



सीएमपीडीआई

cmpdi

A Mini Ratna Company

TENDER DOCUMENT

FOR

**SUPPLY, INSTALLATION, TESTING &
COMMISSIONING OF 100 kWp (10 SETS X 10 KWp)
CAPACITY GRID CONNECTED
SOLAR PHOTOVOLTAIC POWER PLANT MOUNTING
ON RISING STRUCTURE WITHOUT BATTERY BACK
UP AT THE ROOF TOP OF RESIDENTIAL QUARTERS BUILDING OF
CMPDI, RI-IV, JARIPATKA, NAGPUR (MS), PIN-440014.**



**NOVEMBER, 2019
CENTRAL MINE PLANNING AND DESIGN INSTITUTE LTD.
(A SUBSIDIARY OF COAL INDIA LTD.)
REGIONAL INSTITUTE-IV, JARIPATKA, NAGPUR-440014
(MAHARASHTRA)**

SECTION I

e-TENDER Notice



सेन्ट्रल माईन प्लानिंग एण्ड डिजाइन इन्स्टीट्यूट लिमिटेड
(कोल इण्डिया लिमिटेड की अनुषंगी कम्पनी / भारत सरकार का एक लोक उपक्रम)
गोन्दवाना प्लेस, कान्के रोड, राँची - 834 031, झारखंड (भारत)
क्षेत्रीय निदेशक का कार्यालय
Central Mine Planning & Design Institute Limited
क्षेत्रीय संस्थान-४, कस्तूरबा नगर, जरीपटका, नागपुर-४४००१४
(A Subsidiary of Coal India Limited / Govt. of India Public Sector Undertaking)
Hq:- Gondwana Place, Kanke Road, Ranchi - 834 031, Jharkhand (INDIA)
Office of the Regional Director
Regional Institute -IV, Kasturba Nagar, Jaripatka, Nagpur-440014

CORPORATE INDEX NO. U14292JH1975GOI001223

CMPDI/RI-IV/EnM/19-20/2882-91

Date: 20.11.2019

e-TENDER NOTICE FOR THE WORK

WORK FOR “SUPPLY, INSTALLATION, TESTING & COMMISSIONING OF 100 kWp (10 SETS X 10 kWp) CAPACITY GRID CONNECTED SOLAR PHOTOVOLTAIC POWER PLANT MOUNTING ON RISING STRUCTURE WITHOUT BATTERY BACK UP AT THE ROOF TOP OF RESIDENTIAL QUARTERS BUILDING OF CMPDI, RI-IV, JARIPATKA, NAGPUR (MS), PIN-440014.”

TENDER NOTICE NO. : 05 of 2019-20

DATE : 20.11.2019

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

Description of work	Estimated Cost of Work (In Rs.) (including GST)	Earnest Money (In Rs.)	Cost of Tender fee	Period of Completion (In days)
WORK FOR “SUPPLY, INSTALLATION, TESTING & COMMISSIONING OF 100 kWp (10 SETS X 10 kWp) CAPACITY GRID CONNECTED SOLAR PHOTOVOLTAIC POWER PLANT MOUNTING ON RISING STRUCTURE WITHOUT BATTERY BACK UP AT THE ROOF TOP OF RESIDENTIAL QUARTERS BUILDING OF CMPDI, RI-IV, JARIPATKA, NAGPUR (MS), PIN-440014.”	₹ 55,00,000/-	₹ 68,800/-	NIL	60 Days

2. Time Schedule of Activities:

Sl. No.	Particulars	Date	Time
a.	Tender e-Publication date	As per dates given in portal https://coalindiatenders.nic.in	
b.	Document download start date		
c.	Start date for seeking Clarification on-line		
d.	Bid Submission start date		
e.	Last date for seeking Clarification on-line		
f.	Document download end date		
g.	Bid submission end date		
h.	Bid Opening date		

Tender Inviting Authority	Contact Person(s)/Tender Dealing Officer(s)
HOD (E&M) / General Manager (E&M), CMPDI, RI - IV, Kasturba Nagar, Jaripatka, Nagpur, (Maharashtra) PIN-440014 Contact no: 0712-2807242, 9421995358.	D. Subba Rao, Chief. Manager (E&M), Mobile Number: 9421995347, 9766521621

- i. If the due date of opening falls on a holiday, the Tender will be opened on the next working day.
- ii. In case minimum 03 (three) bids are not received within originally stipulated time, the *Bid Submission End Date* will be extended initially for 02 (two) days and if still less than 03 bids are received, the *Bid Submission End Date* will be extended by another 05 (five) days automatically by the system.
- iii. There will be no physical / manual sale of the Tender Document.
- iv. There is no tender fee and the bidders can download the Tender Document free of cost.
- v. Bidders are advised to download the complete set of the Tender Document, including the tender details.

3. Deposit of Bid Security/ Earnest Money Deposit (EMD):

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

NOTE: The Earnest Money/ Bid Security should be 1.25% of the annualized estimated cost / estimated cost whichever is less, rounded up to next hundred rupees subject to maximum of ₹ 50 lakhs. This shall be deposited in the manner as described.

a. For Domestic Bidders:

In Online mode the bidder can make payment of EMD either through net banking from designated Bank/s or through NEFT/ RTGS from any scheduled Bank. In case of payment through net-banking, the money will be immediately transferred to CMPDIL's designated Account.

In case of payment through NEFT/RTGS the bidder will have to make payment as per the Challan generated by system on e-Procurement portal and will have to furnish online the UTR Numbers before submission of bid. Bidder will be allowed to submit his / her bid only when the EMD is successfully received in CMPDIL's account and the information flows from Bank to e-Procurement system.

The Earnest Money/ Bid Security of the unsuccessful bidder will be refunded and will not bear any interest.

NOTE:

The process of submission of EMD should be initiated preferably at least 24 hours before End Date and Time of Bid Submission to avoid any system related problems or issues in the payment gateway.

Clarification: No exemption of EMD for any bidder. However, in the online portal if option of exemption of EMD is mentioned as YES, then it is only to facilitate the bidder to upload detail of EMD in case of foreign currency.

While submitting the tender on-line the foreign bidder should upload a document (.pdf file) clearly specifying the transaction reference number / documentary evidence showing such remittance, in the space provided against 'Upload EMD exemption document' which should be digitally signed before moving on to the Next Page.

4. Availability of Tender Documents:

Detailed Tender Notice & Tender Documents including terms and conditions of works shall be available on e-tendering portal <https://coalindiatenders.nic.in> and Tender Notice shall be available at websites www.cmpdi.co.in, & <http://eprocure.gov.in/cppp> or www.publishtender.gov.in. The Tender document can be downloaded by any prospective bidder from the e-Procurement portal free of cost. The download of tender document may start immediately after e-Publication of NIT and shall continue till the last date and time of bid submission.

5. Clarification of Bid:

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

6. User Portal Agreement:

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 Terms & Conditions*' and '*Special Terms & Conditions*' and other conditions, if any, along with on-line undertaking in support of the authenticity of the declarations regarding the facts, figures, information and documents furnished by the Bidder on-line through <https://coalindiatenders.nic.in> in order to become an eligible bidder. No conditional bid shall be accepted.

7. Eligible Bidders:

In order to submit the bid, the bidders have to get themselves registered online on e-Procurement portal of CIL (<https://coalindiatenders.nic.in>) with valid Digital Signature Certificate (DSC). The bidders should have a 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 invitation for bid is open to all bidders including an individual, proprietorship firm, partnership firm, company registered under company's act having eligibility to participate as per eligibility criteria stipulated in Clause No: 8 of the NIT.

8 Eligibility Criteria

8.1 MNRE / NABL TEST REPORTS:

The intending bidder must submit test report /certificates from MNRE or NABL ACCREDITED test laboratories for the Solar Photovoltaic Panels to be supplied.

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

Scanned copy of documents to be uploaded by bidders (CONFIRMATORY DOCUMENT):

The intending bidder must submit test report /certificates from MNRE or NABL ACCREDITED test laboratories for the Solar Photovoltaic Panels to be supplied. The bidder must also submit the OEM Certificate or Authorized Dealership Certificate or Authorization from the OEM to bid in this tender for the Solar Photovoltaic Panels to be supplied.

Technical evaluation by the System:

The system will evaluate "Yes" as eligible and "No" as not eligible.

~~Note: In case the bidder is a Joint Venture, at least one partner of JV should possess the valid~~

8.2 Work Experience:

The Intending bidder must have in its name ~~or proportionate share as a member of Joint Venture~~ 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:-

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

Or

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

Or

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

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 subcontract in compliance with the provision of such sub-contract in the original contract awarded to the prime contractor). The document may be issued by the Owner/ Govt. department on behalf of the Owner.

The work experience of only those works shall be considered for evaluation purpose, which are completed on or before the last day of the month previous to one in which e-Tender has been invited (date should be mentioned). **The experience of incomplete/ ongoing works as on the 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 on last day of eligibility period, even if, maintenance work is going on, and the certificate issued clearly stipulates the same.**

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

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

In case the bidder is not a prime contractor but a sub-contractor, the bidder 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 sub contracts in the original contract awarded to a prime contractor. The documents may be issued by owner/ Govt Department on behalf of the owner.

The definition of similar work shall be as follows:

“Supply & commissioning of Grid connected Solar Panel/Solar PV panel/Solar PV power plant / system with/without battery backup of capacity 100 KWp or above.”

Note: The work completion certificate submitted against Clause No. 8.2 and 9.8 in respect of composite work should clearly indicate the value of the similar work executed under the contract.

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

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

Scanned copy of documents to be uploaded by bidders (CONFIRMATORY DOCUMENT):

For work experience bidders required to submit copy of the Work Order along with Satisfactory Work Completion Certificate issued by the employer against the Experience of similar work containing all the information as sought on-line. BOQ may be sought during clarification or along with deficient documents

Technical evaluation by the System:

- i. The system shall calculate the period of 7 years backwards starting from the last day of month previous to the e-Publication date of NIT.
- ii. The system shall check the End date of each experience (The system shall not allow more than 3 entries for experience) and accept it as a qualifying experience if the end date of experience falls within the 7 years computed by the system.
- iii. The system shall calculate the value of each qualifying experience by multiplying the value with the % share of experience and adding 5% for each completed year (total No. of days/365) after the end date of experience of work till the last date of month previous to one in which the NIT has been published on e-Procurement portal.
- iv. The system shall check the experience with highest value whether it exceeds 80% of ECV. In case it does not, it shall check the top 2 experiences whether each of them is greater than 50% of ECV. In case, it still does not, the system shall check all 3 qualifying experiences whether each of them exceeds 40% of ECV. The system shall regard the bidder as 'Eligible' if it meets any of the aforementioned criteria or else it shall consider the bidder as 'Ineligible'.
- v. The weightage of 5% every year will be on simple rate and will not be compounded on yearly basis for the purpose of calculating the value of each qualifying experience.
- vi. The work experience of the bidder for those works only shall be considered for evaluation purposes, which are completed before the last date of month previous to one in which NIT has been published on e-Procurement portal. Hence, the works which are incomplete/ongoing, as on the last date of month previous to one in which NIT has been published on e-Procurement portal, shall not be considered against eligibility.
- vii. In case the work is started prior to the eligibility period of 7 years (counted backwards starting from the last day of month previous to the e-Publication date of NIT) and completed within the said eligibility period of 7 years, then the full value of work shall be considered against eligibility.
- viii. In case the experience has been earned by the bidder as an individual or proprietor of a proprietorship firm or partner of a partnership firm, then 100% value of the experience will be considered against eligibility. ~~But if the experience has been earned by the bidder as a partner in a Joint Venture firm then the proportionate value of experience in proportion to the actual share of bidder in that Joint Venture will be considered against eligibility.~~

8.3 Financial-Turnover:

Average annual financial turnover during the last 03 (three) years, ending 31st March of previous financial year 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).

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 years ending 31st 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 CA
- iii. ~~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~~

Scanned copy of documents to be uploaded by bidders (CONFIRMATORY DOCUMENT):

The intending bidder must submit *Turnover Certificate* from Practicing Chartered Accountant of India containing information as furnished by bidder on-line.

Technical evaluation by the System:

- i. The system will calculate the 30 % of the estimated value (ECV) as the required average turnover of the bidder.
- ii. The system will calculate the average of the financial turnover of 3 years furnished by the bidder by adding 5% for each completed year (total number of days/365) after the end of respective Financial Year (i.e. 31st March) till the last day of month previous to one in which e-Tender has been invited.
- iii. The average shall be compared with the minimum requirement to ascertain the eligibility status of the bidder.
- iv. If any bidder does not submit the Turnover value for any of the 3 years, the system will not disqualify him and instead shall consider all 3 years for computing the average by assuming a value of 'zero' for the year for which no information is given by bidder.

8.4 Permanent Account Number (PAN):

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

In respect of the above eligibility criteria the bidders are required to furnish the following information on-line: Confirmation in the form of **Yes / No** regarding possessing of Permanent Account Number (PAN) issued by Income Tax Department, Govt. of India.

Scanned copy of documents to be uploaded by bidders (CONFIRMATORY DOCUMENT):

Photocopy of the PAN Card issued by Income Tax Department, Govt. of India OR the Tax Residency Certificate of the respective country as the case may be.

Technical evaluation by the System:

The system will evaluate "Yes" as eligible and "No" as not eligible.

8.5 Goods and Service Tax (Not Applicable for Exempted Goods/Services):

The bidder should be either

- i. GST Registered Bidder (**but not under Composition Scheme**)
OR
- ii. GST unregistered Bidder

Registration:

The bidder is liable to be registered under GST unless they are specifically exempt from registration under specific notification / circular / section / rule issued by statutory authorities.

The bidder claiming exemption in this respect shall submit supporting documents as well as certificate from Practicing CA/CMA/CS to the effect that Bidder is fulfilling all the conditions prescribed in notification to make him exempt from registration.

For Example: *If the bidder is exempt from Registration under CGST ACT, 2017 due to his aggregate turnover in the relevant financial year being less than 20/10 lakhs or as per the turnover limit of Govt. then bidder shall submit the copy of Notification along Certificate from Practicing CA/CMA/CS to the effect that Aggregate turnover from his all business operation during the relevant financial year is less than 20/10 Lakhs or as per the turn over limit of Govt. and hence he is exempt from Registration under GST Act, 2017.*

The expression "aggregate turnover" shall include all supplies made by the taxable person, whether on his own account or made on behalf of all his principal.

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

- 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.
- ii. Status of the bidder in the BOQ excel sheet being uploaded by the bidder during bid submission.

Scanned copy of documents to be uploaded by bidders (CONFIRMATORY DOCUMENT):

The scanned copy of documents regarding status w.r.t GST to be uploaded by bidders in support of information/declaration furnished online by the bidder in the BOQ sheet against Eligibility Criteria.

I. Status: GST registered Bidder (but not under Composition Scheme):

Document: GST Registration Certificate (i.e. GST identification Number) issued by appropriate authority of **India**

II. 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 compliance with the relevant GST rules of **India**.

Note:

1. If Turnover of bidder exceeds exemption limit, the bidder must have GST registration as per GST Act and Rules.

Technical evaluation by the System of tender and L-1 status:

- a) *The evaluation of tender shall be done based on cost to company. The cost to company shall be ascertained by reducing the total Value (including taxes and duties) quoted by the bidder by the amount of CGST & SGST or IGST, GST (Compensation to state) cess eligible for input tax credit. The L1 shall be decided based on cost to company ascertained in manner suggested above.*

Where the bidder is an unregistered one i.e. (exempt from registration under GST) supplying taxable goods/service causing CMPDIL liable to deposit tax under reverse charge, the CGST & SGST or IGST and GST (Compensation to state) cess, as applicable and payable by CMPDIL under reverse charge, shall be added to cost while ascertaining the landed price. However, in this case also The L1 shall be decided based on cost to company ascertained after deducting the CGST & SGST or IGST and GST (Compensation to state) cess amount eligible for input tax credit, if any, from the total value including tax arrived as above.

- b) *The rate quoted by the bidder shall be exclusive of CGST, SGST, IGST and GST (Compensation to state tax) cess and it should be strictly as per the format of BOQ. Item wise each element of cost shall be indicated in respective column specifically provided for that. ~~Item wise rate of CGST & SGST or IGST and GST (Compensation to state tax) Cess, applicable at the time of bidding, shall be indicated by the bidder in respective column of the BOQ.~~ If the bidder has opted for composition levy, no tax under GST shall be charged by him.*
- c) *The Tax Invoice raised by the bidder must be in compliance of relevant GST Acts, rules & notifications made thereunder and should bear the GSTIN number for the supply to CMPDIL Regional Institute-IV at Maharashtra state as given below:*

State	Unit / HQ	City	GSTIN (Provisional ID)
Maharashtra	RI-IV	Nagpur	27AAACC7475N1Z4

The rate and amount of CGST, SGST, IGST, and GST (Compensation to state) Cess, related to supply of goods, shall be shown separately in tax invoice. In case the bidder has opted for composition levy, the Bill of Supply shall be raised by him in compliance of relevant GST Acts, rules & notifications made thereunder.

- d) *Bill form given at Appendix -12 of Manual for Civil Engineering Works - 2015 (Part I) shall form an part to the tax invoice raised by the supplier in compliance of relevant GST Acts, rules & notifications made thereunder.*
- e) *The CGST & SGST, IGST and GST (Compensation to state tax), as applicable at the time of supply, shall be paid extra against submission of proper Tax invoice, as referred above, by the bidder so that CMPDIL could be able to avail Input tax credit of such CGST, GST, IGST, GST (compensation to state cess) reflected in the invoice.*
- f) *If CMPDIL fails to claim Input Tax Credit (ITC) on eligible Inputs and Capital Goods or the ITC claimed is disallowed due to failure on the part of bidder of goods and services in incorporating the tax invoice issued to*

CMPDIL 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 bidder.

- g) The amount of CGST & SGST or IGST and GST Cess, as indicated in the Tax Invoice shall be paid only when they appear in GSTR 2A of CMPDIL and the bidder has filed the valid return in accordance with the provisions of the GST Act and the rules made there under.
- h) In the event of any additional tax liability accruing on the bidder of goods and / or services due to classification issue or for any other reason, the liability of CMPDIL shall be restricted to the amount of GST charged on the original tax invoice issued by the bidder.
NOTE: Tax Invoice should be raised exactly as per the GST rate declared by the bidder in the BOQ sheet while submitting Price Bid.
- i) 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.
- j) **E-way Bill:** The e-way bill required in connection with supply of goods or services, if any, shall be arranged by the bidder. However, the e-way bill will be arranged by CMPDIL if the bidder/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.)
- k) **TDS:** The TDS, if applicable, shall be made at applicable rate from the payment made or credited to the bidder.
- l) **Evidence in support of import goods:** In case of supply of imported goods as per terms of supply order the supplier shall provide the following documents as evidence in support of import goods.
 - i. **A certificate from their auditor to the effect that they have paid Rs.....** as custom duty against the import of goods under supplier order..... and that refund of custom duty, if any shall be passed on to the buyer.
 - ii. **Self attested copy of Principal's invoice/ packing list.**
 - iii. **Self attested copy of bill of lading/Airway bill.**
 - iv. **Self attested copy of bill of entry.**
 - v. **Certificate of origin.**

The supplier shall provide clear linkage of items as per order with documents furnished under clause (ii).(iii) and (iv).

8.6 Undertaking for Electrical License: (For Electrical work)

Supervision of Electrical works by a person having a valid Electrical License issued by Electrical Licensing Board/Authority of Maharashtra state or any other State Govt /UT of India

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

Scanned copy of documents to be uploaded by bidders (CONFIRMATORY DOCUMENT):

Confirmation regarding execution of electrical works under Supervision of a person having a valid Electrical License issued by Electrical Licensing Board/Authority of Maharashtra state or any other State Govt /UT of India.

Note: ~~In case the bidder is a Joint Venture, at least one partner of JV should possess the valid~~

8.7 Digital Signature Certificate (DSC):

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

Scanned copy of documents to be uploaded by bidders (CONFIRMATORY DOCUMENT):

If the bidder himself is the DSC holder bidding on-line then no document is required.

However If the DSC holder is bidding online on behalf of the bidder then the Power of Attorney or any sort of legally acceptable document for the authority to bid on behalf of the bidder

8.8 Undertaking:

A commitment is to be uploaded in the form of UNDERTAKING on Bidder's letter head as per the format given in the bid document (Annexure-A2).

Undertaking is about the genuineness of information furnished online, authenticity of scanned copy of documents uploaded and about other commitments.

Scanned copy of documents to be uploaded by bidders (CONFIRMATORY DOCUMENT):

A commitment is to be uploaded in the form of UNDERTAKING on Bidder's letter head as per the format given in the bid document (Annexure-A2).

Undertaking is about the genuineness of information furnished online, authenticity of scanned copy of documents uploaded and about other commitments.

8.9 Legal Status of the bidder:

Scanned copy of documents to be uploaded by bidders (CONFIRMATORY DOCUMENT)

Any one of the following documents:

1. Affidavit or any other document to prove proprietorship/ Individual status of the bidder.
 2. Partnership deed containing name of partners
 3. Memorandum & Article of Association with certificate of incorporation containing name of bidder.
 4. Joint Venture Agreement containing name of partners and lead partner, power of attorney to the lead partner and share of each partner.
- ~~(The partnership firm / JV / Consortium is required to submit written consent of all the partners to Arbitration clause.~~

8.10) The bidders must submit the EMD / Bid security along with the bid as per the method described in Clause No.3.

9 Submission of Bid:

9.1 EMD:

The bidder will have an option for submitting EMD through ONLINE mode only (in INR).

9.2 Online Registration:

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. All the bids are to be submitted online and on the website <https://coalindiatenders.nic.in> . No bid shall be accepted offline.

9.3 User Portal Agreement:

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

9.4 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, CMPDIL 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.

9.5 In the undertaking given by bidder online, there will be provision for penal action, if any information/ declaration furnished online by the bidder against eligibility criteria is found to be wrong at any stage which changes the eligibility status of the bidder.

9.6 The information will be provided by the bidder by filling up relevant data through a form in an objective and structured manner. The software will use the information provided by the bidders to evaluate the technical bid automatically.

9.7 The bidder should strictly comply with following instructions:

- i. The bidders are requested to submit offers online giving reference to this tender notice number and date containing offers in two parts in the links Cover-I, OID and Cover-II.
- ii. Two parts of the bid should contain the details as follows:

Part-I / Cover-I and OID:

- i) Letter of bid
- ii) Details of Earnest Money
- iii) Information on Eligibility/ Qualifying criteria as detailed under **Clause No.8** including necessary scanned documents as elaborated there.

Part II / Cover-II:

- i) Prices only in the Excel format as indicated in the Bid document.

9.8 Confirmatory Documents:

All the confirmatory documents as enlisted in the NIT in support of online information furnished by the bidder are to be uploaded in Cover-I & OID (if asked) by the bidder while submitting the bid online.

All the bidders are to submit the information in objective manner confirmed by the uploaded documents. The documents related to the furnished online information, based on which the auto evaluation takes place will be considered. If the bidder uploads any other document, it will be given no cognizance.

The scanned copy of following documents will be submitted by the bidder online while submitting bid under Cover-I (Part-I).

Sl. No.	Documents related to Eligibility Criteria	Scanned copy of documents to be uploaded by bidder in support of information/ declaration furnished online by the bidder against Eligibility Criteria as Confirmatory Documents.
1	Letter of Bid (LoB)	Letter of Bid (LoB) on the bidder's letter head, in prescribed format (Annexure- A1).
2	Earnest Money Deposit (Ref. Clause No. 3 of NIT)	Refer Clause No. 3 of NIT.
3	MNRE / NABL TEST REPORTS: (Ref. Clause No. 8.1 of NIT)	The intending bidder must submit test report /certificates from MNRE or NABL ACCREDITED test laboratories for the Solar Photovoltaic Panels to be supplied.
4	Work Experience (Ref. Clause No. 8.2 of NIT)	Bidders are required to submit the copy of the Work Order along with Satisfactory Work Completion Certificate issued by the employer against the Experience of "similar work" containing all the information as sought 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.
5	Undertaking for Electrical License: (For Electrical work)(Ref. Clause No. 8.6 of NIT)	Undertaking regarding execution of electrical works under Supervision of Electrical works by a person having a valid Electrical License issued by Electrical Licensing Board/Authority of Maharashtra state or any other State Govt /UT of India
6	Financial Turnover (Ref. Clause No. 8.3 of NIT)	Financial Turnover certificate for last 3 (three) financial years issued by a Practicing Chartered Accountant having a membership number with Institute of Chartered Accountants of India.
7	Authorization for Digital Signature Certificate	1. If the bidder himself is the DSC holder bidding on-line then no document is required. However 2. If the DSC holder is bidding online on behalf of the bidder then the Power of Attorney or any sort of legally acceptable document for the authority to bid on behalf of the bidder
8	Undertaking	A commitment is to be uploaded in the form of UNDERTAKING on Bidder's letter head as per the format given in the bid document (Annexure-A2). Undertaking is about the genuineness of information furnished online, authenticity of scanned copy of documents uploaded and about other commitments.

9	Legal Status of the bidder	<u>Any one of the following documents:</u> 1. Affidavit or any other document to prove proprietorship/ Individual status of the bidder. 2. Partnership deed containing name of partners 3. Memorandum & Article of Association with certificate of incorporation containing name of bidder.
10	Permanent Account Number (PAN)	Copy of PAN card issued by Income Tax Department, Govt. of India.
11	Goods and Service Tax (Not Applicable for Exempted Services) (Ref. Clause No. 8.5 of NIT)	The following documents establishing the status of bidder w.r.t GST as declared by Bidder in the BOQ sheet: a) Status: GST registered Bidder (but not under Composition Scheme) - Document: GST Registration Certificate (i.e. GST identification Number) issued by appropriate authority of India. b) Status: GST unregistered bidder / Dealer - 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 compliance with the relevant GST rules of India. <u>If Turnover of bidder exceeds exemption limit, the bidder must have GST registration as per GST Act and Rules.</u>
12	Mandate Form for Electronic Fund Transfer.	Confirmation in form of Yes/No. Copy of Mandate form duly filled in as per Performa. (As per Annexure-A3).
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.		

9.9 Letter of Bid:

The format of Letter of Bid (as given '[ANNEXURE-A1](#)') will be downloaded by the bidder and will be printed/ typed on his letter head. This document will be signed by the bidder or any authorized person of bidder or a DSC holder, bidding online with authorization from the bidder and 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.

9.10 Price- Bid/ Cover-II/ Part-II:

The Price bid containing the Bill of Quantity will be in .xls format (password protected) and will be uploaded during tender creation. This will be downloaded by the bidder and he will quote the rates for all items on this Excel file. Thereafter, the

bidder will upload the same Excel file during bid submission in Cover-II. The Price bid will be in Item Rate or Percentage Rate BOQ format and the bidder will have to quote for all the tendered items and the L-1 will be decided on overall quoted value (i.e. Cost to Company). The Price-bids of the tenderers will have no condition. The Price Bid which is incomplete and not submitted as per instruction given above will be rejected. Any alteration/modification in the Excel format may lead to rejection of bid.

The L-1 bidder will be decided based on cost to the Company.

Prior to quoting the rates in the BOQ file, the bidder will select the appropriate Goods and Service tax (GST), status from the following list given in the BOQ:

I). GST Registered Bidder OR

II) GST Unregistered Bidder OR

The Price bid file will be digitally signed and uploaded by the bidder in Part-II / Cover-II.

10. SYSTEM FOR DECISION OF L-1:

The L1 bidder will be decided based on Overall Quoted Value (i.e. Cost to the Company). The system for decision of L-1 bidder will be as follows:

Case – 1: Works / Services for which INPUT TAX CREDIT is not available to the Company.

The overall bid price (Cost to Company) will be rates quoted by the bidder plus applicable rate of GST (Goods & Service Tax). The ranking of the Bidders will be decided based on 'Cost to Company' price. The lowest cost to company price will be ranked as L-1, the next higher price as L-2 and so on calculated by the system.

Case – 2: Works / Services for which INPUT TAX CREDIT is available to the Company.

The overall bid price (Cost to Company) will be rates quoted by the bidder only; GST (Goods & Service Tax) will not be added in this case. The ranking of the Bidders will be decided based on 'Cost to Company' price. The lowest cost to company price will be ranked as L-1, the next higher price as L-2 and so on calculated by the system.

Contract Value:

The Contract Value will be the value of the 'Rates quoted by bidder plus amount of GST. The liability of payment of GST by the contractor registered under GST will lie with the contractor. The payment of GST would be made to the contractor only on submission of Bill / Invoice in accordance with the provision of GST Rules. ~~In case of unregistered bidder, the applicable GST will be paid by CMPDIL directly to the concerned Tax Authority.~~

The Price-bids/BOQ of the tenderers shall have no condition. The Price Bid which is incomplete and not submitted as per instruction given above will be rejected.

11. 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.

12. Auto Extension of Critical Date:

If number of bids received online is found to be less than 03 (three) on End Date of bid submission, then the following critical dates of the Tender will be automatically extended initially for a period of 02 (two) days; and, if the number of bids still remains less than 03 (three), then for another 05 (five) days:

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

If any of the above extended Dates falls on Holiday i.e. a non-working day as defined in the e-Procurement Portal then the same is to be rescheduled to the next working day.

This extension will be also applicable in case of receipt of zero bid.

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 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.

It is the bidder's responsibility to comply with the system requirement i.e. hardware, software and Internet connectivity at bidder's premises to access the e-tender portal. Under any circumstance, CMPDIL 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.

14. Opening And Evaluation Of Tender:

14.1 Opening of Bid:

Tenders [**Cover-I (Technical-bid)** and **Cover-II (Price-bid)**] will be decrypted and opened online by the Bid Openers with their Digital Signature Certificate (DSC) on the pre-scheduled date & time of tender opening. The bidder can view bid opening remotely on their personalized dash board under "Bid Opening (Live)" link.

14.2 Automatic Evaluation (Technical):

The e-Procurement/tender system will evaluate the Technical bids automatically on the basis of relevant data provided by the bidder, while submitting the bid online. If the parameters furnished by bidder online, in an objective and structured manner, does not confirm to the required eligibility criteria as specified in the NIT, the bid will be automatically rejected by the system and the Price-bid of such bidders shall not be opened by the system.

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 automatically rejected by the system. The system will automatically upload the technical opening summary and technical evaluation summary which will be visible in the site once the Bid.

Openers allow the system to “*Disclose Bidder Information*” after completion of Reverse Auction. Acceptance of Bidder in a general format of online declaration will be recognized and accepted as the certification regarding authenticity of all the information and documents furnished by them online and acceptance of all terms and conditions of the bid document, since such acceptance by Bidder with Digital Signature Certificate is legally tenable. After decryption and opening of bids, the system will show the lowest price (cost to Company) quoted by L-1 bidder without disclosing the identity of any bidder and the total number of bids received/opened.

14.3 Evaluation of Tender (by Evaluator):

- i) Bid evaluation shall be done after taking into consideration overall quoted price by the bidder and effect of Goods and Services Tax (GST), GST Compensation Cess etc. as applicable. L-1 will be decided on the basis of Cost to Company.
- ii) After completion of process, the documents submitted by L-1 bidder in Cover-I 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 L-1 bidder online. If it confirms to all of the information/ declarations furnished by the bidder online and does not change the eligibility status of the bidder then the bidder will be considered eligible for award of Contract.
- iii) In case the Tender Committee finds that there is some deficiency in uploaded documents by L-1 bidder then the same will be specified online by Evaluator, clearly indicating the omissions/shortcomings in the uploaded documents and indicating start date and end date allowing 7 days (7 x 24 hours) time for online re-submission by L-1 bidder. The L-1 bidder will get this information on their personalized dash board under “Upload confirmatory document” link. Additionally, information shall also be sent by system generated email and SMS, but it will be the bidder’s responsibility to check the updated status/information on their personalized dash board regularly after opening of bid. No separate communication will be made in this regard. Non-receipt of e-mail and SMS will not be accepted as a reason of non-submission of documents within prescribed time. The bidder will upload the scanned copy of all those specified documents in support of the information/ declarations furnished by them online within the specified period of 7 days. If the L1 bidder fails to submit the specified document/s in 7 (Seven) days’ time or the uploaded documents still contain some deficiency, additional time of 5 days (5 x 24 hours) may be given to the L-1 bidder for re-submission, indicating start date and end date for re-submission of such document/s. It must be noted that maximum 2 chances, each of 7 days (7 x 24 hours) and 5 days (5 x 24 hours) respectively, duration shall be given.
- iv) The tender will be evaluated on the basis of documents uploaded by L-1 bidder online. The L-1 bidder is not required to submit hard copy of any document through offline mode. Any document submitted offline will not be given any cognizance in the evaluation of tender.
- v) In case the L-1 bidder submits requisite documents online as per NIT, then the bidder will be considered eligible for award of Contract.
- vi) In case the L-1 bidder fails to submit requisite documents online as per NIT; or, if any of the information/declaration furnished by L-1 bidder online is found to be incorrect by Tender Committee during evaluation of scanned documents uploaded by bidder; which changes the eligibility status of the bidder; then his bid shall be rejected and 100% EMD of the L-1 bidder will be forfeited.
- vii) In case the L-1 bidder is technically eligible but rejection is due to high rate quoted by him then the tender shall be cancelled and retendered.
- viii) In case the L-1 bidder is rejected due to non-compliance of confirmatory documents, then the L-2 bidder will become L-1 bidder and Confirmatory Documents of L-2 bidder shall be evaluated by Tender Committee and the process shall be followed as mentioned in Clause no. (i) to (v) above.
- ix) The process as mentioned at Clause no. (vii) shall be repeated till the work is either awarded or all the eligible bidders are exhausted.

- x) In case none of the bidders complies the technical requirement, then re-tender will be done.
- xi) It is responsibility of Bidders to upload legible/clearly readable scanned copy of all the required documents as mentioned above.
- xii) Penal Provisions: If the L-1 bidder happens to be defaulter upon verification of documents uploaded, 100% EMD of defaulting bidders will be forfeited. **Note:** The penal provisions will be squarely applicable to all those firms whose documents are examined on account of treating them as L1 successively.
- xiii) The Tender Committee will recommend for award of work to the successful bidder after evaluating their technical eligibility based on the computer generated evaluation sheets followed by evaluation of the scanned documents uploaded by L-1 bidder in support of the information furnished by them online and after evaluation of the reasonableness of L-1 rates. The reasonableness of rates will be evaluated as per the provisions of Manual of CIL and other guidelines issued from time to time. The approval for award of work to L-1 bidder will be accorded by the competent authority as per Delegation of Power based on the TC recommendation.
- xiv) After competent approval and financial concurrence of TCR, the work order to the L-1 bidder will be issued and the scanned copy of the Work Order will be uploaded on the e-Procurement portal and Simultaneously the original copy will be sent to the bidder through registered/speed post.
- xv) The processes for entering into the agreement with the successful bidder will be done offline as per the prevailing manual system. However, the documents required to be submitted by contractor for executing the agreement will be specified in the Tender document (Annexure-A6).
- xvi) Any tender hosted on the e-Procurement site must be logically concluded i.e. either Letter for Award of work is to be issued at AOC page on e-Procurement portal in online mode or the tender is to be cancelled/ retendered online through corrigendum.

15. One Bid per Bidder:

Each Bidder shall submit only one Bid, either individually, or as a partner in a partnership firm or a Public Limited / Private Limited Company or any legal entity. 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 bidders' participation to be disqualified.

16. Abnormally high rate (AHR) & Abnormally low rate (ALR) items:

If the bid of the successful bidder is seriously unbalanced in relation to the company's estimate of the cost of the 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 scheduled proposed.

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 the quoted price.

Additional Performance Security shall be furnished by bidder along with normal performance security. Failure to submit such additional performance security may result into termination of the contract. This Additional Performance Security will not carry any interest and shall be released in the following manner.

- vi. 30% of additional performance security will release after 60% of the total work is completed.
- vii. 50% of additional performance security will release after 80% of the total work is completed.

viii. 100% of additional performance security will release after total work is completed.

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

17. 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. The EMD of successful bidder (on award of Contract) will be retained by CMPDIL and will be adjusted to Performance Security Deposit.

18. Site Visit:

- i. 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.
- ii. 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.
- iii. The Bidder is expected, before quoting his rate, to go through the requirement of materials/workmanship, specification, requirements and conditions of contract.
- iv. 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.

19. Taxes and Duties:

All duties, taxes [excluding Goods and Services Tax (GST) and 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 either payable by bidder or by company under reverse charge mechanism shall be computed by system in BOQ sheet as per pre-defined 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. CMPDIL) 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 thereunder and after online filing of valid return on GST portal. Payment of GST & GST Compensation Cess is responsibility of bidder/contractor.

However, in case contractor is GST unregistered bidder in compliance with GST rules, the bidder shall not charge any GST and/or GST Compensation Cess on the bill/invoice. In such case, applicable GST will be deposited by CIL/Subsidiary directly to concerned authorities.

Input tax credit is to be availed by Paying Authority as per rule.

If CMPDIL 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 bidder / vendor of goods and services in incorporating the tax invoice issued to CMPDIL 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 bidder / vendor along with interest, 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 reserved the right to deduct / withheld 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.

20. Recovery of any Claim from Vendor/Bidder:

In the event of recovery of any claim towards LD Charges, Penalty, fee, fine or any other charges from the bidder/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 bidder/vendor against their bill/invoice or any other dues.

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

21. 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.

22. Technical Specifications:

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

23. Currencies of Bid and Payment:

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

24. Commencement of Work:

The work should be completed within the stipulated period and the date of commencement shall be reckoned from the next working day of execution of agreement.

25. Handing Over of Site:

On completion of the work all rubbish, debris, brick bats etc. shall be removed by the contractor 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.

26. Deployment of Manpower and Machineries:

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

27. 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.

28. 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.

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

The Bidder, whose Bid has been accepted, will be notified of the award on-line and also by registered post/speed post by the employer prior to expiration of the bid validity period. The L-1 bidder will get the information regarding award of work on their personalized 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 fulfillment 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. The written contract to be entered into between the contractor and the company, shall be the foundation of the rights of both the parties and the contract shall not be deemed to be executed until the contract is signed by both the parties i.e. Contractor and the Company.

30. Bid Validity:

The Bid Validity Period will 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 the Company will be entitled to take action as per [Clause No.31](#) (Modification and Withdrawal of Bid) of NIT.

31. 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/she/they 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:

1. The EMD will be forfeited and
2. The bidder will be debarred for *1(One)* year from participating in tenders in CMPDIL/Subsidiary. The Price-bid of all eligible bidders including this bidder will be opened and action will follow as under:
 - i). If the bidder withdrawing his bid is other than L 1, the tender process shall go on.
 - ii). If the bidder withdrawing his bid is L-1, then re-tender will be done. Penal action against clauses above will be enforced from the date of issue of such order.
 - iii) The standard operating procedure to handle withdrawal of bid after end date of submission is shall be as follows:

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

I. The Mode of Withdrawal:

A. Online Withdrawal of Bids:

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

B. Offline Withdrawal of Bids :

- a. A partner of bidder (in case of 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. Offline withdrawal of bid, beyond end date of bid submission and till award of contract, may be considered by the tender committee.

II. Acceptance of withdrawal by Tender Committee:

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.

The decision of Tender Committee will be binding on the tenderer.

32. Performance Security:

- i. Performance Security would be **5%** of contract amount and should be submitted within 28 days of issuance of LOA by the successful bidder in any of the form given below:

- A Bank Guarantee in the form given in the bid document from any Scheduled bank. The BG issued by outstation bank shall be operative at its local branch at NAGPUR.

NOTE: Bank Guarantee against Performance Security shall be applicable if the amount of Performance Security exceeds Rs. 5.0 lakhs.

The Bank Guarantee shall be issued by a Scheduled Bank / Nationalised 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 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: Kingsway Branch,

IFSC: SBIN0000432,

A/c No: 11172255281,

Address: Kingsway, SV Patel Marg, Nagpur -440001

- Govt. Securities, FDR or any other form of deposit stipulated by the owner and duly pledged in favour of owner.
- Demand Draft drawn in favour of CMPDIL, RI-IV, NAGPUR, on any Scheduled Bank payable at its Branch at NAGPUR

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

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

If performance security is provided by the successful 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.

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

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

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

- ii. **5% Performance Security** will be refunded within 14 days of the issue of defect liability certificate (taking over certificate with a list of defects).

33. 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.

34. Public Enterprises preference:

The Company reserves its right to allow Public Enterprises purchase preference facility as per prevalent policy. 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:

35. 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 form an integral part of this NIT and shall also form a part of the contract agreement.

36. 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.

37. 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.

38. Compliance of Applicable Labour Laws:

- i) The contractor shall abide by the rules & regulations of Labour's Laws applicable in their case relating to weekly holidays, overtime allowance, leave with wages and compensatory holidays etc.
- ii) The contractor shall strictly implement all relevant provisions enumerated under Contract Labour (Regulation & Abolition) Act, 1970 and will submit all statutory documents and records as applicable to concerned authorities and shall take full responsibility for obtaining labour license from Central/State Authority as per the Act. He/she/they will also ensure timely submission of statutory returns as applicable in their case.
- iii) **The contractor shall not pay less than the specified category of minimum wages to the labour engaged by him/her/them as per Minimum Wages Act, 1948 notified by the State Govt. or Central Govt. whichever is higher and as may be in force and the payment has to be released under the Payment of Wages Act 1936. In this matter the decision of the department shall be final and binding. The contractor shall provide benefits / facilities to its employees in accordance with the applicable laws to this locality i.e. Nagpur. CMPDI shall be kept completely indemnified against any liability and consequences thereof. The contractor will be responsible to maintain records/documents pertaining to payment of wages to its workmen as desired by State/Central Govt. Laws including Payment of Wages Act, 1936, Equal Remuneration Act, 1976 & Payment of Bonus Act 1965.**
- iv) The Contractor should maintain all records in Hindi or English 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, 1948, employees Compensation Act, 1923, Employees State Insurance/Act, 1948 etc. and latest amendment thereof. Such records maintained by the contractor shall be open for inspection by the Engineer-in-charge or by the nominated representative of the Principal Employer. Contractor shall also maintain all such records on Contract Labour Information Portal (CLIP) of the Coal India Ltd. (in website: <http://210.212.20.44:50005/CLIP/Forms/ContractorRegistration.php>). Any violations of this clause shall be treated as breach of contract and action shall be taken accordingly
- v) The contractor will strictly regulate the terms of employment of his/her/their employees and manage the discipline as per Industrial Employment (standing orders) Act. 1946.
- vi) The contractor shall get himself registered under Coal Mine Provident Fund (CMPF) / EPF, ESI and miscellaneous provisions registration no. or Code no. allotted for the specific establishment within reasonable time and submit the same to the employer, which are to be obtained before payment of 1st on a/c bill. The contractor shall maintain records/document in compliance with the payment of bonus Act 1965.
- vii) **The contractor shall be solely responsible for the payment of wages, including overtime wages to the workmen and ensure its timely payment thereof through Bank.**
- viii) The Contractor shall abide the rules and regulations of Pradhan Mantri Suraksha Yojana.
- ix) The contractor or its workmen shall not at any point of time have any claim whatsoever against the CMPDI.
- x) The contractor shall indemnify the CMPDI in so far as liability incurred by the CMPDI on account of any default by the contractor.
- xi) Neither the contractor nor his workmen can be treated as employees of the CMPDI for any purposes. They are not entitled for any claim, right, preference etc. over any job/regular employment of the CMPDI.
- xii) If the contractor fails to discharge his duties or neglects to perform the work agreed to done under the agreement, the CMPDI is entitled to terminate this agreement as per clause and get the work done by / through other means and claim reimbursement of actual expenses incurred and also damages for the loss

incurred on account of failure on the part of the contractor to discharge the duties or to perform the work under the agreement.

- xiii) The Contractor shall in addition to any indemnity provided by the relevant clauses of the agreement or by law, indemnify and keep indemnified, the CMPDI against all claims, damages or compensation under the provisions of Payment of Wages Act, 1936, Minimum Wages Act, 1948, Employer's Liability Act, 1938, employees Compensation Act, 1923, Coal Mine Provident Fund (CMPF)/ Employee Provident Fund Act, Employees State Insurance 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 consonance 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 or death.

39. 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.

40. Legal Jurisdiction:

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

Sd/-
General Manager / HOD (E&M)
CMPDI, RI-IV, Nagpur

SECTION II
SPECIAL TERMS AND
CONDITIONS
AND
SCOPE OF WORK

Special Terms and Conditions

SCOPE OF WORK AND TECHNICAL SPECIFICATIONS

DESCRIPTION OF ITEM	QUANTITY
WORK FOR “SUPPLY, INSTALLATION, TESTING & COMMISSIONING OF 100 kWp (10 SETS X 10 KWp) CAPACITY GRID CONNECTED SOLAR PHOTOVOLTAIC POWER PLANT MOUNTING ON RISING STRUCTURE WITHOUT BATTERY BACK UP AT THE ROOF TOP OF RESIDENTIAL QUARTERS BUILDING OF CMPDI, RI-IV, JARIPATKA, NAGPUR (MS), PIN-440014.”	ONE SET

SPECIFICATION FOR 100 kWp (10 Sets X 10 KWp) GRID CONNECTED SOLAR POWER PLANT

- a) This specification covers the requirements of Design, Manufacture, Installation, Testing, Delivery and Commissioning of 100 kWp (10 KWp X 10 sets) Grid connected Solar Power Plant/Panel complete with rising mounting structure and accessories.

Solar PV System shall consist of following equipments:

- Solar PV Modules consisting of required number of PV Cells.
- Power Conditioning Unit/String Inverters with LCD display
- Mounting Rising Structures
- Cables and Hardware
- Junction Box and Distribution Boxes as required
- Earthing and earth pit
- Lightning Arrestors
- Fire Extinguishers

b) Site Conditions

Temperature: Maximum 55Deg.C, Minimum -10 Deg.C, Humidity: Around 80%

c) Specifications

PV Array Capacity:	100 kWp (10 KWp X 10 sets)
Cell Technology:	Poly Crystalline Silicon
Module Characteristics:	Modules of output 315Wp or above.
String Inverter/PCU Rating:	10 x 10KVA (min) (As per technical and space for installation requirement)
String Inverter/PCU Efficiency:	> 90%
Grid Voltage:	415V Three phase
Frequency:	50 Hertz
Frequency Variation Limits:	+/- 3%
Power Factor:	more than 0.8

Current THD:	< 3%
DC Offset Current:	should be less than 1% of the max. current rating
Duty Cycle:	Average Hours of Operation/day: 8-10 hrs per day

d) The String Inverter/PCU must automatically synchronize with the grid and should shut down in case of faults and very low power generation, and wakeup automatically from shutdown state

f) Protections: Over Voltage
Under Voltage
Frequency Errors
Over Current

In all faulty conditions the system should get isolated from grid and should start working when the grid is healthy Phase sequence reversal should be automatically detected and system should continue to work.

Anti- Island Protection: When the grid fails the system should stop operation and it get isolated from the grid within a cycle before getting any damage to the system.

g) Metering & Indicators

Input side: Voltage and Current for individual strings with

MCB Output side: Voltmeter, Ammeter, Bi-directional

Power/Energy Meter SFU for output isolation, Status indication with LCD display

h) The system should automatically MAKEUP' during daytime and "SLEEP" during night

SCOPE OF SUPPLY:

The scope of work shall cover Supply, Installation, Testing& Commissioning of (10 Sets X 10 KWp) or 100 kWp grid connected roof top Solar Photovoltaic Power Plant/Panel (without battery backup) mounted on rising structure (for details ref "Rising Mounting Structure" of technical specification) with associated components with **5 years on site performance Guarantee on complete system AT THE ROOF TOP OF RESIDENTIAL QUARTERS BUILDING OF CMPDI, RI-IV, JARIPATKA, NAGPUR (MS), PIN-440014.**

The Roof top space of Residential Quarters shall be provided to the party during handing over of the site. The residential quarters of CMPDI complex comprises 2 nos. of D Type, 4 nos. of C-Type Blocks and 5 nos. of B-Type Blocks. The intending Bidder should visit the site before submission of tenders.

These systems shall be complete with PV Modules, String Inverter/PCU, Bi-directional Metering, Rising Mounting structure, Junction Boxes, AC, DC Distribution Boards and Cables, Communication Interface, Earthing and earth pits, Lighting arrestors, Fire Extinguishers and any other equipment necessary for Safe and Efficient Operation of the Solar Power Plant.

a) The work shall also include Interconnection of Solar Plant with the Grid. It shall be responsibility of the Bidder to obtain all necessary Statutory and Regulatory clearances from the Competent Authorities.

- b) Fabrication works and civil works required for the successful Installation and Commissioning of complete system shall also be in scope of Supplier.
- c) All the fittings and accessories that might not have been mentioned specifically in the specification but are necessary for equipment's of the Plant, shall be deemed to be included in the specification and shall be supplied and furnished by the Contractor without any extra charge.
- d) It shall be responsibility of the Bidder to ensure that all the works as per scope of the specification are completed for safe and efficient working of the system.

CODES AND STANDARDS

All Equipment and Accessories shall comply with requirement of Standards published by Bureau of Indian Standards (BIS). In case no BIS Codes exist the equipment shall meet the requirement of International Standard including IEEE for Design and Installation of Grid connected PV System. The PV module offered must qualify to latest addition of IEC PV module qualification test or equivalent BIS standards. In addition, the module must conform to IEC 61730 Part-1 requirements for construction & Part 2-requirements for testing, for safety qualification or equivalent IS. The PCU must conform to IEC 61683/IS61683 and IEC 60068-2 (1,2,14,30)/equivalent BIS Std. Lighting protection should be provided as per IEC 62305 Std. Each array structure of the PV yard should be earthed properly as per IS:3043-1987. Junction box enclosures should be IP65 for outdoor. Cables shall meet IEC60227/IS 694, IEC 60502/IS 1554 Stds. The PCU shall have anti islanding protection in conformity to IEEE 1547/UL 1741/IEC 62116 or equivalent BIS Stds. The mounting structure steel shall be as per latest IS 2062:1992 and galvanization of mounting structure shall be as per latest IS 4759.

PV ARRAYS

- a)The PV Modules convert the light reaching them into DC Power. The amount of power they produce is roughly proportional to the intensity and the angle of the light reaching them. Vendor has to ensure the proper positioning of the Modules to take maximum advantage of available Sunlight within site constraints with the Sun's movements during the day.
- b)Supplier shall follow the latest Engineering Practice; ensure long-term compatibility requirements and continuity of equipment supply and the Safety of the Operating Staff.
- c)Vendor is required to optimize generation of electricity in terms of kWh generated with available Solar Radiation at the site (may be obtained through use of efficient electronics, lower cable losses, maximization of power transfer from PV Modules to Converter and the Grid etc).
- d)The PV System shall support Remote Monitoring of important Parameters. The system shall be designed such that personnel without any background knowledge in Microprocessor-based Technology are able to operate the System. The operator interface shall be such that operating personnel shall be able to operate the system easily after having received some basic training.
- e)The Manufacturer shall arrange Certification on Qualification of PV Modules.

- f)The SPV Cells shall be manufactured using unique highly efficient diffusion process or any other technology so as to ensure uniform diffusion profiler to achieve close spread and higher efficiency for each cell.
- g)Stabilized net output of the Solar PV Array for the Solar Power System should not be less than the Nominal design level for the System under Standard Test Condition.
- h)Each Solar PV Module shall be warranted by the Manufacturer for at least 90% of its rated power at the end of 10 Years and 80% of its rated power at the end of 25 Years from the date of System acceptance.
- i)The Bidder shall provide the sample Solar PV Module electrical characteristics including current-voltage (I-V) performance curves and temperature coefficients of power, voltage and current. However, the tabulated document with all the relevant data like voltage, current, power output for all the modules also to be provided.
- j)The PV Modules shall be suitable for continuous outdoor use.
- k)The PV Module shall be made of high quality laminated in ultra violet stabilized polymer material such as Ethyl Vinyl Accelerate (EVA), Tedler, toughend class. The size of single polly crystalline silicon PV Cells shall be so chosen so as to maximize energy density and align with economies of scale. Modules of output shall be 315Wp or above
- l) PV Module shall be provided with frame of anodized channels for size and simplicity in installation offered as a single module or series parallel combination of modules. The PV Module shall be provided with screen-less frame with Solar Cable and Connector.
- m)The PV Modules shall be made of light weight cells, resistant to abrasion, hail impact, rain, water and environmental pollution. The PV Modules shall be provided with anti-reflection coating and Back Surface Field (BSF) structure to increase conversion efficiency.
- n)The PV Module shall use lead wire with weatherproof connector for output terminal.
- o)The terminal box on the module should have a provision for opening for replacing the cable, if required.

STRING INVERTER

- a)The inverter used shall be of String inverter type. The DC power produced is fed to string inverter for conversion into AC. In a grid interactive system AC power shall be fed to the grid at three phase 415 VAC bus. Power generated from the solar system during the daytime is utilized fully by powering to the grid as long as grid is available.
- b)The output of the String inverter must synchronize automatically its AC output to the exact AC voltage and frequency of the grid.
- c)String inverter shall continuously monitor the condition of the grid and in the event of grid failure; the inverter automatically switches to off-grid supply within a cycle. The solar system is resynchronized with the grid within two minutes after the restoration of grid.
- d)Grid voltage shall also be continuously monitored and in the event of voltage going below a preset value and above a preset value, the solar system shall be disconnected from the grid within the set time.

e)The rating of string inverter control unit shall be such that to operate the PV system to its maximum power output.

f)The string inverter shall be a true sine wave inverter for a grid interactive PV system.

g)Following shall also be displayed Protective function limits (AC over voltage, AC under voltage, Over frequency, under frequency, ground fault, PV starting voltage, PV stopping voltage, over voltage delay, under voltage delay over frequency, ground fault delay, PV starting delay, PV stopping delay.)

Nuts & bolts and the inverter enclosure shall have to be adequately protected taking into consideration the atmosphere and weather prevailing in the area.

h)All doors, covers, panels and cable exit shall be gasketed or otherwise designed to limit the entry of dust and moisture. All doors shall be equipped with locks.

i)Operation Mode:

Night or Sleep Mode: where the Inverter is almost completely turned off, with just the timer and control system still in operation, losses shall be less than 2 W per 5 KW.

Standby Mode: where the control system continuously monitors the output of the solar generator until pre-set value is exceeded (typically 10 W).

The control system continuously adjusts the voltage of the generator to ensure the delivery of the power available. The power conditioner/string inverter shall automatically reenter standby mode as input power reduces below the standby mode threshold. Front panel shall provide display of status of the inverter.

SYNCHRONISING EQUIPMENT

Solar PV Systems shall be provided with synchronizing equipment having two input for comparison i.e. grid supply vs. solar output so as to connect the SPV systems in synchronism with grid. In case of grid failure, solar PV system shall be disconnected from the grid and out of synchronization.

PROTECTIONS AND CONTROL

PV system software and control system shall be equipped with all the protection as described above. In addition to disconnection from the grid (islanding protection i.e. on no supply), under and over voltage conditions, PV systems shall be provided with adequate rating fuses, fuses on inverter input side (DC) as well as output side (AC) for overload and short circuit protection and disconnecting switches to isolate the DC and AC system for maintenances are needed. Fuses of adequate rating shall also be provided in each solar array module to protect them against short circuit. A manual disconnect switch beside automatic disconnection to grid would have to be provided at utility end to isolate the grid connection by the utility personal to carry out any maintenance. This switch shall be locked by the utility personal.

POWER QUALITY REQUIREMENTS:

The injection of DC power into the grid shall be avoided by using an isolation transformer at the output of the inverter. It is proposed to limit DC injection within 1% of the rated current of the inverter as per IEC 61727.

RISING MOUNTING STRUCTURES:

Providing and fixing of hot dip galvanized iron mounting structures for mounting the modules / panels/arrays. The minimum height of solar panel at any end should be 2.10m. These mounting structures must be suitable to mount the SPV modules /panels/ arrays on the roof top at an angle of tilt with the horizontal in accordance with the latitude of the place of installation. The structure shall be fixed on the existing column position with suitably designed anchor bolt with concrete pedestal to sustain the maximum wind load conditions. The mounting structure steel shall be as per latest IS 2062: 1992 and galvanization of the mounting structure shall be in compliance of latest IS 4759.

POWER AND CONTROL CABLES:

Power Cables of adequate rating shall be required for interconnection of Modules/panels within array. Power cables size for 415V systems shall be chosen taking into account the full load current & voltage drop. The allowable voltage drop at terminal of the connected equipment shall be max. 2.5% at full load. Control cables shall be 1.1 grades, heavy duty, stranded copper conductor, PVC type insulated, flame retardant low smoke (FRLS) extruded PVC type ST-1 outer sheathed. The cables shall, in general conform to IS- 1554 P-I & other relevant standards.

The permissible voltage drop from the SPV Generator to the Charge controller shall not be more than 2% of peak power voltage of the SPV power source (generating system). In the light of this fact the cross-sectional area of the cable chosen is such that the voltage drop introduced by it shall be within 2% of the system voltage at peak power. All connections should be properly terminated, soldered and/or sealed from outdoor and indoor elements. Relevant codes and operating manuals must be followed. Extensive wiring and terminations (connection points) for all PV components is needed along with electrical connection to lighting loads.

EARTHING

Earthing is essential for protection of the equipment & manpower. Two main grounds used in the power equipment are:

System earth and Equipment earth

The provision for lightning & surge protection of the SPV power source is required to be made. In case the SPV Array cannot be installed close to the equipment to be powered & a separate earth has been provided for SPV System, it shall be ensured that all the earths are bonded together to prevent the development of potential difference between any two earths.

Earth resistance shall not be more than 3 ohms. The earthing conductor shall be rated for the maximum short circuit current. & shall be 1.56 times the short circuit current. The area of cross-section shall not be less than 1.6 sq mm in any case. Required numbers of Earth pits will be made for the desired earth resistance.

The array structure of the PV modules shall be grounded properly as per IS:3043 (1987). All metal casing/ shielding of the plant shall be thoroughly grounded to ensure safety of the power plant.

JUNCTIONS BOXES OR COMBINERS

Dust, water and vermin proof junction boxes of adequate rating and adequate terminal facility made of Fire Resistant Plastic (FRP) shall be provided for wiring. Each solar PV panel shall be provided with fuses of adequate rating to protect the solar arrays from accidental short circuit.

FIRE EXTINGUISHERS:-

The firefighting system for the proposed power plant for fire protection shall be consisting of:

- a. Portable fire extinguishers in the control room for fire caused by electrical short circuits.
- b. Sand buckets in the control room.
- c. The installation of Fire Extinguishers should confirm to TAC regulations and BIS standards. The fire extinguishers shall be provided in the control room housing PCUs as well as on the Roof or site where the PV arrays have been installed.

DANGER BOARDS AND SIGNAGES :-

Danger boards should be provided as and where necessary as per IE Act and CEA guidelines. Three signage shall be provided one each at control room, solar array area and main entry from building. Text of the signage may be finalized in consultation with HOD(E&M)

DRAWINGS:-

The bidder shall submit following drawings

- The General arrangement and dimensioned layout.
- Schematic drawing showing the requirement of SV panel, Power conditioning Unit(s)/ inverter, Junction Boxes, AC and DC Distribution Boards, meters etc.
- Structural drawing along with foundation details for the structure.
- Itemized bill of material for complete SV plant covering all the components and associated accessories.
- Layout of solar Power Array

GENERAL CONDITIONS

Cabling work up to the grid side and PV panel mounting and fabrication work including all materials are under the scope of the supplier. Array support structure shall be of galvanized mild steel sections on concrete pads.

INSTALLATION, COMMISSIONING, TRAINING AND DOCUMENTATIONS

Supplier shall undertake installation & commissioning and provide training to buyer's maintenance team. Party has to submit all the relevant documents like Qualification Documents, Test Certificates,

Catalogue of all Brought out Items, User Manual, Electrical Circuit Diagram, Guarantee Certificates etc. during handing over of the Project.

GUARANTEE

The successful Bidder shall Guarantee the material and workmanship of all components and operation of the equipment and shall meet the requirement of the specifications. Should the performance test result at works deviate from the Guaranteed values including the specified tolerance the Bidder shall correct his equipment at no extra cost to the Purchaser and repeat the performance tests within a reasonable period as agreed by the Purchaser. As regard to the component clauses if the Bidder fails to meet the Guaranteed values subject to tolerances specified, the Purchaser will not accept the equipment/system. **There shall be 5 years on site Guarantee on complete system.**

Other special terms and conditions

1. The bidder should register to CMPF/EPF and take Registration Certificate after award of work before start of work or submission of first Running or final bill whichever is earlier
2. CLIP Portal of CIL: The contractor shall register in CLIP portal (website <http://210.212.20.44.50005/CLIP/Forms/ContractorRegistration.php>) and shall furnish information as stipulated in the portal.
3. The contractor shall ensure payment of government notified minimum wages and other statutory benefit to the workmen through Bank Account employed by him/them shall maintain a register of wages and shall issue a wage slip to every workman employed by him/them and obtain their signature or thumb impression on the wage slips. A copy of such wage slip along with proof of payment through bank shall be submitted with the bills submitted for payment.
4. All the Electrical work shall be done under the supervision of Valid electrical supervisor / contractor license holder.
5. The contractor shall abide by all the statutory rules & regulations related to this contract, whether specified in NIT or not. All the electrical work shall be done as per I.R Rules and CEA Guidelines, MERC Maharashtra, and other ACT related to electrical work safety.
6. All the work shall be done as per the NIT, BOQ etc. Necessary permissions from the Govt for installation and connecting to Grid shall be taken by Bidder.
7. No. Part payment shall be made. Payment shall be made after completion of work.
8. Defect Liability period in this case shall be one year from the date of supply.
9. The party shall submit a performance bank guarantee of 5% of the Total ordered value at the expiry of the defect liability period (i.e. one year after successful completion of work) The PBG submitted will be valid for four years. **This shall be released after successful completion of four years after GURRANTEE PERIOD.**

10. The earlier deposited performance security amount of 5% value and the retention money will be returned to the party after submission of above PBG of 5% of the Total ordered value (as per cl. 9 above).

11. Power evacuation and the Terminal Arrangement to/with the Grid of Power Source (MSEDCL) shall be provided by the bidder. A main Distribution Board comprising MCCB, MCB, Cables etc. shall be provided by the bidder for proper distribution of power. The main incoming supply meter is installed at 11 kV system. The power is stepdown to 415 V (By Transformer of capacity 11kV/415 V, 250 kVA) and distributed to different office and residential areas.

12. Before quoting the rates, the bidder should visit the place where this solar power plant is proposed to be installed.

NOTE: Security deposit shall be dealt only on the basis of special terms and condition and prevail over anything written regarding it at any other place in this NIT.

SECTION III

GENERAL TERMS AND CONDITIONS

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 CMD 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 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 authorized to be in charge of the works for the purpose of this contract. The Engineer-in-Charge /Designated Officer in Charge, who is of an appropriate seniority, will be responsible for supervising and administering the contract, certifying payments due to the contractor, valuing variations to the contract, awarding extension of time and valuing compensation events. The Engineer-in-Charge /Designated Officer in Charge may further appoint his representatives i.e. another person/Project Manager or any other competent person and notify to the contractor who is directly responsible for supervising the work being executed at the site, on his behalf under their Delegation of Powers of the company. However, overall responsibility, as far as the contract is concerned, will be that of the Engineer-in-Charge/Designated Officer in Charge.
- viii) The "Contract" shall mean the notice inviting tender, the tender as accepted by the Company, the work order issued to the contractor, and the formal contract agreement executed between the company and the contractor together with the documents referred to therein including general terms and conditions, special conditions, if any, scope of work, frozen terms & conditions/technical parameters/scope of work and revised offer, if any, specifications, drawings, including those to be submitted during progress of work, schedule of quantities with rates and amounts.
- ix) A "Day" shall mean a day of 24 hours from midnight to midnight.
- x) The "Work" shall mean the works required to be executed in accordance with the contract/work order or parts thereof as the case may be and shall include all extra or additional, altered or substituted works or any work of emergent nature, which in the opinion of the Engineer-in-charge, become necessary during the progress of the works to obviate any risk or accident or failure or become necessary for security.

- xi) "Schedule of Rates" referred to in this conditions shall mean the standard schedule of rates prescribed by the company and the amendments issued from time to time.
- xii) "Contract amount" shall mean:
- a) In the case of turnkey / lump sum contracts the total sum for which tender is accepted by the company.
 - b) In the case of other types of contracts the total sum arrived at based on the individual rate(s) / percentage rate(s) quoted by the tenderer for the various items shown in the Schedule of Quantities" of the tender document as accepted by the Company with or without any alteration as the case may be.
- xiii) "Written notice" shall mean a notice or communication in writing and shall be deemed to have been duly served if delivered in 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 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.

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

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

3. Discrepancies in contract documents & Adjustments thereof

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

- a) Description in Bill of Quantities of work.

- b) Particular specification and special conditions, if any
- c) Drawings.
- d) General specifications.
- e) BIS 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. Security Deposit:

4.1 Security Deposit shall consist of two parts;

- a) Performance Security to be submitted at award of work and
- b) Retention Money to be recovered from running bills.

The security deposit shall bear no interest.

4.2 Performance Security should be 5% of contract amount and should be submitted within 28 days of issuance of LOA by the successful bidder in any of the form given below :

- a Bank Guarantee in the form given in the bid document from any Scheduled bank. The BG issued by outstation bank shall be operative at its local branch at Nagpur or branch at Nagpur. Bank Guarantee against Performance Security shall be applicable if the amount of Performance Security exceeds Rs. 5.0 lakhs.
NOTE: Bank Guarantee against Performance Security shall be applicable if the amount of Performance Security exceeds Rs. 5.0 lakhs.

The Bank Guarantee shall be issued by a Scheduled Bank / Nationalised 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 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: Kingsway Branch,

IFSC: SBIN0000432,

A/c No: 11172255281,

Address: Kingsway, SV Patel Marg, Nagpur -440001

- 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 "CMPDI, RI –IV, Nagpur" on any Scheduled Bank payable at its Branch at Nagpur.

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

The bid security may be adjusted against the Performance security (1st 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.

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

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

4.3 5% Performance Security should be refunded within 14 days of the issue of defect liability certificate (taking over certificate with a list of defects).

4.4 All running on account bills shall be paid at 95% (ninety five percent) of work value. 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 Cl.4.2.

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

4.6 The Company shall be at liberty to deduct/appropriate from the security deposit such sums as are due and payable by the contractor to the company as may be determined in terms of the contract, and the amount appropriated from the security deposit shall have to be restored by further deduction from the contractors subsequent on account running bills, if any.

4.7 REFUND OF SECURITY DEPOSIT: The refund of security deposit shall be subject to company's right to deduct/ appropriate its due against the contractor under this contract or under any other contract.

On completion of the entire work and issue of defect liability certificate (taking over certificate with a list of defects) by the Engineer-in-charge, one half of the security deposit remaining with the company

(Performance Security) shall be refunded as elaborated at Cl. No.4.3.

The other half (Retention Money) shall be refunded to the contractor after issue of No Defect Certificate by the Engineer-in-Charge on the expiry of Defect Liability Period of one year , 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 one year 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 of work and taking over by department.

4.8 Additional Performance Security: (applicable for item rate as well as percentage rate tenders):

Additional performance security shall be applicable if the bid price is below 15% of the justified price, finalized by the owner. The amount of such additional performance security shall be the difference between 85% of the owner's justified price and the 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, and shall be binding on the bidder.

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

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

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.

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 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) 10% of the security (performance security and retention money) deposited / deducted from the bills of the contractors, relevant to the item(s), shall be refunded to him after expiry of Guarantee period. The security amount relevant to the item(s) of work, may be released after 12 months of completion of work against equivalent BG and furnishing Guarantee as at (a) above.

4.10 Refund of security deposit for contracts with supply installation and commissioning of equipment i.e with Mechanical & 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 10% as 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 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.

- 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.

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(Civil) of the company or Staff Officer/HOD (Civil) for the work awarded at Company Hqrs. level and Area level/Regional Institute 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(Civil) of the company or SO/HOD(Civil) of the Area/Regional Institute, 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(Civil) of the company or SO/HOD(Civil) of the Area/Regional Institute, if it is analysed item rates based on prevalent market rates of materials and labour following CPWD norms.

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

5.6 Provisions For Dealing With Variations In Respect Of Abnormally High Rate And Abnormally Low Rate Items.

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

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

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

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

Quantity variation beyond the limit mentioned above shall be dealt by arriving at new rate based on prevalent market rate of materials and labour analysed as per standard analysis of rate of CPWD. 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.

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

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

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

For the purpose of this detailed time and progress chart, the work shall be deemed to have commenced on the expiry of 10* (ten) days from the issue of Letter of Acceptance of Tender or 7(seven) days after handing over the site of work or handing over reasonable number of working drawings to the contractor or the period of mobilization allowed in the work order for starting the work in special circumstances, whichever is later.

For specialized works/High value works (above Rs.500 lakhs), the period shall be 30 days.

6.1 If the contractor, without reasonable cause or valid reasons, commits default in commencing the work within the aforesaid time limit, the company shall, without prejudice to any other right or remedy, be at liberty, by

giving 15 day's notice in writing to the contractor to commence the work, failing which to forfeit the Earnest Money deposited by him and to rescind the Letter of Acceptance of Tender/Work Order and also to debar the contractor to take part in the future re-tender.

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

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

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

OR

- ii) $\frac{1}{2}$ % of the contract-value of group of items/ revised completion value of group of items whichever is less **along with the applicable GST**, 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 **along with the applicable GST**.

OR

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

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

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

6.2.2 The company, if not satisfied that the works can be completed by the contractor, and in the event of failure on the part of the contractor to complete work within further extension of time allowed as aforesaid, shall be entitled, without prejudice to any other right, or remedy available in that behalf, to rescind the contract.

6.2.3 The company, if not satisfied with the progress of the contract and in the event of failure of the contractor to recoup the delays in the mutually agreed time frame, shall be entitled to terminate the contract.

6.2.4 In the event of such termination of the contract as described in clauses 6.2.2 or 6.2.3 or both, the company, shall be entitled to impose penalty/LD as deliberated at Clause 10. Additionally the contractor shall be debarred from participating in the future tenders for a minimum period of 12 months.

6.3 The company may at its sole discretion, waive the payment of compensation on request received from the contractor indicating valid and acceptable reasons if the entire work is completed within the date as specified in the contract/work order or as validly extended date without stipulating any compensation for delay.

6.4 Extension of date of completion: On occurrences of any events causing delay as stated here-under, the contractor shall intimate immediately in writing to the Engineer-in Charge.

a) Force Majeure:

i) Natural phenomena like unprecedented flood and draught, earthquakes & epidemics.

ii) Political upheaval, civil commotion, strikes, lockouts, acts of any Govt. (domestic/foreign) including but not limited to war, proprieties, and quarantine embargoes.

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

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

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

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

c) Non-availability of stores which are the responsibility of the company to supply as per contract.

d) Non-availability of working drawings in time, which are to be made available by the company as per contract during progress of the work.

e) Delay on the part of the contractors or tradesmen engaged by the company not forming part of the contract, holding up further progress of the work.

f) Non-availability or breakdown of tools and plant to be made available or made available by the company.

g) The execution of any modified or additional items of work or excess quantity of work.

h) Any other causes which, at the sole discretion of the company, is beyond the control of the contractor.

6.4.1 A HINDRANCE REGISTER shall be maintained by both department and the contractor at site to record the various hindrances, as stated above, encountered during the course of execution.

Hindrance register will be signed by both the parties. The contractor may also record his observations in the Hindrance Register. In case the contractor has a different opinion for hindrance and a dispute arises then the matter would be referred to the EIC Civil and or the next higher authority whose decision would be final & binding on the contractor & the decision to be communicated within 15 days.

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

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

The opinion of the Engineer-in-charge that the period of extension granted by him is proper or necessary is not, however, final. If the contractor feels that the period of extension granted is inadequate he can appeal to the GM (Civil)/ HOD (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.

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

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

7. Material Supply & other facilities

7.0 All charges on account of GST or any other applicable taxes, duties or levies etc. 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 GTC.

7.1 The contractor shall arrange necessary electricity at his own cost for the work and his own establishment. However, if available and feasible the company may arrange electricity at one point near the work site and necessary recovery of cost of energy consumed will be made at rates prescribed by the company from time to time. Energy meter for this purpose shall be provided by the contractor.

7.2 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.

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

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

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

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

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

- 8.6** The Engineer-in-Charge shall be entitled to have tests carried out for any materials, according to the standard practice followed for such tests, other than those for which satisfactory proof has already been furnished by the contractor who shall provide at his expense all facilities which the Engineer-in-Charge may require for the purpose. All such expenses 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(Civil) or EIC(Civil) representative or any other officer nominated by the company for the purpose to examine and measure any work which is about to be covered up or put out of view and to examine foundations before permanent work is placed thereon. the contractor shall give due notice to the Engineer-in-charge's representative whenever any such work or foundations is ready or about to be ready for examination and the Engineer-in-charge's representative shall, without unreasonable delay, unless he considers it unnecessary and advises the contractor accordingly, attend for the purpose of examining and measuring such work or foundations.

ii) The contractor shall uncover any part or parts of the works or making openings in or through the same as the Engineer-in-Charge may from time to time direct and shall reinstate and make good such part or parts to the satisfaction of Engineer-in-charge.

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

8.9 Removal of Improper Work and Materials:

i) The Engineer-in-charge shall during the progress of the works have power to order in writing from time to time:

- a) The removal from the site, of any materials which in the opinion of Engineer-in-charge, are not in accordance with the contract/ work order/ approved sample.
- b) The substitution with proper and suitable materials.
- c) The removal and proper re-execution, notwithstanding any previous test thereof or interim payment there from, of any work which in respect of materials or workmanship is not in accordance with the contract.

ii) In case of default on the part of the contractor in carrying out such order, the Engineer-in -charge shall be entitled to employ and pay other agency to carry out the same and all expenses consequent thereon shall be recoverable from the contractor or may be deducted from any amount due or which may become due to the contractor.

8.10 Devaluation of Work : In lieu of rejecting work done or materials supplied not in conformity with the contract/work order/approved samples, the Engineer-in-charge or any other officer nominated by the company for the purpose may allow such work or materials to remain, provided the Engineer-in-Charge/the officer nominated by the company is satisfied with the quality of any materials, or the strength and structural safety of the work, and in that case shall make such deduction for the difference in value, as in his opinion may be reasonable.

8.11 Final Inspection of Work: The Engineer-in-charge and any other officer nominated by the company for the purpose shall make final inspection of all work included in the contract/work order, or any portion thereof, or any completed structure forming part of the work of the contract, as soon as practicable after notification by the contractor that the work is completed and ready for acceptance. If the work is not acceptable to the Engineer in-charge at the time of such inspection, he shall inform the contractor in writing as to the particular defects to be remedied before final acceptance can be made.

8.12 Defects appearing after acceptance: Any defects which may appear within the defect liability period and arising, in the opinion of the Engineer-in-charge, from lack of conformance with the drawings and specifications, shall, if so required by the Engineer-in charge in writing, be remedied by the contractor at his own cost within the time stipulated by the Engineer-in-charge. If the contractor fails to comply, the Engineer-in-charge may employ other persons to remedy the defects and recover the cost thereof from the dues of the contractor.

8.13 Site Order Book : A Site Order Book is a Register duly certified by the Engineer-in-charge regarding number of pages it contains, each page being numbered, name of work, name of contractor, reference of contract/ work order and the aforesaid certificate should be recorded on its first page.

Site Order Books shall be maintained on the sites of works and should never be removed there from under any circumstances. It shall be the property of the company. The Engineer-in-Charge or his 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 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 off such material in any manner without any further written notice to the contractor.

9. Measurement and Payments

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

- 9.1** All items of work carried out by the contractor in accordance with the provision of the contract having a financial value shall be entered in the Measurement Book as prescribed by the company so that a complete record of the measurements is available for all the works executed under the contract and the value of the work executed can be ascertained and determined 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 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 hereinbefore and processed for payments.

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

a) The work executed as covered by the bill/bills after deducting the amount already paid, the security deposit and such other amounts as may be deductible or recoverable in terms of the work order/ contract.

b) (i) Payment for excess quantity of work done with the written instructions of the Engineer-in-Charge for items already appearing in the bill of quantities of work with approved rates, will be made along with the on account bills only 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/HOD(Civil) of the Area/regional Institute may authorize 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 (Civil) of the company or Staff Officer/HOD (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.

- 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 relate is/are in accordance with the contract and may be modified or corrected by the Engineer-in-Charge by any subsequent certificate or by the final certificate.

9.7.05 The company reserve the right to recover/enforce recovery of any 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 released from the contractor's dues, if any, with Coal India Limited or any of its subsidiaries.

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

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

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

9.8 Income tax deduction @ 2% 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.

9.9 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 contactors bills, the same shall be done and the certificate to this effect shall be issued to the contactor for dealing with the state government and the company does not take any responsibility to do anything further in this regard.

9.10 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 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 agency.
- b) To give the contractor or his representative of the work 7 (seven) days notice in writing for taking final measurement for the works executed till the date of cancellation or termination of the contract. The Engineer-in-Charge shall fix the time for taking such final measurement and intimate the contractor in writing. The final measurement shall be carried out at the said appointed time notwithstanding whether the contractor is present or not. Any claim as regards measurement which the contractor is to make shall be made in writing within 7 (seven) days of taking final measurement by Engineer-In-charge as aforesaid and if no such claim is received, the contractor shall be deemed to have waived all claims regarding above measurements and any claim made thereafter shall not be entertained.
- c) After giving notice to the contractor to measure up the work of the contractor and to take such whole or the balance or part thereof, as shall be unexecuted out of his hands and to give it to another contractor or take up departmentally, to complete the work. The contractor whose contract is terminated shall not be allowed to participate in future bidding for period of minimum twelve months.

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

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

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

In the event of above course being adopted by the Engineer-in-charge, the contractor shall have no claim to compensation for any loss sustained by him by reasons of his having purchased materials, equipment or entered into agreement or made advances on any account or with a view to the execution of work or performance of the contract. And in case action is taken under any of provision aforesaid, the contractor shall not be entitled to recover or to be paid any sum for any work thereof or actually performed under this contract unless and until the engineer-in-charge has certified in writing the performance of such work and value payable in respect thereof and he shall only be entitled to be paid the value so certified.

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

10.3 Suspension of Work:

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

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

- c) for safety of the works, or part thereof.

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

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

10.4 Foreclosure of contract:

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

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

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

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

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

Agency or with the cost of labour and the prices of materials, as the case may be. The certificate to be issued by the Engineer-in-Charge for the cost of the work so done shall be final and conclusive and the extra cost, if any, shall be borne by the contractor. However, when this clause is invoked, penalty will not be applicable other than on account of delayed completion.

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

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

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

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

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

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

- iv) Precautions shall be exercised at all times by the contractor(s) for the protection of persons (including employees) and property. The safety required or recommended by all applicable laws, codes, statutes and regulations shall be observed by the contractor(s). In case of accidents, the contractor(s) shall be responsible for compliance with all the requirements imposed by the Employees 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 exercise 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, employees 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) and 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 either payable by bidder or by company under reverse charge mechanism shall be computed by system in

BOQ sheet as per pre-defined 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. CMPDIL) 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 thereunder and after online filing of valid return on GST portal. Payment of GST & GST Compensation Cess is responsibility of bidder/contractor.

However, in case contractor is GST unregistered bidder in compliance with GST rules, the bidder shall not charge any GST and/or GST Compensation Cess on the bill/invoice. In such case, applicable GST will be deposited by CIL/Subsidiary directly to concerned authorities.

Input tax credit is to be availed by Paying Authority as per rule.

If CMPDIL 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 bidder / vendor of goods and services in incorporating the tax invoice issued to CMPDIL 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 bidder / vendor along with interest, 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 reserved the right to deduct / withheld 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.

x) The contractor / contractors shall make his / their own arrangement for all materials, tools, staff and labour 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 labour 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 labour including payment of provident fund considered necessary and the company may arrange for witnessing the payment to the labour by its representatives.
- xvi) The contractor shall in additions to any indemnity provided by the relevant clauses of the agreement or by law, indemnify and keep indemnified for the following:
- a) The company or any agent or employee of the company against any action, claim or proceeding relating to infringement or use of any patent or design right and shall pay any royalties or other charges which may be payable in respect of any article or material included in the contract.
- However, the amount so paid shall be reimbursed by the company in the event such infringement has taken place in complying with the specific directions issued by the company or the use of such article or material was the result of any drawing and/or specifications issued by the company after submission of tender by the contractor. The contractor must notify immediately after any claim being made or any action brought against the company, or any agent or employee of company in respect of any such matter.
- b) The company against all claims, damages or compensation under the provisions of payment of Wages Act, 1938, Minimum Wages Act, 1948, Employer's Liability Act, 1938, The employees Compensation Act, 1923, Industrial Dispute Act, 1947, Mines Act as applicable, Employees State Insurance Act 1948 and Maternity Benefit Act, 1961, Acts regulating P.F. or any modification thereof or any other law relating thereto and rules made there under from time to time, as may be applicable to the contract which may arise out of or in consequence of the construction or maintenance or performance of the work under the contract and also against costs, charges and expenses of any suit, action or proceedings arising out of any accident or injury.
- c) The company against all losses and claims for injuries or damages to any third party or to any property belonging to any third party which may arise out of or in consequence of the construction or maintenance or performance of the work under the contract and against all claims/demands proceedings/damages, cost charges and expenses whatsoever in respect of or in relation thereto.
- xvii) The contractor is under obligation to hand over to the company the vacant possession of the completed building structures failing which the Engineer-in-Charge can impose a levy upon the contractor upto 5% of the total contract value for the delay in handing over the vacant possession of the completed works after giving a 15 (fifteen) day's 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 installments as may be certified by the Engineer-in-charge for the purpose of rebuilding or replacement or repair of the works and/or goods destroyed or damaged for which payment was received from the insurers. Policies and certificates for insurance shall be delivered by the contractor to the EIC (Civil) for his approval before the starting date. Alterations to the terms of insurance shall not be made without the approval of EIC (Civil).

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 employees Compensation Act and shall take insurance policy covering all risk, claims, damages, or compensation payable under the employees Compensation Act or under any other law relating thereto.

d) The contractor shall ensure that the insurance policy/ policies is/are kept alive till full expiry of the contract by timely payment of premiums and it/they shall not be cancelled without the approval of the company and a provision is made to this effect in all policies, and similar insurance policies are also taken by his sub-contractors if any. The cost of premium shall be borne by the contractor and it shall be deemed to have been included in the tendered rate.

e) In the event of contractor's failure to effect or to keep in force the insurance referred to above or any other insurance which the contractor is required to effect under the terms of the contract, the company may effect and keep in force any such insurance and pay such premium/premiums as may be necessary for that purpose from time to time and recover the amount thus paid from any moneys due to the contractor.

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

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

The contractor shall have all necessary instruments, appliances and labour in connection therewith. If at any time during the progress of work any error is detected in respect of the position, levels, dimensions

or alignment of any part of the work, the contractor on being required to do so by the Engineer-in-Charge or his representative shall at the expenses of the contractor rectify such errors to the satisfaction of Engineer-in-Charge unless such error is due to incorrect data supplied by the Engineer-in-Charge.

- xx) On receipt of Letter of Acceptance of Tender / Work Order the contractor shall forthwith Register and obtain License from the competent authority under the Contract Labour (Regulation & Abolition) Act 1970, the Contract Labour (Regulation & Abolition) Central Rules, 1971 and submit certified copies of the same to the Engineer-in-Charge and the Principal Employer.
- xxi) ~~The contractor shall be registered with the concerned State Govt. and the Central Govt. in respect of Sales Tax Act and the certificate having details of Registration No., period of validity etc. should be submitted to the Engineer-in-Charge.~~
- xxii) The contractor shall, in connection with works, provide and maintain, at his own cost, all lights, security guards, fencing when and where necessary as required by the Engineer-in-Charge for the purpose of protection of the works, materials at site, safety of workmen and convenience of the public.
- xxiii) All materials (e.g. stone, moorum and other materials) obtained in the course of execution of the work during excavation and dismantling etc. shall be the property of the company and the same may be issued to the contractors, if required for use in the works at the rates to be fixed by the Engineer-in-Charge.
- xxiv) Unless otherwise specifically provided for, dewatering of excavation pits, working areas etc. shall be the contractor's responsibility and is to be carried out at his own cost as per instructions of EIC. The rates quoted by the contractor shall be deemed to include the dewatering costs.
- xxv) Approval by the Nodal Officer/Engineer-in-Charge or his nominee: The contractor shall submit specifications and drawings showing the proposed temporary work to the Nodal Officer/Engineer-in-Charge or his nominee, who is to approve them if they comply with the specifications and drawings.

The contractor shall be responsible for design of Temporary Works.

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

14. Defects Liability Period:

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

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

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

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

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

15. Operating and Maintenance Manual:

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

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

16. Settlement of Disputes.

16.1 Settlement of Disputes with the Contractor

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 GM/HOD (Civil). 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).

16.2 Settlement of Disputes through Arbitration

- (i) Normally, there should not be any scope of dispute between the employer department and the contractor after entering into a mutually agreed valid contract. However, due to various unforeseen reasons, disputes may arise during the progress of the contract between the employer (department) and the contractor.

Therefore, the conditions governing the contract shall contain suitable provision for settlement of such disputes / differences binding on both the parties.

- (ii) Mode of settlement of such disputes/differences shall be through Arbitration. However, when a dispute/difference arises, then, depending on the position of the case, either the employer (department)

or the contractor shall give notice to the other party of its intention to commence arbitration. The applicable arbitration procedure will be as per the Arbitration and Conciliation Act, 1996 as amended by Amendment Act of 2015.

- (iii) Venue of Arbitration: The venue of arbitration shall be the place from where the contract has been issued.
- (iv) Applicable Law: The contracts shall be interpreted in accordance with the laws of the Union of India.
- (v) Legal Advice: While processing a case for arbitration, the purchase organization is to take legal advice, at appropriate stages from competent authorities viz their Legal Department.
- (vi) Following clause shall be included in the General Conditions of the Contract (GCC):

Sole Arbitration Clause:

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 I 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 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 or such other place as the Competent Authority of CIL / CMD of Subsidiary Company (as the case may be) at his discretion may determine.

- (vii) Contracts with Partnership firm/~~Joint Venture/Consortium~~ :

A partner is the implied authority to bind the firm in a contract coming in the purview of the usual business of the firm. The implied authority of a partner, however, does not extend to enter into arbitration agreement on behalf of the firm. Therefore, while entering into a contract with partnership firm ~~/ Joint Venture/ Consortium~~ care should be taken to obtain consent of all the partners to the arbitration agreement.

A suitable clause for obtaining consent of all the partners to the arbitration agreement shall be included in the General Conditions of the Contract (GCC).

In the event of any dispute or difference relating to the interpretation and application of the provision of commercial contract(s) between Central Public Sector Enterprises (CPSEs)/ Port Trusts inter-se and also between CPSEs and Government Department/ Organisation (excluding disputes concerning Railways, Income Tax, Custom & Excise Departments), such disputes or differences shall be taken up by either party for resolution through AMRCD as mentioned in DPE OM No. 4(1)/2013-DPE(GM)/FTS-1835 dtd. 22.05.2018.

- 17. No escalation will be paid.

SAFETY CODES

(Additional Safety measures to be taken by the Contractor)

- (i) Suitable scaffold should be provided for workmen for all works that cannot safely be done from the ground or from solid construction except for such short period of work as can be done safely from ladders. When a ladder is used in carrying materials as well, suitable foot holds and hand holds shall be provided on the ladder. The ladder shall be given an inclination not steeper than used 1/4.
- (ii) Scaffolding or staging more than 3.60 meters above the ground or floor, swung or suspended from & overhead support or erected with stationary support shall be having a guard rail properly attached, bolted, braced and otherwise secured at least 0.90m above floor or platform of such scaffolding on staging 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 a swaying from the building or structure.
- (iii) Working platform, gangways and stairways should be so constructed that they should not gap unduly or unequally and if the height of the platform or the gangway or the stairway is more than 3.60m above ground level or floor level, they should be closely board should have adequate width and should be suitable fenced as described in (i) above.
- (iv) Every opening in the floor of building or in working platform be provided with suitable means to prevent the fall of persons, materials by providing suitable fencing or railing whose minimum height shall be 0.90m.
- (v) Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be provided security fixed. No portable single ladder shall be over 9m in length, while the width between side rails in rung ladder shall in case be less than 0.29m for ladder up to and including 3.0m in length. For longer ladder this width should be increased at least 1/4% for each additional foot of length uniform step spacing shall not be exceeding 0.30m. Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sides of work be stacked or placed as to cause danger or inconvenience to any person of the public. The contractor shall also 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 all 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 proceeding to any such person or which may with the consent of the contractor, he has paid to compromise any claims by any such person.
- (vi) All trenches 1.20m or more depth shall at all times be supplied with at least one ladder for each 30m. in length or traction thereof. Ladder shall be extended from bottom of the trench to at least 0.08m above surface of the ground. The side of trenches which are 1.50m or more in depth shall be sloped back to give suitable sloped or securely held by timber branching, so as to avoid danger of side collapse. The excavated materials shall not be placed within 1.50m of the edge of trench or half of the trench whichever is more. Cutting shall be done from top to bottom, under no circumstances undermining or undercutting shall be done.
- (vii) Before any demolition work is commenced and also during the progress of work.
 - (a) all roads & open areas adjacent to the work site shall either be closed or suitable protected,
 - (b) no electric cable or apparatus which is liable to be a source of danger or no 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 over loaded with debris or materials as to render it unsafe,
- (viii) All necessary personal safety equipment as considered adequate by the Engineer in-charge should be kept available for 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.

- (a) Workers employed on mixing asphaltic materials cement and lime mortars shall be provided with protective footwear and protective goggles.
- (b) Those engaged in welding washing and mixing or stacking of cement bags or any material, which is injurious to the eye, shall be provided with protective goggles.
- (c) Those engaged in welding work shall be provided with protective goggles etc.
- (d) Stone breaker shall be provided with protective goggles and protective clothing & seated at sufficiently safe intervals.
- (e) When workers are employed in sewers and manholes, which are in use, the contractor shall ensure that the manhole covers are opened and are 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.
- (f) The contractor shall not employ men below the age of 18 years and woman on the work of painting with products containing lead in any form. Whenever man above the age of 18 years are employed for the work of lead painting the following precautions should be taken:
 - 1. No paint contained lead or products should be used except in the form of paste of readymade paint.
 - 2. Suitable face masks should be supplied for the use of workers when paint is applied in the form of spray or a surface having lead paint dry rubber and scrapped.
 - 3. Oil shall be supplied by the contractors to the workmen and adequate facilities shall be provided to enable the working painters to wash during the process of work.
- (ix) When the work is done near any place where there is risk of (drowning, necessary equipment should be provided and kept ready 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 sustained during the course of risk.
- (x) Use of machines tackle including their attachments, anchors and supports shall conform to the following standard or conditions:
 - 1]
 - a) Those shall be in mechanical good condition of sound material and adequate strength and free from patent defect and shall be kept in good required 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, adequate strength and free from defect.
 - 2] Every crane driver or hoisting appliance operator shall be properly qualified and no person under an age of 21 years should be in charge of any hoisting machine including any scaffold which give signals to the operators.
 - 3] In case of every hoisting machine and on every chain ring hood, shackle swivel and pullyblock used in hoisting or lowering 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 hoisting machine having a variable/safe working load of the conditions 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.
 - 4] In case of departmental machines, the safe working load shall be notified by the Electrical Engineer-in-charge. As regards contractors machine, the contractor shall notify the safe working load of the machine to Engineer-in-Charge. Whenever he brings any machinery to site of the work he must get it verified by the Electrical Engineer concerned.
- (xi) Gearing, Transmission, Electric wiring and other dangerous parts of hoisting appliances shall be provided with efficient safeguard. Hoisting appliances should be provided with such means as will

reduce to minimum risk of accident independent of the load. Adequate precautions should be taken to reduce to the minimum risk of any part of suspended load becoming accidentally displaced.

- (xii) When workers 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 workers should not wear any ring, watch & carry key or other materials which are good conductors of electricity. (xii) All scaffolds ladders and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffold, ladder equipment shall be altered or removed while it is used. Adequate washing facilities shall be provided at or near places of work.
- (xiii) These safety provisions shall be brought to notice to all concerned by display on a Notice Board at a prominent place at the worksite. The persons responsible for compliance of the safety codes shall be named therein by the contractor.
- (xiv) To ensure effective enforcement of the rules regulations relating to safety precaution the arrangements made by the contractor shall be open to inspection by the labour Officer, Engineer-in-charge of the department or their representatives.
- (xv) Notwithstanding to above clause from (i) to (xiv) there is nothing in these to exempt contractor from the operations of any Act or Rule in force in Republic of India.

SCHEDULE 'C'
Technical Specifications

Civil Engineering Works

Latest CPWD specification shall be adopted. Presently CPWD specifications 2009 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 CPD website.

Electrical Engineering Works

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	2005

***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.)

[Note: Unless otherwise specifically mentioned all materials and workmanship should conform to relevant specifications B.I.S Codes and C.P.W.D. Specifications. Measurements shall be as per IS: 1200.]

SECTION – IV

ANNEXURES

Format of "Letter of Bid" (for Works & Services Tenders)
TO BE SUBMITTED ON THE LETTER HEAD OF THE BIDDER

LETTER OF BID

To,
The Tender Committee,
Central Mine Planning & Design Institute, RI-IV, NAGPUR.

Sub. : Letter of Bid for the work "SUPPLY, INSTALLATION, TESTING & COMMISSIONING OF 100 kWp (10 SETS X 10 kWp) CAPACITY GRID CONNECTED SOLAR PHOTOVOLTAIC POWER PLANT MOUNTING ON RISING STRUCTURE WITHOUT BATTERY BACK UP AT THE ROOF TOP OF RESIDENTIAL QUARTERS BUILDING OF CMPDI, RI-IV, JARIPATKA, NAGPUR (MS), PIN-440014"

Ref. : 1. NIT No. : "-----"
2. Tender Id No. : "-----"

Dear Sir,

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

I /We am/are pleased to submit our bid for the above work. I/We hereby unconditionally accept the bid conditions and bid documents in its entirety for the above work and agree to abide by and 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, Bid security and other documents as required by the Bidding documents.

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

Until a formal agreement is prepared and executed, this bid and your subsequent Letter of Acceptance/Work Order shall constitute a binding contract between us and Central Mine Planning and Design Institute, Ltd, Regional Institute IV, Nagpur.

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

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

PROFORMA for undertaking to be submitted by Bidder/s (On Bidder's Letter Head) for Genuineness of the Information furnished on-line and authenticity of the Documents uploaded on-line in support of his Eligibility:

Format of UNDERTAKING

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 NIT No/Tender ID..... Dated..... and I/ we offer to execute the work in accordance with all the terms, conditions and provisions of the bid.
2. I / Our Partners / Directors don't has/have any relative as employee of Central Mine Planning and Design Institute, Ltd, RI-IV, NAGPUR.
3. All information furnished by us in respect of fulfillment of eligibility criteria and qualification information of this Bid is complete, correct and true.
4. All copy of documents, credentials and documents submitted along with this Bid are genuine, authentic, true and valid.
5. I/ We 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.
8. * I/ We have not been banned or delisted by any Govt., or Quasi Govt. Agencies or PSUs

Or

- * I / Wehave been banned by the organization named " _____ " for a period of..... year/s, effective from to.....
9. If any information and document submitted is found to be false/ incorrect at any time, department may cancel my/our Bid and action as deemed fit may be taken against me/us, including termination of the contract, forfeiture of all dues including Earnest Money and banning/ delisting of our firm and all partners of the firm etc.

[* Delete whichever is not applicable.]

ANNEXURE A3

Mandate Form for ELECTRONIC FUND TRANSFER / INTERNET BANKING PAYMENT.

To

**Central Mine Planning & Design Institute Limited, RI-IV, Nagpur
Kasturba Nagar, Jaripatka, Nagpur-440014.**

Sub: Authorization for release of payment due from Central Mine Planning & Design Institute Limited, RI-IV, Nagpur, Kasturba Nagar, Jaripatka, Nagpur-440014 through Electronic Fund transfer/ Internet Banking.

(SBI-NET)

Ref: Order No. _____ Date _____ and/or Tender/Enquiry/Letter No. _____ Date _____ (Please fill in the information in **CAPITAL LETTERS**, Please **TICK** wherever it is applicable).

1. Name of the Party : _____
2. Address of the Party : _____
City _____ PIN Code _____
3. E- Mail Id _____
4. Permanent Account Number _____
5. **Particulars of Bank**

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

6. Date from which the mandate should be effective: _____

I hereby declare that the particulars given above are correct and complete. If any transaction is delayed or not effected for reasons of incomplete or incorrect information. I shall not hold Central Mine Planning & Design Institute Limited responsible. I also undertake to advise any change in the particulars of my account to facilitate updation of records for purpose of credit of amount through SBI Net.

Place:
Date:

Signature of the party/Authorized Signatory.

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

Banker's Stamp:
Date:

(Signature of the Authorized official from the Banks)

Bank Guarantee Performa for PERFORMANCE SECURITY /GUARANTEE*(TO BE STAMPED IN ACCORDANCE WITH STAMP ACT)**(TO BE ISSUED BY ANY NATIONALISED/ SCHEDULED BANK AUTHORISED BY RBI TO ISSUE A
BANK GUARANTEE)*

To,

**Central Mine Planning & Design Institute Limited, RI-IV, Nagpur
Kasturba Nagar, Jaripatka, Nagpur-440014.**

In consideration of the **Central Mine Planning & Design Institute Limited, Regional Institute, Nagpur-440014** having its Registered office at **Gondwana Place, Kanke Road, Ranchi -834031** (hereinafter called to as the "Employer" which expression shall unless repugnant to the context or meaning thereof, include all successors, administrators and assigns) having awarded to _____ *[Name & Address of the Contractor]* (hereinafter called to as "Contractor" which expression shall unless repugnant to the context of meaning thereof include its successors, administrators, executors and assigns) the work _____ *[Name of the Work]* by issue of Letter of Award No. _____ *[Work Order/Letter of Intent No.]* and the same having been unequivocally accepted by the Contractor resulting into a Contract Agreement dated _____ valued at _____ *[value of Work Order]* (hereinafter called 'the Contract') and the Employer having agreed to accept Performance Bank Guarantee of ____ *[indicate figure]*% of the Contract Sum _____ *[amount in figures and words]* from a Nationalized/Scheduled Bank for due performance of the work executed by the Contractor as per the terms & conditions contained in the said Contract.

We, _____ *[name of the Bank]*, of _____ *[address of the Bank]* (hereinafter called to as "Bank" which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) do hereby guarantee and undertake to pay the Employer immediately on demand and or, all money payable by the Contractor to the extent of _____ *[amount of guarantee in figures and words]*, at any time from _____ to _____ without any demur, reservation, recourse, contest or protest and/or without any reference to the Contractor. Any such demand made by the Employer on the Bank shall be conclusive and binding notwithstanding any difference between the Employer and the Contractor or any dispute pending before any Court, Tribunal, Arbitrator or any other authority. We agree that the Guarantee herein contained shall be irrecoverable and shall continue to be enforceable as per the terms & conditions contained in the said Contract.

The Employer shall have the fullest liberty without affecting in any way the liability of the Bank under this Guarantee, from time to time, to extend the validity of time of Performance of the Contract by the Contractor. The Employer shall have the fullest liberty without affecting this Guarantee, to postpone, from time to time, the exercise of any powers vested in them or of any right which they might have against the Contractor, and to exercise the same at any time in any manner, and either to enforce or to forebear or to enforce any covenants contained or implied in the Contract, between the Employer and the Contractor or any other course or remedy or security available to the Employer. The Bank shall not be released of its obligations under these presents by any exercise by the Employer of its liberty with reference to matter aforesaid or any of them or by reason of any other act of forbearance or other acts of omission or commission on the part of the Employer or any other indulgence shown by the Employer or by any other matter or thing whatsoever which under law would, but for this provision, have the effect of relieving the Bank. The Bank also agrees that the Employer at its option shall be entitled to enforce this Guarantee against the Bank as a Principal Debtor in first instance, without proceeding against the Contractor and notwithstanding any security or other Guarantee that the Employer may have in relation to the Contractor's liabilities. Dated this _____ day of _____ at _____

For and on behalf of the Bank.

Signature _____

Name _____

Designation _____

Common Seal of Bank _____

ANNEXURE A5

Proforma for EXECUTION OF AGREEMENT.

(TO BE STAMPED IN ACCORDANCE WITH STAMP ACT)

This agreement is made on day of between the Central Mine Planning and Design Institute Limited, Regional Institute-IV, Nagpur having its registered office at Gondwana Place, Kanke Road, Ranchi-834031 (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 ₹..... 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 annexure to this agreement should be deemed to form and be read and construed as part of this agreement viz.
 - i) Annexure-A: Tender Notice (Page ... to ...)
 - ii) Schedule-A: General terms & conditions. (Page ... to ...)
 - 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 converted a sum of Rs. only, from the amount of Rs. deposited by the said contractor as Earnest Money, into 'Initial Security Deposit' of 1% of the awarded work value. The excess/balance amount of earnest money shall be adjusted in the RA Bill(s).
- 5) The said contractor hereby covenants with the company that the Company shall retain a sum of Rs. or such sum as may be arrived at based on the executed value of the work, as security deposit for the fulfilment of the contract to the satisfaction of the Company.

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 _____ Address: _____ Signature

Occupation: _____

Signed byon behalf of (Name of Company) in presence of - Signature

1. Name: _____ Address: _____ Signature

**SPECIMEN OF LETTER OF CONTRACTOR'S ACCEPTANCE OF PROVISIONAL REDUCTION OF RATE
FOR SUBSTANDARD WORK.**

No.

Dated:

To

.....
.....

Sir,

Subject: (Complete name of work).....

Reference: Your letter No.....

I/We have carefully read the terms and conditions offered in your letter dated..... and they are acceptable to me/us.

Pending the decision of the Engineer in Charge of the final rates of payment against the items of work specified in the statement attached to your above letter, which will be final and binding.

I/We agree to the same being paid at the provisional rates indicated against each of the said item of work for the above work as mentioned in your statement.

Yours faithfully,

Contractor(s)

HINDERANCE REGISTER

1. Name of Work : _____
2. Contract Agreement No. : _____
3. Date of Commencement : _____
4. Stipulated Date of Completion : _____
5. Extended Date of Completion, if applicable : _____

Sl. No.	Nature of Hindrance	Activity of Work affected	Effect of Hindrance on employment of labour and T&P etc.	Date of notification of hindrance by contractor	Signature of contractor's representative	Date of removal of hindrance	Sign of client Engineer	Period of Hindrance
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)