipulated period then it should be construed that there is no withdrawal of bid. In case the withdrawal/disassociation from the firm (Joint Venture or Partnership firm) has been submitted by any other partner then also the confirmation has to be sought from the bidder and if bidder wants to deny the withdrawal/disassociation from the JV or the partnership firm then the bidder shall be required to furnish a legally acceptable document signed by all the partners of the firm to substantiate his claim.
  - b. Whether the withdrawal is due to the reason other than to support any mala fide intention of any participating bidder such as participating or supporting a cartel formation etc.
  - c. If the mala fide intentions in the withdrawal are apprehended then the tender should be cancelled apart from other penal action as per e-Procurement Manual for works and services of CIL and other guidelines/manuals of CIL.
  - d. If no mala fide intentions in the withdrawal are apprehended then the penal action in line with the prescriptions of the e-Procurement Manual for works and services of CIL will be applicable.
  - e. The Tender Committee may also obtain the opinion of legal department in order to ascertain the legal course of action in case of Clause II-(B)(b) and II-(B)(c) above.

**30. Postponement of scheduled date(s):**

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.

**31. Public Enterprises preference:**

The Company reserves its right to allow Public Enterprises purchase preference facility as admissible under prevailing policy.

**32. Contract Agreement Document(s):**

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 as per clause 2 of the 'General Terms and Conditions' of 'Conditions of Contract'.

**33. Sub-letting of Work:**

No subletting of work as a whole by the contractor is permissible. Subletting of work in piece rated jobs is permissible with the prior approval of the department.

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.

**34. Prohibition of Child Labour engagement:**

The contractor/contractual Agencies must not engage any Child Labour during the course of execution of the contract work within the meaning and scope of the Child Labour Prohibition & Regulation Act-1986 and its relevant Act and Rules amended from time to time by the Govt. of India.

**35. Implementation of CMPF/EPF:**

The tenderer shall have to ensure implementation of CMPF/EPF, if applicable, in respect of the workers deployed by him as detailed in the tender document.

**36. Splitting up of the work:**

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 tenderer(s) or accept the tender in part and not in its entirety.

**37. Settlement of Disputes:**

Matters relating to any dispute or difference arising out of this tender and subsequent contract Awarded based on this tender, shall be dealt as per Clause No. 16- title- 'Settlement of Disputes' of the 'General Terms and Conditions' of 'Conditions of Contract' of the tender document.

**38. Restrictions on Procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries:**

- I. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority (as per details given in Annexure-XV)
- II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain context) means any person or firm or company, including any member of a Joint venture (that is an association of several persons or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated herein before, including any agency, branch or office controlled by such person, participating in a procurement process.
- III. "Bidder from a country which shares a land border with India" means:-
  - a. An entity incorporated, established or registered in such a country; or
  - b. A subsidiary of an entity incorporated, established or registered in such a country; or
  - c. An entity substantially controlled through entities incorporated, established or registered in such a country; or
  - d. An entity whose beneficial owner is situated in such a country; or
  - e. An Indian (or other) agent of such an entity; or
  - f. A natural person who is a citizen of such a country; or
  - g. A joint venture where any member of the joint venture falls under any of the above.
- IV. "The beneficial owner" for the purpose of (III) above will be as under:



1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person(s), has a controlling ownership interest or who exercises control through other means.

Explanation

- a. "Controlling ownership interest" means ownership of, or entitlement to more than Twenty Five Percent of shares or capital or profits of the company;
- b. "Control" shall include the right to appoint the majority of the directors or to control the management or policy decisions, including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;
2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals.
4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official.
5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

V. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.

VI. The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the competent Authority.

**Note:**

1. (a) The intending bidders must submit "Certificate" as per the format given at **Annexure-XIV** in compliance to order no.F.No.6/18/2019-PPD dt 23/7/2020 of Ministry of Finance, Dept of Expenditure, Public Procurement Division with respect to "restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries"

**AND**

(b) Valid registration from competent authority (if applicable). Registration should be valid at the time of submission of bid and at the time of acceptance of bids.

2. Regarding registration with Competent Authority, **Annexure-XV** may please be referred. Regarding exclusion from restriction, **Annexure-XVI** may please be referred.

**39. Integrity Pact (applicable for tenders with estimated cost exceeding Rs. 2.00 Crores).**

~~Bidders are required to submit the Pre-Contract Integrity Pact duly signed & witnessed as per enclosed format, **Annexure-X**, along with the bid Part-I/covers-I. This will be signed by the authorized signatory of the bidder (s) with name, designation and seal of the company. Bidder(s) who do not sign the pact shall be disqualified from participation in the bid process.~~

~~Name, address and contact No. of the Independent External Monitor (IEM) nominated for this tender:~~

<u>Sl. No</u>	<u>Name</u>	<u>Address</u>	<u>email Id</u>
1			

	Shri CHET RAM KOLI, Principal Commissioner of Income Tax( Retd.)	at No. 1701 Imperia, Mahavir Millenium, Near Sindhachal, Vasant Vihar, Thane (W), Maharashtra- 400610	bbile : 9869479987 -e-mail : cr_koli@yahoo.com
	Shri Jagdish Prasad Meena, IAS (Retd.)	Flat A1/401, Bharat Apartments, Plot 8, Sector-18A, Dwarika, New Delhi- 110075.	mobile No: 08802334455 -e-mail: meenajp@gmail.com

**Tender Inviting Authority**

## **CHAPTER -2**

INSTRUCTIONS TO BIDDERS	
<b>1.</b>	<b>SCOPE OF BIDDER</b>
<b>1.1</b>	The <b>Central Mine Planning &amp; Design Institute Limited</b> (referred to as Employer in these documents) invites bids for the works as mentioned in the Bid Notice. The Bidders should submit Bids for all the works mentioned in the Notice
<b>1.2</b>	The successful Bidder will be expected to complete the Work(s) by the Intended Completion period specified in the Bid document/Notice.
<b>2.</b>	<b>ELIGIBLE BIDDERS</b>
<b>2.1</b>	The Invitation for Bid is open to all Bidders including an individual, proprietorship firm, partnership firm, company registered under Companies Act, or joint ventures. The bidders shall be eligible to participate only if they fulfil the qualifying/eligibility criteria specified in e-Tender Notice and at Clause No.3.
<b>2.2</b>	Joint Venture: Two or three companies/contractors may jointly undertake contract/contracts. Each entity will be jointly and severally responsible for completing the task as per the contract (applicable for bids having estimated cost above Rs.2 Crores).
	<b>Joint Venture details :</b>
	Name of all partners of a joint venture (not more than 3):
	1. Lead partner
	2. Partner
	3. Partner
	Joint Venture must comply the following requirements:
	i) Following are the minimum qualification requirements for Joint Venture:
	a) The qualifying criteria parameter e.g. experience of the individual partners of the J.V will be as deliberated under clause 8(A) of e-tender Notice towards fulfilment of qualification criteria related to experience.
	b) The qualifying criteria parameter e.g. financial resources (Turnover)of the individual partners of the J.V. will be added together, for the relevant period, and the total criteria should not be less than as deliberated under clause 8(B) of e-tender Notice towards fulfilment of qualification criteria related to financial turnover.
	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) The bid, and in case of a successful bid, the agreement, shall be signed so as to legally bind all partners jointly and severally and any bid shall be submitted with a copy of the Joint Venture Agreement providing the joint and several liabilities with respect to the contract.
	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 bid submission must include documentary evidence to 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,

### INSTRUCTIONS TO BIDDERS

- participation (percentage share in the total) and liabilities (joint and several) in respect of each and all of the firms in the Joint Venture. Such JV 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 shall be nominated for being in charge of the contract and shall be designated as Lead Partner. This authorization shall be evidenced by submitting with the bid 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. Subsequent declarations/ letters/ documents shall be signed by lead partner authorised to sign on behalf of joint venture or authorised signatory on behalf of JV.
  - ix) The bid should be digitally signed by a person authorized by all the partners of the Joint Venture.
  - x) 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.
  - xi) The JV agreement may specify the share of each individual partner for the purpose of execution of this contract. This is required to fulfil 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.
  - xii) The earnest money / bids security bank guarantee can be submitted by the Joint Venture / one or more partners of the joint venture.
  - xiii) The JV agreement must specifically state that it is valid for the project for which bidding is done. If JV breaks up mid-way before award of work and during bid validity period bid will be rejected.  
  
If JV breaks up midway before award of work and during bid validity/after award of work/during pendency of contract, in addition to normal penalties as per provision of bid document, all the partners of the JV shall be debarred from participating in future bids for a minimum period of 12 months.
  - xiv) JV agreement shall be registered in accordance with law so as to be legally valid and binding on the members before making any payment.  
  
**Note: If the work is awarded to Joint Venture firm, they will register the JV agreement in accordance with Registration Act.**
  - xv) JV shall open a Bank Account in the name of JV and all payments due to the JV shall be credited by employer to that account only. To facilitate statutory deductions all statutory documents like PAN/GSTIN, etc. in the name of the Joint Venture shall be submitted by JV before making any payment.

**2.3** The bidders shall have 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.

**2.4** The bidders have to accept unconditionally the online user portal agreement which contains the acceptance of all the Terms and Conditions of Notice Inviting Tender (NIT) and

### INSTRUCTIONS TO BIDDERS

Instructions to Bidders (ITB), including General and Additional Terms & Conditions, technical specifications, 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.

- 2.5** The Company reserves its right to allow Public Enterprises purchase preference facility as admissible under prevailing policy.

- 2.6** No sub-letting of the work as a whole by the contractor is permissible. Prior permission is required to be taken from the principle employer for engagement of sub-contractors in part work/piece rated work.

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.

### **3. QUALIFICATION OF THE BIDDER**

- 3.1** In the event that pre-qualification of potential bidders has been undertaken, only bids from pre-qualified bidders will be considered for award of contract.

- 3.2** If the employer has not undertaken pre-qualification of potential bidders, all bidders shall fulfil the eligibility / qualifying criteria as detailed at Cl. No.8 & 9 of e-Tender Notice. Such details shall be submitted as deliberated at e-Tender Notice.

- 3.3** If the bidder is subsidiary of a company, the experience and resources of the holding company or its other subsidiaries will not be taken into account. However, if the bidder is a holding company, the experience and resources of its wholly owned subsidiaries will be taken into consideration.

- 3.4** Even though the bidders meet the above eligibility/qualifying criteria, they are subject to be disqualified if they have:

- a. Made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements.

Notes:

The documents to be furnished by the bidder to prove that he is satisfying the qualification criteria laid down should all be in the bidder's name except in cases where though the name has changed, owners continued to remain the same and in cases of amalgamation of entities and when a holding company relies on credential of its wholly owned subsidiary.

### **4. COST OF BIDDING**

- 4.1** The Bidder shall bear all costs associated with the preparation and submission of his Bid, and the Employer will in no case be responsible or liable for those costs.

### **5. CONTENT OF BIDDING DOCUMENTS**

- 5.1** The set of bidding documents comprises the documents listed in the table below as issued online by the Employer and addendum/corrigendum issued in accordance with relevant provision.

- a. Notice Inviting Tender
- b. Instructions to Bidders;

## INSTRUCTIONS TO BIDDERS

- c. Conditions of Contract;
- d. Scope of work/Bill of Quantities;
- e. Forms of Securities and form of Article of Agreement.
- f. Pre contract Integrity Pact (if applicable)
- g. User portal Agreement
- h. Guidelines of Banning of Business
- i. Other document, if required.

### **6. CLARIFICATION OF BIDDING DOCUMENTS**

- 6.1** A prospective bidder requiring any interpretation or clarification of bidding document may seek clarification online or during pre-bid meeting (if any). The clarifications may be asked from the next day of e-Publication of NIT. The last date for seeking clarification will be as specified online. The department will clarify as far as possible only relevant queries. The clarifications given by department will be visible to all the bidders intending to participate in bid.

### **7. AMENDMENT OF BIDDING DOCUMENTS (BE DELETED FOR NORMAL WORKS, APPLICABLE FOR SPECIALISED WORK)**

- 7.1** Before the deadline for submission of Bids, the Employer may modify the bidding documents by issuing addenda.
- 7.2** Any addendum thus issued shall be a part of the bidding document and shall be displayed in the website. The bidder shall upload the same during bid submission.
- 7.3** To give prospective Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Employer shall extend, as necessary, the deadline for submission of Bids, in accordance with Sub-clause 11.2 below.
- 7.4** Bidders are requested to look into website for any addendum as specified in the NIT.

### **8. LANGUAGE OF BID**

- 8.1** All documents relating to the Bid shall be in the English language.

### **9. BID PRICES**

- 9.1** The bidder shall closely study specification in detail and scope of work which govern the rates for which he is quoting. The Bidders shall offer for the whole Works as described in Sub-Clause 1.1, based on the Bill of Quantities. Based on priced bill of quantities submitted by the Bidder, the Employer reserves the right to allot whole or part of the work at their discretion and no claims, whatsoever, shall be entertained in this regard.
- 9.2** The price bid containing the bill of quantity will be excel format and will be downloaded by the bidder and he will quote the rates for all items/heads/sub-heads on this excel file as detailed at clause No.9(d) of e-Tender Notice.
- 9.3** All duties, taxes (excluding Goods and Services Tax (GST) & GST Compensation Cess (if applicable) only) and other levies, royalty, building and construction workers cess (as applicable in States) payable by the bidder/Contractor under the 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. Applicable GST, if any, either payable by bidder or by company under reverse charge mechanism shall be computed by system in BOQ sheet as per predefined logic.

All investments, operating expenses, incidentals, overheads, leads, lifts, carriages, tools and plants etc. as may be attendant upon execution and completion of works shall also be

### INSTRUCTIONS TO BIDDERS

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 Bid and/or any increase over the rate existing on the last date of submission of Bid 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.

The item wise rate quoted by bidder shall be inclusive of all taxes, duties & levies but excluding GST & GST Compensation Cess, if applicable. The payment of GST and GST Compensation Cess by service availer (i.e. CIL/Subsidiary) to bidder/contractor (if GST payable by bidder/contractor) would be made only on the latter submitting a Bill/invoice in accordance with the provision of relevant GST Act and the rules made there under and after online filing of valid return on GST portal. Payment of GST & GST Compensation Cess is responsibility of the service provider/contractor.

Further, any GST credit note required to be issued by the bidder / contractor under the GST provisions should be issued within the time limit prescribed under the GST law.

However, in case bidder/contractor is GST unregistered bidder/dealer or GST registered under composition scheme in compliance with GST rules, the bidder/dealer shall not charge any GST and/or GST Compensation Cess on the bill/invoice. In case of unregistered dealer/bidder, GST, if applicable will be deposited by CIL/Subsidiary directly to concerned authorities in terms with GST provisions.

Input tax credit is to be availed by CIL/Subsidiary as per rule.

If CIL/Subsidiary fails to claim Input Tax Credit(ITC) on eligible Inputs, input services and Capital Goods or the ITC claimed is disallowed due to failure on the part of supplier/vendor of goods and services in incorporating the tax invoice issued to CIL/Subsidiary in its relevant returns under GST, payment of CGST & SGST or IGST, GST (Compensation to State ) Cess shown in tax invoice to the tax authorities, issue of proper tax invoice or any other reason whatsoever, the applicable taxes & cess paid based on such Tax invoice shall be recovered from the current bills or any other dues of the supplier/vendor along with interest and penalty, if any.

Note:

During the execution of the contract if the GST status of the bidder changes, then the payment of GST, if any, to the contractor will be made as per the GST status declared by the bidder during tender stage based on which cost to company has been ascertained or at actuals, whichever is lower.

- 9.4** 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.

**10. BID SECURITY/EARNEST MONEY DEPOSIT**

- 10.1** The bidder shall furnish, as part of his bid, a ~~Bid Securing declaration~~/Earnest Money of the amount as shown in e-tender Notice and in the form as deliberated at Clause 3 of e-tender Notice.

- 10.2** Any Bid not accompanied by an acceptable ~~Bid Securing declaration~~ Bid Security/EMD shall be summarily rejected by the employer as non-responsive.

The bid security/EMD, of successful bidder may be retained and adjusted with performance



### INSTRUCTIONS TO BIDDERS

security/security deposit, at bidder's option.

- 10.3** The Bid Security/Earnest Money may be forfeited- The defaulting contractor will be banned for 02 (two) years from being eligible to submit Bids in CIL and its subsidiaries from the date of issue of such letter if:

(a) if the Bidder withdraws the Bid after Bid opening during the period of Bid validity/extended validity with mutual consent;

**OR**

(b) in the case of a successful Bidder, if the Bidder fails within the specified time limit to:  
(i) sign the Agreement; **OR**

(c) (ii) Furnish the required Performance Security/ Security Deposit.

Additionally, the company shall ban such defaulting contractor from participating in future tenders in concerned Subsidiary/CIL HQ for a period of minimum two years from the date of issue of such letter.

In case of JV/Partnership firm, the banning shall also be applicable to all individual partners of JV/Partnership firm.

- 10.4** The Bid Security/ EMD deposited with the Employer will not carry any interest.

- 10.5** 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.

- 10.6** 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, bidder should submit E-Mandate form in format provided by company.

- 10.7** In case the tender is cancelled then EMD of all the participating bidders will be refunded unless it is forfeited by the department.

- 10.8** 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.

### **11. DEADLINE FOR SUBMISSION OF BIDS**

- 11.1** Bids shall be submitted online on the web site <https://coalindiatenders.nic.in> within the date and time specified in the e-Tender Notice.

- 11.2** The employer may extend the deadline for submission of bids in accordance with provisions of e-Tender Notice/ITB, in which case all rights and obligations of the employer and the bidders previously subject to the original deadline will then be subject to the new deadline.

### **12. SIGNING AND SUBMISSION OF BID**

- 12.1** 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 bears the physical signature in addition to the digital signature of DSC holder, it will be accepted without questioning the identity of person signing the bid.

- 12.2** Submission of bid shall be as detailed at Clause No.9 of e-Tender Notice.

### **13. Tender Status:**

It will be the 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

### INSTRUCTIONS TO BIDDERS

of non-submission of Confirmatory documents within prescribed time. This will be specifically mentioned in the NIT. The Tender Status will be in public domain and anyone visiting the site can view it by identifying the tender.

#### **14. EVALUATION AND COMPARISON OF BIDS.**

**14.1** Evaluation and comparison of Bids will be done by System online. This online evaluation will be validated by CIL/ Subsidiary at each stage as deliberated in e-Tender Notice. The bidder shall also comply with system requirement as deliberated in e-Tender Notice. Bid evaluation shall be done after taking into consideration overall quoted price by the bidder and effect of Goods and Service tax (GST), GST Compensation Cess etc. as applicable. L-1 will be decided based on Cost to the Company.

**14.2** If the Bid of the successful Bidder is seriously unbalanced in relation to the Company's estimate of the cost of work to be performed under the contract, the Employer may require the Bidder to produce detailed price analysis for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the methods and schedule proposed.

~~After evaluation of the price analysis, the company may require that the amount of the performance security/security deposit is increased at the expense of the successful bidder to a level sufficient to protect the company against financial loss in the event of default on the part of the successful bidder under the contract.~~

~~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.

~~Such additional performance security shall be applicable for Item rate and Percentage rate Tenders.~~

~~Such additional performance security shall be furnished by bidder along with normal performance security as per Cl. No. 4 of GTC.~~

~~Additional performance security (APS) shall be furnished within 21 days of issuance of LOA by the successful bidder.~~

~~Failure to submit such additional performance security shall result into cancellation of the contract with forfeiture of earnest money.~~

~~Additionally, the company shall ban such defaulting contractor from participating in future tenders in concerned Subsidiary/CIL HQ for a period of minimum 2 (Two) year from the date of issue of such letter\*. In case of JV/Partnership firm, the banning shall also be applicable to all individual partners of JV/Partnership firm.~~

#### **15. ABNORMALLY HIGH RATE & ABNORMALLY LOW RATE ITEMS.**

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)

### INSTRUCTIONS TO BIDDERS

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 analyzed 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 analyzed 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 meters 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 meters above the ground level.
- d) For reservoirs / tanks (other than overhead reservoirs / tanks): All works up to 1.2 meters 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.
- f) For Roads, all items of excavation and filling including treatment of sub base.

#### **16. AWARD CRITERIA**

**16.1** Subject to Clause No.17, the Employer will award the Contract to the Bidder whose Bid has been determined to be substantially responsive to the Bidding documents and who has offered the lowest evaluated acceptable Bid Price, provided that such Bidder has been determined to be:

- a) Eligible in accordance with the provisions of Clause 2; and
- b) Qualified in accordance with the provisions of Clause 3.

#### **17. EMPLOYER'S RIGHT TO ACCEPT ANY BID, NEGOTIATE AND TO REJECT ANY OR ALL BIDS**

**17.1** Notwithstanding Clause No.16, the Employer reserves the right to accept, negotiate or reject any Bid, and to cancel the bidding process and reject all Bids, at any time prior to the award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Employer's action.

#### **18. NOTIFICATION OF AWARD AND SIGNING OF AGREEMENT**

**18.1** The Bidder, whose Bid has been accepted, will be notified /communicated by the Employer electronically online on the e-procurement portal of CIL prior to expiration of the Bid validity period. This 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").

### INSTRUCTIONS TO BIDDERS

The offline communication of LOA shall not be mandatory.

- 18.2** The notification of award (LOA/Work Order) will constitute the formation of the Contract.

The works should be completed as per period specified in the NIT from the Date of Commencement as defined in Clause 6.0 of General Terms and Condition.

- 18.3** The Agreement will incorporate all agreements between the Employer and the successful Bidder, work programme etc. within 30 (thirty) days following the notification of award along with the letter of Acceptance and/or Work Order issued by department.

In case of failure to enter in to agreement within specified period or extended period on the written request of the bidder, if any, the bidder will be banned for 02 (two) years from being eligible to submit Bids in CIL and its subsidiaries from date of issue of such letter. This banning shall be done under the provisions of the NIT and online blocking of the bidder shall be done in CIL e-Procurement portal. The department will take action as prescribed in Guidelines for Banning of Business along with forfeiture of Earnest Money. The bidder will also be banned from participating in re-tender.

No payment for the work shall be made before execution of this agreement.

In case of JV/Partnership firm, the banning shall also be applicable to all individual partners of JV/Partnership firm.

- 18.4** In the bidding process, the cause of rejection of Bid of any bidder shall be intimated to non-qualified bidder after the award of the work to the successful one and the Security/ Earnest Money shall be refunded to unsuccessful bidders as per provision of e-Tender Notice.

- 18.5** The contractor shall enter into and execute contract agreement in the prescribed form on non-judicial stamp paper in accordance with the relevant law of the State/Union of India. 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 authorized by the company for the purpose. The contract document shall not be used by the contractor for any purpose other than this contract and the contractor shall ensure that all persons employed for this contract strictly adhere to this and maintain secrecy, as required of such documents. Until the formal agreement is signed between the Owner and Contractor, LOA/Work Order together with Contract Document, shall constitute the Contract.

**19. PERFORMANCE SECURITY/SECURITY DEPOSIT**

- 19.1** 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.

**For details refer Clause No.4 of Conditions of Contract (General Terms and Conditions)**

**20. EMPLOYMENT OF LABOUR**

- 20.1** Contractors are to employ, to the extent possible (as per policy decision of the company valid from time to time), local project affected people and pay wages not less than the minimum wages as per minimum Wages Act or such other legislations or award of the minimum wage

### INSTRUCTIONS TO BIDDERS

fixed by respective State Govt. or Central Govt. as may be in force.

Payment of Provident Fund for the workmen employed by him for the work as per the Law prevailing under provision of CMPF/EPF and allied scheme valid from time to time shall be responsibility of the contractor.

The contractor needs to ensure that the employee has become a member of any of the provident fund as the case may be and the unique membership number of the CMPF/EPF or Allied Scheme needs to be submitted to Employer.

In addition to the above, the Contractor shall provide a copy of the updated passbook having entry made in the CMPF/EPF or Allied Scheme(s) of Provident fund as the case may be by the competent authority annually /as and when asked. Bidder shall also submit copies of statutory returns.

**20.2** The bidder shall also comply with statutory requirements of various acts including CL(R&A) Act.

**20.3** The contractor's workmen shall be paid through Bank.

**20.4** The contractors shall register themselves on the Contract Labour Payment Management Portal (CLPMP) of CIL within 30 days of issue of work order and will have to enter and update periodically the following details in the portal:

- a. Work Order details
- b. Details of Contractor workers and payment of wages in respect of each Work Order each month.

**20.5** All the contract workers shall be covered with the Bio-metric attendance system for payment of wages.

**20.6** The bidder shall comply with statutory requirements of various acts including Child Labour (Prohibition & Regulation) Act, 1986 as amended from time to time and all rules, regulations and schemes framed thereunder from time to time in addition to other applicable labour laws.

**20.7** The bidder shall also follow other guidelines as incorporated at Clause 13 of GTC covered under additional responsibilities of the contractor.

NOTE: In case company decides/ circulates separate wages for underground works / for works within mine premises, the same may be allowed based on appropriate circular. Clause 13(xiv) of GTC shall stand amended to this extent before notification of bid.

### **21. LEGAL JURISDICTION**

Matter relating to any dispute or difference arising out of this bid and subsequent contract awarded based on the bid shall be subject to the jurisdiction of local court only where the subject work is to be executed.

### **22. e-PAYMENT**

**22.1** Successful bidder will be required to submit a Mandate Form duly signed by bidder and the Bank Officials for e-Payment.

### **23. MISCELLANEOUS**

**23.1** The bidders should fill the bid document properly and carefully. They should avoid quoting absurd rates.

**23.2** Throughout the bidding documents, the terms 'bid' and 'tender' and their derivatives are synonymous.

## **CHAPTER -3**

## CONDITIONS OF CONTRACT

### GENERAL TERMS AND CONDITIONS

#### 1. Definitions

- i) The word "**Employer**" or "**Company**" or "**Owner**" wherever occurs in the conditions, means the Central Mine Planning & Design Institute Limited, represented at Head Quarters of the Company by the General Manager (Civil) or his authorized representatives or any other officer specially deputed for the purpose who will employ the contractor.
- ii) The word "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 bidder /bidders who has/have deposited the necessary Earnest money submitted Bid Securing declaration 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 on its behalf by the company.
- vii) "**Engineer-in-charge**" shall mean the officer nominated by the company in the Civil 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. Until the formal agreement is signed between the Owner and Contractor, LOA/Work Order together with Contract Document, shall constitute the Contract.
- 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

### CONDITIONS OF CONTRACT

- 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 person 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 of 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 Civil 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 Regulations 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.



## CONDITIONS OF CONTRACT

### **2. Contract Documents and Miscellaneous Provisions:**

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 & Conditions, Special Terms & Conditions, and Commercial Terms & Conditions etc.- as applicable.
- v) Frozen terms & conditions / technical parameters and revised offer, if any.
- vi) Specifications/scope of Work, if any.
- vii) Schedule of quantities (or Bill of Quantities) along with accepted rate.
- viii) Contract drawings and work programme.
- ix) Safety Code etc. forming part of the tender,
- x) Integrity Pact (If applicable).
- xi) Guidelines for Banning of Business.
- xii) Any other document if required.

**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 authorized 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 and 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 this 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. It shall be communicated electronically through e-procurement portal of CIL to the successful bidder and shall make the

## CONDITIONS OF CONTRACT

binding Contract with the Company.

### **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 Specifications.

**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.

### **4.00 Security Deposit:**

~~(As per CIL Guidelines regarding Bid security/ Earnest money, performance Security and Additional Performance Security ref no- CIL/GM(CMC)2020/1133 dt25.11.2020 modified clause is valid for the NIT till 31.12.2021).~~ In case of any Government directives, it will be followed as per order.

~~(Performance Security Deposit (i.e. 5% of contract value in case of tenders other than tenders floated as per chapter 3 & 6 of CMM where it is 5% of annualised value or estimated value whichever is less) shall be reduced to 3%. The provision of Retention Money should be kept as it is in the existing manuals.~~

~~The reduction of Performance Security from existing provision of 5% to 3% of the value of contract Shall be applicable for all existing contracts and all tenders / contracts issued / concluded till 31.12.2021. Further, the reduced percentage of Performance Security shall continue for the entire duration of the contract and there will be no subsequent increase in Performance Security beyond 31.12.2021!~~

~~However, in case of compelling circumstances where Performance Security in excess of 3% is felt necessary, the same can be done with the approval of the next higher authority to the authority competent to finalize the tender.)~~

**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 21 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 shall be issued by a Scheduled Bank on SFMS platform and shall be irrevocable and unconditional. CMPDI shall have the powers to invoke it notwithstanding any dispute or difference between contractors and CMPDI pending before the court, tribunal, arbitrator or any other authority. The

### CONDITIONS OF CONTRACT

Issuing Bank have to send the BG details through SFMS platform to our bank the details of which are as below :

Name of Bank: State Bank Of India

Branch: CMPDI Branch,

IFSC:SBIN0005598

A/C No.: 10106155087

Address: Gondwana Place, Kanke Road, CMPDIL Campus, Ranchi-834008

- The BG issued by outstation bank shall be operative at its local branch at ..... 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 ..... Coalfields Ltd on any Scheduled Bank payable at its Branch at.....

The Earnest Money/ Bid Security deposited shall be discharged when the Bidder has signed the Agreement and furnished the required Performance Security/ 1<sup>st</sup> part of security deposit.

The bid security deposited may be adjusted against the Performance security (1<sup>st</sup> part of security deposit) at bidder's option.

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

- (a) at Bidder's option by a Scheduled 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.

The BG (If performance security is provided by the successful bidder in the form of bank guarantee) issued by issuing bank on behalf of the bidder in favour of "**Central Mine Planning & Design Institute Limited,**" shall be in paper form (Stamp Paper) as well as issued under "Structured Financial Messaging System". Issuing Bank should send the underlying confirmation message in IFN760COV or IFN767COV message type for getting the BG advised through our bank. Also issuing bank should mention "\_\_\_\_\_" in field no. "7037" of IFN760COV or IFN767COV. The message will be sent to the beneficiary bank through SFMS. Codes like **IFN760COV / IFN767COV, 7037** etc. shall be verified from the concerned banks / branches.

Original copy of the Bank Guarantee issued by the Issuing Bank shall be sent by the issuing bank to Civil Engineering Division of CIL/ Subsidiary.

In case the successful bidder fails to submit the Performance Security and ~~Additional Performance Security, if any,~~ within the stipulated time then the award of work shall be cancelled with forfeiture of the bid security/earnest money.

Additionally, the company shall ban such defaulting contractor for a period of 02 (two years) from being eligible to submit Bids in CIL and its subsidiaries from the date of issue of such letter.

This banning shall be done under the provisions of the NIT and online blocking of the bidder shall

**CONDITIONS OF CONTRACT**

be done in CIL e-Procurement portal.

Additionally, the company shall ban such defaulting contractor from participating in future tenders in concerned Subsidiary/CIL HQ for a period of minimum two years from the date of issue of such letter.

In case of JV/Partnership firm, the banning shall also be applicable to all individual partners of JV/Partnership firm.

- 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. 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 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 Clause 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 part of the security deposit remaining with the company (Performance Security) shall be refunded as elaborated at Clause 4.3.

The other part (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 list of defects) is/are rectified to the satisfaction of the Engineer-in-Charge within the said defect liability period of six months or on its due extension till completion of the rectification works as required.
- b) In the case of building work or 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 leakages 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, surface dressing etc.), the performance security and retention money (second part of bid security) can be released simultaneously after completion

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of work and taking over by department.

### 4.8 Additional performance security: (applicable for item rate as well as percentage rate tenders):-

**(As per CIL Guidelines regarding Bid security/ Earnest money, performance Security and Additional Performance Security ref no- CIL/GM(CMC)2020/1133 dt25.11.2020, the clause has been modified).**

There should be no provision in the Bid Documents regarding submission of Additional Security Deposit / Bank Guarantee (BG) in case of Abnormally Low Bids.

**However, it has been provided that in case of compelling circumstances where to ask for Additional security Deposit Bank Guarantee (BG ) in case of ALBs, the same should be taken only with the approval of the next higher authority to the authority competent to finalize the Tender.**

~~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 (APS) shall be furnished within 21 days of issuance of LOA by the successful bidder.~~

~~Failure to submit such additional performance security shall result into cancellation of the contract with forfeiture of earnest money.~~

~~Additionally, the company shall ban such defaulting contractor from participating in future tenders in concerned Subsidiary/CIL HQ for a period of minimum one year from the date of issue of such letter\*. In case of JV/Partnership firm, the banning shall also be applicable to all individual partners of JV/Partnership firm.~~

~~This 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.~~

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

### 4.9 Refund of Security Deposit regarding Specialized Item 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 treatment, 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 contractors who associate specialized agencies, the contractor / firm executing the work should be asked to give a specific guarantee that they shall be responsible for

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removal of any defects cropping up in these works executed by them during the guarantee period. The form of the guarantee to be executed by the contractors shall be as enclosed.

- b) 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 & Electrical Works (shall be applicable only when relevant item exists in the contract)**

For some specialized contracts like Pump house, Intake well etc. there may be Civil works as well as Mechanical and Electrical works. For such works security deposit (performance security and retention money)- deposited / deducted from the bills of the contractors 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 guarantees 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 work(s) 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 extra 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 for such



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extra item(s) 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 / class of work available in the agreement schedule of work or by analysis of rates as at 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 rates shall be taken from the Schedule of Quantities of that particular part in which the deviation is involved, failing that at the lowest applicable rate for the similar item of work in the other schedule of quantities.

For derivation 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 material 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(C) of the company or Staff Officer(C) 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(C) of the company or SO(C) 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(C) of the company or SO(C) 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

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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 of 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 the 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 (i) 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.



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### 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. However, the Date of Commencement may be decided with mutual consent with the Contractor prior to the date as prescribed above.

\* 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 or **performance security deposit** and additional performance security deposit deposited by him to rescind the Letter of Acceptance of Tender/Work Order and also to ban for 02 (two) years from being eligible to submit Bids in CIL and its subsidiaries from the date of issue of such letter to debar the contractor to take part in the future re-tender. The bidder will also be banned from participating in re-tender. . In case of JV/Partnership firm, the debarment shall also be applicable to all individual partners of JV/Partnership firm.

This banning shall be done under the provisions of the NIT and online blocking of the bidder shall be done in CIL e-Procurement portal.

The Company may debar such defaulting Contractors from participating in future Tenders for a minimum period of 24(Twenty four) 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 (½ %) of the contract amount/Revised Contract amount whichever is less, per week of delay.

OR

- ii) ½ % 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

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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 Clause 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.

In the event of recovery of any claim towards LD charges, penalty, fee, fine or any other charges from the supplier/vendor, the same will be recovered along with the applicable GST and the amount shall be adjusted with the payment to be made to the supplier/vendor against their bill/invoice or any other dues.

Further Earnest Money/Performance Security forfeited will be inclusive of GST.

- 6.1** 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.
- 6.2** 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

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is mutually established that Force majeure conditions did actually exist.

- 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 genuineness 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(Civil)/CM(Civil) 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.

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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 endeavours constantly as may be reasonably required of him to the satisfaction of the Engineer-in-Charge.

**7. Material Supply & other facilities: ( NO MATERIAL WILL BE ISSUED BY DEPARTMENT )**

**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 along with GST and any other Tax applicable 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 upto Rs.10.00 lakhs and 3% for value of work above Rs.10.00 lakhs. In the event of cement consumed is more/less than specified above, the recovery for the quantity of cement consumed in excess or less than the specified quantity shall be made at double the issue rate or 115% of prevailing market rate along with GST and any other Tax applicable 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,

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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 go down 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 along with GST and any other tax applicable 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 GST or any other applicable taxes, duties or levies on materials obtained for the works from any source (excluding materials supplied by the company) shall be borne by the contractor. This clause may be read in conjunction with 13(ix) of condition of contract.

- 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

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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 there from, along with clarifications/ explanations thereof, if necessary. However, the contractor will be solely responsible for design and erection of all temporary structures required in connection with the work.

**8.1** For Quality Assurances of all the Civil 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 authorized representative or any other official of higher rank or any other person authorized by the company on 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



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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 born 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 authorized 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

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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 authorized 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



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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 or the IRC / MORTH 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 of 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 there from. 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 authorized representative and by the contractor or his authorized 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

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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 re-measured by the Engineer-in-Charge himself or the authority nominated by the company for the purpose in the presence of the contractor or his authorized 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 authorized 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 authorized 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 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 herein before 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 up to 10% of the quantity provided in the agreement subject to overall value of work not exceeding the agreement value.
- (ii) The GM(Civil) of the company and / or the Staff Officer(C) of the Area may authorize

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interim payment for excess work done up to 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 authorization of GM(C) of the company or Staff Officer (Civil) 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 regularizing 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.

E-way Bill: The e-way bill required in connection with supply of goods or services, if any, shall be arranged by the supplier/vendor. However, the e-way bill will be arranged by CIL/Subsidiary if the supplier/vendor is unregistered one or if provisions of the relevant Act and the rules made there under specifically states that the e-way bill is required to be issued by recipient of goods.

- 9.7.03** The measurements shall be entered in the M.B for the work done up to 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 relates 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 overpayments 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 overpayments 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

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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(C) of the company in this case or any other officer nominated by GM/HoD(C) for the purpose.

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

- i. Signature of Subordinate Engineer(Civil)/ EA(Civil)/ Sr. Overseer(C) / Overseer(C) in MB's both in pages recording measurements, abstract of bill & the duly filled in bill form.
- ii. Signature of Sr. Officer(C)/ Asstt. Manager(Civil) with appropriate check measurements in the MB's and the bill form.
- iii. Signature of Dy. Manager(C)/ Manager(C) 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 works 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.50.00 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.

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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 cements 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

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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 (excluding GST) 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. Further, TDS under GST will be deducted at applicable rates as per the provisions of GST Act wherever applicable.

Building and Construction Workers Cess (as applicable in States) 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, and whether the date of completion has or has not elapsed, by notice in writing 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

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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-bonafide 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 agen-



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cy.

- 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



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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-

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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 his 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.

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**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 as assessed by Engineer-in-charge or as specifically mentioned in the bid. 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, skilful 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.

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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 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 authorized 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 authorized 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 familiarize 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 authorized representative with work reports from time to time regarding the contractor / contractors organization and the progress made by him / them in the execution of the work as per the contract.
- ix) All duties, taxes (excluding Goods and Services Tax (GST) & GST Compensation Cess (if applicable) only) and other levies, royalty, building and construction workers cess (as applicable in States) payable by the bidder/Contractor under the 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. Applicable GST, if any, either payable by bidder or by company under reverse charge mechanism shall be computed by system in BOQ sheet as per predefined logic.

All investments, operating expenses, incidentals, overheads, leads, lifts, carriages, tools and

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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 Bid and/or any increase over the rate existing on the last date of submission of Bid 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.

The item wise rate quoted by bidder shall be inclusive of all taxes, duties & levies but excluding GST & GST Compensation Cess, if applicable. The payment of GST and GST Compensation Cess by service availer (i.e. CIL/Subsidiary) to bidder/contractor (if GST payable by bidder/contractor) would be made only on the latter submitting a Bill/invoice in accordance with the provision of relevant GST Act and the rules made there under and after online filing of valid return on GST portal. Payment of GST & GST Compensation Cess is responsibility of the service provider/contractor.

Further, any GST credit note required to be issued by the bidder / contractor under the GST provisions should be issued within the time limit prescribed under the GST law.

However, in case bidder/contractor is GST unregistered bidder/dealer or GST registered under composition scheme in compliance with GST rules, the bidder/dealer shall not charge any GST and/or GST Compensation Cess on the bill/invoice. In case of unregistered dealer/bidder, GST, if applicable will be deposited by CIL/Subsidiary directly to concerned authorities in terms with GST provisions.

Input tax credit is to be availed by CIL/Subsidiary as per rule.

If CIL/Subsidiary fails to claim Input Tax Credit(ITC) on eligible Inputs, input services and Capital Goods or the ITC claimed is disallowed due to failure on the part of supplier/vendor of goods and services in incorporating the tax invoice issued to CIL/Subsidiary in its relevant returns under GST, payment of CGST & SGST or IGST, GST (Compensation to State ) Cess shown in tax invoice to the tax authorities, issue of proper tax invoice or any other reason whatsoever, the applicable taxes & cess paid based on such Tax invoice shall be recovered from the current bills or any other dues of the supplier/vendor along with interest and penalty, if any.

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 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.

Further, where any damages or compensation becomes payable by either the Company or the bidder / contractor pursuant to any provision of this Agreement, appropriate GST wherever applicable as per the GST provisions in force shall also apply in addition to such damages or compensation.

Note: During the execution of the contract if the GST status of the bidder changes, then the payment of GST, if any, to the contractor will be made as per the GST status declared by the

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bidder during tender stage based on which cost to company has been ascertained or at actuals, whichever is lower.

- 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. Prior permission is required to be taken from the owner for engagement of sub-contractor in part work/piece rated work.
- 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 up to 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 labourer 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 in online mode including payment of provident fund considered necessary.
- 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



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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 up to 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 (except for reasons which are beyond control of the contractor or 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 the case of construction works, without limiting the obligations and responsibilities under the contract, the contractor shall take insurance policy for the works and for all materials at site so that the value of the works executed and the materials at site up to date are sufficiently covered 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 premiums 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 instalments 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 certificates for 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.

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- 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) **Deleted.**

- 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.



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

- xxvi) The contractor shall directly pay the ex-gratia amount of Rs.15.00 (Fifteen) lakhs to the eligible dependent family members of the deceased contractor's worker, who died in mine accident as certified by DGMS, to whom the statutory benefits under Employee Compensation Act, Provident Fund etc. have been paid, as per the terms of contract or through Insurance Company by availing Group Personal Accident Insurance Policy for all its workers before commencement of the contract, which shall be renewed periodically to cover the entire duration of the contract. No reimbursement shall be made on this account by CIL/Subsidiary.

In order to comply with the above provisions, contractor shall immediately on receipt of letter of acceptance/work order shall obtain group personal accident insurance in respect of all the workmen engaged in mining activities for payment of Rs.15.00(fifteen) lakhs in case of death in mine accident. A proof to such effect shall be produced to the satisfaction of the management before commencement of the work. However, the responsibility of payment of special relief/ex-gratia amount shall lie exclusively with the Contractor.

If the contractor fails to disburse the special Relief/Ex-gratia within the due date, the subsidiary concerned may make payment to the eligible dependent as mentioned herein above. However, such amount shall be recovered from the Contractor from his dues either in the same and/or other subsidiaries of CIL".

#### **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

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nominee shall withhold the amount as stated in the agreement.

### **16. Settlement of Disputes.**

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(C). 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, Customs & 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 through Arbitration (THE ARBITRATION AND CONCILIATION ACT, 1996 as amended by AMENDMENT ACT of 2015).

### **16.A Settlement of Disputes through Arbitration**

If the parties fail to resolve the disputes/differences by in house mechanism, then, depending on the position of the case, either the employer/owner or the contractor shall give notice to other party to refer the matter to arbitration instead of directly approaching Court. The contractor shall, however, be entitled to invoke arbitration clause only after exhausting the remedy available under the clause 16.

In case of parties other than Govt. agencies, the redressal of disputes/differences shall be sought through Sole Arbitration as under.

#### **Sole Arbitration:**

In the event of any question, dispute or difference arising under these terms & conditions or any condition contained in this contract or interpretation of the terms of, or in connection with this Contract (except as to any matter the decision of which is specially provided for by these conditions), the same shall be referred to the sole arbitration of a person, appointed to be the arbitrator by the Competent Authority of CIL / CMD of Subsidiary Company (as the case may be). The award of the arbitrator shall be final and binding on the parties of this Contract.

- (a) In the event of the Arbitrator dying, neglecting or refusing to act or resigning or being unable to act for any reason, or his/her award being set aside by the court for any reason, it shall be lawful for the Competent Authority of CIL / CMD of Subsidiary Company (as the case may be) to appoint another arbitrator in place of the outgoing arbitrator in the manner aforesaid.
- (b) It is further a term of this contract that no person other than the person appointed by the Competent Authority of CIL / CMD of Subsidiary Company (as the case may be) as aforesaid should act as arbitrator and that, if for any reason that is not possible, the matter is not to be referred to Arbitration at all.

Subject as aforesaid, Arbitration and Conciliation Act, 1996 as amended by Amendment Act of

### CONDITIONS OF CONTRACT

2015, and the rules thereunder and any statutory modification thereof for the time being in force shall be deemed to apply to the Arbitration proceedings under this clause.

The venue of arbitration shall be the place from which the contract is issued.

Applicable Law: The contracts shall be interpreted in accordance with the laws of the Union of India.

Contracts with Partnership firm:

The Partnership firm is required to submit written consent of all the partners to above arbitration clause at the time of submission of bid.

ii. In case of Govt. agencies, the redressal of disputes/ differences shall be sought through Sole Arbitration as under.

Sole Arbitration:

*"In the event of any dispute or difference relating to the interpretation and application of the provisions of the commercial contract(s) between Central Public Sector Enterprises (CPSEs) / Port trusts inter-se and also between CPSEs and Government Departments / Organizations (excluding disputes concerning Railways, Income Tax, Custom & Excise Departments), such dispute or differences shall be taken up by either party for resolution through AMRCD (Administrative Mechanism for Resolution of CPSEs*

*Disputes) as mentioned in DPE OM No. 4(1)/2013-DPE(GM)/FTS-1835 dtd. 22.05.2018".*

**17. E-way Bill:**

The e-way bill required in connection with supply of goods or services, if any, shall be arranged by the supplier/vendor. However, the e-way bill will be arranged by CIL/Subsidiary if the supplier/vendor is unregistered one or if provisions of the relevant Act and the rules made there under specifically states that the e-way bill is required to be issued by recipient of goods.

**18.** In the event of recovery of any claim towards LD charges, penalty, fee, fine or any other charges (Except EMD) from the supplier/vendor, the same will be recovered with the applicable GST and the amount shall be adjusted with the payment to be made to the supplier/vendor against their bill/invoice or any other dues.

**19. Guidelines for Banning of Business**

CIL and its Subsidiary Companies shall follow the following guidelines for effecting 'Banning of Business' with a contracting entity in respect of Works and Services Contracts.

1. Observance of Principle of Natural Justice before banning the business dealings with any contracting entity.
2. The contracting entity may be banned in the following circumstances :-
  - i) If bidder backs out after notification of opening of price bid and if that bidder is found to be L-1.
  - ii) If L-1 bidder fails to submit PSD and APSD, if any and/or fails to execute the contract within stipulated period.
  - iii) If L-1 bidder fails to start the work on scheduled time.
  - iv) In case of failure to execute the work as per mutually agreed work schedule.

### CONDITIONS OF CONTRACT

- v) Continued and repeated failure to meet contractual Obligations:
- a) In case of partial failure on performance, agency shall be banned from future participation in tenders keeping his present contract alive.
- b) On termination of contract.
- vi) Willful suppression of facts or furnishing or wrong information or manipulated or forged documents by the Agency or using any other illegal/unfair means.
- vii) Formation of price cartels with other contractors with a view to artificially hiking the price.
- viii) The contractor fails to maintain/repair/redo the work up to the expiry of performance guarantee period, when it is specifically brought to his notice.
- ix) Contractor fails to use Mobilisation advance given to him for the purpose it was intended.
- x) Contractor fails to renew the securities deposited to the department.
- xi) The contractor fails to rectify any lapse(s) in quality of the work done within defect liability period.
- xii) Transgression of any clause(s) relating to Contractor's obligation defined in the Integrity Pact wherever such Pact exists.
- xiii) Any other breach of Contract or misdeed which may cause financial loss or commercial disadvantage to the Company.
- 3. Such 'Banning of Business', if and when effected, shall be with prospective effect only. The effect of 'Banning of Business' shall be for future tenders from the date of issue of such Order. However, if any contracting entity is banned after online notification of opening of Price Bid, such a ban will not be effective for that work.
- 4. The banning shall be for a minimum period of one year and shall be effective for the concerned Subsidiary for the tenders invited at Subsidiary level. Similarly, in case of tenders of CIL HQ, banning shall be for CIL HQ. However, if such 'Banning of Business' has to be made effective for entire CIL and its Subsidiaries then approval of Chairman, CIL shall be required.
- 5. Once a contracting entity is banned, it shall be extended to the constituents of that entity, all the partners in case of Partnership Firm, owner/proprietor in case of Proprietorship Firm and all the Directors in case of Limited Company. If such banned owner/Proprietor/ Partner/Director make/form different Firms/entity and attempts to participate in tenders, the same will not be entertained during the currency of such banning.
- 6. The above 'Banning of Business' shall be in addition to other penal provisions of NIT/Contract document.
- 7. **Approving Authority:** The 'Banning of Business' of a contracting entity shall be done with the approval of the Competent Authority as per the details below:
  - a) In case the Accepting Authority of the work is Board or Empowered Committee or FDs or CMD of CIL/Subsidiary Company, then the Competent Authority for banning shall be CMD of CIL/Subsidiary Company.
  - b) In case the Accepting Authority of the work is up to the level of Director of CIL/Subsidiary Company, then the Competent Authority for banning shall be Director of CIL/Subsidiary Company.
- 8. Appellate Authority shall be one Rank higher than the Competent Authority meant for 'Banning of Business'. In case the banning is done with the approval of CMD of the

**CONDITIONS OF CONTRACT**

Subsidiary Company then Chairman, CIL shall be the Appellate authority.

9. Any change on the above may be done with approval of FDs of CIL.
10. All the orders of banning or orders passed in appeal shall be marked to GM(CMC) / Civil / concerned HODs of CIL/Subsidiary Company. Further, all such orders will be uploaded in Coal India site as well website of the Subsidiary Company.
11. Efforts shall be made by the concerned Department so that such order is linked to e-tender portal of Coal India Limited.
20. The contractor shall submit valid electrical license either in his name or of his authorized representative/supervisor [under whose supervision electrification work (internal and/or external) will be executed] issued by Electrical Licensing Board / Authority of the Indian State / UT, in accordance with Indian Electricity Rule before execution of electrical works, if any.

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## ADDITIONAL TERMS AND CONDITIONS

The following additional terms and conditions are also acceptable to the company. The tenderers are requested not to quote any further additional conditions in the tender.

### 1. **Mobilization Advance ~~NO MOBILIZATION ADVANCE WILL BE PAID~~**

- ~~i) No mobilization advance is payable for works whose estimated value is less than Rs.100.00 lakhs.~~
- ~~ii) In the case of turnkey work whose estimated value is more than Rs.100 lakhs a maximum of 10 % of the total contract value of work will be paid as mobilization advance subject to submission of Bank Guarantee equal to 110% of the advance amount. The mobilization advance shall be paid in two installments.~~
- ~~iii) In case of other civil works valued more than Rs.100 lakhs mobilization advance will be paid upto 5% of the contract value subject to submission of Bank Guarantee equal to 110% of the advance amount. The mobilization advance shall be paid in two installments.~~
- ~~iv) Interest on mobilisation advance will be charged at the rate of CIL's borrowing rate under cash credit arrangement as on date of disbursement and to be compounded quarterly.~~
- ~~v) The mobilization advance shall be recovered from the bills of the contractor from the 2nd running account bill onwards @ 20% of the advance amount paid. However, the full amount of mobilization advance with interest will be recovered maximum within scheduled date of completion as per agreement.~~
- ~~vi) The value of Bank Guarantee may be reduced to the extent such advance is recovered by the company subject to the conditions that the value of Bank Guarantee amount at any time is more than the recoverable outstanding advance. Bank Guarantee shall be irrevocable and from a Scheduled Bank acceptable to the Company.~~
- ~~vii) Part Bank Guarantee" (BGs) against the Mobilization Advance shall be taken in as many numbers as the proposed recovery instalments and shall be equivalent to 110% of the amount of each instalment.~~
- ~~viii) In case of "Machinery and Equipment advance", insurance and hypothecation to the employer shall be ensured.~~
- ~~ix) Mobilization advance will be given in instalments and subsequent instalments will be released after getting satisfactory utilization Certificate from the contractor for the earlier instalments.~~

### 2. **Application of Price Variation Clause. ~~Not Applicable~~**

If the prices of materials (not being the materials supplied at fixed issue rates by the company) and wages of labour required for execution of the work increase or decrease, the contractor shall be compensated for such increase or recoveries will be made from the bills for such decrease as per provisions detailed hereafter:

- ~~a) The amount of the contract shall accordingly be varied subject to the condition that such compensation for escalation/ de-escalation in price shall be available only for the work done during the stipulated period of the contract including such period for which the contract is validly extended under the provisions of the contract without any penal action. **The Price Variation Clause shall not be applicable for works for which stipulated period of completion is six months or less.**~~
- ~~b) The base date for working out such escalation/de-escalation shall be the last date on which the bids (inclusive of price part) or revised price bids (inclusive of revised offer) were stipulated to be received.~~

- c) The compensation for escalation or recoveries to be made shall be worked out at quarterly intervals and shall be with respect to the cost of work done during the previous three months. The first such payment will be made at the end of three months after the month (excluding) in which the tender was accepted and thereafter at three months' interval.
- d) Job specific modification in the formulae of price variation given in the following para(s) can be done with the approval of the CMD of the company

**2.1 Escalation/ De-escalation for Labour:** The amount paid to the contractor for the work done shall be adjusted for increase or decrease in the cost of labour and the cost shall be calculated quarterly in accordance with the following formula :

$$VL = W \times \frac{A}{100} \times \frac{L - L_0}{L_0}$$

Where :

- VL= Variation in labour cost i.e., increase or decrease in the amount in rupees to be paid or recovered.
- W = Value of work done during the period under reckoning to which the escalation/de-escalation relates as indicated in clause-2.4 of the Additional Terms & Conditions of the contract.
- A = Component of labour expressed as percentage of the total value of the work adopted from the Table-1.
- Lo = Minimum wages for unskilled workers payable as per the Minimum Wages Act / Rules of the State or Central Govt., whichever is more, applicable to the place of work as on the last date stipulated for receipt of the bids (inclusive of price part) or revised price bids whichever is later.
- L = Revised minimum wages of unskilled worker corresponding to Lo during the period to which the escalation/de-escalation relates.

**2.2 Escalation /De-escalation on Materials:** The amount to be paid to the contractor for the work done will be adjusted for increase or decrease in the cost of materials and the cost shall be calculated quarterly in accordance with the following formula :

$$Vm = W \times \frac{B}{100} \times \frac{M - M_0}{M_0}$$

Where :

- Vm = Variation in the material cost i.e. increase or decrease in the amount in rupees to be paid or recovered.
- W = Cost of work done during the period under reckoning to which the escalation / de-escalation relates as indicated in clause-2.4 of the Additional Terms & Conditions of the contract.
- B = Component of material expressed as percentage of the total value of the work adopted from the Table -1.
- M = Average All India Wholesale Price Index for all commodities for the period to which escalation/de-escalation relates as published by the RBI Bulletin, Ministry of Industry & Commerce, Govt. of India.
- Mo = All India Wholesale Price Index for all commodities as published by the RBI Bulletin, Ministry of Industry & Commerce, Govt. of India, relating to the last date on which the bids (inclusive of price part) or revised price bids whichever is later were stipulated to be received.

- 2.3 Escalation/ De-escalation on POL :** The amount to be paid to the contractor for the work done shall be adjusted for the increase or decrease in the cost of POL and the cost shall be calculated quarterly in accordance with the formula given below :

$$Vf = W \times \frac{C}{100} \times \frac{F - F_0}{F_0}$$

Where :

- Vf = Variation in the cost of fuel, oil and lubricants i ncrease or decrease in the rupees to be paid or recovered.
- W = Value of work done during the period under reckoning to which the escalation/ de-escalation relates as indicated in clause 2.4 of the Additional terms & Conditions of the contract.
- C = Component of POL expressed as percentage of the total cost of the work taken from Table -1.
- F = Average Index Number for wholesale price for the group of 'Fuel, Power, Light & Lubricants' as published by the Economic Adviser, Ministry of Industry, Govt. of India for the period to which the escalation/de-escalation relates.
- F<sub>0</sub> = Index number of wholesale price for the group, Fuel, Power, light & lubricants as published by the Economic Adviser, Ministry of Industry, Govt. of India prevalent on the last date of receipt of bids (inclusive of Price Part) or revised price bids whichever is later.

- 2.4 While calculating the value of "W" the following may be noted :** The cost on which the escalation will be payable shall be reckoned as 85 % of the cost of work as per the bills to which escalation relates, and from this amount the value of materials supplied or services rendered at the prescribed charges under the relevant provisions of the contract, and proposed to be recovered in the particular bill, shall be deducted before the amount of compensation for escalation or de-escalation is worked out. In the case of materials brought to site for which any secured advance is included in the bill, the full value of such materials as assessed by the Engineer-in-Charge (and not the reduced amount for which secured advance has been paid) shall be included in the cost of work done for operation of this clause. Similarly, when such materials are incorporated in the work and the secured advance is deducted from the bill, the full assessed value of the materials originally considered for operation of this clause should be deducted from the cost of the work shown in the bill, running or final. Further the cost of work shall not include any work for which payment is made at prevailing market rates.

- 2.5** In the event the price of materials and/ or wages of labour required for execution of the work decreases, there shall be downward adjustment of the cost of work so that such price of materials and/or wages of labour shall be deductible from the cost of work under this contract and in this regard the formulae herein before stated under this clause shall mutatis/mutandis apply. No such adjustment for the increase / decrease in material price and/ or wages of labour before mentioned would be made in case of contracts in which the stipulated period of completion of the work is six (6) months or less.

**2.6 Application of Price Variation Clause during extended period of Contracts.**

The Price Variation Clause as stated above will be applied for extended time frame of a contract by following the principle stated as under:

- i) Normally, if and when it is understood that a contract is not going to be completed within the scheduled time period, the contract is kept operative by extending the time of completion provisionally. During this provisional extended period the operation of the Price Variation Clause will remain suspended.



- ii) If and when it is decided at the end of the successful completion of the work that the delay was due to causes not attributable to the contractor, then the Price Variation Clause will be revived and applied as if the scheduled date of completion has been shifted to the approved extended date.
- iii) If it is decided at the end of successful completion of the work that the delay was due to the fault of the contractor then the Price Variation Clause will not be revived for the purpose of escalation but shall be revived and applied for the purpose of de-escalation and no further payment will be made to the contractor on account of any escalation during this period but recovery shall be made for de-escalation, if any. Additionally, the Clause related to Compensation for delay will be applied.
- iv) If it is decided at the end of successful completion of work, the delay was partly due to the fault of the contractor and partly due to the fault of the employer and thereby Liquidated Damages (LD)/compensation due to delay is imposed then price variation clause for the purpose of escalation shall not be revived for this extended period, but shall be revived and applied for the purpose of de-escalation.

No payment will be made by applying "FROZEN INDICES "under any circumstances.

**Table – 1**

Value of A, B & C in the escalation formula in the additional terms & conditions for Civil Works :

Sl	Particulars	A% (Labour Component)	B% (Material Component)	C% (POL Component)	Remarks
1	For building works	25	75	Nil	
2	For Road works	15	80	05	
3	For external sewerage, External water supply, and external electrification	10	90	Nil	
4	For external water supply, external sanitary and external electrification (through labour rate contract)	75	25	Nil	
5	For steel structural works	15	85	Nil	
6	For steel structural works with Deptt. free supply of rolled steel sections (through labour rate contract)	75	25	Nil	

7	For Coal Handling Plant Civil Works	25	75	Nil	
8	For under-ground civil works such as Incline Drivage, Shaft Sinking etc.	35	65	Nil.	
9	For only labour oriented works of maintenance nature.	100	Nil	Nil	

For all other works not listed above, the component of labour, material and POL of the total cost of work shall be as specifically indicated in the tender document.

## **CHAPTER- 4**

## **SCOPE OF WORK AND TECHNICAL SPECIFICATION**

### **A. GENERAL**

The IICM campus is located at Kanke Road, Ranchi. This campus consists of various administrative buildings, Training colleges, Hostels, several type of residential quarters, auditorium etc. Power to all these buildings are being supplied from JSEB at 11 kV and further distributed through an in-house switching station installed inside the campus. Additionally 2 nos. of DG sets of capacity 500 kVA are also installed in the campus to cater full loads of offices and other important loads during power failure from JSEB.

### **B. EXISTING POWER SUPPLY & DISTRIBUTION SYSTEM**

To cater the loads of IICM complex, one substation of capacity 2 X 500 kVA, 11 kV/0.415 kV has been provided. The sub-station is located inside the office premises. 3 DG sets of capacity of 500 kVA, 250 kva, 250 kva have also been installed as a stand by source of power.

The substation receives power at 11 kV from JSEB through one no. single circuit overhead line. Power received from JSEB is brought to 11 kV, 800 A vacuum circuit breakers kiosks. Primary control of the transformers is done through these kiosks. LT supply is being distributed through a 415 V Main switchboard panel located in the sub-station building. For further distribution of power within the building as well as external distribution, downstream distribution boards are provided at different locations of the office building. Separate distribution circuits are being used for power, lighting and UPS loads.

The loads mainly comprise of the office lighting & fan, Air-conditioning, pumps, computers etc.

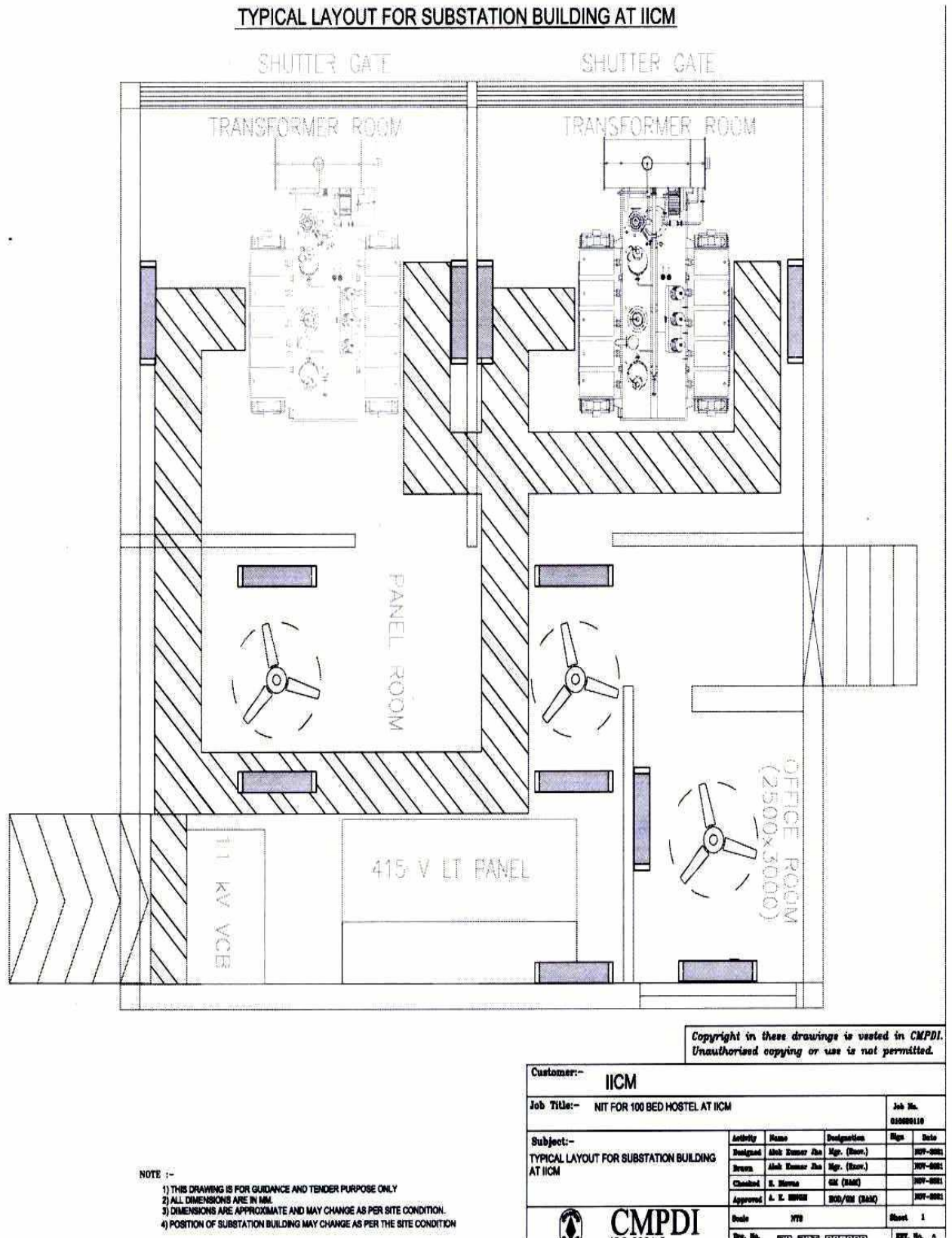
### **C. SCOPE OF WORK:**

The scope of work includes detail design, preparation of drawings including all design calculations, equipment selection, supply of equipment ; installation and Commissioning of 2x500 kVA, 11KV/.415KV Transformer along with incomer VCB, Outgoing distribution panel, cables etc. and construction of control room of size 9x9 sqm. including all necessary auxiliaries, civil & structural works, performance test, **obtaining necessary permissions from the electrical inspector of Jharkhand for the establishment of desired substation at IICM, Ranchi.**

### **D. ELECTRICAL SCOPE OF WORK:**

- a) Dismantling, transportation and re-installation and commissioning of 2 nos. of 500 KVA, 11kv/.415kv transformer along with associated switchgears as per Annexure - I.
- b) Supplying and laying of suitable size PVC/XLPE cable to draw power from the 11kv VCB panel installed at IICM, Ranchi. The cable will be laid underground/laying on the cable trench.
- c) Supplying and installation of capacitor bank of 175 kVAR at 415 V for improving the power factor of the proposed system. It shall be controllable by MCCB of suitable size.
- d) Suitable **chemical earthing** system shall be provided as per Indian electricity rules and the provisions of **IEEE80 and IEC 62561 Standards**.
- e) Supplying and installation of suitable fire fighting system as per site requirement.

The single line diagram for the proposed substation is given below:



## **E. CIVIL SCOPE OF WORK:**

### **1.0 General:**

- a) Clearance of site and demolish of existing old structures at the site, if any.
- b) Construction of a control room of size as proposed in the drg with RCC roof, RCC cable trench with the necessary finishing work. This room will house both HT and LT Panels, capacitor banks etc.
- c) Construction of a concrete foundation for placing the transformer, and it shall be fenced with steel wire mesh to avoid unauthorized access of yard. A gate shall be provided for easy access of transformer for maintenance purpose.
- d) Construction of a shade structure around the foundation area of the transformer to avoid falling of unwanted materials on transformer from nearby residential buildings.
- e) All other civil works which may not be mentioned in the **NIT** but are necessary for the proper working of the system.

### **2.0 Technical specifications**

Technical specification of CPWD should be followed

### **3.0 Clearance of site before start of work**

Site will be handed over to the contractor in 'as it is' condition. Any site preparation work including cleaning, cutting, filling, levelling, grading, removal, etc. before start of the actual work shall be done by the contractor to the full satisfaction of Engineer-in-charge.

### **4.0 Site Clearance after completion of work**

After the completion of work the contractor shall remove scaffolding, sheds rubbish and surplus materials except which are required for rectification of defects. Contractor shall hand over the site in clean and tidy condition after cleaning the total area including floor, drains etc. fit for the use by the owner.

### **5.0 Layout and Levels**

The layout and levels of all structures, etc. shall be laid by the contractor at his own cost from the general grid of the plot and bench marks given by the Engineer-in-charge for checking the detailed layout and correctness of the layout and levels. But the contractor shall be solely responsible for correctness of layout and levels.

## **6.0 Construction, Fabrication, Erection and Commissioning, overheads and supervision**

### **a) Specifications**

The specifications are intended for general description of the work, quality and workmanship. The specifications are not, however intended to cover minute details and the work shall be executed according to the relevant Indian Standard codes of practices or to the recommendations of relevant American and British Standard in cases where Indian Standard codes are not available for such works. These specifications shall have precedence in anything contrary to this stated anywhere in this document. Some important and relevant BIS Codes to be followed are mentioned in the Technical specifications attached hereto.

### **b) Construction Method and Equipment**

The Contractor shall submit drawings and write ups indicating a broad outline of how he intends to execute the work.

### **c) Installation/Erection and Supervision**

It will be the contractor's responsibility to bring, receive and keep the materials in safe custody in proper condition. Responsibility of handling the materials during manufacturing, transit and handling at site rests with the contractor.

All the equipment will have to be installed and fitted with accessories as per approved drawing. Entire tools and tackles, manpower and any other material required for successful installation will be supplied by the contractor. The contractor shall furnish the list of requirement of engineers, supervisors and other skilled personnel to carry out the job properly.

### **Inspection and testing**

Test for Material/Workmanship

All tests required for materials, quality of work and any other tests as required/desired by the Engineer-in-charge shall be at Contractor's cost. The frequency and mode of testing shall be as per latest relevant BIS codes.

### **Perception and remedial measures**

Perception and remedial measures for the entire area under the scope keeping in view the adjoining natural and artificial features such as hill slopes, nallah, buildings, silos etc.

Any other works/services/requirements whether specifically indicated or not and found necessary to be incorporated on later date for safety and efficient operation of the plant shall also be deemed to have been covered within the scope of work of this tender.

## **7.0 GENERAL REQUIREMENTS**



a) Any other requirement whether specifically indicated or not, but found necessary to be incorporated at a later date for safe and efficient operation of the system shall also be deemed to have been covered within the scope of work of this tender.

b) Wherever required dewatering shall be done by the contractor to avoid damage of equipment, structural, etc. and timely completion of work.

c) If any certification or approvals are to be taken from electrical inspector/statutory bodies, the same shall be the responsibility of the contractor.

d) As per system requirement envisaged in the NIT documents, various parameters, specifications may undergo changes during detail engineering stage. This shall be carried out by the contractor without any increase in cost.

e) All safety regulations, code of practices for power supply, manufacturer, installation, erection, commissioning etc. envisaged by the State Govt./Central Govt. or any authorities/bodies shall be strictly complied without any increase in cost.

**All Acts and regulations will be followed during construction stage.**

## **F. TECHNICAL SPECIFICATIONS**

### **1.0 Substation shall consist of following equipment/components:**

Sl.No.	Item description	Qty.	Unit
<b>1</b>	Supply and installation of LTPDB-1 at substation comprising following:		
a.	LTPDB-1 enclosure	1	No.
b.	Incommer ACB, 1250 A.	1	No.
c.	OUTGOING 4P, 630A,MCCB	2	no.
d.	OUTGOING 4P, 400A,MCCB	2	NO.
e.	OUTGOING 4P, 200A,MCCB	14	No.
f.	OUTGOING 4P, 100A,MCCB	9	NO.
<b>2</b>	Supply and installation of LTPDB-2 at Hostel building comprising following:		
a.	INCOMMER 4P, 400A,MCCB	1	No.

b.	OUTGOING 4P, 100A,MCCB	6	No.
c.	OUTGOING TPN, 63A,MCB	5	No.
d.	OUTGOING TPN, 32A,MCB	5	No.
e.	LTPDB-2 enclosure	1	No.
<b>3</b>	Lighting DB comprising following:		
a.	Incommer 4P, 100A,MCCB	2	No.
b.	OUTGOING , 32A,MCB	8	No.
d.	LDB enclosure	1	No.
<b>4</b>	Supply and installation of 1000A Bus duct.	10	meter
<b>5</b>	Supply and installation of 11kv XLPE 3 Core, 70sqmm, aluminium armoured cable.	150	meter
<b>6</b>	Supply of material and laying in ground including sand brick etc. complete 1.1 KV grade single tape armoured aluminium cable of following sizes including glanding crimping connections etc per meter of length (Make - Havells, Polycab or equivalent).		
a.	3 1/2 core 35 sq.mm	100	meter
b.	3 1/2 core 70 sq.mm	400	meter
c.	3 1/2 core 95 sq.mm	100	meter
d.	3 1/2 core 150 sq.mm	100	meter
e.	3 1/2 core 240 sq.mm	400	meter
f.	3 1/2 core 300 sq.mm	150	meter
g.	3 1/2 core 400 sq.mm	300	meter
<b>7</b>	Supply and installation of 175 KVAR capacity LT capacitor bank with APFC.	1	No.
<b>8</b>	Supply and installation of 4 pole 1250 A, changeover switch with enclosures complete.	1	No.
<b>9</b>	Supply and installation of 11 kv, 400 A indoor type VCB with enclosure	1	No.
<b>10</b>	Supply and installation of 60 W LED street light with pole 7m height.	5	No.
<b>11</b>	Supply, installation and connection of chemical earthing comprising following:		
a.	Chemical earthing electrode with filling compound, make (Electrogrip or equivalent).	10	No.
b.	GI Strip of size 25x3 mm.	100	kg
c.	Chemical earthing pit cover.	10	no.

12	Dismantling, shifting and installation of existing 2 nos. 500 kva transformers along with 1 no. 11kv,400A VCB.	1	LS
13	Supplying and making indoor cable end jointing with cast resin compound, including lugs & other jointing materials for 3 core 70 sqmm, 11 kv grade XLPE aluminium conductor.	4	each
14	Supplying and making outdoor cable end jointing with cast resin compound, including lugs & other jointing materials for 3 core 70 sqmm, 11 kv grade XLPE aluminium conductor.	4	each
15	Supply and making end termination with brass compression gland and aluminium lugs for following size of Pvc insulated and pvc sheathed XLPE aluminium conductor cable of 1.1 kv grade as required:		
a.	3.5 core 35 sqmm.	2	each
b.	3.5 core 50 sqmm.	2	each
c.	3.5 core 70 sqmm.	2	each
d.	3.5 core 95 sqmm.	2	each
e.	3.5 core 120 sqmm.	4	each
f.	3.5 core 150 sqmm.	2	each
g.	3.5 core 240 sqmm.	4	each
i.	3.5 core 300 sqmm.	4	each
16	Supply and installation of fire fighting equipments comprising following:	1	LS
a.	Soda acid 9 litres		
b.	CO2 9 kg.		
c.	Dry powder type ABC 6 kg.		
d.	water/sand buckets with stand.		

## **ELECTRICAL, ELECTRONICS & OTHER WORKS**

### **1.0 Electrical Scope of Work**

#### **1.1 SCOPE OF WORK**

The electrical works / equipment included in the scope of this work are listed below:

- 1.1.1 Dismantling shifting of existing substation equipment. The useful materials/components shall be shifted to the proposed sub station as per instruction of Engineer in charge or his representative.

- 1.1.2 Power receiving arrangement for proposed new substation from existing 11 kV terminal point.
- 1.1.3 Supply, Erection and commissioning of 11 kV Cable to feed the power from tapping point to 11 kV VCB panel.
- 1.1.4 Supply, Erection and commissioning of 11 kV Cable to feed the power from VCB panel to primary of 500 kVA Transformer.
- 1.1.5 Supply, Erection and commissioning of one no. 11 kV indoor metal enclosed vacuum circuit breaker.
- 1.1.6 Erection and commissioning of the 500 kVA 11/0.415 kV, one outdoor power transformer
- 1.1.7 Supply, erection and commissioning of the proposed sub-station equipment earthing, neutral earthing, earth pits of transformers and cable trenches including Civil works.
- 1.1.8 Supply, erection and commissioning of proposed two nos. of LT power distribution board, one at substation and other shall be install at hostel building with suitable size of MCCBs and ACBs. as tabulated in earlier clauses.
- 1.1.9 Supply erection and commissioning of LT Bus Duct from Secondary of transformer to LT PDB-1 and other LT cabling system including cable trays, conduits, cables and cable trenches with Civil works.
- 1.1.10 Supply, erection and commissioning of proposed one no. of lighting distribution board of situated size shall be provided in the electrical room of Hostel with suitable nos. of MCCBs and MCBs. as tabulated in earlier clauses.
- 1.1.11 Supply, erection and commissioning of protection system against lightning including civil works.
- 1.1.12 Supply erection and commissioning of lighting of substation and external lighting around the proposed Hostel Building.
- 1.1.13 Supply, erection and commissioning of suitable size of LT capacitor bank with APFC.
- 1.1.14 Supply, erection and commissioning of 2 nos. of Junction Box (minimum 12 nos. input/output) for joining the different size of cable.
- 1.1.15 All the cables inside substation building and outdoor shall be routed through cable trenches.
- 1.1.16 Cable trenches shall be provided from new proposed substation to junction boxes and from new proposed substation to other locations.
- 1.1.17 Supply, erection and commissioning of suitable size of Changeover Panel for DG set.

## **SYSTEM DESCRIPTION (ELECTRICAL)**

### **2.1 POWER SUPPLY AND DISTRIBUTION SYSTEM**

#### **2.1.1 EXISTING POWER SUPPLY ARRANGEMENT**

Existing load of IICM is being catered through a Substation having transformer capacity of 1X500 kVA, 11/0.44 kV and one number of 500 kVA, 11/0.44 kV transformer has been kept as spare. For backup power, two numbers of 250 kVA and one number of 500 kVA DG sets are existing.

#### **2.1.2 PROPOSED POWER SUPPLY ARRANGEMENT**

The existing substation shall be dismantled and shifted to a new location as the proposed hostel building will be constructed on location of the existing substation.

Power supply for the proposed hostel building and allied facilities shall be drawn from the proposed new sub-station. There will be no capacity enhancement of the substation as Existing Substation capacity is sufficient to cater the additional load of the proposed Hostel Building.

The existing switch Gear Panels has become very old and it is not in position for dismantling and re-installation. Furthermore, there is a need to make necessary arrangement so that existing power supply system is not hampered during dismantling/shifting operation. Hence, we have proposed a New LT power Distribution Switch Gear Panel, changeover panel and one number of indoor 11 kV VCB for primary control of 500 kVA, 11 kV/415 V to be installed in the New Sub-station building which is to be constructed before dismantling operation of the existing facility is carried out. This panel shall be fed through available spare transformer. Hence, in this scheme no additional transformers have been envisaged.

Phase wise shifting of the existing facilities shall be done. As the proposed substation will be shifted to a new location which is approximately 70 Mtr. away from the existing substation, provision of required additional cables has been made in this scheme. These cable will be used for making connections between existing cables and proposed LT PDB at new substation.

Different size of outgoing cables from the LT PDB proposed at substation shall be connected to existing cables with the help of two no. junction boxes. These junction boxes shall be proposed at two different strategic locations to cater the maximum number cables through junction boxes.

11 kV power supply shall be tapped from existing source of supply through suitable size and grade of aluminium conductor, armoured XLPE cable and same type of cable shall be used for Connection between VCB and primary of the transformer.

Bus duct of suitable capacity with Aluminium bus shall be used for connection between incomer of LT panel and secondary of the transformer.

For further distribution of power within the Hostel building, one LT Distribution Board shall be provided in the electrical room of Hostel Building.

Power from the LT Power Distribution Board at Substation shall be fed to LT Distribution Board at Hostel Building through Aluminium Conductor, PVC insulated Armoured cable. The cable shall be laid in trench.

### **2.1.2 BACKUP POWER**

At present two numbers of 250 kVA and one number of 500 kVA DG sets are installed for backup power. The capacity of these Dg sets are adequate to cater to the additional needs of the proposed hostel and hence no provision for additional DG sets has been made in this scheme.

### **2.1.3 EARTHING**

Earthing system shall be provided for safety of operating personnel as well as for proper system operation and performance of the protection device. Earthing system shall cover earthing of all electrical installation in Substation, Hostel Building and External installation. Earthing shall conform to the CEAR and the provisions of IS: 3043 (Current). The earthing system shall be designed to have impedance to ground as low as possible and the step and touch potentials shall be within safe limits.

Eight numbers of earth pits shall be provided at different location providing proper earthing. Four numbers of earth pits shall be provided in substation for proper earthing of transformer and other associated equipment. All the installation and accessories shall be connected to earth through suitable sizes of GI earth strips/wires.

### **2.1.4 ILLUMINATION**

Energy efficient LED lighting fixtures have been proposed for internal and external illumination. External illumination/street lights shall be done with 05 nos. 60 W LED lighting fixtures mounted 7m high steel tubular poles. A Lighting Distribution Board shall be provided in the electrical room of Hostel Building for controlling external illumination. Copper conductor PVC insulated armoured cable shall be used for power supply to external lighting system.

### **2.1.5 LT POWER DISTRIBUTION BOARD-1**

One LT Power Distribution Board (PDB) shall be provided in the Substation for distribution of LT power supply to different places of the premise. This LTPDB shall be fed power through bus duct from secondary of transformer. This PDB shall be comprising of one Air Circuit Breaker

(ACB) incomer and required nos. of MCCB outgoing feeders. The Incomer as well as outgoing feeder shall have necessary protections and metering arrangement.

LT Switch Board panel consists of the following:

<b>Sl. No.</b>	<b>Description</b>	<b>No. of panels</b>
<b>1</b>	Incomer ACB, 1250 A, 55 KA, ACB with CTR: 1000 - 500/5 A	1
<b>2</b>	Outgoing 4P, 630 A, MCCB	2
<b>3</b>	Outgoing 4P, 400 A, MCCB	2
<b>5</b>	Outgoing 4P, 200 A, MCCB	14
<b>6</b>	Outgoing 4P, 100 A, MCCB	9
<b>7.</b>	11 kV, 1250 A Changeover Panel	1

#### **2.1.6 LT POWER DISTRIBUTION BOARD-2**

One LT Power Distribution Board (PDB) shall be provided in the Hostel Building for distribution of LT power supply to different floors of the building and other facilities in the proposed hostel premise. This PDB shall be comprising of one MCCB incomer and required nos. of MCCB/MCB outgoing feeders. The Incomer shall have metering arrangement.

LT Switch Board panel consists of the following

<b>Sl. No.</b>	<b>Description</b>	<b>No. of panels</b>
<b>1</b>	Incomer 4P, MCCB, 300 A,	1
<b>2</b>	Outgoing 4P, 100 A, MCCB	6
<b>3</b>	Outgoing TPN, 63 A, MCB	5

<b>5</b>	Outgoing TPN, 32 A, MCB	<b>5</b>
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### 2.1.7 LIGHTING DISTRIBUTION BOARD

One lighting distribution board (LDB) of situated size shall be provided in the electrical room of Hostel Building shall be provided to cater the internal and external lighting loads consists the following:

<b>Sl. No.</b>	<b>Description of Panel of LDB</b>	<b>No. of panels</b>
<b>1</b>	Incomer TPN, 100 A, MCCB	<b>2</b>
<b>2</b>	Outgoing TPN, 32 A MCB	<b>8</b>

### 2.1.8 CAPACITOR BANK

The current Power Factor at sub-station has been observed as around 0.93 lag. Hence, there is a scope of improving the Power Factor upto 0.98. Hence, suitable size of LT capacitor bank with automatic power factor correction shall be provided at the substation considering the existing load as well as the additional load of proposed facilities.

### 2.1.9 FIRE FIGHTING

Suitable firefighting system consisting of portable fire extinguishers, sand buckets etc. as per the IE Rules to quench electric fires in the substation shall be provided.

### 2.1.10 Cable Trenches

All the cables inside substation building and outdoor shall be routed through cable trenches. The cable trenches shall be fixed with cable trays for supporting power and control cables in outdoor and in indoor substation room. The trenches shall be constructed with a gradient for easy flow of water. Power and control cables should be segregated by running them on separate racks.





## TECHNICAL SPECIFICATIONS

### LIST OF SPECIFICATIONS

#### ELECTRICAL

Sl. No.	Item Description
SP/E-01	10 kV Surge Type Lightning Arrestors
SP/E-02	11 kV, Off Load Isolator with Earth Switch
SP/E-03	11 kV Indoor Vacuum Circuit Breaker
SP/E-04	415 V Capacitor Bank With APFC
SP/E-05	415 V Power Distribution Board (PDB)
SP/E-06	Moulded Case Circuit Breakers (MCCB)
SP/E-07	Miniature Circuit Breakers (MCB)
SP/E-08	Cables
SP/E-09	Accessories of Cabling
SP/E-10	Steel Tubular Poles for Lighting
SP/E-11	Earthing and Lightning Protection System
SP/E-12	Lighting Distribution Boards (L.D.B.)
SP/E-13	Switch Boards and Lighting Circuits
SP/E-14	LED Lamp & Luminaire
SP/E-15	Miscellaneous Items

**Specification No. SP/E-01****1.0 SPECIFICATION FOR 10 kV SURGE TYPE LIGHTNING ARRESTORS****1.1 SCOPE**

This specification covers requirements for 10 kV Surge type Lightning Arrestors at site and suitable for outdoor application.

The 10 kV Surge type Lightning Arrestors shall comply with the latest revision of IS: 3070 except where modified or extended by the provision of this specification and with the relevant parts of standards mentioned in clause 1.2.

Any material and component not specifically stated in this specification but necessary for trouble free operation of the equipment and accessories specified herein shall deemed to be included.

**1.2 OTHER RELEVANT STANDARDS**

The other relevant Indian standards are as under:

IS: 4004 : Application guide for non linear resistor type surge arrestors.

IS: 5350 : Dimensions for outdoor porcelain post insulators.

**1.3 DESIGN CRITERIA**

The 10 kV Surge type Lightning Arrestors shall be suitable for 11000V ( $\pm 10\%$ ), 3-phase, 50 Hz ( $\pm 3\%$ ) power supply. The arrestor shall be suitable for operation in a restricted earthed neutral system. The arrestor shall be able to sustain power frequency spark over voltage up to 45 kV. The Lightning Arrestors shall withstand standard impulse withstand voltage of 85 kV. Maximum residual voltage at nominal discharge current shall be 45 kV. The nominal discharge current carrying capacity has been specified in **Annexure-I** at the rated voltage and frequency.

**1.4 CONSTRUCTIONAL FEATURES**

The lightning arrestor shall be line type and gapless. The arrestors shall be composed of units of non-linear resistors made of Zinc oxide.

**1.5 PERFORMANCE****Electrical Features**

The lightning arrestor shall ensure:

- a) Continuous operation at rated voltage (10 kV & 50 Hz) while carrying out effectively and without damage the automatic extinction of the follow up current.
- b) Continuous operation within variation for voltage between  $\pm 10\%$ , and frequency variation between  $\pm 3\%$  and combined voltage and frequency variation of 10%.
- c) The arrestors shall divert any switching surge in excess of basic insulation level at the relevant nominal system voltage and cut off follow-up current of power frequency.

**ANNEXURE -I****TECHNICAL PARAMETERS FOR 10 KV SURGE TYPE****LIGHTNING ARRESTORS**

1	Nominal System Voltage	:	11 kV
2	Highest system voltage	:	12 kV
3	Rated Voltage	:	10 kV
4	Power frequency spark over voltage	:	45 kV
5	1.2/50 Spark over voltage	:	85 kV (peak)
6	Maximum residual voltage at nominal discharge current	:	45 kV (peak)
7	Nominal discharge current	:	10 kA
8	System	:	3 Phase, 50 C/S, Neutral restricted earthed
9	Type	:	Gapless.
10	Location	:	Outdoor as per the drawing
11	Mounting	:	Bracket mounted on structure
12	Other requirements	:	i) Grounding terminal ii) Post insulator conforming to IS: 5350.
13	Line terminals	;	Each terminal should be suitable to accept ACSR/Al bus and it should be suitable both for vertical take off.
14	Standards to conform	:	IS: 4004 & IS : 3070.



## **1.0 SPECIFICATION FOR 11 kV OFF LOAD ISOLATOR AND EARTHING SWITCH**

### **1.1 SCOPE**

This specification covers requirements for 11 kV, Off Load Isolator and Earthing Switch suitable for outdoor application.

The 11 kV, Off Load Isolator and earthing switch shall comply with the latest revision of IS: 1818 except where modified or extended by the provision of this specification and with the relevant parts of standards mentioned in clause 1.2.

Any material and component not specifically stated in this specification but necessary for trouble free operation of the equipment and accessories specified herein shall be deemed to be included.

### **1.2 OTHER RELEVANT STANDARDS**

The other relevant Indian standards are as under:

IS:3043 : Code of practices for earthing.

IS:11353 : Guide for uniform system of marking and identification of conductors and apparatus terminals.

IS:5350(Part 3): Dimensions for outdoor porcelain post insulators.

IS:13134 : Guide for selection of Insulators in respect of pollution conditions.

IS:2486 : Insulator fittings for over head power lines with a nominal voltage greater than 1000 volts.

IS:2099 : Bushings for alternating voltages above 1000 volts.

### **1.3 SYSTEM DETAILS**

The rotating units shall be supported by thrust/taper roller bearings. All moving parts shall be fitted with non-ferrous bushes. The operating mechanism shall comprise of suitable bars and GI pipes of adequate length brought down a pole to a handle provided with galvanized guides. The same shall have arrangement for padlocking as OFF and ON position of the switch.

## 1.4 DESIGN FEATURES

The design of isolators shall be in accordance with the latest practice. However following points shall be taken into consideration.

### Electrical Features

- a) The 11 kV, Off Load Isolator and Earthing Switch shall be suitable for 11000V, 3-phase, 50 Hz power supply.
- b) The isolator shall be designed for an operating temperature of 70°C.
- c) All similar components shall be interchangeable and shall be of same type and rating for easy maintenance and low spare inventory.
- d) Continuous operation at rated current at specified ambient conditions.
- e) Continuous operation within variation for voltage between  $\pm 10\%$  and frequency variation between  $\pm 3\%$  and combined voltage and frequency variation of 10%.
- f) The rated current carrying capacity, breaking and making capacity of the Isolator has been specified in **Annexure-I**
- g) The isolator, when earthing switches are used, shall have arrangement for fixing the same. The earthing switch shall have independent manual drive with mechanical interlock to prevent mal-operation.

### Interlock

Interlocking arrangement shall be provided with the control of circuit breaker to prevent on load operation of the isolator. In this, necessary numbers of auxiliary contacts shall be provided on the isolator.

### Mechanical Features

The isolator should be fitted with Arching horns to interrupt light load and magnetizing current on transformer.

The Isolator shall be designed to withstand severe weather conditions and should be capable of withstanding electro-dynamic stresses due to short circuit.

The incoming and outgoing terminals connections should be suitable for ACSR conductors (Panther).

## 1.5 CONSTRUCTIONAL FEATURES

### Switch Blades

The blade shall be made of hard drawn electrolytic copper strips liberal section to give extra strength and thermal capacity. All copper parts should be silver plated and ferrous parts metallized to give smooth finish.

### Main Bearing

The main bearing ball thrust or taper roller bearing supporting the main rotating insulator operating shaft shall be adjustable in the field if necessary. The insulator shall be bolted to the top of the sheet steel base of fabricated construction. All working parts shall be made of non-rusting steel or specially treated to resist corrosion and the hole shall be brass bushed.

## 1.6 FITTINGS AND SPARES

All standard fittings shall be provided





**ANNEXURE - I**

**TECHNICAL PARAMETERS FOR 11 KV, OFF LOAD ISOLATOR  
AND EARTHING SWITCH**

1. Nominal System Voltage : 11 kV
2. System highest voltage : 12 kV
3. Rated Current : As per requirement
4. Rated Voltage & Frequency : 11 kV, 50 Hz
5. No. of Phases : 3
6. Rated Current of earthing switch : As per requirement
7. Rated Insulation Level
  - 7.1 One minute power frequency withstand voltage : 28 kV rms
  - 7.2 Lightning impulse withstand voltage : 85 kV peak
8. Type of interlock between Isolating and earthing switch : Integral Mechanical
9. Operating mechanism : Manual, off load, air break gang operated outdoor with or without earth switch
10. Mounting : Structure mounted
11. Type : Horizontal mounted centre, post rotating, manually operated, with or without earth switch
12. No. of phases per set : Three
13. Contacts : Contact shall be designed to withstand rated current without over-heating. The switch shall have self aligning hard drawn electrolytic copper contacts.
14. Reference standard : IS: 1818
15. Application : Outdoor
16. Earthing switch : Shall be provided
17. Supporting insulator : The supporting insulator shall be 3 nos. of post type brown glazed porcelain insulator per phase and tested in accordance with IS: 2544 of 1973 (latest version)

## 18. Accessories

- : Base channel of hot dipped galvanized iron
- Operating down rod with complete mechanism
- : Operating handle, mounting base, pad lock system
- Square rod of phase gang operation
- : Post insulators conforming to IS: 5350.
- Earth Switch
- :
- :
- :

## **1.0 SPECIFICATION FOR 11 KV INDOOR METAL ENCLOSED VACUUM CIRCUIT BREAKER**

### **1.1 SCOPE**

This specification covers requirements for 11000V Metal enclosed Vacuum Circuit Breaker panels suitable for indoor application. VCB should be of adequate class for measuring and protection for 11/.415 kV, 500kVA Transformer.

The successful tenderer shall supply 1 no., 11 kV, VCB at consignee substation, unload VCB, bus bar coupling, dismantling of existing OCB's and commissioning work.

### **1.2 DESIGN CRITERIA**

The Circuit Breaker shall be suitable for 11000V (  $\pm 10\%$ ), 3-phase, 50 Hz (  $\pm 3\%$ ), power supply. The circuit breaker shall comply with the latest revision of IS: 13118.

All similar components shall be interchangeable and shall be of same type and rating for easy maintenance and low spare inventory.

The rated current carrying capacity shall be as specified in this document at the rated voltage and frequency and the circuit breaker shall carry rated current continuously while complying with this specification. The breaking and making capacity of the circuit breaker shall be as specified in this document.

### **1.3 CONSTRUCTIONAL DETAILS/GENERAL TECHNICAL REQUIREMENTS**

#### **1.3.1 The Vacuum Circuit Breaker unit**

1.3.1.1 The Breaker unit shall be of horizontal DRAW OUT construction.

#### **1.3.2 Operation of the Breaker**

The breaker shall be electrically operated locally.

The necessary indicating devices for ON/OFF/TRIP indication and operation counter shall be provided.

Terminal blocks for control cables shall also be provided for interfacing with other breakers if required. The closing shall be electrical.

#### **1.3.3 Duty Cycle**

The duty cycle is O – 0.3 sec - CO - 3 min -CO

### **1.4 PERFORMANCE**

1.4.1 The design of the circuit breakers and accessories shall be in accordance with the latest standard practice and shall be such as to facilitate Inspection, clearing, repairs, maintenance and operation and shall ensure safety operations under situation of sudden variations of loads and voltages as may be required under local operating conditions.

The breaker shall ensure:

- a) Continuous operation at rated current at specified ambient conditions.
- b) Continuous operation within variation for voltage between + 10%, and frequency variation between + 3% and combined voltage and frequency variation of 10%.

1.5 Installation of Circuit Breaker unit shall be in scope of bidder. Suitable class of Current Transformer and Potential Transformer shall be provided.

### **1.6 NAME PLATE**

The name plates of the circuit breaker and its operating device shall have suitable marking as under:

Manufacturer

Type designation and serial number  
Rated voltage  
Rated frequency  
Rated normal current  
Short circuit withstand capacity  
Rated short circuit breaking current  
Rated supply voltage of closing and opening devices  
Rated supply frequency of closing and opening devices  
Operating duty  
Supply voltage of auxiliary circuits  
Supply frequency of auxiliary circuits  
Weights  
Rated operating sequence  
Year of manufacture

**TECHNICAL PARAMETERS OF 11kV INDOOR VCB PANEL**

1	Installation	: Indoor Panel
2	Number of Poles	: 3
3	System Voltage	: 11000 V ( $\pm 10\%$ ),
4	Rated current (A)	: 1250 A
5	Making capacity	: 33 kA (peak minimum)
6	Frequency	: 50 Hz ( $\pm 3\%$ ),
7	Symmetrical breaking capacity	: 250 MVA
8	Rated short circuit breaking current	: 13.1 kA (rms minimum)
9	Operating Mechanism	: Manual & Motorized spring charged (230 V AC). Trip free mechanism along-with ON/OFF/TRIP Indication.
9.1	Manual/Electrically operated	: Manual and Electrical with closing and shunt trip coil.
10	Tripping arrangement	: AC shunt trip mechanism.
11	Meters to be provided	: Ammeter and Voltmeter with selector switches, PF meter, KWH meter.
12	Protections to be provided	: i) Short circuit ii) Overload iii) Earth Fault i) Earth leakage ii) Over Voltage vi) Under voltage
13	Indications on Control panel	: ON, OFF, TRIP, LOCKOUT, CONTROL SUPPLY, SPRING CHARGED.
14	Terminal arrangement	:
14.1	Incoming	: Conductor : Aluminium Type : XLPE Size : Suitable size
14.2	Outgoing	: Conductor : Aluminium Type : XLPE Size : Suitable size
15	Control supply	: As per requirement.
16	Control wiring	: 1.5 mm <sup>2</sup> , 660 V, PVC, Copper conductor 2.5 mm <sup>2</sup> , 660 V, PVC, Copper conductor for C.T. secondary connection.
17	Current Transformer	: Of adequate class for measuring and protection with 5 A secondary. Suitable for protection of 11kV/415 V, 500kVA Transformer
18	Use of breaker as	: Incomer cum Transformer control

## 1.0 SPECIFICATION FOR CAPACITOR BANKS

### 1.1 SCOPE

- 1.1.1 This specification covers requirements for 415 V shunt capacitor banks suitable for indoor installation.
- 1.1.2 The capacitor banks shall comply with the latest version of IS: 2834 and IEC-831-1 & 831-2 except where modified or extended by the provision of this specification and with the relevant parts of standards mentioned in clause 2.0.

### 1.2.0 OTHER RELEVANT STANDARDS

The other relevant Indian Standards are as under:

- IS : 12672 Internal fuses and internal over pressure disconnectors for shunt capacitors
- IS : 9046 A.C. contactors of voltages above 1000 V up to and including 11000V
- IS : 13118 General requirements for circuit breakers for voltages above 1000V
- IS : 9920 Switches and switch isolators for voltages above 1000 V
- IS : 13947 L.V. switch gear and control gear (Part 4 section 1- contactors)
- IS : 13947 L.V. switch gear and control gear (Part 3 - switches)
- IS : 13947 L.V. switch gear and control gear (Part 2 - circuit breakers)
- IS : 9402 High voltage fuses for the external protection of shunt capacitors
- IS : 13703 L.V. Fuses for voltages not exceeding 1000V A.C.
- IS : 3043 Code of practice for earthing

### 1.3.0 DESIGN

The capacitor units shall be designed for the following :

- (a) Watt losses 0.5 W per kVAR
- (b) Temperature withstand category of 55<sup>0</sup> C
- (c) Output (kVAR) tolerance not exceeding 10 %
- (d) Capacitor - fuse co-ordination to reduce risk of tank rupture
- (e) Use of bio degradable eco friendly dielectric compound
- (f) Switching life not less than 60,000 operations

#### 1.4.0 CONSTRUCTION

- 1.4.1 The basic units shall be made of dielectric compound polypropylene film impregnated with non-PCB bio-degradable liquid. Foil shall be preferred over paper for better heat dissipation and lower operating temperature.
- 1.4.2 The basic units shall be insulated for power frequency withstand voltages.
- 1.4.3 The basic units shall be provided with protection against sustained overload, earth fault and voltage/current unbalance, self healing type pressure sensitive detector for sensing excessive internal pressure, pressure activated tripper switch for tripping, discharge resistors and automatic power factor correction relay.
- 1.4.4 Each unit shall be supplied in a M.S. container with enamel paint finish.
- 1.4.5 Each element of capacitor unit shall have its own built in special fuse. In case of fault in an element, the over voltage on the remaining elements shall not exceed 10%. Internal discharge resistance shall be provided to limit the residual voltage to less than 50 volt as per relevant standard.
- 1.4.6 The capacitor banks shall be designed to withstand electro-dynamic and thermal stresses caused by transient over currents during switching.
- 1.4.7 To eliminate unduly frequent switching when peak load of short duration occur, a time relay shall be provided.
- 1.4.8 Zero voltage relay shall be provided to reset the control devices to their neutral position, so that on restoration of supply after any supply interruption, the capacitor stages are switched on again without any undesirable current and voltage peak.

#### 1.5.0 PERFORMANCE

- 1.5.1 The unit shall deliver rated output within the limits of watt losses indicated in clause 3.0 without over heating within the limits of ambient temperature indicated in clause 2.1.6.
- 1.5.2 The Capacitor Banks shall be grouped in different kVAR rating, which shall be switched ON/OFF as required according to load connected. For this purpose capacitor kVAR shall be subdivided into a number of regulating stages. The regulating stages shall be switched ON/OFF by means of suitable relay to ensure the system power factor to 0.98 lagging. To eliminate unduly frequent switching when peak load of short duration occur a time delay relay shall be incorporated for stage to stage switching. In case of supply interruption a NO volt relay shall set the control devices to their neutral position. The tenderer shall also provide necessary reactive power relay, No volt relay, control devices and switching devices mounted separately in a dust tight vermin proof sheet metal enclosed cubicle suitable for floor mounting. This cubicle shall also be provided with other devices, such as, current and voltage transformer, protective relays, voltmeter, ammeter with selector switch, auxiliary relay etc.,



which are essential for automatic switching of capacitor banks.

All internal wiring for control sensing instruments, relays etc. shall be done with 650V grade, PVC insulated copper conductor of size not less than 2.5 mm<sup>2</sup>. The capacitor bank shall be rated for continuous operation and shall be suitable for indoor installation.

The Bidder shall indicate the level of improved power factor in the offer.

**ANNEXURE – I****TECHNICAL SPECIFICATION**

1.	Applicable Standard	:	IS : 2834
2.	System	:	415 V, 3 phase 50 Hz solid earthed system
3.	Location	:	Sub-station A & B– 4 Nos.
4.	No. of phases	:	Three
5.	Connection	:	Star/Delta
6.	Output kVAR	:	As required
7.	Insulation level	:	As per relevant IS
8.	Overload	:	1.3 times rated current continuously
9.	Losses	:	Less or equal to 0.5 W/ kVAR
10.	Output tolerance	:	10 % (Max)
11.	Inrush Current	:	Not exceeding 100 times rated current
12.	Peripherals to be supplied	:	Discharge resistors, HRC Fuse, Racks, Isolators
13.	Accessories	:	Control Panel with Automatic P.F. Correction relay
14.	Discharge device	:	Discharge Resistor
15.	Container	:	MS Sheet

**Specification No. SP/E-05****1.0 SPECIFICATION FOR 415 V POWER DISTRIBUTION BOARD (PDB)****1.1 SCOPE**

This specification covers requirements for 415V PDBs, metal enclosed, dust and vermin proof conforming to the latest revision of IS: 8623-1993 The switchboard shall be suitable for indoor application.

**1.2.0 OTHER RELEVANT STANDARDS**

The other relevant Indian standards are as under:

IS : 3043 : Code of practices for earthing.

IS : 4237 : General requirements for switchgear and control gears for voltages not exceeding 1000V AC.

IS : 2551 : Danger Notice Plates

IS : 5082 : Wrought Aluminium Alloys for electrical purpose

IS : 6005 : Code of practice of phosphating iron and steel

IS : 3202 : Code of practice for climate proofing of electrical equipment

IS : 2147 : Degree of protection provided by industrial enclosures

IS : 5 : Colours for ready mixed paints and enamels.

**1.3.0 DESIGN CRITERIA**

The board shall operate on a 415V (+ 10%), 3 phase, 4 wire, 50 Hz (+ 3%) power supply. Fault withstand capacity shall not be less than 50 kA for one second.

The board shall have power frequency withstand voltage of 2500V. All similar components shall be interchangeable and shall be of same type and rating for maintenance and low spare inventory.

**1.4.0 CONSTRUCTIONAL FEATURES**

1.4.1 The board shall be made of sheet steel enclosures, 1.6 mm thick.

1.4.2 Degree of protection of the enclosure shall be IP 42 with coats of paints conforming to IS: 5.

1.4.3 The bus bars shall be TPN, Aluminium and of required rating. The bus bars shall be mounted on non-hygroscopic, anti-tracking, flame retardant, self-extinguishing insulators. The bus bars shall be PVC insulated. The bus bar

system should incorporate integral single piece bar and coupling links to avoid chances of hot spot developing as is possible with bolted construction of bus bar and links. The bus bars should be shrouded against accidental contact. Two conduit entry plates at the top and the bottom should facilitate drilling of holes at site to suit individual requirements.

- 1.4.4 The earthing of the board shall be done by 25mm x 5mm GI strips at two opposite ends of the panel body
- 1.4.5 Panel incomer shall be provided with three phase volt meters and ammeters of suitable range.
- 1.4.6 The switches of the MCCB/MCBs units shall be protruded type.
- 1.4.7 The board shall have a display of Danger Notice.

**ANNEXURE - I****TECHNICAL INFORMATION FOR 415 V PDB**

1	Installation	:	Indoor
2	Enclosure	:	Single front, IP 42
3	Rated voltage	:	415 V
4	Bus bar	:	TPN (Aluminium)
5	Rated current of incoming MCCBs	:	As required
6	Bus bar rating	:	As required
7	Short time rating	:	50 kA rms for 1 second
8	Withstand voltage	:	2500 V, 50 Hz, 1 min.
9	Cable termination	:	In Incoming MCCB unit
10	Earthing	:	GI strip 25mm x 5 mm.
11	Finish	:	Two coats of primer and one coat of final paint as per IS : 5.

**Specification No. SP/E-06****1.0 SPECIFICATION FOR 415 V MOULDED CASE CIRCUIT BREAKERS****1.1 SCOPE**

This specification covers requirements for 415V Moulded Case Circuit Breakers suitable for installation in a switchboard (PDB).

The Moulded case circuit breakers shall comply with the latest revision of IS: 13947(Part- I) and IEC: Publication 947 except where modified or extended by the provision of this specification and with the relevant parts of standards mentioned.

**1.2.0 OTHER RELEVANT STANDARDS**

The other relevant Indian standards are as under:

- IS: 3072 : Code of practice for installation and maintenance of switchgear.
- IS : 4237 : General requirements for switchgear and control gears for voltages not exceeding 1000V AC.
- IS : 10118 : Code of practice for selection, installation and maintenance of Switchgear and Control gear.
- IS : 11353 : Guide for uniform system of marking and identification of conductors and apparatus terminals.

**1.3.0 CONSTRUCTIONAL DETAILS**

- 1) The Circuit breakers shall be four pole, moulded case air break type.
- 2) The circuit breakers shall have tripping mechanism for over load and short circuit irrespective of the type of operating mechanism. In addition, provision shall be made for manual tripping of the breaker. The breakers shall be fixed type.
- 3) Circuit Breakers shall be provided with anti-pumping and trip free feature.
- 4) Tripping shall be possible by means of front mounted "OFF" switch. Making of the breaker shall be possible by means of "ON" switch.
- 5) Suitable indications shall be provided on circuit breaker to show "ON", "OFF", conditions.
- 6) The following protection (release type) shall be provided:
  - a) Ambient temperature compensated thermal overload trip with adjustable settings.
  - b) Magnetic Short circuit trip

**1.4.0 PERFORMANCE**

- 1) The temperature rise of parts of the equipment like terminals, accessible parts, main circuit, windings of coils and electromagnets etc. measured

during the test carried out in accordance with IS: 13947 (Part I) shall not exceed temperature rise limits specified in the said standard.

- 2) The dielectric property of the equipment shall conform to co-ordination of insulation related to insulation levels indicated in IS: 13947 (Part I).
- 3) The equipment shall be capable of making and breaking load and overload currents without failure under the conditions stated in the relevant product standard for the required utilization category.
- 4) The equipment shall be capable of withstanding thermal and electromagnetic stress from short circuit currents during current making, current carrying in the closed position and during current interruptions.

#### **1.5.0 NAME PLATE**

The name plates of the circuit breaker shall have suitable marking as under:

- Manufacturer
- Type designation and serial number
- Rated voltage
- Rated current
- Rated frequency
- Short circuit withstand capacity
- Short circuit breaking capacity
- Weight
- Year of manufacture

**ANNEXURE - I****TECHNICAL SPECIFICATION FOR 415 V MOULDED CASE CIRCUIT BREAKER**

1	Installation	:	Switch board
2	Number of Poles	:	4
3	Service Voltage	:	415 V ( $\pm 10\%$ )
4	Rated current (A)	:	As required
5	Making capacity	:	25 kA (peak)
6	Frequency	:	50 Hz ( $\pm 3\%$ )
7	Interrupting capacity of breakers	:	P1 for MCCB
8	Symmetrical breaking capacity	:	55 kA (rms)
9	Short time current for 1 Second	:	55 kA (rms)
10	Settings	:	As required
11	Operating Mechanism	:	Manual Trip free
12	Tripping arrangement	:	Thermal overload and Short circuit electromagnetic release.
13	Protections to be provided	:	As per requirement
14	Cable Entries	:	
14.1	Incoming	:	Suitable for PVC SWA with aluminium conductor. Totally shrouded to avoid risk of electric shock to operating personnel.
14.2	Outgoing	:	Connected to Bus.
15	Execution	:	Fixed



## **1.0 SPECIFICATION FOR MINIATURE CIRCUIT BREAKERS (MCB)**

### **1.1 SCOPE**

This specification covers requirements for Miniature Circuit Breakers (MCB) suitable for installation in switchboards (PDB/LDB).

The Miniature circuit breakers shall comply with the latest revision of IS: 8828-1993 except where modified or extended by the provision of this specification and with the relevant parts of standards.

### **1.2.0 OTHER RELEVANT STANDARDS**

The other relevant Indian standards are as under:

- |           |   |   |
|-----------|---|---|
| IS: 3072  | : | Code of practice for Installation and Maintenance of switchgear.                              |
| IS: 4237  | : | General requirements for switchgear and control gears for voltages not exceeding 1000V AC.    |
| IS: 10118 | : | Code of practice for selection, installation and maintenance of Switchgear and Control gear.  |
| IS: 11353 | : | Guide for uniform system of marking and identification of conductors and apparatus terminals. |

### **1.3.0 DESIGN CRITERIA**

The breakers shall operate on a 415 V ( $\pm 10\%$ ), 3 phase, 50 Hz (-3% to 3%) power supply. Fault withstand capacity shall not be less than 9 kA for one second.

The rated carrying capacity shall be as specified in Annexure I at the rated voltage and frequency and the breaker shall carry this current continuously while complying with this specification.

### **1.4.0 CONSTRUCTIONAL FEATURES**

- i) The circuit breaker shall have current limiting devices with an inverse time delayed thermal trip device and an undelayed magnetic trip device to take care of steady overload and short circuit faults respectively. The breakers should be suitable for switching/ protection of lighting circuits.
- ii) The technical data for Circuit breakers are given in Annexure V.



**ANNEXURE I**

**TECHNICAL INFORMATION FOR  
MINIATURE CIRCUIT BREAKERS MCB**

1	Application	:	Switch board
2	Number of poles	:	2 / 3/4
3	Rated Current	:	As Required
4	Breaking capacity	:	9 kA
5	System voltage	:	230V ( $\pm 10\%$ )/415V ( $\pm 10\%$ )
6	Frequency	:	50 Hz ( $\pm 3\%$ )
7	Enclosure of the breakers	:	Moulded self-extinguishing thermoset plastic.
8	Dolly (Switching lever)	:	Can be locked in either OFF or ON position.
9	Fixing	:	Snap fitting
10	Cable Terminal	:	Suitable for PVC SWA with aluminium conductor. Totally shrouded to avoid risk of electric shock to operating personnel.
11	Operating mechanism	:	Manual Trip Free
12	Tripping Arrangement	:	Magnetic Short Circuit Release. Thermal Overload Release.

## **SPECIFICATION FOR CABLES**

### **1.0 SPECIFICATION FOR XLPE INSULATED HT CABLES**

#### **1.1 SCOPE**

- 1.1.1 This specification covers requirements for 11 kV grade XLPE insulated Aluminium conductor HT cables.
- 1.1.2 The cable shall comply with the latest version of IS:7098 except where modified or extended by this specification and with the relevant parts of standards mentioned in clause 1.2.

#### **1.2 CODES**

The other relevant standards applicable are as under :

- IS : 10418      Specification of drums for electric cables
- IS : 8130      Conductors for insulated electric cables and flexible cords
- IS : 3975      Specification for mild steel wires, strips and tapes
- IS : 10462      Fictitious calculation method for determination of dimensions of protective covering of cables. Part I elastomeric and thermoplastic insulated cables
- IS : 2          Rules for rounding off values
- IS : 10810      Method of test for cables (Part 0 to Part 63)
- IS : 1885      Electrotechnical vocabulary part 32, cables, conductors and accessories
- IS : 4905      Methods for random sampling.

#### **1.3 CONSTRUCTION**

##### **1.3.1 Material**

- (a) The conductor shall be Aluminium wires and the insulation used shall be Cross Linked Poly Ethylene compound.
- (b) The outer sheath, fillers and inner sheath shall have FRLS property
- (c) Armouring shall be Galvanised round steel wire. Galvanised steel wires shall comply with the requirements of relevant Code. A binder tape on the armour shall be provided.

### 1.3.2 Constructional features

The conductor shall be of stranded construction complying with class 2 of relevant code. A protective barrier shall be provided between the conductor and the insulation and this shall be compatible with the insulating material and the operating temperature of 90°C.

The conductor with protective barrier shall be provided with XLPE insulation applied by extrusion. Cables rated 11 kV shall be provided with conductor screening and insulation screening.

The average thickness of insulation shall be as per relevant IS.

Core identification shall be made by numerals (1,2,3) either by applying numbered strips or by printing on the cores.

Armouring shall be provided over the inner sheath.

The nominal diameter of round armour wire shall be as per relevant IS.

The colour of the outer sheath shall be black. The thickness of outer sheath shall be as per relevant IS.

## 2.0 SPECIFICATION FOR 660/1100 V GRADE PVC ARMoured CABLE

### 2.1 SCOPE

2.1.1 This specification covers requirements for 660 V/1.1 kV grade PVC insulated (Heavy duty) armoured Aluminium conductor electric cables.

2.1.2 The cable shall comply with the latest version of IS:1554 (Part 1) except where modified or extended by this specification and with the relevant parts of standards mentioned in clause 2.2.

### 2.2 CODES

The other relevant standards applicable are as under:

IS : 10418 : Specification of drums for electric cables

IS : 8130 : Conductors for insulated electric cables and flexible cords

IS : 3975 : Specification for mild steel wires, strips and tapes

IS : 5831 : PVC insulation for armouring cables and sheath of electric cables

IS : 10462 : Fictitious calculation method for determination of dimensions of protective covering of cables. Part I elastomeric and thermoplastic insulated cables

IS : 2 : Rules for rounding off values

IS : 10810 : Method of test for cables (Part 0 to Part 63)

IS : 1885 : Electro technical vocabulary part 32, cables, conductors and accessories

## 2.3 CONSTRUCTION

### 2.3.1 Material

- (a) The conductor shall be Aluminium wires conforming to relevant codes and the insulation used shall be Poly Vinyl Chloride (PVC) compound conforming to the requirements of Type A and Type C compound conforming to relevant codes.
- (b) The outer sheath, fillers and inner sheath shall have FRLS property.
- (c) Armouring shall be Galvanised round steel wire. Galvanised steel wires shall comply with the requirements of relevant Code. A binder tape on the armour shall be provided.

### 2.3.2 Constructional features

The conductor shall be of stranded construction complying with class 2 of relevant codes. A protective barrier shall be provided between the conductor and the insulation and this shall be compatible with the insulating material and the operating temperature of 70°C.

The conductor with protective barrier shall be provided with PVC insulation applied by extrusion.

The average thickness of insulation shall be as per relevant IS.

Armouring shall be provided over the inner sheath.

The armour of the cables shall consist of galvanized round steel wires. The nominal diameter of round armour wire shall be as per relevant IS.

## 3.0 SPECIFICATION FOR 660 /1100 V GRADE UNARMoured CABLE

### 3.1 SCOPE

- 3.1.1 This specification covers requirements for 660 V/1.1 kV grade PVC insulated unarmoured Aluminium conductor electric cables for power supply to light & fan circuits.
- 3.1.2 The cable shall comply with the latest version of IS: 14449 except where modified or extended by this specification and with the relevant parts of standards mentioned in clause 3.2.

### 3.2 CODE

The other relevant standards applicable are as under :

- IS : 3961 Recommended current ratings for PVC insulated cables
- IS : 5831 PVC insulation and sheath of electric cables
- IS : 8130 Conductors for insulated electric cables and flexible cables
- IS : 10810 Methods of tests for cables

### 3.3 CONSTRUCTION

#### 3.3.1 Material

- (a) The conductor shall be stranded Aluminium wires conforming to relevant codes and the insulation used shall be Poly Vinyl Chloride (PVC) compound conforming to the requirements of Type A compound conforming to relevant codes.
- (b) The fillers and sheath shall have FRLS property

#### 3.3.2 Conductor

- (a) The construction of the conductors shall be for fixed wiring and the conductor shall be of stranded construction.
- (b) The conductor shall be provided with PVC insulation applied by extrusion.
- (c) The sheath shall be applied by extrusion. It shall be applied over the laid up cores fitting closely and shall have FRLS property.. It shall be possible to remove the sheath without damage to the sheath. The colour of the sheath shall be Black.

## 4.0 SPECIFICATION FOR 660/1100 V GRADE CONTROL CABLE

### 4.1 SCOPE

- 4.1.1 This specification covers requirements for 660 V/1.1 kV grade PVC insulated armoured copper conductor control cables.
- 4.1.2 The cable shall comply with the latest version of IS:1554 (Part 1) except where modified or extended by this specification and with the relevant parts of standards mentioned in clause 4.2.

### 4.2 CODES

The other relevant standards applicable are as under:

- IS : 10418 : Specification of drums for electric cables
- IS : 8130 : Conductors for insulated electric cables and flexible cords
- IS : 3975 : Specification for mild steel wires, strips and tapes
- IS : 5831 : PVC insulation for armouring cables and sheath of electric cables
- IS : 10462 : Fictitious calculation method for determination of dimensions of protective covering of cables. Part I elastomeric and thermoplastic insulated cables
- IS : 2 : Rules for rounding off values
- IS : 10810 : Method of test for cables (Part 0 to Part 63)
- IS : 1885 : Electrotechnical vocabulary part 32, cables, conductors and accessories
- IS : 4905 : Methods for random sampling.

### 4.3 CONSTRUCTION

#### 4.3.1 Material

- (a) The conductor shall be Copper wires conforming to relevant codes and the insulation used shall be Poly Vinyl Chloride (PVC) compound conforming to the requirements of Type A and Type C compound conforming to relevant codes.
- (b) The outer sheath, fillers and inner sheath shall have FRLS property
- (c) Armouring shall be Galvanised round steel wire. Galvanised steel wires shall comply with the requirements of relevant Code. A binder tape on the armour shall be provided.

#### 4.3.2 Constructional features

The conductor shall be of stranded construction complying with class 2 of relevant codes. A protective barrier shall be provided between the conductor and the insulation and this shall be compatible with the insulating material and the operating temperature of 70<sup>0</sup>C.

The conductor with protective barrier shall be provided with PVC insulation applied by extrusion.

The average thickness of insulation shall be as per relevant IS.

Armouring shall be provided over the inner sheath.

The armour of the cables shall consist of galvanized round steel wires. The nominal diameter of round armour wire shall be as per relevant IS.

### 5.0 FLEXIBLE TRAILING CABLES

Flexible Trailing cables shall be 6.6 kV / 1.1 kV grades, shall have annealed tinned stranded copper conductor, EPR insulated, EPR inner sheathed, FRLS, GI wire braid armoured and CSP outer sheathed cables conforming to IS: 14494.

### 6.0 SPECIAL CABLES

Special cables shall be provided including but not limited to the following:

- a) Temperature detectors from HT motors to the selector switches,
  - b) Temperature detectors to associated electronic enclosure, etc.
- These cables shall be heavy duty Fire Retarding Low Smoke and self extinguishing, colour coded, shielded, armoured copper conductor 650/1100 volts grade coaxial screwed compensating mineral insulated etc.

### 7.0 PERFORMANCE

The cables shall carry the rated current for the type of installation and ambient temperature in accordance with the relevant Code. The cable shall also be able to withstand the fault level in accordance with the relevant Code.



**TECHNICAL INFORMATION FOR XLPE INSULATED HT CABLES**

Applicable Code	- IS 7098
Cable Code	- A2XWY/2XWY
Voltage Grade	- 11 KV
Conductor Size	- As required
No. of Cores	- Three

**TECHNICAL INFORMATION FOR 660/1100 V GRADE PVC ARMOURED CABLE**

Applicable Code	- IS 1554 (Part-1)
Cable Code	- AYWY
Voltage Grade	- 660/1100 V
Conductor Size	- As required
No. of Cores	- 2 / 3 / 3.5 / 4

**TECHNICAL INFORMATION 660 /1100 V GRADE UNARMoured CABLE**

Applicable Code	- IS 694
Cable Code	- AYY
Voltage Grade	- 660/1100 V
Conductor Size	- As required
No of Cores	- Two/Three/Four

**TECHNICAL INFORMATION FOR 660/1100 V GRADE CONTROL CABLE**

Applicable Code	- IS 1554 (Part-1)
Cable Code	- YWY
Voltage Grade	- 660/1100 V
Conductor Size	- 1.5 mm <sup>2</sup> (for internal wiring) / 2.5 mm <sup>2</sup> (for external connections)
No. of Cores	- As required

**Specification No. SP/E-09**

## **SPECIFICATION FOR ACCESSORIES OF CABLING**

### **1.0 SCOPE**

- 1.1 This covers requirements for accessories of cabling work like cable trays, cable ladders, PVC & Steel conduits and fittings, support systems.

### **2.0 CODE**

The applicable codes are as under:

IS 732	Code of practice for electrical wiring
IS 513	Cold rolled low carbon steel and strips.
IS 1079	Hot rolled carbon steel and strips.
IS 9537	Conduits for electrical installation.
IS 2667	Fittings for rigid steel conduits for electrical wiring.
IS 8309	Compression type tubular terminal ends for Aluminium conductors of insulated cables .
IS 2629	Recommended practice for hot dip galvanizing.
IS 2633	Methods for testing uniformity of coating of Zinc coated articles.
IS 1367	Technical supply conditions for threaded steel fasteners.
IS 1663	Method for tensile testing of steel sheet & strip of thickness 0.5 mm to 3 mm.

### **3.0 CONSTRUCTION**

#### **3.1 Cable trays, fittings and accessories**

- i) In RCC trenches, the cable trays shall be of cantilever construction, with one or multi tiers complete with matching fittings (like elbows, bends, reducers, tees, crosses, etc.), accessories (like side coupler plates etc.) and hardware (like bolts, nuts, springs, washers, etc.) as may be required. In vertical sections the trays shall be of ladder construction with one or multi tiers complete with matching fittings (like elbows, bends, reducers, tees, crosses etc.), accessories (like side coupler plates etc.) and hardware (like bolts, nuts, springs, washers, etc.) as may be required.
- ii) Cable trays, fittings and accessories shall be fabricated out of rolled Mild Steel sheets free from flaws such as laminations, rolling marks, pitting etc. conforming to relevant codes. Minimum thickness of Mild Steel sheets used for fabrication of cable trays and fittings shall be 2mm. The thickness of side coupler plates shall be minimum 3 mm. These shall be hot dip galvanized.
- iii) Cable trays in the RCC trenches shall be of standard width 250 mm and of standard lengths 2.5 metre. Cable ladders shall be of widths varying between

150 to 250 mm and of standard lengths 2.5 metre.

- iv) Each size and type of cable tray / ladder of 2.5 metre length and 250 mm width simply supported at the ends and uniformly loaded @ 76 kg. per metre shall not have deflection at the mid span exceeding 7 mm.

### 3.2 **Support System for Trays and Cables**

The support system shall be fabricated from standard structural steel members. The cable trays and support system shall be painted after installation with one coat of red lead primer, one coat of oil primer followed by two finishing coats of Aluminium paint.

### 3.3 **Conduits, Fittings and Accessories**

Conduits offered shall be rigid steel & PVC complete with fittings and accessories (like bends, check nuts, sockets etc.). The size of the conduit shall be selected on the basis of maximum 40% fill factor and in accordance with relevant code .

#### i) **Rigid Steel Conduits**

Rigid steel conduits conforming to relevant codes shall be threaded on both sides and suitable for mechanical stresses. Conduits shall be smooth at inside and outside. Conduits shall be plugged by PVC caps at the ends for storage and transportation. Outer surface of conduit shall be hot dip galvanized and shall have high protection against corrosive and polluting substances. Inner surface of a conduit shall be protected against corrosion and polluting substances by hot dip galvanising. Fittings and accessories shall also be hot dip galvanised.

#### ii) **Junction / Joint Boxes & power receptacles circuits**

Junction Box/cable joint boxes with IP:55 degree of protection, shall comprise a case and a detachable cover or hinged doors constructed out of cold rolled steel sheet of minimum thickness 2 mm. Top of the boxes shall be arranged to slope towards rear of the box. Gland plate shall be 3 mm thick sheet steel with neoprene/synthetic rubber gaskets. All junction boxes shall be suitable for mounting on walls, columns & structures. The boxes shall include brackets, bolts, nuts, screws, glands, lugs, earthing stud required for erection. Terminal blocks inside a junction box shall be of 660 volts grade. It shall be complete with insulating barriers, clip-on-type terminal numbering for wiring diagrams & arranged to facilitate easy termination. Twenty percent spare terminals shall be provided in each terminal block.

#### iii) **Cabling Accessories:**

##### a) **Cable Glands :**

Cable glands shall be single compression type suitable for the voltage grade of cables and as per relevant codes. The glands shall be of robust construction capable of clamping cable and cable armour firmly. All washers and hardware shall be made of brass with nickel chrome plating. Rubber components shall be

of neoprene.

**b) Cable Lugs :**

Cable lugs shall be tinned copper solder or crimping type suitable for the voltage grade of cables suitable for Aluminium conductor cables and copper conductor control cables.

**c) Galvanising**

Galvanising of steel components and accessories shall conform to relevant codes. The amount of zinc deposit over threaded portion of bolts, nuts, screws and washers shall be as per relevant codes.

**d) Painting**

Cable supports and cable trays mounting structures and all other non galvanized parts shall be brushed before giving one coat of red lead primer, one coat of oil primer followed by two finishing coats of Aluminium paint.

## **SPECIFICATION FOR STEEL TUBULAR POLES FOR LIGHTING**

### **1.0 SCOPE**

- 1.1 This specification covers requirements for swaged type steel tubular poles for outdoor lighting.
- 1.2 The poles shall comply with the requirements of IS: 2713 except where modified or extended by this specification and with the relevant part or standards mentioned in clause 2.0.

### **2.0 OTHER RELEVANT STANDARDS**

The other relevant standards applicable are as under :

- IS:209 - Specification of Zinc
- IS :2633 - Method of testing weight, thickness, and uniformity of coating on hard dipped, galvanising articles.
- IS : 728 - Method on determination of weight, thickness and uniformity of coating on galvanised articles other than wires & sheets.
- IS : 1573 - Specification for zinc plating
- IS :5 - Colour for ready mixed paints and enamels.

### **3.0 CONSTRUCTION**

- 3.1 The tubular poles shall consist of 3 or 4 sections of dimensions conforming to the relevant standard.
- 3.2 The thickness of the steel sheets shall conform to the relevant standards.
- 3.3 The section shall be hard dip galvanised in accordance with the relevant standards.
- 3.4 The section shall be applied with 2 coats of primer and one coat of final paint in accordance with the relevant standards.
- 3.5 In case of swan neck pole, top section shall be curved in accordance with the requirement. The lamp fixture shall freely fit in with the coupler. For other type of poles, the lamp fixture mounted on a bracket clamped on the pole at a height of not less than 7 m from the road surface and projecting at least 1.3 m into the road from the centre of the pole.
- 3.6 The lower most section shall be provided with a base plate having holes for firm fixation in the foundation. The height of the pole shall be 9 m.

The bidder/supplier shall submit the dimensioned drawings for different sections for approval by Purchaser before fabrication.

## 1.0 SPECIFICATION FOR EARTHING & LIGHTNING PROTECTION SYSTEM

### 1.1 SCOPE

This specification covers the requirements for earthing system.

Earthing system shall be in strict accordance with IS: 3043 and Indian Electricity Rules/Acts.

### 1.2 SYSTEM DESCRIPTION

The earthing system shall consist of earth pits and earthing conductors located near the Substation Building & proposed Hostel Building.

### 1.3 CONSTRUCTION

The primary requirements of the earthing system are as follows:

- i. Frame work of equipment shall be effectively connected to nearest pit by two separate GI flats or a combination of GI flats & wires of the sizes mentioned below:

Equipment	Earth conductor buried in earth	Earth conductor above ground level & in built up trenches
a) 415 V/230 V PDB 230 V LDB Lighting pole	Not applicable	25 x 6 mm GI flat 8 SWG GI wire 8 SWG GI wire
b) 1 kW to 30 kW Fractional Horse Power	Not applicable Not applicable	25 x 6 mm GI flat 8 SWG GI wire
c) Columns, structures, cable trays, bus duct enclosures	Not applicable	25 x 8 mm GI flat

- ii. Each earth pit shall have GI pipe electrode not smaller than 40 mm. The buried length of the electrode shall not be less than 2.5 meters. Each electrode shall be buried vertically in an earth pit of minimum 300 mm x 300 mm area and 3 meters depth preferably by using homogenous mixture of bentonite clay and soil (Chemical Earthing) in the ratio of 1:3. The distance between two earth pits shall be maintained at least double the length of the electrode pipe and earth pits shall be constructed away from drains.
- iii. All conductors for earthing shall be made of Galvanised Iron (GI).
- iv. The grids inter connecting the pits shall have an area not less than 300 Sq mm and be buried at a depth not exceeding 600 mm below the soil. Back filling shall be placed in layers of 150 mm. Earthing conductors embedded in the concrete floor of the building shall have approximately 50 mm concrete cover.
- v. Each pit shall be provided with a cast iron top cover for inspection & identification.
- vi. Metallic frame of all electrical equipment shall be earthed by two separate and distinct connections to earthing system each of 100% capacity. Each continuous laid out lengths of cable tray shall be earthed at minimum two places by GI flats

to the earthing system, the distance between earthing points shall not exceed 30 meter. Different sections of cable trays shall be connected by low resistance connecting links.

- vii. Neutral connections and metallic conduits/pipes shall not be used for the equipment earthing. Lightning protection system down conductors shall not be connected to other earthing conductors above the ground level.
- viii. Connections between earth leads and equipment shall normally be of bolted type.
- ix. A minimum earth coverage of 300 mm shall be provided between earth conductor and the bottom of trench/foundation/underground pipes at crossing. Earthing conductors crossing the road can be installed in hume pipes. Wherever earthing conductor crosses on runs at less than 300 mm distance along metallic structures such as air, water, pipe lines, steel reinforcement in concrete, it shall be bonded to the same.
- x. Earthing conductors along their run on columns, walls, etc. shall be supported by suitable welding/cleating at interval of 1000 mm and 750 mm respectively.

#### **1.4 LIGHTNING PROTECTION SYSTEM**

- a) Lightning protection system shall be in strict accordance with IS:2309.
- b) Lightning conductor shall be of 25 x 6 mm GS strip when used above ground level. It shall be connected through test link with earth electrode/earthing system.
- c) The Bidder shall furnish the details including typical arrangement drawings for the lightning protection system offered.
- d) Down conductors shall be as short and straight as practicable and shall follow a direct path to earth. Down conductor shall not be connected to other earthing conductors above ground level. The size of down conductor of each mast shall not be lower than 65 x 8 mm. Each down conductor shall be effectively connected to independent earthing pit .
- e) Each down conductor shall be provided with a test link at 1000 mm above ground level for testing but it shall be inaccessible to interference. No connections other than the one direct to an earth electrode shall be made below a test point.
- f) All joints in the down conductors shall be of welded type.
- g) All metallic structures within a vicinity of two meters of the conductors shall be bonded to conductors of lightning protection system.
- h) The lightning protection system shall not be through cables, conduits and metal enclosures of electrical equipment.
- i) Lightning conductors shall not pass through or run inside GI Conduits.
- j) Testing link shall be made of galvanised steel of size 25 x 6 mm.

**Specification No. SP/E-12****SPECIFICATION FOR 230V LIGHTING DISTRIBUTION BOARD****1.0 SCOPE**

This specification covers requirements 230 V switchboard (LDB).

Switch board shall conform to IS : 8623 with the relevant parts of standards mentioned in clause 2.0 except where modified or extended by the provision of this specification.

**2.0 OTHER RELEVANT STANDARDS**

The other relevant Indian standards are as under:

IS : 3043 : Code of practices for earthing.

IS : 4237 : General requirements for switchgear and control gears for voltages not exceeding 1000V AC.

IS : 10118 : Code of practice for selection, installation and maintenance of Switchgear and Control gear.

IS : 11353 : Guide for uniform system of marking and identification of conductors and apparatus terminals.

IS : 8588 : Thermostatic bimetals

**3.0 CONSTRUCTION****3.1 General****3.2 Enclosure**

The enclosure shall be manufactured from at least 2 mm thick steel sheets in aesthetically appealing powder coated finish. The boards are to confirm to the requirement of IS: 8623 for factory built assemblies.

**3.3 Bus bar system**

The bus bar system should incorporate integral single piece bar and coupling links to avoid chances of hot spot developing as is possible with bolted construction of bus bar and links. The bus bar system should accept double pole and single pole circuit breakers in any combination of these. The bus bars should be shrouded against accidental contact. The circuit breakers should be arranged in two horizontal or vertical banks with switch levers operating in vertical or horizontal planes for on-off switching. The mounting of breakers



should be quick snap and easy removal type without disturbing the other breakers. It should be capable of being connected to at least cable sizes of 25 mm<sup>2</sup> for phase conductors and 16 mm<sup>2</sup> for neutral conductors. Two conduit entry plates at the top and the bottom should facilitate drilling of holes at site to suit individual requirements.

### **3.4 Distribution Boards**

- 3.4.1 These breakers shall be current limiting devices with an inverse time delayed thermal trip device and an un-delayed magnetic trip device to take care of steady overload and short circuit and earth leakage faults respectively. The breakers shall be suitable for switching/control/protection/regulation of lighting, control and motor circuits.
- 3.4.2 The circuit breakers should also be suitable for protection/control/switching of single phase, 230 Volt motors.
- 3.4.3 The technical data for Circuit breakers are given in Annexure-IA.
- 3.4.4 The technical data for Distribution Boards are given in Annexure-IB.

**ANNEXURE - I****TECHNICAL SPECIFICATION FOR  
DISTRIBUTION BOARDS**

- |    |                               |  |
|----|-------------------------------|--|
| 1  | Applicable Standard           | : IS : 8623  |
| 2  | Bus current carrying capacity | : Suitable with DP                                   |
| 3  | Enclosure                     | : 2 mm thick CRCA sheets.                            |
| 4  | No. of outgoing               | : As Required  |
| 5  | No. of incoming               | : 1 No.  |
| 6  | Mounting                      | : Channel mounted / Flush top cover.                 |
| 7  | Cable entry                   | : Top / Bottom cable entry conduits.                 |
| 8  | Protection                    | : IP 42 (Metallic double door) degree of protection. |
| 9  | Finishing                     | : Powder coated finish.                              |
| 10 | Locking                       | : Pad locking facility.                              |
| 11 | Bus bar                       | : Shrouded type integral single piece bus bar.       |
| 12 | Arrangement of breakers       | : Vertical/Horizontal arrays.                        |

## SPECIFICATION FOR SWITCH BOARDS FOR LIGHTING CIRCUITS

### 1.0 SCOPE:

This covers requirements for switch boards for tube light & fan circuits.

### 2.0 CODES:

The applicable codes are as under:

IS : 1293	3-Pin, plug and socket outlets
IS : 3954	Switches for domestic and similar purposes
IS : 694	PVC unarmoured 660 V grade cable
IS : 5133	Boxes for enclosure of electrical accessories - Steel and cast iron boxes
IS : 9224	Low voltage fuses

### 3.0 CONSTRUCTION:

#### 3.1 Switch Boards

- i) The switch boards shall be made of 1.6 mm thick, MS sheet with decorative bakelite cover. The switch boards shall be provided with earthing terminal, mounting holes and screws, specified number of conduit knock outs on both sides etc. The switch boards shall be suitable for surface mounting. The switchboards shall mount double pole MCBs and sockets.
- ii) The switches shall be Double pole MCBs, quick make quick break suitable for operation on 230 V AC supply.
- iii) The sockets shall be of 5 pin type 5/15 A, 230 V AC socket with 15 A switch.
- iv) The switch boards shall be adequately sized to accommodate switches/fan regulators/sockets. All switch boards mounted items shall be fully wired by 660 V grade PVC insulated flexible Copper wire.
- v) All in-coming and out-going wires shall be suitable for loop in loop out of 4 Sq. mm stranded Aluminium wire and tap off of 1.5 mm<sup>2</sup> copper wire.

**TECHNICAL INFORMATION**

1.	Rated Voltage	:	230 V
2.	No of 5A Double pole MCBs	:	As required
3.	No of 5/15A , 3/5 pin socket with 16A MCBs	:	As required
4.	No. of fan regulators (electronic)	:	As required
5.	Rewirable fuse 5A with base	:	As required
6.	Top cover	:	Decorative Bakelite
7.	Switch board	:	1.6 mm thick MS sheet
8.	Internal wiring	:	with 660 V grade by 1.5 Sq mm Copper cable
9.	Mounting	:	Flush/projected
10.	Earthing	:	Two terminals shall be provided for earthing by 8 SWG GI Wire

**Specification No. SP/E-14****1.0 SPECIFICATION FOR LED LAMP & LUMINAIRE**

- 1.1 The scope of work includes design, development, manufacturing, testing, supply, installation and commissioning of energy efficient luminaire complete with all accessories, LED lamps with suitable current control driver circuit including mounting arrangement for recessed type & ceiling mounting arrangements for indoor lighting and pole/mast mounted for outdoor lighting. The luminaire shall be suitable for rugged service under the operational and environmental conditions encountered during service. Each type of luminaire shall be supplied with associated driver circuit compatible with LEDs in all respect as required including complete optics.
- 1.2 The illumination system shall be designed such that the outdoor and indoor areas remain illuminated properly to achieve safety and operational efficiency and convenience. The levels of outdoor and indoor illumination shall be as specified in relevant IS.
- 1.3 Wherever service conditions and requirements laid down in these specifications differ from applicable standards, the conditions specified herein shall prevail.

## 1.3.1 REFERRED STANDARDS

IS: 513	:	Cold-rolled low carbon steel sheets and strips
IEC 60529	:	Classification of degree of protections provided by enclosures.
EN 55015, CISPR15	:	Limits and methods of measurement of radio disturbance characteristic of electrical lighting and similar equipment.
IEC 62031	:	LED modules for general lighting-Safety requirements
EN 61547	:	Equipment for general lighting purposes – EMC immunity requirement.
EN 60929	:	Performance, AC supplied electronics ballast for tubular fluorescent lamps performance requirement.
IEC 60598-2-1	:	Fixed general purpose luminaires
IEC 60598-1	:	Luminaires - General requirement and tests
IEC 61000-3-2	:	Electro Magnetic compatibility (EMC) -Limits for Harmonic current emission - (equipment input current $\leq 16$ Amps. per phase.
IEC 60068-2-38	:	Environmental Testing :Test Z- AD: composite temperature/humidity cyclic test
IEC 61347-2-13	:	Lamp control gear : particular requirements for DC or AC supplied electronic control gear for LED modules.
IS 10322	:	Specification for the luminaires
IS 4905	:	Method for random sampling
LM 79	:	LED luminaire photometry measurement.
LM 80	:	Lumen Maintenance
IEC 62384	:	DC or AC supplied electronic control gear for LED modules performance requirements
IEC/PAS 62612	:	Self-ballasted LED lamps for general lighting services- Performance requirements

### 1.3.2 OTHER RELEVANT STANDARDS

The following Indian Standards applicable are as under:

IS:16101: 2012	:	General Lighting - LEDs and LED modules – Terms and Definitions
IS:16102 (Part 1): 2012	:	Self- Ballasted LED Lamps for General Lighting Services Part 1 Safety Requirements
IS:16102(Part 2) : 2012	:	Self-Ballasted LED Lamps for General Lighting Services Part 2 Performance Requirements
IS:16103(Part 1): 2012	:	Led Modules for General Lighting Part 1 Safety Requirements
IS:16103(Part 2): 2012	:	Led Modules for General Lighting Part 2 Performance Requirements
IS:15885(Part2/Sec13): 2012	:	Safety of Lamp Control Gear Part 2 Particular Requirements Section 13 d.c. or a.c. Supplied Electronic Controlgear for Led Modules
IS: 16104: 2012	:	d.c. or a.c. Supplied Electronic Control Gear for LED Modules - Performance Requirements
IS: 16105: 2012	:	Method of Measurement of Lumen Maintenance of Solid State Light (LED) Sources
IS: 16106: 2012	:	Method of Electrical and Photometric Measurements of Solid-State Lighting (LED) Products
IS: 16107 Part 1:2012	:	Luminaires Performance Part 1 General Requirements
IS: 16107-1:2012	:	Luminaires Performance Part 2 Particular Requirements Section 1 LED Luminaire
IS: 16108: 2012	:	Photo biological Safety of Lamps and Lamp System

### 1.4 CONSTRUCTIONAL DETAILS/GENERAL TECHNICAL REQUIREMENTS

- 1.4.1 All lighting fixtures shall be Pressure Die Cast Aluminum housing with corrosion resistant polyester powder coating & safety as per IS 10322 and shall have mounting bracket with aiming & locking facilities. Power Factor of the fixtures shall be not less than 0.95.

- 1.4.2 Housing, if not used as a heat sink shall be made of at least 0.8 mm thick sheet Steel conforming to IS: 513 (Grade O)/CRCA polyester powder coated of at least 60 microns) and high U.V. & corrosion resistance. Heat sink used should be aluminum extrusion having high conductivity preferably to grade 6061 alloy or better having thermal conductivity of at least 170-180 W/m.K or Aluminium die cast having high conductivity preferably ADC 12 or LM 24. Efforts shall be made to keep the overall outer dimensions as minimum as possible.

All luminaires shall be provided with toughened glass of min. 0.8 mm thickness of sufficient strength and high efficiency (90%) prismatic diffuser under the LED chamber to protect the LED and luminaries and shall not show yellowness during luminaire life time.

- 1.4.3 Suitable number of LED lamps shall be used in the luminaires.
- 1.4.4 Suitable reflector / lenses may also be provided to increase the illumination uniformity and distribution.
- 1.4.5 Bidder will be solely responsible for testing and performance of the luminaries after installation and shall also ensure the specified and uniform illumination and comfort level on the work desk/ floor/area.
- 1.4.6 Design of the thermal management shall be done in such a way that it shall not affect the properties of the diffuser.
- 1.4.7 In outdoor area lighting, totally enclosed dust and vermin proof luminaries (IP 65) with LED lamps shall be used. The junction boxes shall be as per IS: 2148 with IP 65 enclosures.
- 1.4.8 All wiring for indoor illumination shall be of concealed type with PVC conduit.
- 1.4.9 Sizes of cables will be selected based on continuous current ratings with derating factors and a maximum of 3% voltage drop.

## 1.5 TECHNICAL SPECIFICATIONS

- 1.5.1 This specification covers requirement for fixtures of LED lamps in various applications.
- 1.5.2 The luminary casing/housing shall be of Stainless steel SS304 grade or aluminum having high conductivity preferably grade 5000 or similar to high conductivity heat sink material.
- 1.5.3 High power and high lumen efficient LEDs suitable for following features shall be used:
- The efficiency of the LED lamps at 85°C junction temperature shall be more than 85%.
  - The working life of the lamp at junction temperature of 85°C at rated current shall be more than 50,000 working hours of accumulative operation and shall be suitable

for continuous operation of 24 hours per day.

- c. Adequate heat sink with proper thermal management shall be provided.
- d. Colour temperature of the proposed white colour LED shall be 5700k (nominal CCT) and the color variation should be in the range of 5500- 7000K.
- e. Minimum view angle of the LED shall not be less than 120°.
- f. The output of LED shall be more than 100 lumen per watt at minimal operating current and shall ensure guaranteed operation life of 50,000 burning hours with controlled junction temperature of 85° C.
- g. Power factor of complete fitting shall be more than 0.9 at full load 230V (L-L).
- h. Thermal management shall be in such a way that LED soldering point temperature shall not go beyond 75°C.
- i. Input frequency range shall be between 50 Hz  $\pm$  3%.
- j. The LED luminaire shall be free of glare.
- k. Color rendering index CRI  $\geq$  75

#### 1.5.4 LED DRIVER specification used for street/flood light shall be as follows:

- a. Input voltage Range within 180V rms to 270V rms
- b. Operating input voltage 230V (L-L).
- c. No load power consumption  $\leq$  500mW
- d. Output voltage 105V DC $\pm$ 3%
- e. Output voltage ripple should be within 3%
- f. Output over voltage protection 125V DC
- g. Power factor 0.95
- h. Full Load Efficiency  $\geq$  85%
- i. THD <10 %
- j. Hot swapping
- k. Load regulation  $\pm$ 5%
- l. Current waveform should meet EN 61000-3-2
- m. Maximum Temperature rise  $\leq$  30°C @ 45°C Temp. with safety margin of 10°C
- n. The driver should comply to CISPR 15 for limits and methods of measurement of



## Radio Disturbance characteristics.

- o. The equipment should comply to IEC 61547 for EMC immunity requirements.
- p. The control gear should be compliant to IEC 61347-2-13, IEC 62031 and IEC 62384 as per the requirements

1.5.5 The equipment should be compliant to IEC 60598-1, IEC 62031 and IEC/PAS 62612 depending on the type of luminaire. The equipment should be compliant to IEC 60598-1, IEC 62031 and IEC/PAS 62612 depending on the type of luminaire.

## 1.6 TECHNICAL REQUIREMENTS

1.6.1 The electronic components used shall be as follows:-

- a) IC (Integrated circuit) shall be of industrial grade or above.
- b) Metallic film / Paper/Polyester Capacitor shall be rated for a temperature of at least 105°C.
- c) The resistors shall be preferably made of metal film of adequate rating. The actual rating versus loading shall be by a factor of 3.
- d) The conformal coating used on PCBs must be cleared and transparent and shall not affect colour code of electronic components or the product code of the company.
- e) The construction of PCBs and the assembly for components for PCBs should be as per relevant Indian /international standards.
- f) The electronics covered for this equipment shall pass all the tests covered under relevant Indian / International standards specification.
- g) The connecting wires used inside the luminaires, shall be low smoke halogen free, fire retardant e-beam cable and fuse protection shall be provided in input side.
- h) For outdoor fixtures, Care shall be taken in the design that there is no water stagnation anywhere. The entire housing shall be dust and water proof having IP65 or above protection and the light shall pass driving rain test/jet water test.
- i) The LED Module(s), Driver gear, etc. shall be designed in such a way so that temperature of heat sink shall not exceed 30°C above the ambient temperature.
- j) All the material used in the luminaires shall be halogen free and fire retardant confirming to UL94.
- k) The LED Luminaires shall have an input connector which shall be made of fire retardant material & its construction shall be water proof
- l) Each LED should have necessary lens /reflector for better distribution of light at surface.
- m) The heavy components shall be properly fixed. The solder connection shall be with good finish.
- n) The electronics covered for this equipment shall pass all the tests called for in the specification.

1.6.2 Care shall be taken in the design that there is no water stagnation anywhere. The entire housing for indoor type fittings shall be dust and water proof having at least IP20 protection as per IEC 60529.

1.6.3 Luminaire shall be such that the glare from individual LED is restricted and shall not cause inconvenience to the people. The Diffuser should be used in the luminaire to restrict the glare of LEDs.

1.6.4 In-Built protection of the luminary shall be as follows:

- a) Surge Protection – 4 kV
- b) Over Voltage Protection – 280 V
- c) Short Circuit Protection – Constant current limit mode.
- d) Over temperature protection – Auto shut off.

1.6.5 Optics of the luminary shall comprise of secondary lens array for optimizing roadway photometric distribution.

1.6.6 High /Low voltage cut-off shall be provided.

1.6.7 The whole luminaire shall be eco-friendly green technology based i.e. mercury free. No UV and IR radiations shall be produced.

1.6.8 Access of driver for maintenance shall be provided at the top/side of the luminaire fixture.

1.6.9 The LED Module(s), Driver gear, etc. shall be designed in such a way so that temperature rise of heat sink should not increase more than 20°C even after 48 hrs. of continuous operation.

1.6.10 All fasteners shall be of stainless steel.

1.6.11 Any material, component or accessory not specifically stated in this specification but necessary for trouble free operation shall deemed to be included.

## 1.7 **Street light fixtures**

The reflector shall be made of Pressure Die Cast Aluminum housing with corrosion resistant polyester powder coating & safety as per IS 10322.

The cable entry shall be from the side.

A locking device shall be provided to prevent unauthorised opening of the fixture.

The fixture shall be suitable for mounting 70 Watt LED lamps.

## ANNEXURE-I

## TECHNICAL SPECIFICATION OF LED LIGHTING

1.	Supply Source	:	230 V
2.	IP Protection	:	Luminary, Optical & Control Gear compartment with IP65 or more for Outdoor and IP20 or more for Indoor.
3.	LED Array Wattage (Rated Wattage)	:	30 W ( $\pm 5\%$ )/50 W ( $\pm 5\%$ )/120 W ( $\pm 5\%$ )/200 W ( $\pm 5\%$ ) and as per requirement
4.	Luminaire Efficacy	:	$\geq 100$ (lumens/watt)
5.	Total System Wattage (Luminary Wattage)	:	$\leq$ (Rated Wattage + 10% of Rated Wattage)
6.	Frequency	:	$50 \pm 3\%$ Hz
7.	System Power Efficiency	:	$\geq 85\%$
8.	Driver Efficiency	:	$\geq 85\%$
9.	Ballast	:	Electronic type with PF>0.95
10.	Operating Temperature Range	:	- 10°C to + 60°C
11.	Operating Humidity	:	10% to 90% RH
12.	Colour Temperature	:	5500- 7000K.
13.	Control Gear	:	Prewired with PVC insulated Copper wiring up –to terminal block.
14.	Power Factor	:	Greater than 0.95
15.	Colour Rendering Index	:	Minimum CRI of 75
16.	Total Harmonic Distortion (THD)	:	< 10 % maximum

17.	Jn. Temperature of LED at 25°C	:	$\leq 65^{\circ}\text{C}$
18.	Heat Sink temperature rise above ambient	:	$\leq 30^{\circ}\text{C}$
19.	Thermal Management of LED	:	Good thermal management system should be provided and LED must be mounting on Heat sink conductive aluminium with suitable large area surface by means of fins to dissipate the heat to ambient air.

20.	Internal surge Protection against lightning or any other electrical surge	:	At least Up to 5KV
21.	Control Circuit	:	Compatible with LED
22.	System Components	:	All printed circuit board must be MCPCB
23.	Electrical connector	:	Lead wire of required length for connection
24.	Life Expectancy	:	Above 50,000 burning hours 70% lumens
25.	Luminary Housing	:	i) Pressure Die Cast Aluminum housing with corrosion resistant polyester powder coating & safety as per IS 10322. ii) Should have mounting bracket with mounting angle adjustment facility & aiming & locking facilities. iii) Suitable large surface area with fins to dissipate the heat to ambient air and block any accumulation of dust / water.

## SPECIFICATION FOR MISCELLANEOUS ITEMS

The following general requirements shall be applicable to all the miscellaneous items furnished under these specifications.

### **1.0 Metal Enclosed Non-segregated Phase Bus Duct**

- 1.1 Metal enclosed non-segregated phase bus duct assemblies shall be supplied for incoming connection from the transformers to MCCs.

The enclosure shall be made of aluminium alloy. The section of the bus duct shall be rectangular. The enclosure sheet thickness shall not be less than 3 mm.

The entire duct shall be designed for dust, vermin and weatherproof construction. A suitable aluminium sheet hood shall be provided to cover all outdoor bus duct enclosure joints to facilitate additional protection against rainwater ingress. Bus duct enclosure in the indoor portion shall have a degree of protection not less than IP-52 and that in the outdoor portion shall have a protection not less than IP-55 accordance with IS 2147.

Flexible expansion joints for the enclosure shall be provided wherever necessary.

Enclosures shall be provided with flanged ends with drilling dimensions to suit the flanges at the switchgear and transformer terminals. The flanges shall be provided with gaskets, nuts, bolts, etc.

Suitable inspection covers shall be provided for periodic inspection of insulators. Handles shall be provided on inspection covers to facilitate lifting.

Synthetic/neoprene gasket shall be provided so as to satisfy the operating conditions imposed by temperature, weathering, durability etc. Flange gasket shall be provided at the equipment terminal connections.

Bus duct enclosure shall be connected to station earth grid at both ends.

Necessary earthing arrangement as applicable shall be provided with clamps to receive station earthing bus. All accessories and hardware required for the earthing arrangement shall be provided by the bidder. Suitably rated GI earth strip shall run all along the bus duct and shall be bolted to each section of bus duct enclosure at least at two places.

- 1.2 Bus Duct space Heaters

Space heaters shall be provided in the bus ducts, wherever considered necessary for preventing harmful moisture condensation.

The space heaters shall be suitable for continuous operation on 240V AC, 50 Hz, single phase supply, and shall be automatically controlled by thermostats.

### 1.3 **FIRE FIGHTING SYSTEM :**

The switch-gear rooms in the sub-stations and all strategic points shall be provided with fire fighting equipment of the following class:

Class B (Foam type) : IS : 933

Class A (Soda Acid) : IS : 934

Class BC (Dry Powder) : IS : 933

The equipment shall be portable, wall mounted with refilling and recharging facility from time to time.

### 1.4 **Painting:**

All electrical equipment should be painted as per relevant code in accordance with respective manufacturer's standard practice.

### 1.5 **Standards:**

The electrical equipment included in this tender shall comply with relevant IS specifications and IS code of practice. In the absence of IS, BS, any other standard of repute shall be followed.

### 1.6 **Tests:**

The offer shall include all test certificates as required by ISS and Indian Electricity Rules.

### 1.7 **Fitting & Spares:**

All standard fittings should be provided. The tenderer shall quote item-wise unit price for spare parts.

### 1.8 **Guarantee:**

All the supplies should be guaranteed for a period of one year from the date of installation and commissioning.

### 1.9 **Completeness of Offer:**

The details given in the write-up/specifications (including drawings) in respect of electrical system/equipment are indicative, not exhaustive. The electrical system/equipment shall co-ordinate with mechanical system/equipment of the plant.

If any electrical component or equipment with associated wiring is considered necessary and desirable as per Indian Electricity Rules amended up to date read with various circulars issued by the Director General of Mines Safety, Dhanbad, or if the same is considered necessary and desirable to comply with the up-to-date engineering practices or with various Indian codes of Practices issued by the I.S.I. New Delhi from time to time the same shall be deemed to be a requirement of this tender specifications and same should consequently included in the offer not-with-standing the fact that such requirements are not clearly or specifically indicated in these specifications along with the associated drawings.

All the equipment attachments, required for the execution of works as per scope of work as envisaged in the document shall be designed, fabricated erected and maintained for efficient and satisfactory performance, and the bidder shall be solely responsible for the same and the same shall be deemed to be within the scope of the offer/work whether specifically mentioned or not in these documents and the bidder shall not be eligible for any extra claim on this issue.

**Note: the specification of CPWD pertaining to Substation should adhere to. Specification for those items is not available in CPWD specification, the specification needs to be obtained from the Engineer in charge or concerned Electrical Engineer of CMPDI. The final decision of Engineer in charge will be bound/liable to successful contractor.**

#### TECHNICAL SPECIFICATIONS

**Technical Specifications to be followed:**

##### Civil Engineering Works

Latest CPWD specification shall be adopted. Presently CPWD specifications 2019 Vol. I & II is in vogue which may be followed. These specifications cover all type of Building Works. The specifications are available as a printed document issued by CPWD and also in soft copy PDF format in CPWD website.

##### Electrical Engineering Works : CPWD General specification for Electrical Works

**–Part-IV Sub-Station will be applicable and Jharkhand Electricity rules are also applicable.**

Latest CPWD specification shall be adopted. Presently the following are in vogue:

Part No.	Description	Year Of Issue
I	Internal	2013
III	Lifts And Escalators	2003

V	Wet Riser And Sprinklers System	2006
VI	Heating, Ventilation And Air Conditioning Works	2017

**\*Roads And Bridges**

Standard specifications issued by ministry of surface transport may be followed. Presently MORTH Specifications on roads and bridges 2013 is available. These specifications cover exhaustively various roads and bridge works. (Applicable for important and major roads.)

\*Delete if not applicable



**SAFETY CODE**

1. Suitable scaffolds should be provided for workmen for all works that cannot safely be done from the ground, or from solid construction except such short period work as can be done safely from ladders. When a ladder is used, an extra mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well suitable footholds and hand-hold shall be provided on the ladder and the ladder shall be given an inclination not steeper than  $\frac{1}{4}$  to 1 ( $\frac{1}{4}$  horizontal and 1 vertical).
2. Scaffolding of staging more than 3.6 m (12ft). above the ground or floor, swung or suspended from an overhead support or erected with stationary support shall have a guard rail properly attached or bolted, braced and otherwise secured at least 90 cm (3ft) high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
3. Working platforms, gangways and stairways should be so constructed that they should not sag unduly or unequally, and if the height of the platform or the gangway or the stairway is more than 3.6 m (12ft) above ground level, they should be closely boarded, should have adequate width and should be suitably fastened as described in (2) above.
4. Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of person or materials by providing suitable fencing or railing whose minimum height shall be 90 cm (3ft).
5. Safety means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9 m (30ft) in length while the width between side rails in rung ladder shall in no case be less than 20 cm ( $11\frac{1}{2}$ " ) for ladder upto and including 3 m (10ft) in length. For longer ladders, this width should be increased at least  $\frac{1}{4}$ " for additional 30 cm (1ft.) of length. Uniform step spacing of not more than 30 cm shall be kept. Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites or work shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The contractor shall provide all necessary fencing and lights to protect the public from accident and shall be bound to bear the expenses of defence of every suit, action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit; action or proceedings to any such person or which may, with the consent of the contractor, be paid to compensate any claim by any such person.
6. Excavation and Trenching: All trenches 1.2 m (4ft) or more in depth, shall at all times be supplied with at least one ladder for each 30 m. (100 ft.) in length or fraction thereof. Ladder shall extend from bottom of the trench to at least 90 cm (3ft) above the surface of the ground. The side of the trenches which are 1.5 m (5ft) or more in depth shall be stepped back to give suitable slope or securely held by timber bracing, so as to avoid the danger of sides collapsing. The excavated materials shall not be placed within 1.5 m (5ft) of the edges of the trench or half of the depth of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances, undermining or undercutting shall be done.
7. Demolition: before any demolition work is commenced and also during the progress 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 a 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. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render it unsafe.
8. All necessary personal safety equipment as considered adequate by the Engineer-in-Charge should be kept available for the use of the person 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: - The following safety equipment shall invariably be provided.
- i) Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles.
  - ii) Those engaged in white washing and mixing or stacking of cement bags or any material which is injurious to the eyes, shall be provided with protective goggles.
  - iii) Those engaged in welding works shall be provided with welder's protective eye-shields.
  - iv) Stone breaker shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
  - v) When workers are employed in sewers and manholes, which are in active use, the contractors shall ensure that the manhole covers are opened and ventilated at least for an hour before the workers are allowed to get into the manholes, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to the public. In addition, the contractor shall ensure that the following safety measures are adhered to: -
    - a) Entry for workers into the line shall not be allowed except under supervision of the Engineering Assistant or any other higher officer.
    - b) At least 5 to 6 manholes upstream and downstream should be kept open for at least 2 to 3 hours before any man is allowed to enter into the manhole for working inside.
    - c) Before entry, presence of Toxic gases should be tested by inserting wet lead acetate paper which changes colour in the presence of such gases and gives indication of their presence.
    - d) Presence of Oxygen should be verified by lowering a detector lamp into the manhole. In case, no Oxygen is found inside the sewer line, workers should be sent only with Oxygen kit.
    - e) Safety belt with rope should be provided to the workers. While working inside the manholes, such rope should be handled by two men standing outside to enable him to be pulled out during emergency.
    - f) The area should be barricaded or cordoned off by suitable means to avoid mishaps of any kind. Proper warning signs should be displayed for the safety of the public whenever cleaning works are undertaken during night or day.
    - g) No smoking or open flames shall be allowed near the blocked manhole being cleaned.
    - h) The malba obtained on account of cleaning of blocked manholes and sewer lines should be immediately removed to avoid accidents on account of slippery nature of the malba.
    - i) Workers should not be allowed to work inside the manhole continuously. He should be given rest intermittently. The Engineer-in-Charge may decide the time up to which a worker may be allowed to work continuously inside the manhole.
    - j) Gas masks with Oxygen Cylinder should be kept at site for use in emergency.

- k) Air-blowers should be used for flow of fresh air through the manholes. Whenever called for, portable air blowers are recommended for ventilating the manholes. The Motors for these shall be vapour proof and of totally enclosed type. Non-sparking gas engines also could be used but they should be placed at least 2 meters away from the opening and on the leeward side protected from wind so that they will not be a source of friction on any inflammable gas that might be present.
- l) The workers engaged for cleaning the manholes / sewers should be properly trained before allowing to work in the manhole.
- m) The workers shall be provided with Gumboots or non-sparking shoes bump helmets and gloves non-sparking tools safety lights and gas masks and portable air blowers (when necessary). They must be supplied with barrier cream for anointing the limbs before working inside the sewer lines.
- n) Workmen descending a manhole shall try each ladder stop or rung carefully before putting his full weight on it to guard against insecure fastening due to corrosion of the rung fixed to manhole well.
- o) If a man has received a physical injury, he should be brought out of the sewer immediately and adequate medical aid should be provided to him.
- p) The extents to which these precautions are to be taken depend on individual situation but the decision of the Engineer-in-Charge regarding the steps to be taken in this regard in an individual case will be final.
- vi) The Contractor shall not employ men and women below the age of 18 years on the work of painting with products containing lead in any form. Wherever men above the age of 18 are employed on the work of lead painting, the following precaution should be taken: -
  - a) No paint containing lead or lead products shall be used except in the form of paste or readymade paint.
  - b) Suitable face masks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint is dry rubbed and scrapped.
  - c) Overalls shall be supplied by the contractors to the workmen and adequate facilities shall be provided to enable the working painters to wash during and on the cessation of work.
  - d) Measures shall be taken, wherever practicable, to prevent danger arising out of from dust caused by dry rubbing down and scraping.
  - e) Adequate facilities shall be provided to enable working painters to wash during and on cessation of work.
  - f) Overall shall be worn by working painters during the whole of working period.
  - g) Suitable arrangement shall be made to prevent clothing put off during working hours being spoiled by painting materials.
- 9. When the work is done near any place where there is risk of drowning, all necessary equipment should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision, should be made for prompt first aid treatment of all injuries likely to be obtained during the course of the work.
- 10. Use of hoisting machines and tackle including their attachments, anchorage and supports shall conform to the following standards or conditions: -
  - i) (a) These shall be of good mechanical construction, sound materials and adequate strength and free from patent defects and shall be kept repaired and in good working order.

- (b) Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength, and free from patent defects.
- ii) Every crane driver or hoisting appliance operator, shall be properly qualified and no person under the age of 21 years should be in charge of any hoisting machine including any scaffolding winch or give signals to operator.
  - iii) In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block used in hoisting or as means of suspension, the safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load. In case of a hoisting machine having a variable safe working load each safe working load and the condition under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.
  - iv) In case of departmental machines, the safe working load shall be notified by the Electrical Engineer-in-Charge. As regards contractor's machines the contractors shall notify the safe working load of the machine to the Engineer-in-Charge whenever he brings any machinery to site of work and get it verified by the Electrical Engineer concerned.
12. Motors, gearing, transmission, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards. Hoisting appliances should be provided with such means as will reduce to the minimum the risk of accidental descent of the load. Adequate precautions should be taken to reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced. 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 rings, watches and carry keys or other materials which are good conductors of electricity.
  13. All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near places of work.
  14. These safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent place at work spot. The person responsible for compliance of the safety code shall be named therein by the contractor.
  15. To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangements made by the contractor shall be open to inspection by the Labour Officer or Engineer-in-Charge of the department or their representatives.
  16. Notwithstanding the above clauses from (1) to (15), there is nothing in these to exempt the contractor from the operations of any other Act or Rule in force in the Republic of India.

## **COMPLIANCE OF LABOUR LAWS**

### **1. Labour**

- 1.1 The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, their payment, housing, feeding and transport.

The Contractor shall, if required by the Engineer, deliver to the Engineer a return in detail, in such form and at such intervals as the Engineer may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by contractor on the site and such information respecting contractor's equipment as the Engineer may require.

- 1.2 The work has to be carried out through regular employees as far as possible and the Wages thereof are to be made in their bank accounts

### **2. Compliance with Labour Regulations**

- 2.1 During continuance of the contract, the contractor and his sub contractors shall abide at all times by all existing labour enactments and rules made thereunder, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law, including rules, regulations, bye laws that may be passed or notification that may be issued under any labour law in further either by the State or Central Government or the local authority. Salient features of some of the major labour laws that are applicable to construction industry are given below. The contractor shall be held responsible in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made thereunder, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications bye laws/acts/rules/regulations/including amendments, if any on the part of the contractor, the Engineer/Employer shall have the right to deduct any money due to the Contractor including his amount of performance security. The Employer/Engineer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer.

The employees of the contractor and the sub-contractor in no case shall be treated as the employees of the Employer at any point of time.

## 2.2 SALIENT FEATURES OF SOME MAJOR LABOUR LAWS APPLICABLE TO ESTABLISHMENT ENGAGED IN BUILDING AND OTHER CONSTRUCTION / CIVIL WORKS.

- a) **Workmen Compensation Act, 1923** :- The act provides for compensation in case of injury by accident arising out of and during the course of employment.
- b) **Payment of Gratuity Act, 1972** :- Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed 5 years service or more or on death the rate of 15 days' wages for every completed year of service. The Act is applicable to all establishments employing 10 or more employees.
- c) **Employees PF and Miscellaneous Provisions Act, 1952** :- The Act provides for monthly contributions by the employer and workers @ 12 % or as applicable. The benefits payable under the Act are :
  - i. Pension or family pension on retirement or death as the case may be.
  - ii. Deposit linked Insurance on the death in harness of the worker.
  - iii. Payment of PF accumulated on retirement/death etc.

Note- The contractor shall provide the undertakings that

" I/We undertake that no benefit under the Pradhan Mantri Rojgar Protsahan Yojna (PMRPY), has been availed. In the event of availing any benefit under the Pradhan Mantri Rojgar Protsahan Yojna (PMRPY), I/We will declare it to [ CMPDI] before any payment is released by [CMPDI] with respect to this Contract."

- d) **Maternity Benefit Act, 1951** :- The Act provides for leave and some other benefits to women employees in case of confinement or miscarriage etc.
- e) **Contract Labour (Regulation & Abolition) Act, 1970** :- The Act provides for certain welfare measures to be provided by the contractor to contract labour and in case the contractor fails to provide, the same are required to be provided by the Principal Employer by Law. The Principal Employer is required to take Certificate of Registration and the contractor is required to take license from the designated Officer. The Act is applicable to the establishments or contractor of Principal Employer if they employ 20 or more contract labour.
- f) **Minimum Wages Act, 1948** :- The Employer is supposed to pay not less than the Minimum Wages fixed by appropriate Government as per provisions of the Act if the employment is a scheduled employment. Construction of Buildings, Roads, Runways are scheduled employment.
- g) **Payment of Wages Act, 1936** :- It lays as to by what date the wages are to be paid, when it will be paid and what deductions can be made from the wages of the workers.
- h) **Equal Remuneration Act, 1979** :- The Act provides for payment of equal wages for work of equal nature of Male and Female workers and for not making discrimination against Female employee in the matters of transfers, training and promotion etc.
- i) **Payment of Bonus Act, 1965** :- The Act is applicable to all establishments employing 20 or more workmen. The Act provides for payments of annual bonus subject to a minimum of 8.33% of

wages and maximum of 20% of wages to employees drawing Rs. 3500/- per month or less. The bonus to be paid to the employee getting Rs. 2500/- per month to about upto Rs. 3500/- per month, shall be worked out by taking wages as Rs. 2500/- per month only. The Act does not apply to certain establishments. Some of the State Governments are exempted for five years in certain circumstances. Some of the State Governments have reduced the employment size from 20 to 10 for the purpose of applicability of the Act.

- j) **Industrial Disputes Act, 1947** :- The Act lays down the machinery and procedure for resolution of Industrial disputes, in what situations a strike or lock-out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.
- k) **Industrial Employment (Standing Orders) Act, 1946** :- It is applicable to all establishments employing 100 or more workmen (employment size reduced by some of the State and Central Government to 50). The Act provides for laying shown rules governing the conditions of employment by the Employer on matters provided in the Act and get the same certified by the designated Authority.
- l) **Trade Union Act, 1926** :- The Act lays down the procedure for registration of trade unions of workmen and employees. The Trade Unions registered under the Act have been given certain immunities from civil and criminal liabilities.
- m) **Child Labour (Prohibition & Regulation) Act, 1986** :- The Act prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulations of employment of children in all other occupations and processes. Employment of Child Labour is prohibited in Building Industry.
- n) **Inter-State Migrant Workmen's (Regulation of Employment & Conditions of Service) Act, 1997** :- The Act is applicable to an establishment which employs 5 or more inter-state migrant workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another state). The Inter-State migrant workmen, in an establishment to which this Act becomes applicable, are required to be provided, certain facilities such as Housing, Medical-Aid, Travelling expenses from home upto the establishment and back etc.
- o) **The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 and the Cess Act of 1996** :- All the establishments who carry on any building or other construction work and employs 10 or more workers are covered under this Act. All such establishments are required to pay cess at the rate not exceeding 2% of the cost of construction as may be modified by the Government. The employer of the establishment is required to provide safety measures at the Building or construction work and other welfare measures, such as canteens, First-Aid facilities, Ambulance, Housing accommodation for workers near the work place etc. The Employer to whom the Act applies has to obtain a registration certificate from the Registering Officer appointed by the Government.
- p) **Factories Act, 1948** :- The Act lays down the procedure for approval at plans before setting up a factory, health and safety provisions, welfare provisions, working houses, annual earned leave and rendering information regarding accidents or dangerous occurrences to designated authorities. It is applicable to premises employing 10 persons or more with aid of power or 20 or more persons without the aid of power engaged in manufacturing process.

### **eTender Portal User Agreement**

In order to create a user account and use the eTender portal you must read and accept this eTender portal User Agreement.

#### **A. UNDERTAKINGS TO BE FURNISHED ONLINE BY THE BIDDER**

I DO HEREBY UNDERTAKE

1. That all the information being submitted by me/us is genuine, authentic, true and valid on the date of submission of tender and if any information is found to be false at any stage of tendering or contract period, I/We will be liable to the following penal actions apart from other penal actions prescribed elsewhere in the tender document.
  - a. Cancellation of my/our bid/contract (as the case may be)
  - b. Forfeiture of EMD
  - c. Punitive action as per tender document
2. That I/we accept all terms and condition of NIT, including General Terms and Condition and Special/Additional Terms and Condition as stated there in the tender document as available on the website.
3. That I/we accept the Integrity Pact as given in the tender document (if applicable).
4. That I/we, am/are giving my/our consent for e-payment and submitting/ shall submit the mandate form for e-Payment in the format as prescribed in the document in case, the work is awarded to us.
5. That I/we do authorize CIL/Subsidiary for seeking information/clarification from my Bankers having reference in this bid.
6. That I/we will upload original/certified photo/scanned of all the relevant documents as prescribed in the tender document in support of the information and data furnished by me/us online.
7. I/We confirm that I/We have not been banned or de-listed by any Govt. or Quasi Govt. agencies or PSUs. In case We are banned or delisted this information shall be specifically informed to the tender issuing authority.
8. That I/We accept all the undertakings as specified elsewhere in the tender document.
9. That this online agreement will be a part of my bid and if the work is awarded to me/us, this will be a part of our agreement with CIL/Subsidiary Company.

#### **B. TERMS AND CONDITIONS OF E-TENDER SERVICES AGREEMENT**

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[www.coalindiatenders.nic.in](http://www.coalindiatenders.nic.in) is an e-procurement portal of Coal India Limited / its Subsidiary.

**THIS E-TENDER PORTAL AND RELATED SERVICES TO YOUR COMPLIANCE WITH THE USER'S TERMS AND CONDITIONS SET FORTH BELOW:**

PLEASE READ THE FOLLOWING INFORMATION CAREFULLY. YOU MAY NOT COMPLETE YOUR REGISTRATION AND USE THE E-TENDER PORTAL WITHOUT AGREEING TO COMPLY WITH ALL OF THE TERMS AND CONDITIONS SET FORTH BELOW.

BY REGISTERING THE USER NAME AND PASSWORD, YOU AGREE TO ABIDE BY ALL THE TERMS AND CONDITIONS SET FORTH BELOW:

**Bidder Registration, Password and Security:**

Upon successful completion of Registration online, User ID and Password will be registered. You can login, only by giving valid User ID and Password and then signing with your valid Digital Signature Certificate.

The Online registration/enrolment of bidder on the portal should be done in the name of the bidder.

The person whose DSC is attached to the Registered Bidder should be either the bidder himself Or, duly authorized by the Bidder.

User ID and password are strictly personal to each Authorised User and non-transferable. The User shall ensure that its Authorised Users do not divulge or disclose their user ID or password to third parties. In the event that the Authorised User comes to know that the User ID/Password has been/might have been divulged, disclosed or discovered by any third party, user or its authorized user shall immediately modify the password using "Change Password" option. CIL/subsidiary will have no responsibility or obligation in this regard.

At the time of enrolment in the e-Tendering portal of CIL/its Subsidiaries, the Bidders should ensure that the status of DSC is active on this site. The activation of newly issued DSC may take 24 hrs or more. Hence Bidders who are obtaining new DSC should register at least 24 hrs before the submission of Bid.

By registering in this portal, you forthwith assume the responsibility for maintaining the confidentiality of the Password and account, and for all activities that occur under your Password or Account. You also agree to (a). immediately notify by e-mail to Application Administrator/Nodal officer, of any unauthorized use of your Password or Account or any other breach of security, and (b) ensure that you log-out from your account at the end of each session. CIL/its Subsidiaries shall not be liable for any loss or damage caused to you due to your failure to comply with the foregoing.

Registered user can modify or update some of the information in their profile as and when required at their own discretion. However, some information such as "User ID" are protected against changes by Bidder after enrolment and some other information such as "Bidder Name" etc. are protected against changes by Bidder after bid submission.

**Modification of software:**

With consent of Project Advisory Committee, e-procurement of CIL, the Administrator of e-Tender portal, reserves the right to modify, add, delete and/or change the contents, classification and

presentation of the information on the market place at any time as it may in its absolute discretion find to be expedient and without giving any notice. It is the users responsibility to refer to the terms and/or any change or addition to the same while accessing the site.

Coal India Limited reserves right to interrupt/suspend the availability of the e-Tender system without any notice to the users.

#### **System Requirements:**

It is the user's responsibility to comply with the system requirements: hardware, software, Internet connectivity at user premises to access the eTender portal as mentioned in the home page in the link "Resources Required".

Under any circumstances, CIL shall not be liable to the Users for any direct/indirect loss incurred by them or damages caused to them arising out of the following:

- (a). Incorrect use of the e-Tender System, or;
- (b). Internet Connectivity failures in respect of the equipment used by the Users or by the Internet Service Providers, or;
- (c). Inability of the Bidder to submit their bid due to any DSC related problems, hardware, software or any other factor which are personal/ special/local to the Bidder.

#### **Contents of Tender Information:**

Tenders shall be published by the authorized Tender Inviting Authorities of the respective Tendering entities of CIL/subsidiary. In case of any clarifications arising out of the tenders, the users have to contact the respective Tender Inviting Authority.

#### **Bid Submission Acknowledgement:**

The User should complete all the processes and steps required for Bid submission. The successful Bid submission can be ascertained once acknowledgement is given by the system through Bid Submission number i.e. Bid ID, after completion of all the processes and steps. Coal India Limited is not responsible for incomplete bid submission by users. Users may also note that the incomplete bids will not be saved by the system and so the same will not be available to the Tender Inviting Authority for processing.

The acknowledgment is the only confirmation of submission of bid, which the bidder can show as a proof of participating in the tender. Other than this acknowledgement, no proof will be considered as a confirmation to the submission of a bid. If the bidder fails to produce this acknowledgement required for verification in case of dispute, his claim for submission of bid may not be considered.

#### **Upload files:**

The bidders have to ensure that the files being uploaded by them are free from all kinds of viruses and contain only the relevant information as stated by the Tender Inviting Authorities for the particular tender. It is not obligatory on the part of CIL/subsidiary to read each and every document uploaded by the Bidder. If any bidder/Company has uploaded/attached irrelevant data, bogus or fabricated certificates towards his qualification requirements to the respective tender then their User account will be liable for termination permanently or temporarily by CIL/subsidiary without any prior notice.

#### **User Conduct:**

You agree that all information, data, text, software, photographs, graphics, messages or other materials ("Content"), whether publicly posted or privately transmitted, are the sole responsibility of the person from which such Content is originated. This means that you are entirely responsible for all Content that you upload, post, email or otherwise transmit via the eTender portal.

CIL/subsidiary does not control the Content posted via the e-Tender portal and, as such, does not guarantee the accuracy, integrity or quality of such Content. Hence under no circumstances, CIL/subsidiary is liable in any manner for any Content, including, but not limited to, for any errors or

omissions in any Content, or for any loss or damage of any kind incurred as a result of the use of any Content posted, e-mailed or otherwise transmitted via the Site.

**Amendments to a tender published:**

You agree that the CIL/ Subsidiary companies reserves the right to re-tender /cancel a tender or extend the closing date or amend the details of tender at any time by publishing corrigendum as applicable.

**Special Admonitions for International Use:**

Recognizing the global nature of the Internet, you agree to comply with all local rules regarding online content and acceptable Content. Specifically, you agree to comply with all applicable laws regarding the transmission of technical data to and from India or the country in which you reside.

**Links:**

The Site may provide, links to other World Wide Web sites or resources. Because CIL/subsidiary has no control over such sites and resources, you acknowledge and agree that the CIL/Subsidiary is not responsible for the availability of such external sites or resources, and does not endorse and is not responsible or liable for any Content, advertising, products, or other materials on or available from such sites or resources.

You further acknowledge and agree that the CIL/subsidiary shall not be responsible or liable, directly or indirectly, for any damage or loss caused or alleged to be caused by or in connection with use of or reliance on any such Content, Goods or Services available on or through any such site or resources.

**Miscellaneous:**

This Agreement shall all be governed and construed in accordance with the laws of India & applicable to agreements made and to be performed in India. The e-Tender portal's failure to insist upon or enforce strict performance of any provision of this Agreement shall not be construed as a waiver of any provision or right. Neither the course of conduct between the parties nor trade practice shall act to modify any provision of this Agreement. CIL/subsidiary may assign its rights and duties under this Agreement to any party at any time without notice to you. Any rights not expressly granted herein are reserved.

**Governing Law:**

Terms shall be governed by, and construed in accordance with, Indian law. The parties agree that the principal civil court of the place where the registered office of Coal India/Subsidiary Company is situated shall have non-exclusive jurisdiction to entertain any dispute with Coal India/Subsidiary company. In case of dispute being with a regional Institute of CMPDIL, the principal Civil Court where the said regional Institute is situated shall be place of suing.

CIL/subsidiary reserves the right to initiate any legal action against those bidders violating all or any of the above-mentioned terms & conditions of e-Tender services agreement.

**Modification of terms of Agreement:**

CIL/its Subsidiaries reserves the right to add to or change/modify the terms of this Agreement. Changes could be made by us after the first posting to the Site and you will be deemed to have accepted any change if you continue to access the Site after that time. CIL/its Subsidiaries reserves the right to modify, suspend/cancel, or discontinue any or all services/ make modifications and alterations in any or all of the content, at any time without prior notice.

**Policy and Security:****General Policy:**

CIL/its Subsidiaries is committed to protecting the privacy of our e-Tender site visitors. CIL/subsidiary does not collect any personal or business information unless you provide it to us voluntarily when conducting an online enrolment, bid submission etc. or any other transaction on the Site.

**Information Collected:**

When you choose to provide personal or business information to us to conduct an online transaction, we use it only for the purpose of conducting the specific online transaction that you requested. The information is also used for the purpose of vendor searches. For each online transaction, we require only a minimum amount of personal and business information required to process your transaction.

When you visit our portal to browse, read pages, or download information, we automatically collect and store only the following information:

The Internet domain and IP address from which you access our portal;

The date and time you access our portal;

The pages you visit

This information would help us to make our site more useful to visitors and to learn about the number of visitors to our site and the types of technology our visitors use.

We do not give, share, sell or transfer any personal information to a third party unless required to do so by law. If you do not want any personal or business information to be collected, please do not submit it to us; however, without this required information we will be unable to process your online bid submission or any other online transaction. Review, update and correction of any personal or business information can be done directly on the Site.

**Use of Cookies:**

When you choose to enter into an online transaction, we use cookies to save the information that you input while progressing through the transaction. A cookie is a very small amount of data that is sent from our server to your computer's hard drive. By enabling this feature, the cookie will remember the data entered by you and next time when you visit this site, the data stored in the cookie will be available in future.

**Security:**

The Site has security measures in place to protect against the loss, misuse and alteration of information under our control.

**eMail/ SMS Notifications:**

The GePNIC eProcurement Server has functionality of automatically sending eMail / SMS alerts at various events as per the bidders preference. There is no manual intervention while sending these pre-defined eMail / SMS alerts. All events for which eMails / SMS being sent is also available to users on the Dash Board / the user login of the Bidder. Although all efforts will be made to ensure timely delivery of eMail / SMS, due to dependency in various other external factors, the delivery of eMail / SMS may not be assured and bidders are requested to check the portal on a periodic basis for any such events. Non receipt of eMail / SMS cannot be quoted as a reason for failure of service as this is an added facility being provided to users.

<b>ANNEXURES</b>
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**Annexure-I****FORMAT FOR LETTER OF BID****(To be uploaded by the Bidder on his Letter Head during submission of bid online)**

To,

The Tender Committee

Central Mine Planning &amp; Design Institute Limited

Sub: BID for the Work “.....”.

**NIT No.:** .....**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 fulfil all terms and conditions and specifications as contained in the bid document.

I/we here by submit all the documents as required to meet the eligibility criteria as per provision of the bid notice/document.

I/We hereby confirm that this bid complies with the Bid validity 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 CIL/Subsidiary.

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 **Central Mine Planning & Design Institute Limited**.

Should this bid be accepted, I/we agree to furnish Performance Security within **stipulated date** and commence the work within **stipulated date**. In case of my/our failure to abide by the said provision, **Central Mine Planning & Design Institute Limited** shall, without prejudice to any other right or remedy, be at liberty to cancel the letter of acceptance/ **work order** /award and also ban me/us for 02 (two years) from being eligible to submit Bids in CIL and its subsidiaries. ~~to forfeit the Earnest Money and also debar us from participating in future tenders for a minimum period of 12(twelve) months.~~

## **Annexure-II**

### **PROFORMA FOR UNDERTAKING**

**(To be uploaded by the Bidder on his Letter Head during submission of bid online)**

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

1. I/We am/are submitting Bid for the work.....against Bid Notice No. .... 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 **Central Mine Planning & Design Institute Limited**
3. All information furnished by us in respect of fulfilment 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 hereby authorize department to seek references / clarifications from our Bankers.
6. 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.
7. \*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.

**\* Delete whichever is not applicable.**

8. \*\* I/We have not been banned or delisted by any Govt., or Quasi Govt. Agencies or PSUs.

Or

—

\*\*I / We .....have been banned by the organization named “ \_\_\_\_\_ ” for a period of..... year/s, effective from ..... to.....

**\*\* Delete whichever is not applicable.**

9. I/We have not been debarred by any procuring entity for violation of Preference to Make in India (as applicable) vide Order No. P-45021/2/2017-PP (BE-II) dated 04.06.2020, issued by Govt. of India as amended from time to time (not applicable for works with estimated value put to tender less than 5 lakh).
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 and banning of my/ our firm and all partners of the firm etc. for 02 (two) years from being eligible to submit Bids in CIL and its subsidiaries from the date of issue of such letter ~~including Earnest Money and banning of our firm and all partners of the firm etc.~~

### Annexure-III

#### MANDATE FORM FOR ELECTRONIC FUND TRANSFER / INTERNET BANKING PAYMENT

1. Name of the Bidder : .....

2. Address of the Bidder: .....

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.			
(Digital 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 Company 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 / RTGS transfer/NEFT. 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 / Authorised Signatory

-----

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

Banker's Stamp

Date :

Signature of the Authorised official from the Bank)



**PROFORMA OF BANK GUARANTEE FOR PERFORMANCE SECURITY**

To

**Central Mine Planning & Design Institute Limited,  
Gondwana Place, Kanke Road, Ranchi -834031**

Re: Bank Guarantee in respect of Contract No....., Dated.....  
Between ..... (Name of the company) and ..... (Name of the Contractor)

WHEREAS ..... (Name and address of the Contractor) (herein after called "the Contractor") has entered into a contract made as per letter of acceptance.....dated.....(herein after called the said contract) with ..... (name of the Company) (hereinafter called "the Company") to execute ..... (name of the contract and brief description of work) on the terms and conditions contained in the said contract.

It has been agreed that the Contractor shall furnish a Performance Security in the shape of Bank Guarantee from a Schedule bank for a sum of Rs..... as security for due compliance and performance of the terms and conditions of the said contract.

We..... (name of the Bank) having its branch/Office at..... have, at the request of the Contractor, agreed to furnish this bank Guarantee by way of performance Security.

NOW, THEREFORE, we the..... Bank (herein after called The Bank) hereby, unconditionally and irrevocably, guarantees and affirms as follows:

The Bank do hereby irrevocably guarantees and unconditionally agree with the Company that if the contractor shall in any way fail to observe or perform the terms and conditions of the said contract or shall commit any breach of its obligation there under, the Bank shall on its mere first written demand, and without any objection, demur and without any reference to the contractor, pay to the company the said sum of ..... or such portion as shall then remain due with interest without requiring the Company to have recourse to any legal remedy that may be available to it to compel the Bank to pay the sum, or failing on the company to compel such payment by the contractor.

Any such demand shall be conclusive as regards the liability of the Contractor to the company and as regards the amount payable by the Bank under this Guarantee. The Bank shall not be entitled to withhold payment on the ground that the Contractor has disputed its liability to pay or has disputed the quantum of the amount or that any arbitration proceeding or legal proceeding is pending between the company and the Contractor regarding the claim.

The Bank further agree that the Guarantee shall come into force from the date hereof and shall remain in force and effect till the period that will be taken for the performance of the said Contract which is likely to be ..... day of ..... but if the period of Contract is extended either pursuant to the provisions in the said contract or by mutual agreement between the contractor and the company, the Bank shall renew the period of the Bank Guarantee failing which it shall pay to the company the said sum of ..... or such lesser amount of the said sum of ..... as may be due to the company and as the company may demand.

This Guarantee shall remain in force until the dues of the company in respect of the said sum of .....and interest are fully satisfied and the Company certifies that the Contract has been fully carried out by the Contractor and discharged the guarantee.

The Bank further agrees with the company that the company shall have the fullest liberty without consent of the Bank and without affecting in any way the obligations hereunder to vary any of the terms and conditions of the said contract or to extend time for performance of the said contract from time to time or to postpone for any time or from time to time any of the powers exercisable by the Company against the contractor and to forbear to enforce any of the terms and conditions relating to the said Contract and the Bank shall not be relieved from its liability by reason

of such failure or extension being granted to the Contractor or to any forbearance, act or omissions on the part of the company or any indulgence by the Company to the Contractor or any other matter or thing whatsoever which under the law relating to sureties would but for this provision have the effect or relieving or discharging the Guarantor.

The Bank further agrees that in case this Guarantee is required for a longer period and it is not extended by the Bank beyond the period specified above, the Bank shall pay to the company the said sum of ..... or such lesser sum as may then be deemed to the Company and as the Company may require.

Notwithstanding anything contained herein the liability of the Bank under this Guarantee is restricted to Rs..... The guarantee shall remain in force till the day .....\*..... of .....\*..... and unless the guarantee is renewed or claim is preferred against the bank on or before the said date all rights of the Company under this guarantee shall cease and the Bank shall be relieved and discharged from all liabilities hereunder except as provided in the preceding Clause.

\* The date of guarantee shall cover a period of minimum one year or 90 days beyond the date of completion whichever is more.

Any notice by way of request, demand or otherwise hereunder maybe sent by post/e-mail/Fax addressed to the bank branch/operative branch, which shall be deemed to be a sufficient demand notice. Bank shall effect payment thereof forthwith.

This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor.

The Bank has under its constitution power to give this Guarantee and Sri..... who has signed it on behalf of the Bank has authority to do so.

Signed and sealed this.....day of.....at.....

SIGNED, SEALED AND DELIVERED

For and on behalf of the Bank by:

(Signature)

(Name)

(Designation)

(Code number)

(address)

“The Bank Guarantee as referred above shall be operative at our branch at ..... payable at .....

(NIT shall specify town/city of the operative Branch. Bank Guarantee shall specify name of the branch with address of the specified town/city)”

NOTE:- The department shall ensure extension of guarantee period in case of extension of time.

**Annexure-V****PROFORMA OF JOINT VENTURE AGREEMENT**

(On Non-Judicial Stamp paper of appropriate value as per provision of the Stamp Act applicable in the concerned state)

This Joint Venture agreement is made on this .....day of.....

AMONGST/BETWEEN

M/s....., having its registered Office at .....

Represented by Shri.....(Name and Designation) of M/s.....Who has power of Attorney to enter into Joint Venture with.....andSign all documents/agreements on behalf of M/s..... (hereinafter referred to as".....")

AND

M/s....., having its registered Office at .....

Represented by Shri.....(Name and Designation) of M/s.....who has power of Attorney to enter into Joint Venture with.....andSign all documents/agreements on behalf of M/s..... (hereinafter referred to as".....").

AND

M/s....., having its registered Office at .....

Represented by Shri.....(Name and Designation) of M/s.....who has power of Attorney to enter into Joint Venture with.....andSign all documents/agreements on behalf of M/s..... (hereinafter referred to as".....").

The expressions M/s .....and M/s.....and M/s .....shall, wherever the context admits, mean and include their respective legal representatives, successors-in-interest and assigns and shall collectively be referred to as "Joint Venture /Parties" and individually as "Joint Venture Partner/Party".

WHEREAS M/s.....and M/s.....agreed to form a Joint Venture in order to join their forces to obtain best results from the combinations of their individual resources of technical and management skill, finance and equipment for the benefit of the project and in order to submit the Bid for the work of "....."

..... (Hereinafter referred to as "Project") under.....(Name of Company(hereinafter referred to as "the principle Employer").

The Parties hereby enter into this Joint Venture Agreement (hereinafter referred to as "Joint Venture agreement") to jointly prepare and submit the Bid for the Project and in the event of securing the Project from the Employer, to execute the Project in accordance with the Contract terms and conditions, to the satisfaction of the Principal Employer.

NOW THEREFORE, the parties, in consideration of the mutual premises contained herein, agree as follows:

**1) FORMATION AND TERMINATION OF THE JOINT VENTURE.**

The parties under this Agreement have decided to form a Joint Venture to submit the Bid for the above Project and execute the Contract with the Principal Employer for the Project, if qualified and awarded.

- a) The name and style of the Joint Venture shall be “.....”  
(hereinafter called the “Joint Venture”)
- b) The Head Office of the Joint Venture shall be located at..... and the site office will be located at the site of the Project. All communication regarding the project will be made to..... Telephone Nos.....
- c) Neither of the parties of the Joint Venture shall be allowed to sign, pledge, sell or otherwise dispose all or part of its respective interests in the Joint Venture to any party including the existing partner of the Joint Venture.
- d) The terms of the Joint Venture shall begin as on the date first set forth above and shall terminate on the earliest of the following dates.
  - i) The Joint Venture fails to obtain qualification from the Employer.
  - ii) The Contract for the Project is not awarded to the Joint Venture.
  - iii) The Employer cancels the Project.
  - iv) The Project is completed including defects liability period to the satisfaction of the Employer and all the parties complete any and all duties, liabilities and responsibilities under or in connection with the Contract and the Joint Venture agreement.

## 2) **LEAD PARTNER.**

M/s..... shall be the Lead Partner of the Joint Venture and is In-charge for performing the contract management. M/s..... shall be attorney of the parties duly authorized to incur liabilities and receive instructions for and on behalf of any and all partners in the Joint Venture and also all the partners of the Joint Venture shall be jointly and severally liable during the bidding process and for the execution of the contract as per contract terms with the employer in accordance with the power of attorney annexed. All Joint Venture partners M/s.....; M/s..... & M/s..... nominate and authorize Shri..... (name and designation) of M/s..... to sign all letters, correspondence, papers & certificates and to submit the Pre-qualification Application / Bid documents for and on behalf of the Joint Venture.

## 3) **REPRESENTATIVE OF THE PARTNERS OF THE JOINT VENTURE.**

Each constituent party of the Joint Venture appoints the following personnel as the representative of the relevant party with full power of attorney from the Board of Directors of the concerned company, or from the partners of the entity, or from the proprietor.

<u>JV Partner</u>	<u>Name</u>	<u>Position in the respective Company</u>
M/s.....	.....	.....
M/s.....	.....	.....
M/s .....	.....	.....

## 4) **PARTICIPATION SHARE & WORK RESPONSIBILITIES.**

4.1 The parties agree that their respective participation share (hereinafter called ‘Participation Share’) in the Joint Venture shall be as follows:

M/s..... : .....% (.....per cent)

M/s..... : .....% (.....per cent) and

M/s..... : .....% (.....per cent)

4.2 The Parties shall share the rights and obligations, risk, cost and expenses, working capitals, profits or losses or others arising out of or in relation to execution of the Project in proportion to their share of participation in the Joint Venture except as otherwise agreed.

4.3 The parties shall jointly execute the works under the Project as an integrated entity and allocate responsibilities as regards division of work between themselves by organizing the adequate resources for successful completion of the Project. However all parties shall remain jointly and severally responsible for the satisfactory execution of the Project in accordance with the Contract terms and conditions.

**5) JOINT AND SEVERAL LIABILITIES.**

All partner of Joint Venture shall be liable jointly and severally during the Pre-qualification and Bidding process; and in the event the contract is awarded, during the execution of the Contract, in accordance with Contract terms.

**6) WORKING CAPITAL**

Each party shall contribute working capital for equipment, labour and material or any expenses incurred for execution of the Project or any other investment required in connection with the execution of the project proportionate to the participation ratio.

**7) PERFORMANCE SECURITY & OTHER SECURITIES:**

Performance Security and other securities shall be paid by the Joint Venture except as otherwise agreed.

**8) PERSONNEL & EQUIPMENT**

Team of Managers / Engineers of all the partners of the Joint Venture will form part of the core management structure and assist in execution of the project. The list of Personnel and equipment proposed to be engaged for the project by each Party will be decided by the management committee.

**9) NON PERFORMANCE OF RESPONSIBILITY BY ANY PARTY OF JOINT VENTURE .**

- a) As between themselves, each Party shall be fully responsible for the fulfillment of all obligations arising out of its scope of the work for the Project to be clarified subject to the Agreement between the Parties and shall hold harmless and indemnified against any damage arising from its default or non-fulfillment of such obligations.
- b) If any Party fails to perform its obligations described in this Agreement during the execution of the Project and to cure such breach within the period designated by the non-defaulting party, then the other party shall have the right to take up work, the interest and responsibilities of the defaulting party at the cost of the defaulting party.
- c) Stepping into the shoes of the existing partner of Joint Venture with all the liabilities of the existing partner from the beginning of the contract with the prior approval on Northern Company.
- d) Notwithstanding demarcation or allotment of work of between/amongst Joint Venture partners, Joint Venture shall be liable for non-performance of the whole contract irrespective of their demarcation or share of work.
- e) In case bid being accepted by Company, the payments under the contract shall only be made to the Joint Venture and not to the individual partners.

**10) BANK A/C.**

Separate Bank A/c. shall be opened in the name of the Joint Venture in a scheduled or Nationalized Bank in India as per mutual Agreement and all payments due to the Joint Venture shall be received only in that account, which shall be operated jointly by the representative of the Parties hereto. The financial obligations of the Joint Venture shall be discharged through the said Joint Venture Bank Account only and also all the payments received or paid by company to the Joint Venture shall be through that account alone.

**11) LIMIT OF JOINT VENTURE ACTIVITIES.**

The Joint Venture activities are limited to the bidding and in case of award, to the performance of the Contract for the Project according to the conditions of the Contract with the Employer.

**12) TAXES.**

Each Party shall be responsible for its own taxes, duties and other levies to be imposed on each party in connection with the Project. The taxes, duties and other levies imposed on the Joint Venture in connection with the Project shall be paid from the account of the Joint Venture.

**13) EXCLUSIVITY**

The Parties hereto agree and undertake that they shall not directly or indirectly either individually or with other party or parties take part in the Bid for the said Project. Each Party further guarantee to the other party hereto that this undertaking shall also apply to its subsidiaries and companies under its direct or indirect control.

**14) MISCELLANEOUS:**

a. Neither party of the Joint Venture shall assign, pledge, sell or otherwise dispose all or part of its respective interests in the Joint Venture to all third party without the Agreement of the other party in writing.

b. Subject to the above clause, the terms and conditions of this agreement shall be binding upon the parties, the Directors, Officers, Employees, Successors, Assigns and Representatives.

**15) APPLICABLE LAW**

This agreement shall be interpreted under laws and regulations of India.

IN WITNESS Whereof the Parties hereto have hereunder set their respective hands and seals the day, month, year first above written.

For .....

For.....

Signature \_\_\_\_\_

Signature \_\_\_\_\_

(Name & Address )

( Name & Address )

(Official Seal )

(Official Seal )

Place .....

Place.....

Date .....

Date .....

Witness

Witness

Signature .....

Signature .....

(Name & Address)

(Name & Address)

**PRE CONTRACT INTEGRITY PACT****General**

This pre-bid pre-contract Agreement (hereinafter called the Integrity Pact) is made on.....day of the month of .....20..., between, on one hand, Central Coalfields Limited acting through General Manager (Civil), Designation of the officer, (hereinafter called the “BUYER / Principal”, which expression shall mean and include, unless the context otherwise requires, his successors in office and assigns) of the First Part and M/s. ....represented by Shri....., Chief Executive Officer (hereinafter called the “BIDDER/Seller/Contractor” which expression shall mean and include, unless the context otherwise requires, his successors and permitted assigns) of the Second Part.

WHEREAS the BUYER proposes to procure .....(Name of the Stores/Equipment/Item) and the BIDDER/Seller is willing to offer/has offered the stores and

WHEREAS the BIDDER is a private company/public company/Government undertaking/partnership/registered export agency, constituted in accordance with the relevant law in the matter and the BUYER is a Central Public Sector Unit.

NOW, THEREFORE,

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence/prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to :-

Enabling the BUYER to obtain the desired said stores/equipment at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement, and

Enabling BIDDERS to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the BUYER will commit to prevent corruption, in any form, by its officials by following transparent procedures.

The parties hereto hereby agree to enter into this Integrity Pact and agree as follows:

**Section 1 – Commitments of the Principal**

(1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-

- a. No employee of the Principal, personally or through family members, will in connection with the tender for or the execution of a contract, demand; take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
- b. The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
- c. Principal will exclude from the process all known prejudiced persons.

(2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/ PC Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

## Section 2 - Commitments of the Bidder(s)/ Contractor(s)

(1) The Bidder(s) / Contractor(s) commit themselves to take all measures necessary to prevent corruption. The Bidder(s) / Contractor(s) commit themselves to observe the following principles during participation in the tender process and during the contract execution.

a. The Bidder(s) / Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/ she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.

b. The Bidder(s) / Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non- submission of bids or any other actions to restrict competitiveness or to introduce cartelisation in the bidding process.

c. The Bidder(s) / Contractor(s) will not commit any offence under the relevant IPC/ PC Act; further the Bidder(s) / Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

d. The Bidder(s) / Contractors(s) of foreign origin shall disclose the name and address of the Agents/ representatives in India, if any. Similarly, the Bidder(s) /Contractors(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. Further details as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers" shall be disclosed by the Bidder(s) / Contractor(s). Further, as mentioned in the Guidelines all the payments made to the Indian agent/ representative have to be in Indian Rupees only.

e. The Bidder(s) / Contractor(s) will, when presenting their bid, disclose any and all payments made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.

f. Bidder(s) / Contractor(s) who have signed the Integrity Pact shall not approach the Courts while representing the matter to IEMs and shall wait for their decision in the matter.

(2) The Bidder(s) / Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

## Section 3 - Disqualification from tender process and exclusion from future contracts

If the Bidder, before contract award, has committed a transgression through a violation of Section 2 or in any other form such as to put his reliability or credibility as Bidder into question, the Principal is entitled to disqualify the Bidder from the tender process or to terminate the contract, if already signed, for such reason.

(1) If the Bidder / Contractor / Supplier has committed a transgression through a violation of Section 2 such as to put his reliability or credibility into question, the Principal is also entitled to exclude the Bidder / Contractor / Supplier from future contract award processes. The imposition and duration of



the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case. In particular the number of transgressions, the position of the transgressors within the company hierarchy of the Bidder and the amount of the damage. The exclusion will be imposed for a minimum of 6 months and maximum of 3 years.

(2) A transgression is considered to have occurred if the Principal, after due consideration of available facts and evidences within his / her knowledge concludes that there is a reasonable ground to suspect violation of any commitment listed under Section 2 i.e “Commitments of Bidder(s) / Contractor(s).

(3) The Bidder accepts and undertakes to respect and uphold the Principal’s absolute right to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision to resort to such exclusion is taken. This undertaking is given freely and after obtaining independent legal advice.

(4) If the Bidder / Contractor / Supplier can prove that he has restored / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal may revoke the exclusion prematurely.”

#### Section 4 - Compensation for Damages

(1) If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to take action as deemed fit including termination of the contract, forfeiture of all dues and banning for 02 (two) years from being eligible to submit Bids in CIL and its subsidiaries from the date of issue of such letter

(2) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages of the Contract value or the amount equivalent to Performance Bank Guarantee.

#### Section 5 - Previous transgression

(1) The Bidder declares that no previous transgressions occurred in the last three years with any other Company in any country conforming to the anti-corruption approach or with any Public Sector Enterprise in India that could justify his exclusion from the tender process.

(2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or action can be taken as per the procedure mentioned in "Guidelines on Banning of business".

#### Section 6 - Equal treatment of all Bidders / Contractors / Subcontractors

(1) In case of Sub-contracting, the Principal Contractor shall take the responsibility of the adoption of Integrity Pact by the Sub-contractor.

(2) The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors.

(3) The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

#### Section 7 - Criminal charges against violating Bidder(s) / Contractor(s) / Subcontractor(s)

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will

inform the same to the Chief Vigilance Officer.

#### Section 8 - Independent External Monitor

(1) The Principal appoints competent and credible Independent External Monitor for this Pact after approval by Central Vigilance Commission. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.

(2) The Monitor is not subject to instructions by the representatives of the parties and performs his/her functions neutrally and independently. The Monitor would have access to all Contract documents, whenever required. It will be obligatory for him / her to treat the information and documents of the Bidders/Contractors as confidential.

He/ she reports to the Chairman, Coal India Limited / CMD, Subsidiary Companies

(3) The Bidder(s) / Contractor(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his/ her request and demonstration of a valid interest, unrestricted and unconditional access to their project documentation. The same is applicable to Sub-contractors.

(4) The Monitor is under contractual obligation to treat the information and documents of the Bidder(s) / Contractor(s) / Sub-contractor(s) with confidentiality. The Monitor has also signed declarations on 'Non-Disclosure of Confidential Information ' and of 'Absence of Conflict of Interest'. In case of any conflict of interest arising at a later date, the IEM shall inform Chairman, Coal India Limited / CMD, Subsidiary Companies and recuse himself / herself from that case.

(5) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.

(6) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he/ she will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.

(7) The Monitor will submit a written report to the Chairman, Coal India Limited / CMD, Subsidiary Companies within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.

(8) If the Monitor has reported to the Chairman, Coal India Limited / CMD, Subsidiary Companies, a substantiated suspicion of an offence under relevant IPC/ PC Act, and the Chairman, Coal India Limited / CMD, Subsidiary Companies has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.

(9) The word 'Monitor' would include both singular and plural.

#### Section 9 - Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the contract, and for all other Bidders 6 months after the contract has

been awarded. Any violation of the same would entail disqualification of the bidders and exclusion from future business dealings.

If any claim is made / lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged / determined by Chairman Coal India Limited / CMD, Subsidiary Companies.

#### Section 10 - Other provisions

(1) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.

(2) If the Contractor is a partnership or a Joint Venture, this agreement must be signed by all partners or JV members.

(3) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

(4) Issues like Warranty / Guarantee etc. shall be outside the purview of IEMs.

(5) In the event of any contradiction between the Integrity Pact and its Annexure, the Clause in the Integrity Pact will prevail.

#### Section 11- Facilitation of Investigation

In case of any allegation of violation of any provisions of this Pact or payment of commission, the BUYER or its agencies shall be entitled to examine all the documents including the Books of Accounts of the BIDDER and the BIDDER shall provide necessary information and documents in English and shall extend all possible help for the purpose of such examination.

#### Section 12- Law and Place of Jurisdiction

This Pact is subject to Indian Law. The place of performance and jurisdiction is the seat of the BUYER.

#### Section 13 - Other Legal Actions.

The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

(For & On behalf of the Principal)

(For & On behalf of Bidder/ Contractor)

(Office Seal)

(Office Seal)

Place -----

Date -----

Witness 1:

(Name & Address)

Witness 2:

(Name & Address)

**PROFORMA FOR EXECUTION OF AGREEMENT****STAMP PAPER****(of appropriate value as per Stamp Act)**

This agreement is made on ..... day of ..... between ( Name of Company ) having its registered office at ..... (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.

Whereas the Company invited tenders for the work of "....." and whereas the said Contractor/ Firm submitted tender for the said work ~~and deposited a sum of Rs..... as Earnest Money~~ and whereas the tender of the said contract has been accepted by the Company for execution of the said work.

**NOW THIS AGREEMENT WITNESSETH 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 annexed 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 Specification (Page .... to ...) and

Safety Code.

iii) Schedule-B The probable Quantities and Amount (Page ... to ...)

iv) Schedule-C Negotiation letters –

v) Schedule-D Letter of Acceptance/Work Order (Page .. to ..)

vi) 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 items measurements at unit prices by the Company, the said Contractor shall, subject to the terms & condition 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 (1<sup>st</sup> part of Security Deposit) in the form of Demand Draft / Certified Cheque/ B.G./ *other form (details to be furnished)* .

5) The said contractor hereby covenants with the company that the company shall deduct at 5% of R/A Bills as Retention Money (2<sup>nd</sup> part of security deposit) as per the terms & condition 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 behalf of Signature  
(Name of Company) in presence of -

a) Name : Signature

b) Address: .

**CONSENT TO ARBITRATION CLAUSE 16 and 16A OF GTC****(Applicable in case of Partnership firm)**

We,.....(Name of Partners of Partnership Firm), partners of .....(Name of Partnership Firm) hereby consent to abide by the provisions of Clause 16 and 16A of General Terms and Conditions pertaining to arbitration.

(Name, Signature and Seal of Partners of Partnership Firm)

**Performa for certificate regarding Restrictions under Rule 144 (xi) of the GFRs,2017 to be uploaded by bidder during submission of bid online on the LETTER HEAD OF BIDDER (As enrolled on the e-Procurement Portal of CIL) :**

**“Certificate regarding compliance to order no.F.No. 6/18/2019-PPD dt 23/7/2020 of Ministry of Finance, Dept of Expenditure, Public Procurement Division with respect to restrictions on procurement of goods, services or works from a bidder of a country which shares a land border with India and on subcontracting to contractors from such countries”**

<b>Name of work</b>	
<b>NIT No.</b>	
<b>Tender ID</b>	

I/we have read the Clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries; I/we certify that I am/we are not from such a country or, if from such a country, has/have been registered with the Competent Authority and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority. I hereby certify that I/we fulfil all requirements in this regard and I am/ we are eligible to be considered.

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

**Annexure-X****Format for Bid Securing Declaration**

~~(To be uploaded by the Bidder on his Letter Head during submission of bid online)~~

I / We, \_\_\_\_\_, Proprietor/Partner/Legal Attorney/Director/ Accredited Representative of M/S. \_\_\_\_\_, solemnly accept/(s) that if I/We withdraw or modify my/our Bid during the period of validity, or if I/we are awarded the contract and fail to sign the contract agreement, or to submit performance security before the deadline as per NIT/ Tender document / Letter of award or any other default made by me/us till execution of agreement as defined in the NIT/Tender Document, I/we will be banned for 02 (two) years from being eligible to submit Bids in CIL and its subsidiaries.

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