



Under Jurisdiction of Ranchi Court Only

Central Mine Planning & Design Institute Ltd.
(A Mini Ratna Company - Subsidiary of Coal India Ltd.)
Gondwana Place, Kanke Road, Ranchi – 834031, JHARKHAND, India
Office of the General Manager (Exploration)
Phone: +91-651-2232637, FAX No. +91-651-2230875
E-mail: gmexpl.cmpdi@coalindia.in

TENDER DOCUMENT

Global Tender cum Reverse Auction through e-Procurement Portal: <https://coalindiatenders.nic.in> for 2D Seismic Survey along with Detailed Exploration in the Khariaparha, Grindola, Bandbahal Block, Ib Valley Coalfield of Jharsuguda District in the State of Odisha

TENDER NO. : CMPDI/EXPLORATION/GPH/E-TENDER/KHARIAPARHA, GRINDOLA, BANDBAHAL BLOCK
DATE :

In order to enhance the Coal Resource base, Central Mine Planning & Design Institute Ltd. (CMPDI), a subsidiary of Coal India Ltd., plans to take up 2D Seismic Survey along with Detailed Exploration in the Khariaparha, Grindola, Bandbahal Block, Ib Valley Coalfield of Jharsuguda District in the State of Odisha.

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

Description of work	Quantity		Estimated Contract Value (ECV) (In ₹)	Earnest Money (In ₹)	Period of Completion (In Days)					
	2D Seismic (line km)	Drilling (Meter)			Mobilization period for 2D Seismic and Drilling	For Field & Lab Studies*		For GR		Total
						2D Seismic (Line km)	Drilling (Meter)	2D Seismic**	Drilling***	
2D Seismic Survey along with Detailed Exploration in Khariaparha, Grindola, Bandbahal Block, Ib Valley Coalfield as per Scope of Work given at Annexure-I, IA & IB.	102	1,12,300	35,18,03,609	43,97,600	50 Days	160 Days	1,700 Days	60 Days	180 Days	2150 Days {50=Mobilization)+ (220=2DSeismic)+ (1880=Exploration)}

***Both the activities will start simultaneously, starting with Topographical Survey followed by other Activities within 50 Days from issue of letter of acceptance/work order or handing over the relevant document to the contractor for preparation of Exploration Scheme, whichever is later.**

****The 2D-Seismic Report shall be utilized for planning of detailed drilling and must to be prepared within 60 days after the completion of the 2D Seismic field Work.**

***** Geological Report (GR) will be prepared within 180 days after the completion of the drilling work.**

Tender Inviting Authority	Contact Person(s)/Tender Dealing Officer(s)
General Manager (Exploration) Exploration Division, CMPDI (HQ) Gondwana Place, Kanke Road, Ranchi – 834031 Phone – 0651-2232637 (O)	Shri A. K. Mohanty, General Manager (Geology) – 8987788921 Shri Rajendra Pandeya, Chief Manager (Geology)-8987789131 E-procurement Help Line - 0651-2233058

2. Time Schedule of Tender: As given on the on-line tender document.

Sl. No.	Particulars	Date	Time (in Hours)
a.	Tender e-Publication date	As available on website https://coalindiatenders.nic.in	
b.	Document download start date		
c.	Document download end date		
d.	Bid Submission start date		
e.	Bid Submission end date		
f.	Start date for seeking Clarification on-line		
g.	Last date for seeking Clarification on-line		
h.	Date of Pre-bid Meeting		
i.	Bid Opening Date		
j.	Start Date of Reverse Auction		

NOTE (Important):

- If the due date of opening falls on a holiday, the Tender will be opened on the next working day.
- 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.
- There will be no physical / manual sale of the Tender Document.
- There is no tender fee and the bidders can download the Tender Document free of cost.
- Bidders are advised to download the complete set of the Tender Document, including the tender details.

3. 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>. 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 specified for downloading the document.

4. Clarification of Bid:

The bidder may seek clarification online within the specified period. The identity of the Bidder will not be disclosed by the system. The department will clarify as far as possible the relevant queries of bidders. The clarifications given by department will be visible to all the bidders intending to participate in that tender. The clarifications may be asked from the day of e-Publication of NIT. The period for seeking clarification by bidder will be up to 7 (seven) days before the end date of bid submission.

5. Bid Security / Earnest Money (EMD):

1) Deposit of EMD:

The bidder will have to make the payment of EMD through **ONLINE** mode only, except overseas bidder who may opt for payment of EMD in Foreign Currency as per Sub. Clause 5.1(b) hereunder.

NOTE: This shall be deposited in the manner as described below:

No Bid will be accepted unless accompanied by requisite Earnest Money Deposit as stated above.

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.

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.

b. For Foreign Bidders:

Overseas Bidders can make payment of EMD through Direct Foreign Remittance to CMPDI, Bank Account, the details of which are as under:-

1. Name of Account: Central Mine Planning and Design Institute Limited;
2. Account No.: 916020064660613;
3. Bank Name: Axis Bank Limited;
4. Branch Name: Ranchi Branch
5. Branch Code: 106
6. IFSC Code: UTIB0000106;
7. SWIFT Code: AXISINBB106;

Instruction to foreign bidders: The foreign bidder who make the payment of EMD in foreign currency as explained above, should opt for "YES" in the option of exemption for submission of EMD in on-line mode and should upload the document (.pdf file) specifying the transaction reference number / documentary evidence showing remittance of EMD payment, in the space provided against 'Upload EMD exemption document' which should be digitally signed before moving on to the Next Page.

2) Exemption of EMD

The bidders under the category of Sate/Central Govt./PSUs/firms registered with NSIC/MSEs(Micro & Small Enterprises)/Start-up having valid registration for the tendered works are exempted from submission of EMD against uploading of valid documentary evidence in cover I.

6. User Portal Agreement:

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

7. Pre-Bid Meeting:

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

8. Qualification of the Bidders:

- 8.1 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.

Bidders are advised to upload the scanned copy of documents specified under the eligibility criteria of the tender in support of their qualification, as Cover-I, against the tender. The CHECK LIST of such documents is also available under the heading **Confirmatory Document** to verify the submission of required information. Non- submission of requisite documents/ information will be considered as a non-responsive bid, which is liable for rejection.

- 8.2 The invitation for bid is open to all bidders including an individual, proprietorship firm, partnership firm, company or a Joint Venture, consortium having eligibility to participate as per eligibility criteria stipulated in **clause No.9 of NIT** and having Digital Signature Certificate (DSC) issued from any agency authorized by Controller of Certifying Authority (CCA), Govt. of India and which can be traced up to the chain of trust to the Root Certificate of CCA.

- 8.3 **Requirements of a Joint Venture** - Two or Three companies / contractors may participate in the tender as Joint Venture (JV). Joint Ventures must comply the following requirements:

- i) Following are the minimum qualification requirements for a joint venture.
 - a) The minimum qualification requirements for Joint Venture: The qualifying criteria parameters e.g. experience, financial resources etc. of the individual partners of the J.V. will be as deliberated under clause 9 of the NIT towards fulfillment of qualification criteria related to the experience.
 - b) The qualifying criteria parameter e.g. financial resources (Working Capital) of the individual partners of the J.V. will be added together, for the relevant period, and the total criteria should not be less than as deliberated under Clause No. 9 of the NIT towards fulfillment of qualification criteria related to financial turn over.
- ii) The formation of Joint Venture or change in the Joint Venture character / partners after submission of the bid and / or any change in the bidding regarding Joint Venture will not be permitted.
- iii) The bid, and in case of a successful bid, the agreement shall be signed, so as to legally bind all partners jointly and severally and bid shall be submitted with a copy of the Joint Venture Agreement providing the joint and several liabilities with respect to the contract.
- iv) The pre-qualification of a joint venture does not necessarily pre-qualify any of its partners individually or as a partner in any other joint venture or association. In case of dissolution of a joint venture, each one of the constituent firms may pre-qualify if they meet all the pre- qualification requirements, subject to written approval of the employer.
- v) The JV Agreement must include the relationship between joint venture partners in the form of JV Agreement to legally bind all partners jointly and severely for the proposed agreement which should set out the principles for the constitution, operation, responsibilities regarding work and financial arrangements, participation (percentage share in the total) and liabilities (joint and severally) in respect of each and all of the firms in the joint venture. Such JV Agreement must evidence the commitment of the parties to bid for the facilities applied for (if pre-qualified) and to execute the contract for the facilities if their bid is successful.
- vi) One of the partners shall be nominated for being in charge of the contract and shall be designated as Lead Partner. This authorization shall be evidenced by a Power of Attorney signed by legally authorized signatories of all the partners at the time of bidding.
- vii) The JV Agreement must provide that the Lead Partner shall be authorized to incur liabilities and receive instructions for and on behalf of any and all partners of the Joint Venture and the entire execution of the contract shall be done with active participation of the Lead Partner.
- viii) The contract agreement should be signed jointly by each Joint Venture Partners. Subsequent declaration/ letters/ documents shall be signed by the lead partner authorized to sign on behalf of the Joint Venture or by the authorized signatory on behalf of the JV.
- ix) The bid should be signed by all the partners of the Joint Venture.
- x) An entity can be a partner in only one Joint Venture. Bid submitted by Joint Ventures including the same entity as partner will be rejected.

- xi). The J.V. agreement may specify the share of each individual partner for the purpose of execution of this contract. This is required to fulfill eligibility and also for the purpose of apportioning the value of the contract to that extent to individual partner for subsequent submission in other bids if he intends to do so for the purpose of the qualification in the bid.
- xii) The earnest money/ Bid security/Bank guarantee can be submitted by the JV/one or more partners of the JV.
- xiii) The JV agreement must be specific that it is valid for the project for which the bidding is done. If the JV breaks up midway before award of work/during bid validity period the bid will be rejected. If the JV breaks up midway before award of work/during bid validity/after award of work/during pendency of the contract; in addition to normal penalties as per provisions of the bid document, all the partners of the JV shall be debarred from participating in future bids for a minimum period of 12 months in CMPDIL.
- xiv) JV agreement shall be registered in accordance with the law so as to become legally valid and binding on the members before making any payment.
- xv) JV shall open a bank account in the name of the JV and all payments due to the JV shall be credited by the employer in that account only. To facilitate statutory deductions all statutory documents like PAN / GSTIN etc. shall be submitted by the JV before execution of the agreement for the work/ before making any payment.

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

8.4 Requirements of a Consortium – Following requirements, in case of Consortium Route of participation, shall be met:

- i. The maximum number of consortium members may go up to 03 (Three) with clearly defining in the Consortium Agreement/MOU (Memorandum-of-Understanding) who will be the Lead Member for the purpose of this Work apart from other Terms and Conditions.
- ii. The Consortium agreement must specify the roles and responsibilities of each member.
- iii. The work order will be placed on the Lead Member (Bidder).
- iv. The Lead Member shall be the bidder having experience of drilling activities. The Consortium Agreement must provide that the Lead member shall be authorized to incur liabilities and receive instructions for and on behalf of any and all members of the Consortium and will have the sole responsibility for execution of the Contract.
- v. Collectively consortium members must meet the Technical Qualification requirements (TQR) i.e. 2-D Seismic Survey – Data acquisition, processing, interpretation & report preparation and Coring Drilling, Field Geological services, Topographical Survey, Geophysical Logging/Surveying & Preparation of Geological Report.
- vi. However, Lead member has to meet the Working Capital requirement as per Clause No. 9.2 of NIT.
- vii. To facilitate statutory deductions, all statutory documents like PAN / GSTIN etc. shall be submitted by the Lead Member (Bidder) at the time of bid submission.
- viii. The Bills will be raised by the Lead Member on behalf of the Consortium and all payments shall be credited in the account of Lead Member only as per Clause No. 9.0 of General Terms & Conditions” (GTC). CMPDI will not be responsible for making any payment to the Individual members of the Consortium and no such claim shall be entertained by CMPDI.
- ix. Submission of Consortium Agreement/ MoU (To be submitted by bidders as a Confirmatory Document): Bidder shall upload a Consortium Agreement/ MoU with his Consortium members as per format given in the Annexure-X of this bid document. This MoU shall be signed by all the Consortium members, through their respective authorized signatories.

9. Eligibility Criteria

9.1 (A) Work Experience for Drilling:

The bidder must have in its name or proportionate share as a member of JV/Consortium, experience of having successfully completed **works of similar nature** which includes Coring Drilling, Field Geological services, Topographical Survey, Geophysical Logging/Surveying & Preparation of Geological Report *valuing* 65% of the annualized *estimated* cost of the work put to tender (for period of completion over 1 year) / 65% of the estimated

cost of the work (for completion period up to one year) put to Tender in any year (consecutive 365 days) during last 7(seven) years ending last day of month previous to the one in which bid applications are invited.

“Annualized value” of the work shall be calculated as the “Estimated Cost / Period of completion in Days x 365”.

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

The works of Similar Work shall be “Coring Drilling **OR** combination of Coring & Non-Coring Drilling in a coal / lignite / stratified deposit along with other allied activities as specified in Scope of work (Annexure-I/IB)”.

Data to be furnished by Bidder on-line: In respect of the above eligibility criteria, the bidders are required to furnish the following information on-line:

- i. Start date of the year for which work experience of bidder is to be considered for eligibility.
- ii. Start date & end date of each qualifying experience (similar nature).
- iii. Work Order Number/ Agreement Number of each experience
- iv. Name & address of Employer/ Work Order Issuing authority of each experience
- v. Percentage (%) share of each experience (100% in case of an Individual/ Proprietorship firm or a partner in a partnership firm and the actual % of share in case of a Joint Venture).
- vi. Executed Value of work against each experience
- vii. In case the bidder is a Joint Venture, the work experience of any one, two and three of the individual partners of JV or the JV itself may be furnished as the work experience of the bidder.

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

For work experience bidders are 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.

Technical evaluation by the System:

- i. The system shall calculate the end date by adding 365 days to the start date of experience (provided by bidder). End date shall not be later than the last date (last day of month previous to the month in which NIT has been published on e-procurement portal).
- ii. The system shall check the Start & End date of each experience and accept it as a qualifying experience if it falls within the year selected by the bidder (as calculated by adding 365 days to the start date restricted to the 'last date').
- 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 calculate the value of all qualifying experiences taken together for each bidder and grade him as 'Eligible' if it meets the minimum requirement (65% of Annualized Value or estimated value whichever is less) or else as 'Ineligible'.
- v. In case any of the experiences does not fall in the selected period of 365 days (continuous), such experiences will be excluded from evaluation. Hence the bidder shall have to furnish the value of work executed only during the selected period of 365 days (continuous).
- vi. 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."
- vii. The work experience of the bidder may be an ongoing work and the executed value of work shall be considered for evaluation.
- 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.

(B) Experience for Geological Work & 2D Seismic Survey (Both the experience are required):

(B-I) Geological Work: The tenderer must have in its name as a prime contractor having either experience of preparing at least one geological report (GR) of coal/lignite/ stratified deposit & **carrying geophysical logging**

in at least 10 boreholes of coal/ lignite deposit or having key professionals as per number and experience mentioned in the Table below:

Alternatively, the tenderer must have valid MOU with the Associates possessing the experience for above mentioned jobs (GR & Geophysical Logging) or having key professionals as per number and experience mentioned in the Table below:

(B-II) 2D/3D Seismic Survey Work: The tenderer must have in its name as a prime Contractor having experience of acquisition, interpretation, processing & documentation along with topographical survey of at least one 2D/3D Seismic Project with key professionals as per number and experience mentioned in the Table below:

Alternatively, the tenderer must have valid MOU with the Associates having proven capability / experience for above mentioned jobs (acquisition, interpretation, processing & documentation along with topographical survey of at least one 2D/3D Seismic Project) with key professionals as per number and experience mentioned in the Table below:

Table showing details of Key Professional required as per clause 9.1(BI) & 9.1(B2)					
Sl. No.	Specialization	Level	Minimum Requirement	Qualification	Minimum Experience (Years)
I	Geologists	Supervisory	1	M. Sc. / B. Tech. in Geology / Applied Geology or equivalent	5 Year experience in coal / lignite exploration & preparation of minimum 1 GR of coal / Lignite / Stratified deposit
		Execution	1	M. Sc. / B. Tech. in Geology / Applied Geology or equivalent	3 Year experience in coal / Lignite / Stratified deposit
II	Surveyor	Execution	1	Diploma / Surveyor Certificate	3 Year experience in DGPS Survey in coal / Lignite / Stratified Deposit
III	Geophysicist	Supervisor	1	M. Sc. /Masters in Geophysics / Applied Geophysics or equivalent	5 Year experience in 2D/3D Seismic data processing, Interpretation & report preparation in OIL/GAS/Stratified Deposit
		Execution	3	M. Sc. /Masters in Geophysics / Applied Geophysics or equivalent	3 Year experience in 2-D/3-D Seismic Survey in data acquisition work in OIL/GAS/Stratified Deposit
			1	M. Sc. /Masters in Geophysics / Applied Geophysics or equivalent	3 Year experience in Geo-physical Logging in data acquisition, processing, & Interpretation work, in Coal/ Lignite Deposit

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 Clause 9.1B (both BI & BII).**

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

The bidders are required to submit of its own or through MoU for work experience as per clause 9.1-BI

- I. Copy of the work order along with satisfactory work completion certificate of preparing at least one geological report (GR) of coal/lignite/ stratified deposit & carrying geophysical logging in at least 10 boreholes of coal/lignite deposit
- II. Self-attested CVs of the Key personnel, including the similar assignments handled and their role, duly countersigned by the authorized representative of bidder.

The bidders are required to submit of its own or through MoU for work experience as per clause 9.1-BII

- I. Copy of the work order along with satisfactory work completion certificate of experience in acquisition, interpretation, processing & documentation along with topographical survey of at least one 2D/3D Seismic Project along with self-attested CVs of the Key personnel, including the similar assignments handled successfully and their role, duly countersigned by the authorized representative of bidder.

Note: One person shall be eligible for only one skill set, even though having minimum requisite qualification for more

than one skill set. The key personnel should be full time employee on the roll of bidder. In case of contractual employment, the contract should be for full time employment of at least 24 months.

9.2 Working Capital:

Evidence of possessing adequate working capital (at least 20% of the “Annualized value or Estimated value whichever is less” of this work) inclusive of access to lines of credit and availability of other financial resources to meet the requirement. The bidder should possess the working capital within **three months** prior to the date of opening of tender.

Data to be furnished by Bidder on-line: In respect of the above eligibility criteria, the bidders are required to furnish the following information on-line:

- i. Amount of available working capital inclusive of lines of credit and availability of other financial resources
- ii. Date on which the bidder possesses the required working capital
- iii. Name of the Chartered Accountant (CA)
- iv. Membership Number of CA who certifies the bidder's working capital on a particular date.
- v. Date of Issue of Certificate
- vi. In case the bidder is a Joint Venture, the working capital 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

Technical evaluation by the System:

- i. The system shall check that the date on which the bidder possesses the required working capital as well as the date of issue of certificate is within 3 months of the date of opening of tender.
- ii. The value of working capital as certified by the CA is greater than or equal to the minimum requirement.

Scanned copy of documents to be uploaded by bidders (Confirmatory Document):

Certificate of Working Capital issued by a Practicing Chartered Accountant having a membership number with Institute of Chartered Accountants of India containing the information as furnished by bidder on-line or equipment certificate in case of foreign bidder / partner issued from the respective country.

9.3 Fleet Requirement:

The bidder is required to give an undertaking in the form of an Affidavit in the prescribed format to deploy matching Rigs & Latest for 2D Seismic Survey and Geophysical logging Survey equipment and related software as per NIT either owned or hired.

Data to be furnished by Bidder on-line: 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 acceptance to deploy matching Drilling Rigs/Survey Instrument/Geophysical Logging unit/equipment and related software as per NIT either owned or hired

Technical evaluation by the System:

The system will evaluate “Yes” as eligible and “No” as not eligible.

Scanned copy of documents to be uploaded by bidders (Confirmatory Document): An affidavit confirming acceptance to deploy sufficient number of matching **Drilling Rigs/Survey Instrument/Geophysical Logging & Geophysical 2D Seismic Survey unit/equipment and all the related software as per NIT** either owned or hired.

9.4 Permanent Account Number:

The bidder should possess a Permanent Account Number (PAN) issued by Income tax Department.

Data to be furnished by Bidder on-line: 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 PAN

Technical evaluation by the System:

The system will evaluate “Yes” as eligible and “No” as not eligible.

Scanned copy of documents to be uploaded by bidders (Confirmatory Document):

PAN CARD of the bidder

NOTE: In case, the bidder is a *Joint Venture/ Consortium*, PAN Card issued by the Income Tax Department, Govt. of India for each Indian Partner of JV/ Consortium and verifiable *Tax Residency Certificate* of respective country for each foreign partner or JV/Consortium itself).

9.5 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 then bidder shall submit the copy of Notification along with 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 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.*

Explanation:

1. Every supplier shall be liable to be registered under this Act in the State or Union territory, other than special category States, from where he makes a taxable supply of goods or services or both, if his aggregate turnover in a financial year exceeds twenty lakh rupees.
2. Provided that where such person makes taxable supplies of goods or services or both from any of the special category States, he shall be liable to be registered if his aggregate turnover in a financial year exceeds ten lakh rupees.

Special category States” shall mean the States as specified in sub-clause (g) of clause (4) of article 279A of the Constitution: States of Arunachal Pradesh, Assam, Jammu and Kashmir, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura, Himachal Pradesh and Uttarakhand are specified in sub-clause (g) of clause (4) of article 279A of the Constitution.

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 as per previous column.

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/ dealer in compliance with the relevant GST rules of India.

NOTE:

[In case of JV a Certificate from a practicing Chartered Accountant having membership number with Institute of Chartered Accountants of India confirming the status of JV w.r.t GST in compliance with relevant GST rules or GST Registration Certificate of JV.]

1. In case the Service contract is awarded to a Joint Venture participating in the tender they have to submit PAN, GST registration (as applicable in the tender and for the bidder status) etc. in the name of the Joint Venture after Award of Service contract at the time of execution of agreement/ before the payment of first running on account bill.
2. If turnover of bidder exceeds exemption limit, the bidder must have GST registration as per GST Act and Rules.

Technical evaluation 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 L-1 shall be decided based on cost to company ascertained in manner suggested above.*

Where the vendor is an unregistered one i.e. (exempt from registration under GST) supplying taxable service causing CMPDIL liable to deposit tax under reverse charge (Applicable after 31.03.2018 as decided by GOI), the CGST & SGST or IGST and GST (Compensation to state) cess, as applicable and payable by CMPDIL under reverse charge, shall be added to quoted price while ascertaining the landed price. However, in this case also the L-1 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 supplier 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.*
- c) *The Tax Invoice raised by the supplier must be in compliance of relevant GST Acts, rules & notifications made thereunder and should bear the GSTIN number for the supply to CMPDIL HQ and its Regional Institutes located at different states as given below:*

State	Unit / HQ	City	GSTIN (Provisional ID)
Jharkhand	HQ	Ranchi (HQ)	20AAACC7475N1ZI
	RI-II	Dhanbad (RI-II)	
	RI-III	Ranchi (RI-III)	
West Bengal	RI-I	Asansol	19AAACC7475N1Z1
Maharashtra	RI-IV	Nagpur	27AAACC7475N1Z4
Chhattisgarh	RI-V	Bilaspur	22AAACC7475N1ZE
Madhya Pradesh	RI-VI	Singrauli	23AAACC7475N1ZC
Odisha	RI-VII	Bhubaneswar	21AAACC7475N1ZG

The rate and amount of CGST, SGST, IGST, and GST (Compensation to state) Cess, related to supply of goods/Services, shall be shown separately in tax invoice.

- d) *The CGST & SGST, IGST and GST (Compensation to state tax) Cess, as applicable at the time of supply, shall be paid extra against submission of proper Tax Invoice, as referred above, by the supplier 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.*
- e) *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 supplier 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 supplier.

- f) 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 supplier has filed the valid return in accordance with the provisions of the GST Act and the rules made there under.*
- g) If the Tax invoice submitted by the supplier is found defective causing disallowance of Input Tax Credit (claimed by CMPDIL based on such invoices) by the tax authorities, the applicable taxes & Cess paid based on such Tax invoice shall be recovered from the current bills or any other dues of the supplier.*
- h) In the event of any additional tax liability accruing on the supplier 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 supplier.*

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

9.6 An Affidavit:

An Affidavit on the bidder's letter-head regarding genuineness of the information furnished by him on-line and authenticity of the scanned copy of documents uploaded by him on line in support of his eligibility, as per the format given in the bid document at Annexure-VIII.

9.7 Legal Status of the bidder:

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.
5. Agreement/MOU in case of consortium as per Annexure-X

Data to be furnished by Bidder on-line: 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 the supporting documents.

Note: The partnership firm / JV / Consortium is required to submit written consent of all the partners to Arbitration clause as per the provision stipulated in the NIT.

9.8 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.

Data to be furnished by Bidder on-line: 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 either a DSC holder or possessing the supporting document for authorization.

9.9 Banning:

The bidders would give a declaration that they have not been banned or delisted by any Govt. or Quasi Govt. agencies or PSUs. If a bidder has been banned or delisted by any Govt. or Quasi Govt. agencies or PSUs, this fact must be clearly stated and it may not necessarily be a cause for disqualification. If the declaration is not given, the bid will be rejected as non-responsive.

9.10 Provident Fund:

The bidder should possess a Provident Fund Registration Certificate issued by Govt. Department of any Indian State.

10 Submission of Bid:

10.1 The bidder can submit their bid only after payment of EMD as per the provision stipulated in the NIT.

10.2 The bidder will submit their bid online. No off-line bid shall be accepted. However, in case of tenders having relaxation in eligibility criteria for co-operative societies formed by PAPs (Project Affected Persons), there will be provision for offline submission of bids by PAPs and online submission of bids by bidders other than PAPs in the same tender

10.3 In order to submit the Bid, the bidders have to get themselves registered online on the e-Procurement portal of CIL i.e. at <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 prospective bidders should register for availing the services through the option "Online Bidder Enrollment" on the home page of at <https://coalindiatenders.nic.in>. The registration should be in the name of bidder, whereas DSC holder may be either bidder himself or his duly authorized person.

10.4 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.

10.5 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.

10.6 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.

10.7 **General Instructions for Submission of Tender**

For online submission of tender the bidders will have to upload "Letter of Bid", Information regarding Eligibility Criteria, Financial Turn-over and all the confirmatory documents as prescribed in the NIT in Cover-I and only "Price-bid" in Cover-II. In case of EMD exemption one more document in support of the claim of EMD exemption will have to be uploaded by the bidder in cover I.

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

b **Letter of Bid:** The format of Letter of Bid (LOB) will be downloaded by the bidder and will be printed on Bidder's letter head and the scanned copy of the same will be uploaded during bid submission in cover-I. This will be the covering letter of the bidder for his submitted bid. The content of the "Letter of Bid" uploaded by the bidder must be the same as per the format downloaded from website and it should not contain any other information.

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

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

c **Confirmatory Documents:** All the confirmatory documents as enlisted in the NIT in support of online information submitted by the bidder are to be uploaded in cover-I by the bidder while submitting his/her bid. The Bidder will

have to give an undertaking online that if the information /declaration /scanned documents furnished in support of the same in respect of Eligibility Criteria are found to be wrong or misleading at any stage, they will be liable to punitive action. Any other document uploaded which is not required as per the terms of the Tender Document shall not be considered.

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

Sl No.	Eligibility Criteria	Scanned copy of documents, to be uploaded in support of information/ declaration furnished online by the bidder against Eligibility Criteria as Confirmatory Document
1	Letter of Bid (LOB):	Letter of Bid (LOB) on the bidder's letter head, in prescribed format (Annexure- VII).
2	Earnest Money Deposit:	Refer Clause No. 5 of NIT. NOTE: 1. In case of Foreign Bidders the offline EMD submission method may be opted as per Clause 5.1(b) [if applicable]. 2. The bidders claiming exemption from submission of EMD (as per clause 5.2) must upload valid documentary evidence in cover I.
3	The Work Experience for Drilling (Refer Clause 9.1A): The bidder must have in its name or proportionate share as a member of JV/Consortium, experience of having successfully executed (includes completed works of similar nature (Coring Drilling OR a combination of Coring and Non-Coring drilling, Field Geological services, Topographical Survey, Geophysical Logging & Preparation of Geological Report in a coal/lignite/stratified deposit) <i>valuing</i> 65% of the annualized <i>estimated</i> cost of the work put to tender (for period of completion over 1 year) / 65% of the estimated cost of the work (for completion period up to one year) put to Tender in any year (consecutive 365 days) during last 7(seven) years ending last day of month previous to the one in which bid applications are invited.	Bidders are required to submit 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 the eligibility criteria will have to be submitted. Note: In case of JV/Consortium, above documents of partner(s)/members are required.
3.1	Experience in Geological & 2D Seismic work (Refer Clause 9.1B): (B-I) Geological Work: The tenderer must have in its name as a prime contractor having either experience of preparing at least one geological report (GR) of coal/lignite/ stratified deposit & carrying geophysical logging in at least 10 boreholes of coal/lignite deposit or having key professionals as per number and experience defined earlier in 9.1B-I. <i>Alternatively, the tenderer must have valid MOU with the Agency possessing the experience for above mentioned jobs (GR & Geo-physical Logging) or having key professionals as per number and experience defined earlier in 9.1B-I.</i> (B-II) 2D/3D Seismic Survey Work: The tenderer must have in its name as a prime Contractor having experience of acquisition, interpretation, processing & documentation along with topographical survey of at least one 2D/3D Seismic Project with <i>key professionals as per number and experience defined earlier 9.1B-II.</i>	For work experience in Geological & 2D Seismic Work, the bidders are required to submit any one of the documents mentioned herein, as sought on-line, of its own or through MoU: For Geological Work: (i) Copy of the work order along with satisfactory work completion certificate of preparing at least one geological report (GR) of coal/lignite/ stratified deposit & carrying geophysical logging in at least 10 boreholes of coal/lignite deposit (ii) Self-attested CVs of the Key personnel, including the similar assignments handled satisfactorily and their role, duly countersigned by the authorized representative of bidder. For 2D Seismic Work: - (i) Copy of the work order along with satisfactory work completion certificate of experience in acquisition, interpretation, processing & documentation along with topographical survey of at least one 2D/3D

	<i>Alternatively, the tenderer must have valid MOU with the agency (ies) having proven capability / experience for above mentioned job (s) with key professionals as per number and experience defined earlier in 9.1B-II.</i>	Seismic Project. (ii) Self-attested CVs of the Key personnel, including the similar assignments handled satisfactorily and their role, duly countersigned by the authorized representative of bidder.
4	The Availability Of Working Capital (Refer clause 9.2) : Evidence of possessing adequate working capital (at least 20% of the "Annualized value or Estimated value whichever is less" of this work) inclusive of access to lines of credit and availability of other financial resources to meet the requirement. The bidder should possess the working capital within three months prior to the date of opening of tender.	Certificate of Working Capital issued by a Practicing Chartered Accountant having a membership number with Institute of Chartered Accountants of India containing the information as furnished by bidder on-line or equivalent certificate of foreign bidder/ partner issued from the respective country.
5	Fleet Requirement (Refer clause 9.3): The bidder is required to give an undertaking in the form of an Affidavit in the prescribed format to deploy matching <i>Drilling Rigs/Survey Instrument/Geophysical Logging & Geophysical Survey unit/equipment and related software as per NIT</i> either owned or hired	An affidavit confirming acceptance to deploy matching Drilling Rigs/Survey Instrument/ Geophysical Logging unit/equipment and related software as per NIT either owned or hired
6	Permanent Account Number (PAN) (Refer clause 9.4): The bidder should possess a Permanent Account Number (PAN) issued by Income tax Department.	In respect of the above eligibility criteria, the bidders are required to furnish the Scanned copy of PAN CARD of the bidder. (In case of JV / consortium, PAN card for each Indian partner of JV/ Consortium and Verifiable Tax Residency Certificate of respective country for each foreign partner or JV/ Consortium itself)
7	Goods and Service Tax (Not Applicable for Exempted Goods/ Services) (Ref. Clause No. 9.5 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/Dealer - Document: GST Registration Certificate (i.e. GST identification Number) issued by appropriate authority. 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/ dealer in compliance with the relevant GST rules. [In case of JV a Certificate from a practicing Chartered Accountant having membership number with Institute of Chartered Accountants of India confirming the status of JV w.r.t GST in compliance with relevant GST rules or GST Registration Certificate of JV]
8	Legal Status of the bidder (Refer clause 9.7):	<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. 4. Joint Venture Agreement containing name of partners and lead partner, power of attorney to the lead partner and share of each partner. 5. Agreement/MOU in case of Consortium as per Annexure-X. (The partnership firm / JV / Consortium is required to submit written consent of all the

		partners as per provisions of NIT.
9	Valid Digital Signature Certificate (Refer clause 9.8):	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
10	Integrity-Pact: (Applicable for tendered value of Rs.2.00 Crore & above).	Duly signed and witnessed Integrity Pact in the prescribed format (Annexure-II). Note: In case of JV, Integrity Pact shall be signed by all the partners.
11	Mandate Form for Electronic Fund Transfer.	Copy of Mandate form duly filled in as per Performa. (As per Annexure- IV).
12.	Banning /Delisting (Refer clause 9.9):: The bidders would give a declaration that they have not been banned or delisted by any Govt. or Quasi Govt. agencies or PSUs.	If a bidder has been banned or delisted by any Govt. or Quasi Govt. agencies or PSUs, this fact must be clearly stated and it may not necessarily be a cause for disqualification. If the declaration is not given, the bid will be rejected as non-responsive.
13	An undertaking regarding genuineness of the information furnished by him on-line and authenticity of the scanned copy of documents uploaded by him on-line in support of his eligibility, as per the format given in Annexure-VIII.	
14	Any other document to support the qualification information as submitted by bidder on-line.	
Note:	Only one file in .pdf format can be uploaded against each eligibility criteria. Any additional/ other relevant documents to support the information/declaration furnished by bidder online against eligibility criteria may also be attached by the bidder in the same file to be uploaded against respective eligibility criteria	

d 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 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
- III. Foreign Bidder.

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

10.8 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 per following 02(two) cases:

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

The overall bid price (Cost to Company) will be the rate 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.

10.9 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 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 Taxes and Duties:

All duties, taxes [excluding Goods and Services Tax (GST) and GST Compensation Cess (if applicable) only] and other levies 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 predefined logic. All investments, operating expenses, incidentals, overheads etc. as may be attendant upon execution and completion of works shall also be included in the rates, prices and total Bid price submitted by the bidder.

However, such duties, taxes, levies etc. which is notified after the last date of submission of 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 availor (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 CMPDI 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 supplier / vendor of goods and services in incorporating the tax invoice issued to CMPDI in its relevant returns under GST, payment of CGST & SGST or IGST, GST (Compensation to State) Cess shown in tax invoice to the tax authorities, issue of proper tax invoice or any other reason whatsoever, the applicable taxes & cess paid based on such Tax invoice shall be recovered from the current bills or any other dues of the supplier / vendor along with interest, if any.

12 Modification and withdrawal of Bid: 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 JV and partnership firms) whose DSC is registered on the e-Procurement portal can access the portal for online withdrawal but when there is a split in the business relationship, the partners whose DSC is not registered on the portal do not have the option of online withdrawal of bid. Hence such partners may opt to use offline method of withdrawal of his/her offer (or express his disassociation from the bidder organization).
- b. 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 12.I-(A) (b) and Clause 12.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.

- 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 **Automatic Evaluation (Technical):**

- 14.1** The e-Procurement System will evaluate the Technical bids automatically on the basis of relevant data provided by bidder through a format 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
- 14.2** 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.

15 **Extension of Time schedule of Tender:**

If the number of bids received online is less than three on the end date of bid submission then the bid submission end date, bid opening date and date of Reverse Auction will be automatically extended by the System, initially for a period of two days and if the number of bids still remains less than three then for another five days. This will be reflected in the portal after midnight i.e. start of the next day.

In case number of bids received is still less than three, the tender received will be opened. If no tender is received after second extension the tender will be cancelled.

16 Opening And Evaluation Of Tender:

16.1 Opening of bids:

Tender (Cover-I and Cover-II) will be decrypted and opened online by the "Bid Openers" with their Digital Signature Certificates on the pre-scheduled date & time of Tender Opening. After opening of the tender on the scheduled date & time of opening, the system will automatically evaluate the particulars as contained in the GTE, TPS.

After opening of the bids, GTE, BOQ and all other documents uploaded by the eligible bidders get opened and comparative statement of prices will be generated by the system.

16.2 Instructions to Bidders w.r.t. Reverse Auction Process (RAP): (Applicable for tenders having ECV of ₹ 1.00 Crore & above)

- a) *Reverse Auction Process (RAP) will be initiated within two hours of opening of price bids.*
- b) *There will be no participation fees for e-Reverse auction.*
- c) *Upon opening of the price bids, a reverse auction platform will be created, displaying only the L1 price received. No indication will be available in the portal to anybody regarding number of bids and names of the bidders.*
- d) *Initial period of reverse auction will be 2 (Two) hours. There will be auto extension of time every time by 10 (Ten) minutes in case of any reduction recorded in the last ten minutes. The reverse auction will come to a close only when there is no further reduction recorded in the last ten minutes slot.*
- e) **H-1 bid will be eliminated during price bid opening, if more than three techno-commercially acceptable bids are available as per the evaluation done by system and such bidder will not be allowed to participate in reverse auction.** If two or three bidders have quoted same H-1 land cost (i.e. Cost to Company), the bidder(s) who submitted / frozen the bid later, shall be rejected and will not be allowed to participate in reverse auction.
- f) The 'Start Bid' price will be either of the following, which one is lower:
 1. L-1 price **OR**
 2. [Approved estimated/ justified price excluding GST (only estimated price in case of mining tenders) + applicable GST including GST Compensation Cess, if any, taking into consideration Input tax credit, if applicable] + 10%
- g) *The L1 price / Start Bid price is cost to the company price on which the auction will be initiated. At the end of reverse auction, the L1 bidder has to submit break up of prices conforming to the lowest landed rate quoted by him in the reverse auction.*
- h) **Decremental Value:** The decrement value will be 0.5 % of the start bid price. The reduction by the bidder shall have to be made as per decrement value or in multiple thereof. The Maximum **seal percentage** will be fixed as 2% of start bid price / last quoted price during reverse auction, whichever is lower.

In order to have ease of submission of reverse auction bid by the bidders, it is suggested that decrement value may be rounded off to nearest value as under:

 - i. For decrement values up to Rs.10/-, rounding off may be made to nearest rupee.
 - ii. For decrement values from Rs.11/- to Rs.100/-, rounding off may be made to nearest 10.
 - iii. For decrement value from Rs.101/- to Rs.1,000/-, rounding off may be made to nearest 100.
 - iv. For decrement value from Rs.1,001/- to Rs.10,000/-, rounding off may be made to nearest 1000 & so on...

For cases where the unit rate is low and quantum of item is huge, if the decrement value in terms of 0.5% works out to be in paise and rounding off to nearest rupee, would be much higher than 0.5% of start bid value, the unit of measurement may be adjusted in such a way so that decrement value may remain in the range of 0.5% or Rs.1/- whichever is higher.

For example, Tender for any item, whose unit of measurement is in KG and having low unit rate may be invited in terms of 10 KG or 100 Kg, as may be considered appropriate, as unit of measurement.
- i) System protects bid and bidder information till auction gets over and displays current L1 price to the bidder in auction dashboard.
- j) System provides bidder details along with bid documents at the end of reverse auction process only.

- k) The log details of the entire reverse auction process will be generated by the system once the process of reverse auction is completed.
- l) If a bidder does not submit his bid in the Reverse Auction, the price quoted by him in the price bid shall be considered as the valid price of that bidder. The status of the bidder (L1, L2, etc.) will be evaluated considering either the bid price submitted in Reverse auction or the Price quoted in the price bid, whichever is lower.
- m) Since, reverse auction is a sequel to e-tender, the process of finalizing the tender upon completion of reverse auction will be same as the tender process without reverse auction.
- n) Only the chronologically last bid submitted by the bidder till the end of the auction shall be considered as the valid price bid of that bidder. Any bid submitted earlier by the bidder prior to submission of his last bid will not be considered as the valid price bid.
- o) Server time shall be the basis of Start time & Closing time for bidding and shall be binding for all. This would be visible to all concerned.
- p) On expiry of the closing of the auction, the bid history showing all the last valid bids offered along with name of the bidders shall be published. All bidders shall have the facility to see and get a print of the same for their record.
- q) The bid history shall reflect only the landed price. The landed price shall also not be same for two bidders even if any bidder makes such an attempt.
- r) All electronic bids submitted during the reverse auction process shall be legally binding on the bidder. The chronologically last bid submitted by the bidder till the end of the auction will be considered as the valid price bid offered by that bidder and acceptance of the same by CMPDIL will form a binding contract between CMPDIL and the bidder for entering into a contract. Any bid submitted earlier by the bidder prior to submission of his last bid will not be considered as the valid price bid.
- s) Conditional discounts shall not be considered. If a bidder offers a discount unilaterally after submission of bid, the discount will not be considered for evaluation of offers but will be availed if order is placed on such tenderer.
- t) At the end of the reverse auction, the bidder(s) who has participated in the reverse auction has to upload the breakup of Cost to Company prices in the confirmatory documents. In case of item rate composite works tenders, the reverse auction will be conducted on the composite cost to company price.
- u) The bidder(s) after reverse auction will be responsible to ensure that the cost to company rate as per the breakup of prices provided by him after the reverse auction and cost to company rate offered by him in the reverse auction is exactly same. The bidder will not be allowed to increase the rate of any item while submitting the break up. While giving the break up, the bidder will have to consider same rate of taxes and duties as quoted while submitting the e-price bid. In case the bidder(s) fail(s) to submit the break-up of cost to company price within stipulated period or the break up given by bidder does not match with total offered price, the Company will be at liberty to place order by proportionately reducing item rates on the basis of the breakup of the e-Price Bid submitted by the bidder along with the initial offer and the same will be binding on the bidder.
- v) If the lowest price received during reverse auction is unreasonable or it is unacceptable on ground of being too high or too low compared with estimated price, the management reserves right to seek justification of the price from lowest bidder. If the price is not considered reasonable, management may not accept such bid and go for another tender process.
- w) In case of disruption of service at the service provider's end while the RAP is online, due to any technical snag or otherwise attributable to the system failure at the server end, the RAP process will start all over again. In such a situation, the last recorded lowest price of prematurely ended RAP, will be the 'Start Bid' price for the restarted RAP. The prices quoted in the prematurely ended RAP will be binding on all the bidders for consideration, if the restarted RAP does not trigger within the stipulated time. A provision to this effect should be made in the NIT.

Disruption and restarting of RAP shall be intimated to all the bidders through system/SMS/e- mail through e procurement portal. All the time stipulations of normal RAP will be applicable to the restarted RAP.

16.3 Evaluation by 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.

Acceptance of Bidder in a general form 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.

16.4 Tender / Tender cum auction evaluation (By Evaluator):

- A.** After opening of Price-bid(after finishing reverse auction in case of tender cum auction), the documents submitted by L-1 bidder in cover I as enlisted in the NIT will be downloaded by the Evaluator and shall be put up to the Tender Committee. The Tender Committee will examine the uploaded documents against information/declarations furnished by the L1 bidder online. If it confirms to all of the information/ declarations furnished by the bidder online and does not change the eligibility status of the bidder then the bidder will be considered eligible for award of Contract.
- B.** In case the Tender Committee finds that there is some deficiency in uploaded documents by L1 bidder then the same will be specified online by Evaluator clearly indicating the omissions/shortcomings in the uploaded documents and indicating start date and end date allowing 10 days (10 x 24 hours) time for online re-submission by L1 bidder. The 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 required in this regard. Non-receipt of e-mail and SMS will not be accepted as a reason of non-submission of documents within prescribed time. The bidder will upload the scanned copy of all those specified documents in support of the information/ declarations furnished by them online within the specified period of 10 days. If the L1 bidder fails to submit the specified document/s in 10(Ten) days, 10 more days (10 x 24 hours) of time may be given by Evaluator clearly indicating the omissions/shortcomings in the uploaded documents and indicating start date and end date for submission of such document/s.
- C.** The tender will be evaluated on the basis of documents uploaded by L-1 bidder online. The L-1 bidder is not required to submit hard copy of any document through offline mode. Any document submitted offline will not be given any cognizance in the evaluation of tender.
- D.** In case the L-1 bidder submits requisite documents online as per NIT, then the bidder will be considered eligible for award of Contract. .
- E.** In case the L-1 bidder fails to submit requisite documents online as per NIT or if any of the information / declaration furnished by L-1 bidder online is found to be wrong by Tender Committee during evaluation of scanned documents uploaded by bidder, which changes the eligibility status of the bidder, then his bid shall be rejected and 100% EMD of L-1 bidder will be forfeited.
- F.** In case the L1 bidder is technically eligible but rejection is due to high rate quoted by him/her then the tender shall be cancelled and retendered.
- G.** In case the L1 bidder is rejected due to noncompliance of confirmatory documents then the L-2 bidder will become L-1 bidder and confirmatory documents of this bidder shall be evaluated by TC and the process shall be followed as mentioned in clause no. A to F above.
- H.** The process as mentioned at Clause. G shall be repeated till the work is either awarded or all the eligible bidders are exhausted.
- I.** In case none of the bidder complies the technical requirement, then re-tender will be done (with the same or different quantity, as per the instant requirement).
- J.** It is responsibility of Bidders to upload legible/ clearly readable scanned copy of all the required documents as mentioned above.
- K.** 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.

- 16.5 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.

- 16.6 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.

- 16.7 Any tender hosted on the e-Procurement site must be logically concluded i.e. either Award of work is issued at AOC page on e-Procurement portal in online mode or the tender is cancelled/ retendered online through corrigendum.

- 17 **Purchase preference to “Micro & Small Enterprises (MSEs)”/ “START-Ups”** will be applicable as per Government of India guidelines issued from time to time subject to the following:

- a) Meeting Work Experience as per clause 9.1 (A) & 9.1 (B) of NIT
- b) Quoting Price within band of L1+15% and accepting L1* price wherever L1 is quoted by someone Others.

* **L1** price is the lowest price of the Techno-Commercially Qualified bidder received after the Reverse Auction (RA)
For the Tender valuing less than Rs 1 Crore, where RA is not applicable, the L1 price is the lowest price quoted By the Techno-Commercially qualified bidder.

- 18 **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 estimated cost put to tender. The amount of such additional performance security shall be the difference between 85% of the estimated cost put to tender and 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.

- i. 30% of additional performance security will release after 60% of the total work is completed.
- ii. 50% of additional performance security will release after 80% of the total work is completed.
- iii. 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.

- 19 **EMD Refund:**

- 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.
- g. Bid Security of bidder will not carry any interest during the period of retention in CMPDIL.

20 Bid Extension: If number of bids received online is found to be less than **three** on end date of bid submission then the following critical dates of the Tender will be automatically extended initially for a period of **2 (Two)** days and if the number of bids still remains less than three then for another **5 (Five)** days:

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

21 Cancellation of Tender: Any tender published on the e-Procurement portal must be concluded to its logical end i.e. either "Award of Contract" or "Cancellation of Tender" or "Retender".

It will be the responsibility of the Publisher of tender to conclude the published tenders to its logical end within the original bid validity period.

Tenders should be cancelled only under exceptional cases with due approval of Tender Approving Authority. In case of tenders where Board of Directors of CMPDIL is the Tender Approving Authority, in such cases the approval of CMD, CMPDIL will be required. However, for cancellation of Tender due to non-receipt of any bid, no approval will be required.

In all such cases the Tender Cancellation Notice must contain the details of the circumstances leading to cancellation of tender.

The Cancellation of Tender on the e-Procurement portal can be done by way of creation and publication of corrigendum. However, since Cancellation of Tender, in true sense, is not a Corrigendum to NIT, the Tender Cancellation Notice will be uploaded only on the e-Procurement portal.

22 All the details of technical bid and price bid will be kept preserved in the archives for auditing purposes and the same can be accessed with special authorization. The IP address of all the bidders who has participated in the bid along with timing and date will also be kept preserved in the system.

23 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-IX**).

24 The Company reserves the right to postpone the date of receipt and opening of tenders without assigning any reason whatsoever.

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

26 Subletting/Sub-vending 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 contractor or his sole authorized agent shall be the sole point of contact for all purposes of the contract. The contractor will have the sole and prime responsibility for the execution of the statement of work. The prime contractor shall confirm unconditional acceptance of full responsibility of executing the scope of work in this tender. The confirmation should be submitted along with the techno-commercial bid. 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.

- 27 The Company does not bind itself to accept the lowest tender and reserves the right to reject any or all the tenders without assigning any reasons whatsoever and to split up the work between two or more tenderers or accept the tender in part and not in its entirety.
- 28 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, where the subject work is to be executed.
- 29 **Site Visit:** The Bidder, at the Bidder's own responsibility, cost and risk, is encouraged to visit and examine the Site of works and its surroundings on **CMPDI's specified date** 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.
- CMPDI officials shall be available at site to assist the bidders during site visit.**
- It shall be deemed that the tenderer has visited the site/area and got fully acquainted with the working conditions and other prevalent conditions and fluctuations thereto whether he actually visits the site/area or not and has taken all the factors into account while quoting his rates.
- 30 **Cost of Bidding:** The bidder shall bear all costs associated with the preparation and submission of his bid and the Employer will in no case be responsible and liable for those costs.
- 31 **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.
- 32 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.
- 33 The tenderer shall closely study all specifications in detail, which govern the rates for which he is tendering.
- 34 **Currencies of Bid and Payment:**
- The unit rates and prices shall be quoted by the Bidder in Indian Rupees only in case of domestic bidders and in other specified currencies [viz. US Dollar (USD), Japanese Yen (JPY), EURO (EUR), Australian Dollar (AUD) and Great Britain Pound Sterling (GBP)] in case of foreign bidders only.***
- 35 **Period of Work:**
- The work should be completed in 2150 days and the date of commencement of the work will be reckoned from the actual date of issue of letter of acceptance/work order or handing over the relevant document to the contractor for preparation of Exploration Scheme, whichever is later.
- 36 **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 issue of letter of acceptance/work order or handing over the relevant document to the contractor for preparation of Exploration Scheme, whichever is later.
- On completion of the work all rubbish, debris, brick bats etc. shall be removed by the contractor(s) at his/their own expense and the site cleaned and handed over to the company and he/they shall intimate officially of having completed the work as per contract.
- 37 **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.
- 38 **Letter of Acceptance (LOA)/ Work Order/ Agreement:**
- The Bidder, who's 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.

39 Validity of offer:

The validity period of the tenders shall be 120 (One Hundred Twenty) days from the end date of bid submission.

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 but will be required to extend the validity of his bid security/EMD.

The tenderer shall not, during the said period or within the period extended by mutual consent, revoke or cancel his tender or alter the tender or any terms/conditions thereof without consent in writing of the company. In case the tenderer violates to abide by this, the Company will be entitled to take action as per **Clause No. 12** (Modification and Withdrawal of Bid) of NIT.

40 One Bid per Bidder:

Each Bidder shall submit only one Bid, either individually, or as a partner in a partnership firm or a partner in a Joint Venture or a public limited firm. A Bidder who submits or participates in more than one Bid (other than as a sub-contractor or in cases of alternatives that have been permitted or requested) will cause all the proposals with the Bidder's participation to be disqualified.

41 This Tender Notice shall be deemed to be part of the Contract Agreement. The "General Terms & Conditions", Additional Terms & Conditions, Special Terms & Conditions (if any), Technical Specifications, drawings (if any) and any other document uploaded on portal as NIT document forms an integral part of this NIT and shall also form a part of the Contract agreement.

42 Performance Security:

The Performance security shall be **5%** of the contract amount of 1(one) year, and is to be submitted within 28 days of receipt of Letter of Acceptance (LOA) / Work Order, by the successful bidder, in any of the form given below:

- a A Bank Guarantee in the form given in the Bid Document. The Bank Guarantee shall be issued by a Scheduled Bank / Nationalized 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: CMPDI Branch,

IFSC: SBIN0005598

A/c No: 10106155087

Address: Gondwana Place, Kanke Road, CMPDIL Campus, Ranchi – 834008.

- b Govt. Securities, FDR or any other form of deposit stipulated by the owner.
- c Money (Demand Draft) drawn in favour of CMPDI on any Scheduled Bank payable at its branch at RANCHI.
- d The Earnest Money / Bid Security deposited shall be discharged when the bidder has signed the agreement and furnished the required Performance Security / Security Deposit equivalent to the 5% of the contract value.
- e If performance security is provided by the successful bidder in the form of Bank Guarantee it shall be issued either
- (i) at bidder's option by a Nationalized / Scheduled Indian Bank or
 - (ii) by a foreign bank located in India and acceptable to the employer.
- The validity of the Bank Guarantee shall be for a period of contract period or extended contract period PLUS 90 (Ninety) days whichever is later.
- f 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.
- g Retention money will be deducted at 5% from the bill that would be submitted by the contractor for the work done against the work order given in that particular year. Retention money of 5% deducted from the bills shall be refunded

- h 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 contractor's subsequent on account running bills, if any.
- i **If security deposit is submitted in the form of 'Bank Guarantee' the original instrument thereof shall be retained by CMPDI after its relinquishment / absolution and returned only against specific request.**
- j 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.

43 Additional Performance Security

Additional Performance Security shall be in accordance with the **Clause 18 of NIT**, and is to be submitted within 28 days of receipt of Letter of Acceptance (LOA) / Work Order, by the successful bidder, in any of the form given below:

- a. A Bank Guarantee in the form given in the Bid Document. The Bank Guarantee shall be issued by a Scheduled Bank / Nationalized 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 follows:
Name of Bank: State Bank of India,
Branch: CMPDI Branch,
IFSC: SBIN0005598
A/c No: 10106155087
Address: Gondwana Place, Kanke Road, CMPDIL Campus, Ranchi – 834008.
- b. Govt. Securities, FDR or any other form of deposit stipulated by the owner.
- c. Money (Demand Draft) drawn in favour of CMPDI on any Scheduled Bank payable at its branch at RANCHI.
- d. If Additional 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 Nationalized / Scheduled Indian Bank or
 - (b) by a foreign bank located in India and acceptable to the employer.
- e. The validity of the Bank Guarantee shall be for a period of contract period or extended contract period PLUS 90 (Ninety) days whichever is later.
- f. **If security deposit is submitted in the form of 'Bank Guarantee' the original instrument thereof shall be retained by CMPDI after its relinquishment / absolution and returned only against specific request.**
- g. 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.

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

45 Employment of Local Labour:

- a) Contractors are to employ, to the extent possible, only local project affected people and pay wages not less than the minimum wages fixed by the local Government.
- b) If a contractor submit his bid qualifies and does not get the contract because of his being not the lowest, he, will be prohibited from working as a sub-contractor for the contractor who is executing the contract.

46 Non-disclosure/ Confidentiality clause:

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

clause would constitute a serious offence for which appropriate legal action may be taken to ensure the enforcement of confidentiality clause.

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

If services are not found satisfactory, CMPDI reserves the right to cancel the contract within three-months.

47 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.

48 Compliance of Applicable Labour Laws:

- a. 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.
- b. 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.
- c. 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. Jharkhand. 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.
- d. The Contractor should maintain daily BIOMETRIC attendance record and all other 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, Workmen Compensation Act, 1923, Employees State Insurance/Act, 1948 etc. and their 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.
- e. 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.
- f. The contractor shall get himself registered under Employees Provident Funds/ Coal Mine Provident Fund, 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.
- g. 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.
- h. The Contractor shall abide the rules and regulations of Pradhan Mantri Suraksha Yojana.
- i. The contractor or its workmen shall not at any point of time have any claim whatsoever against the CMPDI.
- j. The contractor shall indemnify the CMPDI in so far as liability incurred by the CMPDI on account of any default by the contractor.
- k. 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.

- l. 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.
- m. 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, Workmen's Compensation Act, 1923, Employees provident fund, 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.

49 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.

50 Settlement of Disputes:

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

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

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

In first stage dispute shall be referred to GM / HoD of the concerned department for the tenders of HQ and to the Regional Director of the respective Regional Institute of CMPDIL for the tenders of RIs. 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 manners:

51 Settlement of Disputes through Arbitration:

If the parties fail to resolve the disputes/ differences by in house mechanism, then, depending on the position of the case, either the employer/ owner or the contractor shall give notice to other party to refer the matter to arbitration instead of directly approaching Court.

The contractor shall, however, be entitled to invoke arbitration clause only after exhausting the remedy available for settlement of dispute as per provisions of the Tender document.

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

Sole Arbitration:

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

- a) In the event of the Arbitrator dying, neglecting or refusing to act or resigning or being unable to act for any reason, or his/her award being set aside by the court for any reason, it shall be lawful for the Competent Authority of CIL / CMD of Subsidiary Company (as the case may be) to appoint another arbitrator in place of the outgoing arbitrator in the manner aforesaid.

- b) It is further a term of this contract that no person other than the person appointed by the Competent Authority of CIL / CMD of Subsidiary Company (as the case may be) as aforesaid should act as arbitrator and that, if for any reason that is not possible, the matter is not to be referred to Arbitration at all.
- ii. In case of Govt. agencies, the redressal of disputes/ differences shall be sought through Sole Arbitration as under.

Sole Arbitration:

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

52 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 Ranchi Court (Jharkhand) only.

53 Integrity Pact:

The Integrity Pact **as per format given under General Terms & Conditions has to be accepted by the bidder though the User Portal Agreement.**

The Two Independent Monitor nominated for this tender shall be as under-

Prof (Dr.) L.C. Singhi, IAS (Retd.), L-31 Third Floor, Kailash Colony, New Delhi - 110 048 Phone no. 91-11-29237274; Mobile no. +919968073976 e-mail : lcsinghi@yahoo.com ; lcsinghi@gmail.com	Dr. S.M.Jharwal, IES (Retd.) Flat No.501, Block-CIC-PKT-1, Samridhi Apartment, DDA HIG Flats-Gate-4, Lift No. 9&10, Sector 18B, Dwarka, New Delhi-110078 Mobile No. 9871845431/9416295192 e-mail : smjharwal@gmail.com & jharwal@nic.in
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भवदीय

महाप्रबन्धक (गवेषण)

GENERAL TERMS AND CONDITIONS

1.0 DEFINITIONS

- i. The word "Company" or "Employer" or "Owner" or "CMPDI" wherever occurs in the conditions, means the Central Mine Planning & Design Limited, represented at the headquarters of the Company by the Chairman-cum-Managing Director or his authorized representative or any other officer specially deputed for the purpose.
- ii. The word "Contractor" wherever occurs means the successful Bidder who has deposited the necessary Earnest Money and has 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.
- iii. **"The Site" shall mean the site of the contract work viz. 2D Seismic Survey along with Detailed Exploration in the Khariaparha, Grindola, Bandbahal Block, Ib Valley Coalfield of Jharsuguda District in the State of Odisha is being carried out.**
- iv. The term "subcontractor", as employed herein, includes those having a direct contract with contractor either on piece rate, items rate, time rate or on 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 supplied materials.
- v. 'Accepting Authority' shall mean the management of the Company and includes an authorized representative of the Company or any other person or body of persons empowered in this behalf by the Company.
- vi. A 'Day' shall mean a day of 24 hours from midnight to midnight.
- vii. Engineer-in-charge /Designated Officer-in-charge will be the Project Coordinator (PRCO). In all cases PRCO will be General Manager (Exploration), CMPDI (HQ), Ranchi who will be responsible for supervising and administering the Contract, certifying payment due to the contractor, valuing variations to the contract, awarding extension of time and valuing compensation events.
HoD (Exploration) of **Regional Institute-VII, Bhubaneswar** will be the Project Manager who will be directly responsible for supervising the work being executed at the site such as certifying the quantities, give observation in the matter of valuing variations to the contract, awarding provisional extension of time and valuing compensation for events on behalf of the PRCO after due deliberation with PRCO under the 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/ PRCO.
- viii. The 'Contract' shall mean the Notice Inviting Tender, the tender as accepted by the Company and the formal Agreement executed between the Company and the Contractor together with the documents referred to therein including General Terms and Conditions, Special Conditions, if any, specifications, designs & drawings including those to be submitted during progress of work, schedule of quantities with rates and amounts.
- ix. The 'works' shall mean the works required to be executed in accordance with the contract 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 Project Manager, become necessary during the progress of the works to enhance the reliability of exploration.
- x. 'Schedule of Rates' referred to in these conditions shall mean the standard schedule of rates prescribed by the Company and the amendments issued from time to time.
- xi. 'Contract Price' shall mean the total sum arrived at, based on the individual rates quoted by the Bidder for the various items shown in the 'Bill of quantities' of the Tender Specification Documents as accepted by the Company with or without any alteration as the case may be.
- xii. '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 firm or to an office of the Corporation/Company for whom it is intended, or if delivered at or sent by registered mail to the last business address known to him who gives the notice.
- xiii. "Drawings"/"Plans" shall mean all:
 - (a) drawings/plans furnished by the owner with the Tender Specification Document, if any, as a basis for proposals,
 - (b) working drawings/plans furnished by the Owner after issue of letter of acceptance of the tender to start the work,
 - (c) subsequent working drawings/plans furnished by the owner in phases during progress of the work, and

- d) drawings/plans, if any, submitted by the contractor and duly approved by the owner.
- xiv. "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 thereunder.
 - (c) Indian Explosive Act and Rules and Regulations made thereunder.
 - (d) Indian Petroleum Act and Rules and Regulations made thereunder.
 - (e) Indian Mines Act and Rules and Regulations made thereunder.
 - (f) Any other Act, rule and regulations applicable for employment of labour, safety provisions, payment of provident fund and compensation, insurance etc.
- xv. "L1" price is the lowest price of the Techno-Commercially Qualified bidder received after the Reverse Auction (RA). For the Tender valuing less than Rs 1 Crore, where RA is not applicable, the L1 price is the lowest price quoted by the Techno-Commercially qualified bidder.
- xvi. "Line Kilometer" of seismic survey will be measured by multiplying shot interval with number of shots minus one shot.

2.0 CONTRACT DOCUMENTS

The following documents shall constitute the contract documents:

- (i) Articles of Agreement,
 - (ii) Notice Inviting Tender,
 - (iii) Letter of Acceptance of Bid indicating deviations, if any, from the conditions of contract Incorporated in the Tender Specification Document issued to the Bidder and duly accepted by the Employer,
 - (iv) Conditions of contract, including General Terms and Conditions, Additional Terms and Conditions, Special Conditions, if any etc. forming part of the Agreement,
 - (v) Specifications, where it is part of Tender Specification Documents,
 - (vi) Scope of works/Bills of quantities/schedule of works/quantities and
 - (vii) Contract Drawings/finalized Work Programme.
- 2.1 After acceptance of tender and on execution of contract/issue of work order to proceed with the work, as the case may be, the Contractor shall be furnished, free of charge, two copies of contract documents (certified true copies), excepting those drawings to be supplied during the progress of work. 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 Project Manager or any other official authorized by the Company for the purpose.
- 2.2 None of these documents shall 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 Matter relating to any dispute or difference arising out of this tender and subsequent contract awarded based on the Bid shall be subject to the jurisdiction of Ranchi Court only.

3.0 DISCREPANCIES AND 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 schedules of quantities, the specifications and/or drawings; the following order of preference shall be observed:

- a. Description in schedule of quantities
- b. Particular specification and special conditions, if any
- c. Drawings / Work Programme / Agreement
- d. General Specification

- 3.1 In the event of varying or conflicting provisions made in any of the document/documents 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 schedule of quantities or any omission therefrom, 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.

4.0 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 shall be **5%** of contract amount and shall be submitted within 28 days of receipt of LOA by the successful Bidder in any of the form given below:
- A Bank Guarantee in the form given in the Tender Specification Document
- Govt. Securities, FDR or any other form of deposit stipulated by the owner
- Demand Draft drawn in favour of Central Mine Planning & Design Institute Ltd on any Scheduled Bank payable at its Branch at Ranchi.

The Bid security deposited in the form of Bank Guarantee shall be duly discharged and returned to the contractor. The Bid security deposited in the form of Demand draft shall be adjusted against the security deposit.

- 4.3 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 nationalized/Scheduled Indian 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, whichever is more.
- 4.4 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.
- 4.5 The rates and prices quoted by the Bidder shall attract price escalation as provided in Additional Terms and Conditions.
- 4.6 **5%** Performance Security shall be refunded within 14 days of the issue of comments by CMPDI on the acceptable draft geological report (DGR) submitted by the successful Bidder, not requiring major modifications, which is to be taken as "defect liability certificate" (taking over certificate with a list of defects). 5% Retention Money shall be refunded within 14 days of acceptance of the Final Geological Report submitted by the Bidder.
- 4.7 **Refund of security deposit** - The refund of security deposit shall be subject to company's right to deduct/appropriate its dues against the contractor under this contract or under any other contract. On completion of the entire work and certified as such by the Project Manager and vetted by PRCO, one half of the security deposit remaining with the company shall be refunded. The other half shall be refunded after acceptance of the final GR submitted by the Bidder.

5.0 DEVIATIONS / VARIATIONS IN QUANTITIES - EXTENT AND PRICING

The quantities given in the 'Price Bid Format' are provisional and are meant to indicate the approximate extent of the work and to provide a uniform basis for tendering and any variation either by addition or omission by Company shall not vitiate the contract.

- 5.1 The Company through its PRCO shall, without radically changing the original scope and nature of the contracted work, have power to make any alterations in or additions to or substitution of the approved exploration scheme that may appear to be necessary or advisable during the progress of the work. The contractor shall be bound to carry out the works in accordance with the instructions given to him in writing by the PRCO 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 conditions in all respects on which they agree to do the main work and at the same rate/rates as are specified in the contract.
- 5.2 If the additional, altered or substituted work includes any class of work for which no rate/rates is/are specified in the contract, rates for such items shall be determined by the PRCO as follows:
- a. the rate shall be derived from the rate/rates for similar or near similar class of work as is/are specified in the contract/tender, failing which
 - b. the rates shall be derived from the company's prescribed schedule of rates based on which the estimate for tendering has been prepared plus or minus the percentage by which the tendered amount for the whole work quoted by the contractor is above or below the estimated amount as per the Tender Specification Documents, failing which
 - c. the rate shall be derived from contractor's rate claimed for such class of work supported by analysis of the rate/rates claimed by the contractor. The rate to be determined by the PRCO as may be considered reasonable taking into account percentage of profit and overhead not exceeding ten percent or on the basis of market rates, if any, prevailing at the time when work was done.

However, the PRCO shall be at liberty to cancel the instruction by notice in writing and to arrange to carry out the work in such manner as he /she considers advisable under the circumstances. The contractor shall under no circumstances suspend the work on the plea of non-settlement of rates.

- 5.3 Quantities (2D Seismic & Exploration) are likely to vary by (+/-) 30% due to element of surprises inbuilt in any sub-surface exploration OR outcome of 2D seismic Survey such as (i) variation in expected depth of occurrence of target/potential seam (i.e. Borehole depth), (ii) areal variation in potentiality of the seams requiring curtailment/enhancement/variation in geographical extent of the block, (iii) variation in number/density of boreholes on account of complexity of the structural setup revealed in course of exploration, etc. AND (IV) Likely Variation on account of 2D Seismic Survey. Alterations in the quantities shall not be considered as a change in the conditions of the contract nor invalidate any of the provision. Supplementary/ revised work order shall be issued on the same rates and terms & conditions up to 30% above the ordered quantity. The duration of the contract would be adjusted on pro rata basis for any increase/decrease in quantities.

In case, variation is expected/required in occurrence of target/potential seam during the course of exploration and the said variation is up to 30% of the envisaged depth as given in tender document/work order/exploration scheme, the rate of payment for the said additional depth up to 30% (i.e. meterage from envisaged depth to the actual drilled depth) will be calculated/paid based on predefined logic as detailed in clause 5.7 of the GTC.

- 5.4 The time for completion of the originally contracted work shall be extended by the Company in the proportion that the additional work (in value) bears to the original contracted work (in value) as may be assessed and certified by the Project Manager and vetted by PRCO.
- 5.5 The Company through its PRCO 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 work in accordance with the instruction given by the PRCO. No claim for omitting the part of the work or extra charges/damages shall be made by the Contractor on these grounds.
- 5.6 In the event of any deviation being ordered which in the opinion of the contractor changes radically the original scope and 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 or the rate/rates to be paid thereof shall be resolved separately with the Company.

- 5.7 In view of the change in the modalities of the cost estimation of such Block(s), in which Borehole having depth of more than 600m, following modifications are envisaged:

The Bidder will submit their quotation w.r.t BASE RATE for drilling up to 600m only and the calculation for incremental rate in each depth band beyond 600m will be done by system based on a pre-defined logic as per following details:

Depth (m)	Rate of Increment in percentage in sliding scale
<600	Base Rate (LAR)
600-800	5% of the Base Rate
800-1000	10% of the Base Rate
1000-1200	15% of the Base Rate
1200-1400	20% of the Base Rate

The system will automatically multiply the above incremental rates with quantum of drilling envisaged in each depth band and the sum of all the band will be the total cost for the block. The total drilling to be carried out in each depth band will be defined in the 'Salient features" (Annexure-XI).

The above provision will be made in the BoQ and the final tender evaluation for arriving at the L1 bidder.

6.0 TIME FOR COMPLETION OF CONTRACT - EXTENSION THEREOF, DEFAULTS & COMPENSATION FOR DEL AY

The contractor has to mobilize its required resources immediately (within 50 days) from date of issue of letter of acceptance/issue of work-order/handling over of relevant documents whichever is later. In the work, preparation of scheme for 2D seismic survey- data Acquisition, processing, interpretation and Seismic report preparation are to be incorporated along with drilling the supporting boreholes and carrying out multiparametric geophysical logging in them.

The party based on 2D seismic survey and drilled boreholes data shall submit the 2D-Seismic Report in consultation with PRCO, through the Project Manager. The scheme is prepared on the basis of schedule showing the order in which the work is proposed to be carried out within the time specified in the contract documents. The same Exploration scheme will be approved by PRCO. For the purpose of the time and start of 2D seismic survey, the work shall be deemed to have commenced on the day of the issue of letter of acceptance/work order or handing over the relevant document to the contractor for preparation of Exploration Scheme, whichever is later.

- 6.1 If the Contractor, without reasonable cause or valid reason, commits default in commencing the execution of the work within the aforesaid date, the Company shall, without prejudice to any other right or remedy, be at liberty, by giving 15 days' notice in writing to the contractor to commence the work, failing which to forfeit the Earnest Money deposited by him.

Additionally, the Company will reserve the right to debar such defaulting Contractors from participating in future Tenders for minimum period of one year.

- 6.2 If the Contractor fails to maintain the required progress in terms of the agreed time to complete the work as per Tender Specification Document (TSD) and clear the site on or before the date of completion of contract 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 @ half percent (1/2%) of the contract price per week of delay. The aggregate of such compensation/ compensations shall not exceed 10 (ten) percent of the total value as shown in the contract.

The Monthly Progress Report(s) submitted by the Bidder and accepted by the Project Manager (or his authorized representative) shall be the basis of assessment of the progress. The

provisional assessment of LD shall be done at an interval of 6 months (excluding month in which the work has been awarded to bidder) and finally at the end of scheduled period of completion.

This will also apply to items or group of items for which separate period of completion has been specified. The amount of compensation may be adjusted or setoff 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 of 10% of the contract price plus GST on forfeited amount.
- 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.
- 6.3 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 recover L.D. up to ten percent (10%) of the contract value and forfeit the security deposit made by the contractor besides getting the work completed by other means at the risk and cost of the contractor.

The defaulter i.e. the Contractor who don't commence the work after issue of LOA shall not be allowed to participate in the retender for the same work.

- 6.4 **Extension of date of completion** - on happening of any events causing delay as stated here under, the contractor shall intimate immediately in writing to the Project Manager with a copy to PRCO:
- a. abnormally bad weather
 - b. serious loss or damage by fire or other causes related to 'Force Majeure Conditions'.
 - c. civil commotion, strikes or lockouts affecting any of the trades employed on the work
 - d. any other causes which, at the sole discretion of the company is beyond the control of the contractor.

A "Hindrance Register" shall be maintained by both the Company and the Contractor at site to record the various hindrances, as mentioned above, encountered during the course of execution; which will be countersigned by the Project Manager or his authorized representative along with the representative of the contractor.

The Contractor may request the company through Project Manager in writing for extension of time within 15 days of happening of such event causing delay stating also, if practicable, the period for which extension is desired. The company may, considering the eligibility of the request, give a fair and reasonable extension of time including reasonable mobilization time (if required for completion of work after Force Majeure event is over) for completion of the work. Such extension shall be communicated to the contractor in writing by the Company through the Project Manager/PRCO within one month of the date of receipt of such request.

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 Project Manager.

- 6.5 Provisional extension of time may also be granted by the PRCO, after due recommendation of Project Manager, during the course of execution, on written request for extension of time within 15 (fifteen) days of happening of such events as stated above (Cl. 6.4), reserving the Company's right to impose/ waive penalty at the time of granting final extension of time as per contract agreement.

- 6.6 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 Company or the both. The extension will have to be by party's agreement, expressed or implied.

In case the Contractor does not apply for grant of extension of time within 15 (fifteen) days of hindrance occurring in execution of the work and the Company wants to continue with the work beyond the stipulated date of completion for reason of the work having been hindered, the PRCO, after due recommendation of Project Manager, at his sole discretion can grant provisional extension of time even in the absence of application from the Contractor. Such extension of time granted by the PRCO 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 contract.

- 6.7 Whenever time extension is given to the contractor for reasons for delay solely attributed to the company (for all the cases including where higher prices have been awarded), price variation may have to be allowed depending on the conditions of the contract. In order to determine the above, a hindrance register will be maintained which will be jointly signed by both the parties at the time of periodical review meetings to be held at least once in three months by the PRCO whose decision in this cases will be final. The delays will be determined solely on the basis of this register, and that any refusal on the part of the contractor to sign the register would mean that the delay, if it occurs will be solely attributed to him.

Hindrance register is signed by both the parties. The contractor should also be given permission to write his observations/ disagreement in the register.

In case the contractor has a different opinion for hindrance and a dispute arises, then the matter would be referred to the higher authority whose decision will be final and binding on the contractor & the decision to be communicated within 15 days.

6.8 **FORCE MAJEURE:**

- 6.8.1 Force majeure is herein defined as any cause which is beyond the control of the Contractor or the Owner as the case may be which they could not foresee or with a reasonable amount of diligence could not have foreseen and which substantially affect the performance of the contract, such as:

- (a) natural phenomena, including but not limited to floods, draughts, earthquakes and epidemics:
- (b) acts of any government, including but not limited to war, declared or undeclared, priorities, quarantines, embargoes,

Provided either party shall within fifteen (15) days from the occurrence of such a cause notify the other in writing of such causes.

- 6.8.2 (a) The successful bidder / contractor will advise, in the event of his having 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 clause of delay, within fifteen days of the occurrence and cessation of such Force Majeure condition . In the event of delay lasting over two months, if arising out of Force Majeure, the contract may be terminated at the discretion of the Company.
- (b) For delays arising out of Force Majeure, the successful bidder/ contractor will not claim extension in completion date for a period exceeding the period of delay attributable to the causes of Force Majeure and neither Company nor the bidder shall be liable to pay extra costs (like increase in rates, re-mobilization advance, idle charges for labour and machinery etc.) Provided it is mutually established that the Force Majeure conditions did actually exist.
- (c) If any of the Force Majeure conditions exists in the place of operation of the bidder even at the time of submission of bid he will categorically specify them in his bid and state whether they have been taken into consideration in their quotations.

- 6.8.3 The Contractor or the Owner shall not be liable for delays in performing his obligations resulting from any force majeure cause as referred to and/or defined above. The date of completion will, subject to hereinafter

provided, be extended by a reasonable time even though such cause may occur after contractor's performance of his obligations has been delayed for other causes.

7.0 SUPPLY OF MATERIALS

- 7.1 The Contractor shall at his own expense, provide all materials required for the exploration and the rates quoted by the contractor shall be inclusive of all materials required for completion of the exploration as specified in the contract.
- 7.2 All materials, tools and plants brought to site by the contractor shall be deemed to be held in lieu by the Company and the contractor shall not have the right to remove the same from the site, without the permission of the Project Manager. The Company shall not however be liable for any loss, theft or damage due to fire or other causes during this period of lien.
- 7.3 The Contractor shall bear the cost of loading, transporting to site, unloading, storing under cover as required, etc., as may be necessary for the use and keeping the materials in good condition.
- 7.4 All charges on account of tax as applicable for the materials obtained for the works from any source shall be borne by the contractor.

8.0 QUALITY ASSURANCE - MATERIALS AND WORKMANSHIP:

- 8.1 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, instructions of the Project Manager. The Project Manager may issue from time to time further drawings, detailed instructions/directions in writing to the Contractor. All such drawings, instructions/directions shall be consistent with the contract documents and should be reasonably inferable therefrom, along with clarifications/explanations thereof, if necessary. However, the contractor will be solely responsible for design and erection of all temporary structures required in connection with the work.
- 8.2 The Contractor shall be responsible for correct and complete execution of the work in a workmanlike manner with right materials and equipment 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 Project Manager or any other official of higher rank or any other person authorized by the Company in this behalf and the Contractor shall allow the same.

9.0 MEASUREMENT AND PAYMENT

Except where any general or detailed description of the work in the bill of quantities provides otherwise, measurements of work done shall be taken in accordance with the relevant standard method of measurement as applicable to the schedule of quantities/schedule of work /specification to the contract. In the case of items not covered by any of the aforesaid contract documents, measurement shall be taken in accordance with the relevant standard method of measurement issued by the Bureau of Indian Standard.

- 9.1 All items of work carried out by the contractor in accordance with the provisions of the contract having a financial value shall be entered in the Measurement Book/Log Book, etc. as prescribed by the company so that a complete record is obtained of all work performed under the contract and the value of the work carried out can be ascertained and determined therefrom.
- 9.2 Measurements shall be taken jointly by the Project Manager and by the Contractor or his authorized representative. The line KM of seismic survey will be measured by multiplying shot interval with number of shots minus one shot.
- 9.3 Before taking measurements of any work, the Project Manager 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 of 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 In the event of failure on the part of contractor to attend or to send his authorized representative to attend the measurement after receiving the intimation, or to countersign or to record objection within a week from the date of the measurement, the measurement taken by the Project Manager shall be taken to be the correct measurement of the work done.

- 9.5 **Payment on Account** - The Contractor shall submit monthly bill for the work carried out in accordance with the contract. The Project Manager shall then arrange for verification of the bill with reference to the measurements taken or to be taken or any other records relevant for the purpose. The payment will become due and payable by CMPDI within 30 days from the date of receipt of bill/invoice/ debit note by CMPDI.

- 9.6 Payment on account shall be made on the Project Manager certifying the quantity for which the contractor is considered entitled by way of interim payment for the work executed as covered by the bill after deducting the amount already paid, the security deposit and such other amounts as may be deductible or recoverable in terms of the contract.

The advance payment, if any and 5% towards retention money shall be recovered by adjustment from on A/c bills of the contractor. The payment excluding advance payment, if any and retention money shall be made based on the meterage drilled by the contractor during the month only when the logs of all the boreholes drilled during the month are received by CMPDI with the monthly progress report.

- 9.7 Any certificate given by the Project Manager/PRCO for the purpose of payment of monthly bill/bills shall not have itself be conclusive evidence that any work to which it relates is in accordance with the contract and may be modified or corrected by the Project Manager/PRCO by any subsequent certificate or by the final certificate.

- 9.8 The Company reserve the right to recover/enforce recovery of any overpayments detected after 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 may be recovered from the 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 from the amount retained as per Clause 4.6 or the contractor shall pay the amount of overpayment on demand.

- 9.9 Amount payable/repayable for any subsequent change in the statutory tax and duties on Works Contract will be made to/from the Contractor after departmental verification of such changes of tax law issued by Statutory Authority.

10.0 **TERMINATION, SUSPENSION, CANCELLATION & FORECLOSURE OF CONTRACT**

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

- a. makes default in proceeding with the works with due diligence and continues to do so even after a notice in writing from the PRCO, 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 PRCO, then on the expiry of the period as may be specified by the PRCO in a notice in writing
or
- c. 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 PRCO in a notice in writing

- 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 the company.
- or
- e. obtain a contract with the company as a result of ring tendering or other non-bona fide method of competitive tendering.
- or
- f. transfers, sublets, assigns the entire work or any portion there -off without the prior approval in writing from the PRCO. The PRCO may give a written notice; cancel the whole contract or portion of it in default.

10.1 The contract shall stand terminated under 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 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 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 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 PRCO shall have powers:

- a. to take possession of the site and any materials, implements, stores, etc. thereon.
- b. to carry out the incomplete work by any means at the risk and cost of the Contractor
- c. to determine the amount to be recovered from the Contractor for completing the remaining work or in the event the remaining work is not to be completed the loss/damage suffered, if any, by the Company after giving credit for the value of the work executed by the contractor up to the time of cancellation less on a/c payments made till date and value of contractor's materials, equipment, etc., taken possession of after cancellation.
- d. to recover the amount determined as above, if any, from any money due to the Contractor or any account or under any other contract and in the event of any shortfall, the Contractor shall be called upon to pay the same on demand.

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** - The contractor shall on receipt of the order in writing of PRCO (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 PRCO 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 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 PRCO. 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% 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 work shall, throughout the stipulated period of contract, be carried out with all due diligence on the part of the contractor. In the event of termination or suspension of the contract, on account of default on the part of the contractor, as narrated hereinbefore, the security deposit and other dues of this work or any other work done under this company shall be forfeited and brought under the absolute disposal of the company provided, that the amount so forfeited shall not exceed 10% of the contract value plus GST on forfeited amount."

- 10.4 **Foreclosure of contract in full or in part** - If at any time after acceptance of the tender, the Company decides to abandon or reduce the scope of the work for any reason whatsoever as decided by the Company, other than non-availability of the statutory Clearance(s) viz. (i) Notification under Section 4(i) of CBA Act, 1957 & (ii) Permission for exploration in Forest Areas; the Project Manager/PRCO shall give notice in writing to that effect to the Contractor. In the event of abandonment/reduction in the scope of work in such cases, the company shall be liable:
- a. to pay the Contractor at the contract rates full amount for works executed and measured at site up to the date of such abandonment/reduction in the work.
 - b. to pay reasonable amount assessed and certified by the Project Manager/PRCO 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 supply for the work including supply to labour/staff quarters, office, etc.
 - 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 part if so desired by him and to be transported by the contractor from site to his place.
 - d. 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.

The Contractor shall, if required by the Project Manager/PRCO, furnish to him books of accounts, papers, relevant documents as may be necessary to enable the Project Manager/PRCO to assess the amount payable in terms of part 10.4(b), (c) and (d) above, the contractor shall not have any claim for compensation whatsoever either for abandonment or for reduction in the scope of work, other than those as specified above.

If the Contractor fails to complete the work and the order is cancelled, the amount due to him on account of work executed by him, if payable, shall be paid to him only after due recoveries as per the provisions of the contract and that too after alternative arrangements to complete the work has been made.

If the contractor fails to complete the work due to non-availability of the statutory Clearance(s) viz. (i) Notification under Section 4(i) of CBA Act, 1957 & (ii) Permission for exploration in Forest Areas and the work order is terminated (Partly or Fully), the same will be without any financial implication on either side.

11.0 DEFECT LIABILITY CERTIFICATE / COMPLETION CERTIFICATE

The contractor shall give notice of completion of work, after submission of DGR of the block, to the PRCO. The PRCO shall within 30 days from the receipt thereof, inspect the DGR and scrutinize 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 PRCO 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 before issue of Defect Liability Certificate. In the event there are no defects or the

defects/deficiencies are of a minor nature and the PRCO 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 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 including reasons therefore and with necessary instructions to the contractor to clear the site/place of work of all debris/waste materials, scaffoldings, sheds, surplus materials etc. making it clean and usable .

- 11.1 In cases where separate period of completion for certain items or groups of items are specified in the contract, separate Defect Liability Certificate (Taking Over Certificate with list of defects), for such items or groups of items may be issued by the PRCO 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.
- 11.2 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.
- 11.3 In case of Contractor's failure, the PRCO shall have right to get the work done at the cost of the Contractor.

12.0 ADDITIONAL RESPONSIBILITIES OF THE CONTRACTOR

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

- i. The Company reserve the right to let other contractors also work in connection with the project and the contractor shall co-operate in the works for the introduction and stores and materials and execution of his/their works.
- ii. The Contractor shall keep on the work, during the progress a competent Superintendent and necessary assistants who shall represent the contractor(s) in his/their absence. Important instructions shall be confirmed to the contractor(s) in writing. If the Contractor in course of the works 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 Project Manager/PRCO, it shall be his/their duty to immediately inform the Project Manager/PRCO in writing and the Project Manager/PRCO 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.
- iii. The Contractor shall employ only competent, skilful and orderly men to do the work. The Project Manager/PRCO shall have the right to ask the Contractor to remove from the work site any men of the contractor who in his opinion is undesirable and the Contractor will have to remove him within three hours of such orders. The Contractor shall further be responsible for making arrangements at his own cost for accommodation and other essential needs of the staff and workers under his employment.
- iv. Precautions shall be exercised at all times for the protection of persons (including employees) and property. The safety required or recommended by all applicable laws, codes, statutes and regulations will be observed. In case of accidents, he/they shall be responsible for compliance with all the requirements imposed by the Workmen's Compensation Act or any other similar laws in force, and shall indemnify the Company against any claim on this account.

The Contractor 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 or Central Government or Municipalities and other authorities in India. The Contractor 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 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 furnish to the Project Manager/PRCO with work reports from time to time regarding the contractor organization and the progress made by him/them in the execution of the work as per the contract agreement.

- vii. All duties, taxes and other levies payable by the Contractor under the Contract (excluding "GST"), or for any other cause as applicable on the last date of submission of tender, shall be included in the rates, prices and the total Bid Price submitted by the Bidder. All incidentals, overheads, etc. as may be attendant upon execution and completion of works shall also be included in the rates, prices and total Bid Price submitted by the Bidder.
However, such duties, taxes, levies etc. which is notified after the last date of submission of tender and/or any increase over the rate existing on the last date of submission of tender shall be reimbursed by the company on production of documentary evidence in support of payment actually made to the concerned authorities.
However, any reduction of cost on account of Govt. notification for duties or levies shall be recovered from the bills submitted by the Bidder.
- viii. The Company reserves the right to deduct/ withhold any amount towards taxes, levies, etc. and to deal with such amount in terms of the provisions of the Statute or in terms of the direction of any statutory authority and the company shall only provide with certificate towards such deduction and shall not be responsible for any reason whatsoever.
- ix. The Contractor shall make his/their own arrangement for all materials, tools, staff and laborers 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 the entire satisfaction of the company.
- x. The Contractor shall make their own arrangement for carriage of all materials to the work site at his/their own cost and supply of all water required for the contracted work and drinking water to his/their workmen.
- xi. The work shall not be sublet to any other party, unless approved by PRCO, in writing.
- xii. The Contractor shall work in reserved/protected forest area as per the guidelines of the Forest Department/the Forest Protection Act. Any liability on account of violation of the provisions shall be borne by the contractor.
- xiii. The Contractor shall not pay less than the minimum wages to the labourers engaged by him/them as per Minimum Wages Act or such other legislation or award or the minimum wages fixed by the respective State Government as may be in force. The contractor 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 Schemes and Miscellaneous Provisions Act 1948 or Employees Provident Fund and Miscellaneous Provisions Act 1952 as the case may be.
- xiv. All accounts shall be maintained in English and the company shall have the right of access and inspection of all such books of accounts etc. relating to payment of labourers including payment of provident fund etc. considered necessary as per prevalent Statutes, Acts and Laws and the company may arrange for witnessing the payment to the labourers by its representatives.
- xv. The Contractor shall in addition to any indemnity provided by law, indemnify and keep indemnified:
 - 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 rights 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 be notified immediately after any claim being made or any action brought against the company, or any agent or employee of the company in respect of any such matter.
 - b. the Company against all losses and claims for injuries or damage 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, costs, charges and expenses whatsoever in respect of or in relation thereto.
 - c. the Company against all claims, damages or compensation under the provisions of payment of Wages Act, 1936, Minimum Wages Act 1948, Employer's Liability Act 1938, The Employees Compensation Act 1923, Industrial Disputes Act 1947, The Employees State Insurance Act 1948, CMPF and Allied Schemes and Provisions Act 1948, EPF and Miscellaneous Provisions Act 1952 and Maternity Benefit Act, 1961 or any modifications thereof or of any other law relating thereto and rules made thereunder 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.
- d. The Contractor shall ensure that any Payment to the Contractor's worker is made through the Bank.
- xvi. **Insurance** - The Contractor shall take following insurance policies during the full contract period at his own cost:
- The Contractor shall at all times during the pendency of the contract indemnify the company against all claims, damages or compensation under the provisions of the Employee's Compensation Act and shall take insurance policy covering all risk, claims, damages or compensation payable under the Employee's Compensation Act or under any other law relating thereto.
 - The Contractor shall ensure that the insurance policy/policies are kept alive till full expiry of the contract by timely payment of premiums and shall not be cancelled without the approval of the Company and a provision is made to this effect in all the policies, and similar insurance policies are also taken by his subcontractor(s) if any. The cost of premiums shall be borne by the contractor and it shall be deemed to have been included in the tendered rate.
 - 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 by the Contractor.
 - Since Contractor shall ensure 100% payment of Contractor's Worker through Bank, a premium of Rs.12/- per annum per member will be deducted from the account holder's savings bank account through 'auto debit' facility in one installment on or before 1 st June of each annual coverage period under the scheme Pradhan Mantri Suraksha Bima Yojna (PMSBY).
- xvii. Anything of historical or other interest or of significant value unexpectedly discovered on the site shall be the property of the Owner. The Contractor shall notify the PRCO of such discoveries and carry out the PRCO's instructions for dealing with them.

13.0 SETTLEMENT OF DISPUTES

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

The Contractor should make request in writing to the PRCO 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.

If differences still persist, the settlement of the dispute with Govt. Agencies shall be dealt with as per the Guidelines issued by the Ministry of Finance, Govt. of India in this regard. In case of parties other than Govt. Agencies, the redressal of the dispute may be sought in the Court of Law.

Committee on Disputes (COD) constituted by the Cabinet Secretariat for pursuing litigation by PSUs/ Government Departments stands wound up with 17.02.2011, as communicated by the Director (Administration), Cabinet Secretariat, Sardar Patel Bhawan, Sansad Marg, New Delhi vide Office Memorandum No. A-12034/01/2011-Ad.1 date 1st September 2011.

14.0 NON-DISCLOSURE/CONFIDENTIALITY CLAUSE

The bidder will not at any time during pendency of contract or afterwards, disclose to any person any information as to documents, components, parts, information, drawings, data, sketches, plans, programs, specifications, techniques, processes, software, inventions and other materials, both written and oral, of a secret, confidential or proprietary nature, including without limitation any and all information relating to finance, invention, research, design or development of information system and any supportive or incidental subsystems, and any and all subject matter claimed in or disclosed by any patent application prepared of

filed by or on behalf of CMPDIL, in any jurisdiction, and any amendments or supplements thereto. The bidder should understand that any breach of this clause would constitute a serious offence for which appropriate legal action may be taken to ensure the enforcement of confidentiality clause.

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

ADDITIONAL TERMS & CONDITIONS

The following additional terms & conditions are also acceptable to the company. The Bidders are requested not to quote any additional conditions in their tender.

1.0 PRICE VARIATION CLAUSE

The quoted price shall remain firm & final for the period stipulated for completion of the work, except the escalation/de-escalation on account of increase/ decrease in the price of POL as per provision given at sl. no. 1.3, 1.4 & 1.5 (only POL component).

In case the work is not completed during the stipulated period due to Force Majeure Condition and/ or delay in statutory Clearance(s) viz. (i) Notification under Section 4 (i) of CBA Act, 1957 & (ii) Permission for exploration in Forest Areas; one time escalation/de-escalation of contract price to the tune of 50% on account of increase/ decrease in the price of wages of labour and materials required for execution of work will be applicable as per provision given at sl. no. 1.1, 1.2 1.4 & 1.5 (only labour & Material components). The said one time escalation/de-escalation of the contract price on account of wages of labour & Material components would be applicable for the extended contract period, which will not be more than the original contract period. However, the escalation/de-escalation on account of increase/ decrease in the price of POL will continue as per the above stipulation for the entire contractual period.

- a) The amount of the contract shall accordingly be varied, subject to the condition that such compensation for variation in prices shall be available only for the work done during the contractual period including such period for which the contract is validly extended under the provisions of the contract without any penal action.
- b) The base date for working out such price variation shall be the last date on which the price bids are stipulated to be received.
- c) The compensation of price variation for POL shall be worked out at quarterly intervals and shall be with respect to the cost of actual work done during the previous three months. The first such payment shall be made at the end of three months after the month (excluding) in which the tender was accepted and thereafter at three months' interval.
- d) If the contract is to be extended beyond the stipulated period for completion of the work due to fault on the part of the Contractor, escalation on prices shall not be allowed further and the prevailing contract price will continue for completion of the work, consequently clause 6.0 of the General Terms & Condition will be applicable.

1.1 PRICE VARIATION FOR LABOUR

The amount paid to the contractor for the work done shall be adjusted for increase or decrease in the cost of labour and the cost shall be calculated as per aforesaid provision in accordance with the following formula:

$$VL = W \times \frac{A}{100} \times \frac{L - Lo}{Lo} \times \frac{50}{100}$$

Where:

- VL = Variation in labour cost i.e. increase or decrease in the amount in rupees to be paid or recovered.
- W = Value of work done during the period under reckoning to which the price variation relates as indicated in clause no. 1.4 of this section.
- A = Component of labour expressed as percentage of the total value of work adopted from Table-1 of this section.
- Lo = Minimum wages for unskilled workers payable as per the Minimum Wages Act / Rules of the State or Central Government, whichever is more, applicable to the place of work as on the last date stipulated for receipt of the Price bids or Revised Price bids whichever is later.
- L = Revised minimum wages of unskilled workers on the date of completion of initial contract period.

1.2 PRICE VARIATION ON MATERIALS

The amount to be paid to the contractor for the work done shall be adjusted for increase or decrease in the cost of materials and the cost shall be calculated as per aforesaid provision in accordance with the following formula:

$$V_m = W \times \frac{B}{100} \times \frac{M - M_o}{M_o} \times \frac{50}{100}$$

Where:

- V_m = Variation in material cost i.e. increase or decrease in the amount in rupees to be paid or recovered.
- W = Value of work done during the period under reckoning to which the price variation relates as indicated in clause no. 1.4 of this section.
- B = Component of material expressed as percentage of the total value of work adopted from Table-1 of this section.
- M_o = All India Wholesale Price Index for all commodities as published by the RBI Bulletin, Ministry of Industry & Commerce, Govt. Of India, relating to the last date on which the price bids or revised price bids whichever is later was stipulated to be received.
- M = All India Wholesale Price Index for all commodities as published by the RBI Bulletin, Ministry of Industry & Commerce, Govt. Of India on the date of completion of initial contract period.

1.3 PRICE VARIATION ON POL

The amount to be paid to the contractor for the work done shall be adjusted for increase or decrease in the cost of POL and the cost shall be calculated as per aforesaid provision in accordance with the following formula:

$$V_f = W \times \frac{C}{100} \times \frac{F - F_o}{F_o}$$

Where:

- V_f = Variation in the cost of fuel, oil and lubricants i.e. increase or decrease in the amount in rupees to be paid or recovered.
- W = Value of work done during the period under reckoning to which the price variation relates as indicated in clause no. 1.4 of this section.
- C = Component of POL expressed as percentage of the total value of work adopted from Table-1 of this section.
- F_o = Index Number for Wholesale Price for the group of "Fuel, power, light and lubricants" as published by the Economic Advisor, Ministry of Industry, Govt. Of India prevalent on the last date of receipt of price bids or revised price bids whichever is later.
- F = Average Index Number for Wholesale Price for the group of "Fuel, power, light and lubricants" as published by the Economic Advisor, Ministry of Industry, Govt. of India for the period to which escalation/ de-escalation relates.

1.4 WHILE CALCULATING THE VALUE OF "W" THE FOLLOWING SHALL BE NOTED

The cost on which the escalation/price variation shall be payable shall be reckoned as 85% of the cost of work as per the bills to which escalation relates, and from this amount the value of materials supplied or services rendered at the prescribed charges under the relevant provisions of the contract, and proposed to be recovered in the particular bill, shall be deducted before the amount of compensation for escalation/price variation is worked out. In the case of materials brought to site for which any secured advance is included in the bill, the full value of such materials as assessed by the Project Manager/PRCO (and not the reduced amount for which secured advance has been paid) shall be included in the cost of work done for operation of this clause. Similarly when such materials are incorporated in the work and the secured advance is deducted

from the bill, the full assessed value of the materials originally considered for operation of this clause should be deducted from the cost of the work shown in the bill, running or final. Further the cost shall not include any work for which payment is made at prevailing market rates.

- 1.5 In the event the price of materials and/ or wages of labour required for execution of the work decreases, there shall be downward adjustment of the work so that such price of materials and/or wages of labour shall be deductible from the cost of work under this contract and in this regard the formulae hereinbefore stated under this clause shall mutatis/mutandis apply.

Table-1: Value of A, B & C in the Price variation formula

A (Labour Component)	B (Material Component)	C (POL Component)
55	35	10

The price variation clause as stated above will be applied for extended time frame of a contract by following the principles as under:

- i) Normally, if and when it is understood that a contract is not going to be completed within the scheduled time period, the contract is kept operative by extending the time of completion provisionally. During this provisional extended period the operation of the Price Variation Clause will remain suspended.
- ii) If and when it is decided at the end of the successful completion of the work that the delay was due to causes not attributable to the contractor, then the Price Variation Clause will be revived and applied as if the scheduled date of completion has been shifted to the approved extended date.
- ii) If it is decided at the end of successful completion of the work that the delay was due to the fault of the Contractor then the Price Variation Clause will not be revived and no payment will be made to the contractor on this account. Additionally the Clause related to Compensation for delay will be applied.
- iv) In some cases the total delay may be partially due to causes not attributable to the Contractor and partially due to his fault. It may be difficult to exactly quantify the total delay proportionately in such cases. The Price Variation Clause under such condition will be made operative for the entire extended time period by freezing the relevant indices on the date of the scheduled date of completion as originally fixed in the contract/ agreement. At the same time the Clause related to the compensation for delay will also be applied.

COMPREHENSIVE SCOPE OF WORK

- 1.0** The Contractor has to undertake Detailed Exploration in the Khariaparha, Grindola, Bandbahal Block on the basis of the outcome (Seismic Report) of 2D Seismic Study along with drilling data of supplementary boreholes (initially 1 BH/Sq. Km.) drilled along the profile lines. The **Item wise Bidder's Scope of Work** includes following activities to be carried out in consultation with the Project Manager:

Item No.	Sr. No.	Sub-item
Item-1: Preparation of Scheme and Surveying	1	Preparation of Exploration Scheme for both the 2D seismic survey as well as for initial exploration of block with one Borehole/Sq.Kms (1,12,300 m of coring drilling as per specifications given in 3.1, 3.3, and 3.5 below). Time line for exploration in forest and non-forest areas in the block has to be specified separately by the Contractor in his Exploration Scheme as per the information provided by CMPDI in the Salient feature of the block in the NIT.
	2	Topographical Survey to draw profile line for 2D Seismic which includes fixing of observation point by putting wooden pegs on 10 m interval on profile line and the RL & Co-ordinate survey by DGPS.
	3	Simultaneously, RL & Co-ordinate survey of the Boreholes to be drilled during/for 2D seismic and thereafter for all the Boreholes by DGPS. The Topographical Survey in 2m contour interval on RF 1:4000/5000, (if required) to be decided by the Project Manager.
Item-2: 2D Seismic (Annexure-IA)	1	2D Seismic Survey data acquisition over – 102 Line Km*, using Seismic Vibrator/Explosives as source. The entire 2D Seismic survey Data acquisition, Processing and Interpretation exercise must be directed to resolve the roof and floor of the deepest occurring coal seam having thickness exceeding 4m. The Profile lines should be evenly distributed (400m x 800m) i.e. 400m line spacing along Dip and 800m line spacing along the strike direction, so as to have almost uniform coverage of the block. The length of lines should cover entire block with minimum 30 fold even at the block boundary. The Depth of investigation would be maximum up to 1000 meters. The seismic survey should be carried out at 10m geophone interval. Maximum care should be taken to reduce the noise level in the data while recording
	2	100% Geophysical Logging of boreholes drilled initially for aid of Seismic survey (approx. 1 BH/Sq. Km.) essentially with P & S full Wave Sonic Parameter in addition to Dual Density, Caliper, Natural Gamma ray, Single Point Resistance, SP, and 16"-64" Resistivity and Deviation parameters.
	3	Processing and interpretation of Seismic Survey Data as per detail given at Clause B and C with deliverables D.B and D.C in Annexure-I.
	4	PREPARATION OF SEISMIC REPORT: Utilization / Assimilation of all the 2-D Seismic survey findings and sub surface geological information generated from all the boreholes drilled along 2D profile lines and elsewhere for preparation of the Seismic report. The Report should include geological data/plan out puts like Descriptive lithology, lithologs, structural floor contours of coal horizons, geological cross sections, Iso-chore of coal horizons, Iso-density of coal horizons, broad coal horizons wise resources and the deliverable outputs of 2D Seismic Report along with geological model as per deliverables D.C in Annexure-IA, within the specified Time limit as per page No-1 of NIT.
Item-3: Exploration (Annexure-IB)	1	1,12,300 meters of vertical diamond core drilling in HQ/NQ/BQ or equivalent sizes having envisaged depth of Up to 1000 meters (approximate) with >90% recovery in coal and >80% recovery in non-coal portion; sealing of boreholes and erection of borehole pillars.
	1A	Preparation of scheme for detailed exploration.
	2	Detailed geological mapping (on RF 1:4000/5000) including outcrops of different lithological units/coal seams, structural details.
	3	Detailed drill core logging (lithological characteristics, structural features, geotechnical properties, RQD).
	4	Packing and transportation of coal cores to laboratories for chemical analysis as per advice of the Project Manager
	5	Preparation of analysis advices for chemical analysis of coal cores of all boreholes covering required parameters for coking and non-coking coal (as the case may be); analysis advice to include band by band for all coal seams (100%), proximate (overall) analysis (100%), determination of calorific value (100%) and special tests for selected samples (20%) and petrographic studies of minimum two representative coal core samples of each potential seams and arrangement for above analysis.
	6	Packing and transportation of non-coal cores of one-two borehole wherein maximum strata and coal seams have been intersected to laboratory for physico-mechanical investigation as per advice of the Project Manager.

	7	Analysis advice for physico-mechanical investigation for determination of (a) RQD, (b) Density (c) Porosity (d) Compressive Strength, (e) Tensile Strength (f) Cohesion (g) Angle of internal friction (h) Young's modulus of elasticity (i) Point load test (j) Slake durability.
	8	Geological modeling through computer including all available geological and geophysical data of the block (refer Annexure-IB).
	9	Formulation of Interim Geological Note, Integrated Draft Geological Report and Final Geological Report (refer Annexure-IB).
	10	50% Geophysical Logging of BHs drilled for Geological investigations with parameters as mentioned in 2.2 above.
	11	Resistivity Survey (Line Km) , Not required.
	12	Magnetic Survey (Stations) , Not required.

Note:

1. The quantities of 2D Seismic profiling work and total meterage to be drilled indicated is likely to vary by (+/-) 30% depending on the field conditions, complexities revealed during 2D Seismic & Exploration (Refer Clause 5.3 of General Terms & Conditions). Actual requirement shall be assessed on the basis of 2D Seismic Report/Interim Geological Note.
2. Any additional data of the block provided by CMPDI shall have to be incorporated and interpreted by the bidder in the GR.
3. Bidder shall prepare Monthly Progress Report (both Hard Copy and Soft Copy) in respect of all activities as per standard format provided by CMPDI and submit to PRCO or his authorized representative for verification and certification for acceptance by CMPDI.
4. The Monthly Progress Report(s) submitted by the Bidder and accepted by the Project Manager (or his authorized representative) shall be the basis of assessment of the progress. This provisional assessment of LD shall be done at an interval of 6 months (excluding month in which the work has been awarded to bidder) and finally at the end of scheduled period of completion/ submission of FGR.
5. In case of 2D Seismic: The test processing parameterization and subsequent data analysis shall be done in association with CMPDI geoscientists.
6. In case of loss of data or data getting corrupted (both due to system malfunction), the same shall be replicated at the cost of the contractor. No time extension shall be given for such eventuality. Under no situation, the data shall pass to any third party in whatsoever manner.
7. Bidder shall confirm that Seismic data processing & interpretation shall be carried out with the Industry standard and latest version of processing & interpretation software packages in India only.
8. Bidder shall deploy necessary hardware of not older than 2 years from the date of NIT and latest versions of required software for undertaking the complete scope work of processing & interpretation and for completing them within the given time frame or earlier. In case, it is found that the minimum required hardware and software are not sufficient to complete scope work of processing & interpretation within the given time frame, CMPDI shall ask the CONTRACTOR to increase the resources without any additional cost.
9. Bidder should deploy latest state of art software for seismic data processing and interpretation to achieve the objectives of the project.
10. Bidder shall submit the list of hardware & software proposed to be deployed along with the techno-commercial bid as pointed out earlier also.

SCOPE OF WORK FOR 2D SEISMIC STUDY

A. DATA ACQUISITION PARAMETERS: Contractor shall acquire data using following Parameters utilizing the best possible international geophysical practices–

Geophones/Receivers	Low distortion high sensitive with 10Hz natural frequency.
No. of channels per shot	120 for end-on shooting & 240 for symmetrical split spread shooting
Sampling rate	0.5 milli sec
Record length	3 sec
Geophone group interval	10 m(On 400m x 800m grid line)
No. of geophones per group	6
Source	Seismic Vibrator / explosive
Foldage of data	30 fold even at block boundaries.
Shooting pattern	End on / Split spread
Geophone Array Pattern	Linear without overlap (Mixing) or Bunching
Offset	Depending on test survey to be conducted by the bidder
Up-hole survey for statics	Every 1 Km interval, Shot hole depth=40m and charge size=2Kg

NOTE- See clause no-29 of NIT regarding site visit by the tenderer

Experimental survey:

The above mentioned parameters indicate only the optimum requirements. The bidder in actual should carry out necessary experimental work initially to determine data acquisition parameters before commencing seismic data acquisition work

Energy sources: Energy parameters for vibrators/Explosives shall be as follows:

Explosive Sources-

- Charge Size : 1.5 to 2.0 kg
- Shot hole depth : 15-20 m

Vibrator Sources-

- Number of Vibrators : 1
- Sweep length : 8 sec
- Recording length: 3 sec
- Listen time : 12 sec
- Number of sweeps per position: 6 to 18
- Sweep patterns: Linear sweep, Non-linear sweep, combined sweep etc.
- Peak force: Minimum 75 kN

It'll be the responsibility of the contractor to obtain the license to use Wi-Fi devices etc., authorizations to use of a particular frequency spectrum in the local area, local permits, authorizations and the like from the administration to operate the Vibrator devices, equipment and/or explosives, their movements, safe keeping and security etc. from their own resources at no extra cost to CMPDI. Whenever necessary, CMPDI shall provide necessary documents only if required. In case of explosives & detonators, handling must be done by licensed authorized personnel i.e. statutory requirement must be fulfilled.

Test Report: Bidders shall submit a detailed report on selection of the field parameters with test Record printouts within 48 hours of the completion of experimental work. The field work is to be started after approval and satisfaction of CMPDI representative.

Calibration: Calibration of all the systems is the bidder's responsibility. In case of any bad record, bidder shall re-record at its own cost. Bad records shall be defined as records containing more than 2% of active traces that are defective due to noisy/dead trace, synchronization error, parity error, appreciable

cross-feed/leakage/Noise or unacceptable S/N ratio due to poor loading of charge/ improper depth.(It does not include dead channel due to logistic reason, natural or manmade hindrances etc.)

Work shall not continue on any day if:

- a) There are more than 2% of active traces are defective
- b) Polarity of Geophone is not correct
- c) Controllable ambient noise exceeds 12 dB (compared to adjacent traces) on more than 2% of the active traces on the spread, as displayed on the noise trip recorded at the beginning of each day.
- d) Monitor device is inoperative.
- e) Five consecutive records are defective.

Bad Records: A record having any one of the following will be considered as bad record and shall not be considered For daily progress

- i) More than 2% dead channels of total channels recorded, per record. The contractor shall put all his efforts to rectify the dead/bad channels as early as possible. However, the contractor shall start every day's operations with all good traces.
- ii) Records with more than 6 consecutive dead channels in any record. However, total no of dead channels in a record cannot exceed more than 2% of total channels recorded per record.
- iii) Record with synchronized error.
- iv) Record with parity errors.
- v) Record with appreciable cross feed, leakage and spread noise etc.
- vi) If there are more than 25% of the records per ground line Km are bad, than the same shall be re-shot by the contractor.
- vii) The contractor will re-shoot the bad records at the advice of CMPDI's representative at site.
- viii) No detonation of charge occurs.
- ix) Data recorded with incorrect instrument settings.
- x) Data is not identifiable to the recorded sort on not retrievable on cartridges.
- xi) Loss of Magnetic recording occurs during designated record length.
- xii) Shot with charge at depth less or more than pre-decided optimum depth.
- xiii) Partial detonation/floating of explosive in a hole.
- xiv) Data recorded with only internal time break.

Quality Control: The bidder shall install state of the art workstation with requisite software to carry out QC tests with acceptable plotting facility at field site for

- 1. QC of survey data.
- 2. Planning of Seismic survey.
- 3. Uphole data interpretation and static computation.
- 4. Online field QC processing system with capability up to brute stack for every completed line.

The above QC tests shall be carried out jointly with the representative of CMPDIL as well as of The party on daily basis at sites.

Play back: Records will be taken for every shot with displaying signals, from all seismic channels, shot instant, timing lines and up-hole time. All monitor records shall be annotated with line No., SP No., charge size, charge depth, up-hole time and date etc.

B. SEISMIC DATA PROCESSING:

- B.1 The acquired data must be processed using state of the art processing software (e.g. the latest versions of PARADIGM/CGG/PROMAX/LANDMARK or equivalent). The objective of the processing is to generate highest quality of interpretable seismic time and depth section (Ref: Item no.2, Sl. No. 4 Annexure-I) which can further be used for geological interpretation giving output like – Descriptive lithology, lithologs, structural floor contours of coal horizons, geological cross sections, Iso-chore coal horizons, broad coal horizon wise resources in 2D-Seismic report along with geological model.

- B.2 The stand-alone workstations with adequate RAM disk space for the software packages like survey data management & processing, 2D field management & planning, survey simulation, up-hole data processing and interpretation should be available with bidder. The work station should be connected to color plotter, line printer and drive for back-ups.
- B.3 CONTRACTOR is required to process and interpret the data at CONTRACTOR's work center in India. Being a turnkey project involving multiple activities and data volumes, CONTRACTOR has to make meticulous project planning for scheduling concurrent activities for acquisition, drilling of Bore wells logging, processing & interpretation to meet the scheduled time lines for timely completion of the project
- B.4 **Quality Control**
The quality control parameters shall be maintained as per the best in the industry standards. All necessary Quality Control and diagnostics such as data display, impulse response, amplitude spectrum etc. will be made available to CMPDI representative for study and verification at the processing centers. Examination of data for Quality Control may require hard copy as well as online evaluation on workstation. Facility should also exist to take the screen dump, whenever required.
CMPDI representatives will be made aware of interpretative processing procedures that will be applied during processing of data.
- B.5 **Parameter Test**
All necessary and sufficient testing shall be performed to determine optimum processing parameters at every stage of processing sequence. Testing, in general, will be conducted at different locations along the lines selected in consultation with CMPDI representative.
CMPDI at its option may request additional or extra QC displays to be produced. Any other testing requirements and displays on the data as requested by CMPDI representative or suggested by the contractor should be performed.
- B.6 **Suggestive Data Processing Flow**
The suggestive data processing flow is given below
1. Format conversion
 2. Loading of data
 3. Preparation of SPS to build geometry from acquisition details
 4. Computation of shot/receiver statics
 5. Geometry and updating headers
 6. Statics application
 7. Data conditioning and S/N enhancement.
 8. Linear noise attenuation (testing and application in different domains)
 9. Random noise attenuation (testing and application in different domains)
 10. Spherical divergence correction
 11. CDP binning & sorting
 12. Trace Balancing
 13. Deconvolution
 14. Band pass filter
 15. Velocity analysis 1st pass
 16. Residual static application
 17. Pre-stack time migration
 18. Velocity analysis 2nd pass
 19. Spectral balancing on PSTM gathers
 20. RNA on PSTM gathers and SEG Y output for pre-stack inversion
 21. Mute and Stack
 22. RNA on PSTM stack
 23. Spectral balancing to boost frequencies
 24. Deconvolution to remove multiples
 25. TVF
 26. Trace Balance (full window) and SEG Y output

The suggestive PSDM processing sequences are given below

1. Input Pre-mig gathers from PSTM sequences.
2. Pre-PSDM data conditioning.
3. Initialize velocity model
4. Velocity model updating
5. Output Final Stack (PSDM)

Note:-

1. The processing sequence given above is indicative only and will be finalized after thorough testing mutually by CMPDI's representative and the CONTRACTOR's processing manager which may change from area to area.
2. To improve the data quality, repetition or addition of suitable processes may be done, if required.
3. The data is likely to have low signal to noise ratio with multiples and peg legs due to the presence of trap. Effective multiple and peg leg suppression techniques need to be adopted.
4. It is anticipated that the sub basalt data will be of low frequency. Techniques like Low Frequency Enhancement and Q Compensation may be tested.
5. Initial velocity analysis should be done based on constant velocity stacks or perturbed velocity stacks.

(C) DATA INTERPRETATION

The scope of work of data interpretation is given below:

1. conditioning of the post stack seismic data
2. Identification of coal markers and other lithology and well to seismic tie.
3. Tracking of horizons corresponding to coal/shale tops and fault mapping.
4. Time and Depth Structure mapping
5. Spectral decomposition for identification of tuning effects.
6. Iso-chore maps of Coal horizons
7. Fault analysis using geometrical attributes.
8. AVO, Pre and Post stack Inversion studies.
9. Identification of seismic attributes that relates to coal properties, through cross plotting of seismic and well log data.
10. Preparation of various maps, lithologs, structural floor contour of coal horizons, geological cross sections.
11. Preparation of Iso-density maps of coal horizons.
12. Broad estimation of Coal horizon wise resources.

This is only a suggestive work flow for interpretation. However, the bidder should adopt the best and internationally accepted interpretation workflow in consultation with the representatives of CMPDI. Lithological logs generated from geological and geophysical logging of the drilled coring boreholes should be used to correlate the different coal horizons with seismic reflectors. The sonic and density logs can be used for generation of synthetic seismogram along with depth wise velocity determination which in turn can be utilized for time to depth conversion.

(D) DELIVERABLES

A. DATA ACQUISITION:

The CONTRACTOR shall provide the following deliverables to CMPDI within 15 days from the completion of data acquisition:

1. Seismic data (shot records) in SEG format on Hard Disc (in triplicate).
2. Topographic survey data on Hard Disc / CD (triplicate).
3. Geometry data in SPS format on CDs/Hard Disc (triplicate).
4. Quality Control processing outputs on Hard Disc.
5. A comprehensive operational report (3 hard copies and CDs each) including details of experimental work and the results of all Up-Hole surveys along with near surface model

B. DATA PROCESSING:

The following outputs & deliverables will be considered to be part of the processing sequence and price quoted for processing should include these. All output products must conform to the highest industry standards in terms of their quality and future usage.

- (A) The contractor will furnish to CMPDI all output results of all the testing carried out to determine optimum processing parameters.
- (B) Soft and hard copies in triplicate of detailed processing report which must include details of all parameter testing including quality control displays, final processing sequence, and final location map with appropriate annotation.
- (C) Three (03) copies of the following data volumes in SEG-Y Format (Rev. 1) will be produced as part of the standard processing sequence on Hard disk. All SEG-Y output will follow standard byte location for different headers. Details of byte locations should be included in EBCDIC header of the outputs.
 - a. Geometry updated SP gathers
 - b. Residual statics applied CMP Deconvolution gathers
 - c. PSTM gathers (without any mute)
 - d. RMS velocity (ASCII & SEG-Y) – original picks at locations
- (D) Raw Stack, Final PSTM and Final PSDM stack.
- (E) Soft and hard copies in triplicate of processing report including the details of processing steps and parameter test results and final presentation to CMPDI.

C. DATA INTERPRETATION:

The 2D-Seismic report should be submitted with G.M (Exploration). The following minimum deliverables are required to be submitted within sixty (60) days at the end of seismic data acquisition. The deliverable maps, figures of international standard should be provided. Essential deliverables should be –

- Seismic time section along profile lines
- Interpreted depth section along profile lines depicting subsurface set up of coal horizons with thickness preferably on 1:10000 scale and structural disturbances e.g. faults with throw etc., deciphered if any.
- Velocity model
- Synthetic seismograms
- Structural floor contours of coal horizons on RF 1:5000
- Iso-chore of coal horizons on RF 1:5000
- Iso-density of coal horizons on RF 1:5000
- Interpreted lithologs after combining geological and geophysical logs of boreholes on RF 1:500.
- Geological cross sections of the coal horizon on RF 1:2000
- Submission of 2D-Seismic report incorporating all of the above 2D Seismic survey deliverables and Geological Data generated simultaneously. More specifically the report should include geological data/plan out puts like Descriptive lithology, lithologs, structural floor contours of coal horizons, geological cross sections, iso-chores of coal horizons, iso-density of coal horizons, broad coal horizon wise resources along with geological model within the specified Time limit as per page No-1 of NIT. Other maps and figures are open to bidder to provide with report as per international practice of presentation in two hard copies and one soft copy in CD/DVD in printable format, during submission of Report.

SCOPE OF WORK FOR DETAILED EXPLORATION

1.1.1 Geological Modeling: The Bidder shall take up geological modeling through computer including all available geological and geophysical data of the block while submitting the 2D-Seismic report.

1.1.1(A) Scheme for detailed exploration: The bidder shall submit scheme for detailed exploration based on outcome of 2D-Seismic report

1.1.2 (I) Interim Geological Note (IGN):

(a) Bidder shall prepare and submit two copies of IGN to CMPDI within one month after completion of 50% of the estimated drilling meterage for the block for planning of future boreholes for preparation of integrated draft geological report.

(b) The IGN shall contain the following:

- Borehole location and 2D seismic profile lines plan (RF 1:4000/5000)
- Geological plan (RF 1:4000/5000)
- Graphic and descriptive log of the completed boreholes by combining geological and geophysical log
- Coal seam wise geological structure by combining updated 2D seismic data, geophysical logging data and borehole data.
- Representative geological cross-sections
- Coal seam wise seam-folio plans showing iso-thickness and iso-grades lines
- Recommendation in respect of revised estimate of exploration and scope of sub-blocking for separate GRs for CMPDI's consideration and approval.

(II) Integrated Draft Geological Report (DGR): Bidder shall prepare sub-block wise DGR and submit two copies to CMPDI for vetting purpose. The DGR shall comprise following:

1	Salient Feature (Location, Accessibility / Communication, Objective, Period of investigation, Status of Mining, Area of the block, Details of drilling, Seam-wise borehole density, Tabulation showing the quantum of all investigations, including 2D seismic, geophysical logging, Geological Formations, Geological Structure, Faults, Intrusive, Coal seams & Quality, Geological Reserves and Land use pattern (To be given at the beginning of GR)
2	CHAPTER 1: INTRODUCTION (Objective, Location, Communication & Accessibility, Area of the block, Physiography & Drainage, Climate, Previous work, Mining History of the block, Exploration Design, Important Features in the Area, Present geological and geophysical Investigation, Quantum of Total Exploration Inputs, Scope and limitations, Acknowledgements, Personnel Associated with Investigation)
3	CHAPTER 2: EXPLORATION SCHEME (Topographical survey, Geological Mapping, Remote Sensing*, Surface Geophysical Survey, Drilling Equipments and year wise, Agency wise drilling quantum, Core logging / Sampling / Packing / Boxing, Geophysical equipment, quantum of geophysical logging and surface geophysical survey, Coal analysis, Data Synthesis). *If provided by CMPDI
4	CHAPTER 3: GEOLOGY & STRUCTURE (REGIONAL GEOLOGY indicating General description of the coalfield, Formations, Stratigraphy, Description of Formations, Intrusive & Distribution, REGIONAL STRUCTURE indicating Tectonic Set-up & Basin Configuration, GENERAL GEOLOGY OF THE BLOCK indicating Location, Geological Succession, Description of Formations, GEOLOGICAL STRUCTURE OF THE BLOCK indicating General description, strike and Dip, Pattern of Faulting & Description of faults.
5	CHAPTER 4: DESCRIPTION OF COAL SEAMS (General definition of coal, Dirt bands & Parting, Formation wise number of coal seams, Correlation, Quality Parameter & basis of Assessment, Sequence of coal seams & PARTINGS, <i>Description of Individual coal seams</i> indicating seam name, Reference of plates and annexure, Status of Mining, Details of Borehole Intersection, Depth of Intersection (Roof), Minimum & Maximum FRL's, Stratigraphic Position, Parting above & below, Thickness (Stratigraphic and effective), Splitting, Outcrop / In-crop, Lithology of Immediate Roof & Floor, Pyrolitization, Dirt bands (combustible & non-combustible in-seam dirt bands & its percentage, for details reference to Annexure-VI), Proximate Analysis (Ranges, observations ; reference to

	Annexure-VII for details, BCS I₃₀ / I₁₀₀ / I_p sample as per requirement. Similar details may be given for seam sections which merits attention from mining point of view), Determined Gross CV (Ranges, observation; reference to Annexure VII for details), Ultimate Analysis (Ranges, observation; reference to Annexure VIII for details), Sulphur (Ranges, observation; reference to Annexure VIII for details), Petrographic studies (Ranges, observation; reference to Annexure IX for details), HGI (Ranges, observation ; reference to Annexure VIII for details), any other <i>*Specific Parameters for Non coking coal</i>, Long flame Characteristics, Ash Fusion Range (Ranges, observation; reference to Annexure VIII for details), Ash Analysis (Ranges, observation; reference to Annexure VIII for details), Washability Studies (Reference to Annexure X for details). Additionally in case of Coking coals Parameters of Caking Propensity like Caking Index, Coke Type, Swelling Index etc. (Ranges, observation; reference to Annexure VIII for details) & Determination of Alkalis (Ranges, observation; reference to Annexure VIII for details), Statistical Analysis of key parameters and at the end of each seam description Summary of seam parameters and special Observation. <i>* Give characteristics of coking / non-coking coals as per requirement.</i>						
6	CHAPTER 5: RESERVES (GENERAL DESCRIPTION, BASIC ASSUMPTIONS AND NORMS FOLLOWED indicating Definitions, Seams affected by Intrusives, Categorization of reserves & Grade Estimation, PROCEDURE OF RESERVE CALCULATION indicating Block boundary, Barriers, Sector /Sub sectors, Mine data considered, Methodology, Average Specific Gravity, Computation of coal reserves (Brief Description for calculation of gross reserves), DESCRIPTION OF OVERBURDEN (only in case of Open Cast reserves) indicating Nature, Inseam burden, Methodology For Overburden Estimate & Depth of excavation, DESCRIPTION OF RESERVES (details in Annexure XI), its Summary (Description of coal reserves estimated) and Summarized tabulated statements for Reserves as per opencast / underground norms and SURFACE CONSTRAINTS indicating Coal Reserves under surface constraints						
7	CHAPTER 6: SPECIALISED STUDIES (GENERAL DESCRIPTION OF SPECIALISED STUDIES UNDERTAKEN, GEOPHYSICAL INVESTIGATION INCLUDING UPDATED SEISMIC AND GEOPHYSICAL LOGGING FINDING PHYSICO-MECHANICAL PROPERTIES indicating Design, Tests undertaken, summery of Test Results (The detailed test results in Annexure- VIII to be summarized), Discussion (Above test result in terms of various lithologies) & Results (Physico mechanical characteristics of major partings between coal seam) and any other test s undertaken.						
8	Environmental Data (Demography, water quality analysis, soil quality, flora and fauna, land use pattern, air quality, noise level, etc.). Data is to be collected by the bidder to the extent available with statutory agencies/authorities.						
9	Discussions of Results and Conclusion						
10	LIST OF ANNEXURES Annexure I Details of Co-ordinates, Reduced Levels of boreholes, Seismic profile lines and Closing Depths of Boreholes drilled inblock,CF. Annexure II Descriptive Geological Log of boreholes drilled inblock,CF. Annexure III Statement showing thickness of Soil, Weathered mantle and different Formations intersected in boreholes drilled inblock,CF. Annexure IV Seam Correlation chart,block,CF. Annexure V Seam wise Borehole wise Band by Band Analytical Data inblock,CF. Annexure VI Seam wise Borehole wise details of Dirt bands inblock,CF. Annexure VII Seam wise Borehole wise Overall Proximate Analysis, GCV etc inblock,CF. Annexure VIII Seam wise results of Special Tests of boreholes drilled inblock,CF. (Coking coals or Non coking coals, applicable) Annexure IX Seam wise results of Petrographic Tests inblock,CF. Annexure X Test result of Washability Studies & Characteristics of cleans and middlings of borehole samples inblock,CF. Annexure XI Test Results on Physico - Mechanical properties of rock / coal samples from Borehole no.... ,block,CF. Annexure XII Details of reserves estimation, block, CF Annexure XIII Details of OB estimation, block, CF. (incase of Opencast block)						
12	LIST OF PLATES <table><tr><td>Subject</td><td>Plate no</td><td>RF / Scale</td></tr><tr><td>1. Location Map</td><td>I</td><td>1 :50000 / 1 :100000</td></tr></table> (Location of block within map of coalfield with a inset map of India showing location of coalfield)	Subject	Plate no	RF / Scale	1. Location Map	I	1 :50000 / 1 :100000
Subject	Plate no	RF / Scale					
1. Location Map	I	1 :50000 / 1 :100000					

2. Topographical Map	II	1 : 5000 / 4000
(Surface contours, Boreholes, Inclines, Shafts, Limits of OC mines, River, Nala, Road, Rail lines, Wells, Habitations, High tension lines etc.)		
3. Geological Map	III	1 : 5000 / 4000
(Seismic profile lines, Boreholes, Special tests boreholes with distinctive style, Inclines, Shafts, Limits OC mines, in addition to formational boundaries, Coal seams In-crops / Outcrops, Structural features etc.)		
4. Graphic Lithologs of Bhs along with Geophysical logging curves	IV A to IV ...	1 : 500
5. Graphic Correlation	V A to V....	1 : 1000
6. Geological Cross section	VI A to VI..	1 : 2000
7. Floor Contour Plan	VII A to VII..	1 : 5000 / 4000
(in ascending order)		
8. Seam structure	VIII A to VIII ...	1 : 50
(in ascending order)		
9. Seam Folio Plan	IX A to IX..	1 : 5000 / 4000
(in ascending order)		
10. Iso-parting Map	X A to X ..	1 : 5000 / 4000
(As per requirement / optional in case of Opencast block)		
11. Total Overburden Plan	XI	1 : 5000 / 4000
(As per requirement / optional in case of Opencast block)		
12. Iso-Excavation Plan	XII	1 : 5000 / 4000
(As per requirement / optional in case of Opencast block)		
13. Coal : OB Plan	XIII	1 : 5000 / 4000
(As per requirement / optional in case of Opencast block)		
14. Interpreted seismic sections	XIV A to XIV..	1:10000
15. Any other map as per requirement		

(III) Final Geological Report (FGR): Bidder shall attend and incorporate in FGR all vetting comments given on the DGR and shall submit 5 copies of FGR within one month of receipt of vetting comments. Bidder shall also submit two soft copies of the FGR along with their MINEX models on CDs.

1.2 CMPDI's Scope of Work

- a) CMPDI shall arrange necessary statutory clearances for exploration in Forest Areas.
 - (i) Status of permission for exploration in Forest Areas:
Note: In case statutory clearance(s) is not provided within the contract period/mutually agreed extended period; the work order will be terminated (Partly or fully) without any financial implication on either side.
- b) CMPDI shall scrutinize the exploration scheme, suggest and approve the borehole locations, select/approve boreholes for special tests, randomly/regularly check and verify completed and ongoing works; and decide need of geophysical logging/surface geophysical surveys, etc. by Bidder/CMPDI.
- c) CMPDI shall assess the recommendations given in IGN by the Bidder in respect of revised estimate of exploration and respond within 15 days.
- d) CMPDI shall scrutinize the Integrated DGR submitted by the Bidder and submit its comments/observations within 30 days which needs to be incorporated by the Bidder in Integrated FGR.
- e) CMPDI shall scrutinize the FGR to verify incorporation of its comments given earlier on Integrated DGR within 15 days.

2.0 Laws governing the coal sector in India

The indicative list of laws governing the coal sector and mining operations in India is given below. As the laws and statutes listed below are not exhaustive, Successful Bidder should obtain independent legal advice with regard to compliance to all applicable laws.

Table-3.1

S.No	Acts / Rules /Regulations	Promulgation
1.	The Mines & Minerals (Regulation & Development) Act	1957
2.	The Mineral Concession Rules	1960
3.	The Coal Bearing Areas (Acquisition and Development) Act	1957
4.	The Mineral Conservation and Development Rules	1988
5.	Coal Mines (Nationalization) Act	1973, amended in 1993
6.	The Coal Mines (Conservation and Development) Act	1974
7.	The Land Acquisition Act	1894
8.	Forest (Conservation) Act including Rules	1980
9.	Water (Prevention and Control of Pollution) Act including Rules	1974
10.	Air (Prevention and Control of Pollution) Act including Rules	1981
11.	Environmental (Protection) Act	1986
12.	The Mines Act	1952
13.	Mines Rules	1955
14.	Coal Mines Regulations	1957
15.	The Contract Labour (Regulation and Abolition) Act	1970
16.	The Explosive Rules	2008

In addition to the **Acts / Rules /Regulations** mentioned above in the table 3.1, there are acts, bye laws dealing with the use of explosives, motor vehicles, electricity, wages and remuneration etc. Another category of acts relates to marketing, distribution, sales, pricing, contracts, transportation, exports / imports of various minerals.

3.0 Duration of the Contract: Duration of contract shall be as follows:

Description of work	Quantity		Estimated Contract Value (ECV) (In ₹)	Earnest Money (In ₹)	Period of Completion (In Days)					
	2D Seismic line km	Drilling metres			Mobilization period for 2D Seismic and Drilling	For Field & Lab Studies*		For GR		Total
						2D Seismic line km	Drilling metres	2D Seismic **	Drilling g***	
2D Seismic Survey along with Detailed Exploration in Khariaparha, Grindola, Bandbahal Block, Ib Valley Coalfield as per Scope of Work given at Annexure-I, IA & IB.	102	1,12,300	35,18,03,609	43,97,600	50 Days	160 Days	1,700 Days	60 Days	180 Days	2150 Days {50=Mobilization)+ (220=2DSeismic)+ (1880=Exploration)}
N.B: Zero date shall be the day of the issue of letter of acceptance/work order or handing over the relevant document to the contractor for preparation of Exploration Scheme, whichever is later.										
CMPDI after reviewing the recommendations given by the Bidder in IGN may, however, reduce/increase by 30% the drilling meterage at existing terms and conditions. Accordingly, the duration of the contract would be adjusted on pro rata basis for any increase/decrease in quantities (Refer Clause 5.3 of General Terms & Conditions).										

4.0 Details of Scope of Works

- 4.1** Bidder with his declared owned/leased drills and equipment shall carry out drilling in HQ/NQ/BQ sizes. Reduction in size of boreholes below BQ size shall not be allowed. Bidder shall mobilize within mobilization period all the rigs declared in the bid submitted against the tender of the block.
- 4.2** Bidder shall make efforts to obtain maximum core recovery in coal seams and non-coal strata. In no case the recovery should be less than 80% in non-coal and 90% in coal strata, except in fault zone, weathered zone, soil and structurally disturbed area.
- 4.3** Boreholes are desired to be vertical. Bidder will take all possible precautions and skill to maintain verticality of the boreholes.
- 4.4** The locations of the boreholes finalized in consultation to CMPDI shall be fixed on the ground by the Bidder.
- 4.5** After completion of drilling, each borehole shall be sealed (plugged) by the bidder. After sealing, the bidder shall construct and erect pillars [of standard size to be specified by CMPDI] with Borehole Number at the borehole sites at his cost.
- 4.6** The bidder shall be responsible for:
- (i) Preservation of cores with proper depth markings at the end of every run,
 - (ii) Geological logging of the cores and keeping cores ready for inspection by CMPDI,
 - (iii) Providing strong core boxes and preserving samples therein duly wrapped in polythene,
 - (iv) Sending packed core boxes for chemical/physico-mechanical investigations on coal cores/borehole cores to laboratories designated by CMPDI for analysis at his cost. CMPDI will bear the cost of analysis.

In case the designated laboratory expresses its inability to undertake analysis of cores, the bidder shall be free to select an accredited laboratory to get the analysis completed within the project schedule. However, CMPDI shall reimburse the actual cost of analysis on production of certified laboratory bills. The maximum reimbursable rates shall be CIMFR rates applicable for CMPDI.

- 4.7** In case of lower core recovery in normal geological conditions or jamming of the boreholes before completion of depth, deviation drilling/re-drilling shall be carried out by the bidder at his own cost on the instruction of CMPDI. However, if re-drilling is resorted to, the borehole location point shall be at the nearest possible distance from the original borehole and the bidder shall be free to do non-coring drilling up to the depth from where the coring drilling is required for generating cores with stipulated recovery.
- 4.8** If a borehole fails to drill up to the targeted depth due to drilling difficulties or otherwise, the bidder shall have to re-drill a fresh borehole in lieu of the abandoned borehole. However, bidder need not to drill a fresh borehole in lieu of that abandoned borehole in which more than 80% of the targeted depth has been achieved provided that number of such abandoned boreholes are within 10% of the planned number of boreholes for the block and they are scattered over the block. CMPDI shall pay for drilling against such abandoned borehole(s) up to 3 (three) m depth beyond floor of last correlated seam
- 4.9** CMPDI shall have no responsibility towards construction of approach roads to field sites, arranging the water supply for drilling, watch and ward, and safety of men and material of the Bidder.
- 4.10** Decision for closure of the boreholes shall be taken by the Project Manager with approval of PRCO.
- 4.11** Immediately after completion of work on each site, the Bidder shall at his own cost remove all equipment and unused materials; fill in and level pits and reinstate the site to its original conditions.
- 4.12** No extra cost shall be paid towards any “fishing” operation in connection with failure of tubular, bit etc., inside the borehole. No time extension will be provided for “fishing” operation and delay shall attract L/D clauses.

- 4.13** The Successful Bidder's Scope of Work shall also include all the obligations covered in NIT, General Terms & Conditions, Additional Terms and Conditions and Technical Document.
- 4.14** The Scope of Work shall include bringing in and/ or procurement and/ or deployment of Bidder's own equipment and personnel.
- 4.15** Site preparation, supply, transportation to site, water arrangement, lighting, etc., shall be responsibility of the successful Bidder.
- 4.16** The manpower deployment by the Bidder should be in conformity to the laws and regulations applicable in India. However, CMPDI will have no liability, whatsoever, with regard to the manpower provided by the selected Bidder within or after the contractual period.
- 4.17** The Bidder shall also submit recorded data of geophysical investigations carried out by him in digital format.
- 4.18** The bidder is required to carry out multi-parametric geophysical logging in 50% boreholes in coring drilling with consultation of CMPDI.
In order to have velocity estimation and for generating synthetic seismogram, (I) Full wave (P & S) sonic (II) DUAL DENSITY, (III) CALIPER, (IV) NATURAL GAMMA RAY, (V) SINGLE POINT RESISTANCE (VI) SP-SELF POTENTIAL (SP) AND (VII) RESISTIVITY LOGS (16" and 64") must be recorded.
- Payment for Geophysical Logging can only be made when above mentioned compulsory parameters are logged {Sl. No. (i) to (v)}.
 - Regarding Other Parameters 10% deduction shall be made in case of absence of Sl. No. (vi) and 20% in case of Sl. No. (vii).
 - Further the 10% and 20% deduction shall be made from the overall cost of Geophysical Logging for that particular Borehole.
 - In addition to above the following Geophysical parameters will be taken up as per following details:
- A.DEVIATION (Only for bore holes > 600m depth).
- In case CMPDI itself decides to take up geophysical logging of any borehole/and surface geophysical survey, the bidder shall have to provide access to boreholes and extend all logistic support to CMPDI for conducting the investigations and survey of profile lines at bidder's cost. The logistic support in geophysical logging would include washing of boreholes, fishing of stuck up borehole and space for logger van at the drill site. The casing provided in the borehole needs to be kept intact till completion of geophysical logging. In case of geophysical survey, the logistic support shall include physical sighting of boreholes in the block besides supply of coordinates of boreholes.
- 4.19** Locations of all surface features (natural & artificial) shall be surveyed by the Bidder for their three dimensional co-ordinates. Spot levels at suitable intervals shall be taken up for generating contours at specified interval for the entire area. The detailed survey for topographical mapping shall be carried out with reference to the primary order of Control Stations or by establishing secondary order of Control Stations (with reference to primary order of control station), depending upon nature and extent of the area. Any unusual condition or formation on the ground, forest area, location of rock outcrops (if visible on the surface) and springs / falls, possible aggregate deposits etc. shall also be surveyed.
- 4.20** Spot levels shall be taken at about every 20m interval and also at closer interval wherever abrupt change in ground elevation is found so that sufficient points properly distributed over entire area shall be located for generating contours at specified intervals.
- 4.21** All surface features, contours including control stations, boundary pillars, forest area existing and / or abandoned quarried etc. shall be shown on topographical plan / map by means of conventional symbols (preferably symbol of Survey of India Maps).

4.22 The field survey work shall be conducted with DGPS/Total Station associated with software(s), Auto Set / Precise leveling and other required surveying equipment in the following steps.

- i) Establishing horizontal and vertical controls of primary and secondary/ tertiary orders.
- ii) Detailed surveying and leveling for locating all kinds of surface features (natural & man made) and contours at specified intervals.
- iii) All surveying and leveling operations shall commence and close upon known control stations.
- iv) All necessary precautions as per standard survey practice should be scrupulously observed to avoid various types of errors.
- v) *Seismic Profile lines, Borehole and Block Boundary to be surveyed on WGS-84 Platform. The base should be fixed in consultation with CMPDI.*

4.23 Accuracy of the surveying & leveling: Linear accuracy of triangulation / trilateration (b) should be 1:1000. Minimum accuracy of the surveying and leveling shall be as follows:

Sl. No.	Type of surveying & leveling	Accuracy in surveying		Accuracy in leveling	Remarks
		Angular	Linear		
1	Primary order				
	a) Traversing	$LC\sqrt{n}$ second	1:10,000	-	Where LC is the least count of the instrument and n is no. of traverse stations
	b) Triangulation / Trilateration	15 second (triangles closure)	- do - (discrepancy between measured & computed base)	-	
	c) Levelling for B.M. establishment			(+/-) 1 cm per km	
2	Secondary order				
	a) Traversing	$10\sqrt{n}$ second	1:5000	-	-do-
	b) Levelling for B.M. establishment	-	-	(+/-) 1 cm per km	

5.0 Statutory Rules

It is proposed that the following statutory rules and regulations be followed by the successful Bidder undertaking the detailed coal exploration:

- (a) The successful Bidder should follow all statutory rules, regulations applicable laws etc. and statutory requirement related to government licenses, workmen compensation, insurance etc, including Minimum Wage Act, for their personnel. Machine operators and others, to whom the work would be allotted, should be provided safety shoes and helmets etc. by the successful Bidder. The successful Bidder is required to indemnify CMPDI from any liability falling on CMPDI due to an act of commission/omission by the successful Bidder or by its representatives or by its employees or by any third party in execution of the contract. If CMPDI is made liable for such claim by the Court or other Authority, the same should be reimbursed to CMPDI by the successful Bidder as if CMPDI has paid on their behalf.

The Successful Bidder is not required to indemnify CMPDI in the event of an act of commission/omission by CMPDI including that contributing to the injury, sickness, disease or death.

- (b) During the course of execution of the work, if any accident occurs whether major or minor, the successful Bidder or his supervisory staff should inform the same immediately without any delay to the concerned authorities and take steps in accordance with the Mines Act and other relevant laws, else, it is envisaged to take necessary action against the successful Bidder or his supervisory staff for violation of the mines act and other relevant laws.
Execution of the work with contract labour is prohibited vide notification U/S 10(1) contract labour (Regulation & Abolition) Act, S.O 2063, dated 21.06.1988. So, the successful Bidder should execute the work in such a way that the above Act is not violated in any manner.

6.0 Accommodation, site office:

Bidder shall have to make his own arrangement for accommodation/site office/store etc. The Successful Bidder shall deploy all Supervisory & operation personnel and pay as per his norms. CMPDI shall not carry any responsibility for the personnel deployed by the Bidder.

7.0 Wage Payment

The successful Bidder shall make payment of minimum wages to its staff/personnel as per Contract Labour (R&A) Act 1970 and Contract Labour (R&A), Central Rules 1971. The successful Bidder shall submit to CMPDI monthly return of payments made to its employees. Copies of returns towards payment of provident fund on behalf of its employees shall also be submitted to CMPDI within seven (7) days of its submission. Inadequate wages paid and other statutory dues (including provident fund) not paid to the employees in terms of minimum wages act or other statutory rules and regulations in force in India, shall be termed as breach of contract.

8.0 Other Obligations of Successful Bidder:

The responsibility of acquiring/hiring land required for drill sites and other allied operations as well as payment of compensation to land owners shall be the responsibility of the Bidder.

INTEGRITY PACT

Between

Central Mine Planning and Design Institute Limited (CMPDI) hereinafter referred to as "Principal"

And

..... hereinafter referred to as "The Bidder/Contractor"

Preamble

The Principal intends to award, under laid down organizational procedures, contract for 2D Seismic Survey along with Detailed Exploration in the Khariaparha, Grindola, Bandbahal Block, Ib Valley Coalfield of Jharsuguda District in State of Odisha, offered vide Global Notice Inviting Tender No. **Dated** The Principal values full compliance with all relevant laws and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder/s and Contractor/s.

In order to achieve these goals, the Principal cooperates with the international Non-Governmental Organization "Transparency International" (TI). Following TI's national and international experience, the Principal has appointed external independent Monitors [NIT document] who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1: Commitments of the Principal

- (1) The principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-
 1. No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of the contract, demand, take a promise for or accept, for him/herself or third person, any material or immaterial benefit which he/she is not legally entitled to.
 2. The Principal will, during the tender process treat all Bidders with equity and reason. The Principal will in particular, before and during the tender process. Provide to all Bidders the same information and will not provide to any Bidder confidential/additional information through which the Bidder could obtain an advantage in relation to the tender process or the contract execution.
 3. The principal will exclude from the process all known prejudiced persons.
- (2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the relevant Anti-Corruption Laws of India, or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

Section-2 : Commitments of the Bidder/Contractor

- (1) The Bidder/Contractor commits itself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
 1. The Bidder/Contractor will not, directly or through any other person or firm offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or immaterial benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
 2. The Bidder/Contractor will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications,

- certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
3. The Bidder/Contractor will not commit any offence under the relevant Anti-corruption Laws of India, further the Bidder/Contractor will not use improperly for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship regarding plans, technical proposals and business details including information contained or transmitted electronically.
 4. The Bidder/Contractor will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- (2) The Bidder/Contractor will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section-3: Disqualification from tender process and exclusion from future contracts.

If the Bidder, before contract award has committed a transgression through a violation of Section 2 or in any other form such as to put his reliability or credibility as Bidder into question, the Principal is entitled to disqualify the Bidder from the tender process or to terminate the contract, if already signed, for such reason.

- (1) If the Bidder/Contractor has committed a transgression through a violation of Section 2 such as to put his reliability or credibility into question, the Principal is entitled also to exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case, in particular the number of transgressions, the position of the transgressors within the company hierarchy of the Bidder and the amount of the damage. The exclusion will be imposed for a minimum of 6 months and maximum of 3 years.
- (2) The Bidder accepts and undertakes to respect and uphold the Principal's absolute right to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision to resort to such exclusion is taken. This undertaking is given freshly and after obtaining independent legal advice.
- (3) If the Bidder/Contractor can prove that he has restored/recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal may revoke the exclusion prematurely.
- (4) A transgression is considered to have occurred if in light of available evidence no reasonable doubt is possible.

Section-4: Compensation for Damages

- (1) If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover from the Bidder liquidated damages equivalent to 3% of the value of the offer or the amount equivalent to Earnest Money Deposit/Bid Security, whichever is higher.
- (2) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages equivalent to 5% of the contract value or the amount equivalent to Security Deposit/Performance Bank Guarantee, whichever is higher.
- (3) The Bidder agrees and undertakes to pay the said amounts without protest or demur subject only to condition that if the Bidder/Contractor can prove and establish that the exclusion of the Bidder from the tender process or the terminate of the contract after the contract award has caused no damage or less damage than the amount of the liquidated damages, the Bidder/Contractor shall compensate the Principal only to the extent of the damage in the amount proved.

Section-5: Previous transgression.

- (1) The Bidder declares that no previous transgressions occurred in the last 3 years with any other Company in any country conforming to the TI approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.
- (2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

Section-6: Equal treatment of all Bidders/Contractors/Subcontractors

- (1) The Bidder/Contractor undertakes to demand from all subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.
- (2) The Principal will enter into agreement with identical conditions as this one with all Bidders, Contractors and Subcontractors.
- (3) The Principal will disqualify from the tender process all Bidders who do not sign this Pact or violate its provisions.

Section-7: Criminal charges against violating Bidders/Contractors/Subcontractors

If the Principal obtains knowledge of conduct of a Bidder, Contractors or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

Section-8: External Independent Monitor/Monitors (three in number depending on the size of the contract) (to be decided by the Chairperson of the Principal).

- (1) The Principal appoints competent and credible external independent Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- (2) The Monitor is not subject to instructions by the representative of the parties and performs his functions neutrally and independently. He reports to the Chairpersons of the Board of the Principal.
- (3) The Contractor accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder/Contractor/Subcontractor with confidentiality.
- (4) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meeting.
- (5) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or heal the violation, or to take other relevant action. The Monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
- (6) The Monitor will submit a written report to the Chairperson of the Board of the Principal within 8 to 10 weeks from the date of reference or intimation to him by the "Principal" and, should the occasion arise, submit proposals for correcting problematic situations.
- (7) Monitor shall be entitled to compensation on the same terms and being extended to/provide to Outside Expert Committee members/Chairman as prevailing with Principal.
- (8) If the Monitor has reported to the Chairperson of the Board a substantiated suspicion of an offence under relevant Anti-Corruption Laws of India, and the Chairperson has not within reasonable time, taken visible action to proceed against such offences or reported it to the Vigilance Office, the Monitor

may also transmit this information directly to the Central Vigilance Commissioner, Government of India.

- (9) The word "Monitor" would include both singular and plural.

Section-9: Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Contractor (i.e. Lead Partner in case of Joint Venture) 12 months after the last payment under the respective contract and for all the Bidders (i.e. other partners of the Joint Venture) 6 months after the contract has been awarded.

If any claim is made/lodged during this time, the same shall be binding and continue to be valid despite lapse of this pact as specified above, unless it is discharged/determined by the Chairperson of the Principal.

Section-10: Other provisions

- (1) This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal, i.e. Ranchi.
- (2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- (3) If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- (4) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

.....

For the Principal

Place

Date

.....

For the Bidder/Contractor

Witness 1:

Witness 2:

BANK GUARANTEE PROFORMA 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,
Gondwana Place, Kanke Road, Ranchi -834031

In consideration of the **Central Mine Planning & Design Institute Limited**, 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 _____

MANDATE FORM FOR ELECTRONIC FUND TRANSFER/INTERNET BANKING PAYMENT.

To

**Central Mine Planning & Design Institute Limited,
Gondwana Place, Kanke Road, Ranchi -834031**

Sub: Authorization for release of payment due from Central Mine Planning & Design Institute Limited,
Gondwana Place, Kanke Road, Ranchi 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)			

4. **Date from which the mandate should be effective:** _____

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

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)

NON-BANNING OR DELISTING CERTIFICATE

Our firm has not been suspended, banned or de-listed by any Government or Quasi-Government agencies or PSU's.

Date:

Signature of the Bidder with seal of the firm

USER PORTAL AGREEMENT

e-Tender Portal User Agreement

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

A. UNDERTAKINGS TO BE FURNISHED ONLINE BY THE BIDDER

I DO HEREBY UNDERTAKE

1. That all the information being submitted by me/us is genuine, authentic, true and valid on the date of submission of tender and if any information is found to be false at any stage of tendering or contract period I/We will be liable to the following penal actions apart from other penal actions prescribed elsewhere in the tender document.

- a. Cancellation of my/our bid/contract(as the case may be)
- b. Forfeiture of EMD
- c. Punitive action as per tender document

2. That I/we accept all terms and condition of NIT, including General Terms and Condition and Special/Additional Terms and Condition as stated there in the tender document as available on the website.

3. That I/we accept the Integrity Pact as given in the tender document (if applicable).

4. That I/we am/are giving my/our consent for e-payment and submitting/shall submit the mandate form for e-payment in the format as prescribed in the document in case, the work is awarded to us.

5. That I/we do authorize CIL/subsidiary for seeking information/clarification from my Bankers having reference in this bid.

6. That I/we will upload original/certified photo/scanned of all the relevant documents as prescribed in the tender document in support of the information and data furnished by me/us online.

7. I/We confirm that I/We have not been banned or de-listed by any Govt. or Quasi Govt. agencies or PSUs. In case We are banned or delisted this information shall be specifically informed to the tender issuing authority.

8. That I/We accept all the undertakings as specified elsewhere in the tender document.

9. That this online agreement will be a part of my bid and if the work is awarded to me/us, this will be a part of our agreement with CIL/subsidiary Company.

Yours faithfully,

(Signature of Bidder ; **OR**
Authorised person of bidder; **OR**
DSC Holder bidding online with
authorisation from bidder)

1. **Name of the Signatory :**

2. **Status of Signatory :**

(Whether he is the Bidder himself **OR** Authorised person of bidder **OR** DSC Holder bidding online with authorisation from bidder)

3. **Address :**

4. **e-Mail Address :**

Format of "Letter of Bid" (for Works & Services Tenders)

Letter of Bid

To,
The Tender Committee,
Central Mine Planning & Design Institute, Ranchi.

Sub. : Letter of Bid for the work "-----"
Ref. : 1. NIT No.: "-----"
 2. Tender Id No. : "-----"

Dear Sir,

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

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

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, Ranchi 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.

Yours faithfully,

(Signature of Bidder ; **OR**
 Authorised person of bidder; **OR**
 DSC Holder bidding online with
 authorisation from bidder)

1. **Name of the Signatory :**

2. **Status of Signatory :**

(Whether he is the Bidder himself **OR** Authorised person of bidder **OR** DSC Holder bidding online with authorisation from bidder)

3. **Address :**

4. **e-Mail Address :**

(This document is digitally signed by the DSC holder authorised 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, Ranchi.
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 (In case of JV, all partners are covered).
Or
* I / Wehave been banned by the organization named "....." for a period of..... year/s, effective from to.....(in case of JV, name(s) of the JV Partner(s)).
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.]

Yours faithfully,

(Signature of Bidder ; **OR**
Authorised person of bidder; **OR**
DSC Holder bidding online with
authorisation from bidder)

1. Name of the Signatory :

2. Status of Signatory :

(Whether he is the Bidder himself **OR** Authorised person of bidder **OR** DSC Holder bidding online with authorisation from bidder)

3. Address :

4. e-Mail Address :

AGREEMENT FORM

This agreement, made the _____ day of _____ 201__ between _____ (name and address of the Employer) (hereinafter called "the Employer" and _____ (name and address of the Contractor) (hereinafter called "the Contractor" of the other part)

Whereas the Employer is desirous that the Contractor execute for 2D Seismic Survey along with Detailed Exploration in the Khariaparha, Grindola, Bandbahal Block, Ib valley Coalfield of Jharsuguda District in State of Odisha offered vide Global Notice Inviting Tender No. CMPDI/EXPLORATION/GPH (GLOBAL-_____) dated _____ & Tender Reference No. _____ (hereinafter called "the Works") and the Employer has accepted the Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein.

NOW THIS AGREEMENT WITNESSETH as follows:

1. In this agreement, works and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to, and they shall be deemed to form and be read and construed as part of this agreement.
2. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all respects with the provisions of the Contract.
3. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of the defects wherein the Contract price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
4. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.
:

- (i) Letter of Acceptance;
- (ii) Notice to proceed with the work;
- (iii) Contractor's Bid;
- (iv) Conditions of Contract;
- (v) Specifications;
- (vi) Drawings;
- (vii) Bill of Quantities and
- (viii) Any other document listed in the Bid document/ Contract as forming part of the contract

IN witness whereof the parties thereto have caused this Agreement to be executed the day and year first before written.

The Common Seal of _____

was hereunto affixed in the presence of: _____

Signed, Sealed and Delivered by the said _____

in the presence of: _____

Binding Signature of Employer _____

Binding Signature of the Contractor _____

FORMAT OF CONSORTIUM AGREEMENT/ MEMORANDUM OF UNDERSTANDING WITH ASSOCIATE(S)

(Format for the Consortium Agreement/ MoU between the Bidder i.e.
Lead Member & its Associate(s) and to be submitted by Bidders)

(To be executed on Non-Judicial Stamp Paper of appropriate value and notarized)

Sub: 2D Seismic survey along with Detailed Exploration in the Khariaparha, Grindola, Bandbahal Block, Ib Valley Coalfield of Jharsuguda District in the State of Odisha

Ref: Detail E-Tender Notice No.

We, M/s (Name & Address of the Bidder i.e. Lead Member) and (1) M/s (2) M/s..... & (3) M/s.....* (Names and addresses of the Associate/ Consortium Members) have formed a Consortium for 2D Seismic survey along with Detailed Exploration in the Khariaparha, Grindola, Bandbahal block, Ib Valley Coalfield of Jharsuguda District in the state of Odisha and hereby undertake:

1.0 To conduct 2D Seismic survey along with Detailed Exploration in Khariaparha, Grindola, Bandbahal block, Ib Valley Coalfield of Jharsuguda District in the State of Odisha as per the period of association specified at para 5.0 of this Consortium Agreement/ MoU. (1) M/s (2) M/s..... & (3) M/s.....* (name of Associate/ Consortium partners) have the liberty to dissociate themselves after a time period as mentioned at para 4.0 of this Consortium Agreement/ MoU

2.0 That M/s (Bidder/ Associate or Consortium members)* have the experience as per Clause No 9.1 (A) and (B) of Detail E-Tender Notice whose details are given hereafter.

Details of the Consortium:

Sl. No.	Name of Associate Consortium members	Area of Experience	Number of related projects handled independently or as associate member and the years of experience in the indicated field	Details of the last project completed successfully (As on last day of month previous to the one in which Bid is invited)	Remarks
1					
2					
3					

3.0 That M/s shall be the Lead Member for this Associate/ Consortium.

4.0 That M/s (Name of the Bidder i.e. Lead Member) has associated with (1) M/s (2) M/s..... & (3) M/s.....* (name of the Associate or Consortium partners) for the subject work as per the roles, responsibilities and tenure in association as given hereafter:

Sl. No.	Name of Bidder (LM) & Associate/ Consortium partners	Role of Bidder/ Associate/ Consortium Members	Tenure of Association**
	M/s..... (Bidder/ LM)	Set up/ Operation & Financial Qualification	Entire Contract Period
	M/s..... (Associate 1)		
	M/s..... (Associate 2)		
	M/s..... (Associate 3)		

- 5.0 That M/s (Bidder i.e. Lead Member) have formed consortium with (1) M/s (2) M/s..... & (3) M/s.....* (name of Associate/ Consortium members) having collective experience towards 2D Seismic survey along with detailed drilling and Geological Report preparation-as per para 2.0 of this Consortium Agreement/ MoU. We hereby undertake that this Consortium Agreement/ MoU as per the provision of the Bid Document shall remain valid for the term of association as specified at para 4.0 of this Consortium Agreement/ MoU
- 6.0 That this Consortium Agreement/ MoU shall be valid till this subject work is completed.
- 7.0 That the above Consortium Agreement/ MoU shall be governed by substantive and procedural laws in India.

For and on behalf of :
(The Lead Member of Associate/ Consortium)

Signature :
(The Authorized Signatory)

Name of the Signatory :

Designation :

Company's Stamp/ Seal :

For and on behalf of : (1) (2)..... (3)*
(The Associate)

Signature : (1) (2) (3)*
(The Authorized Signatory)

Name of the Signatory : (1) (2) (3)*

Designation : (1) (2) (3)*

Company's Stamp/ Seal :

Witness (1):

Witness (2):

Signature:

Signature:

Name:

Name:

Official address:

Official address:

Date:

Place:

* Strike out which is not applicable.

** Association/ Consortium formed for execution of this subject work will be effective from the date of signing of the Consortium Agreement/ MoU.

SALIENT FEATURES

1. **Name of the block** : *KHARIAPARHA-GRINDOLA-BANDBAHAL*
2. **Name of the coal field** : IB Valley Coalfield
3. **District** : Jharsuguda
4. **State** : Odisha
5. **Co-ordinates** : Lat: 21°49'18.004" N and 21°53'40.447" N
Long: 83°47'29.362" E and 83°51'30.605" E
6. **Topo-Sheet No .** : 64 O/13.
7. **Brief geographic location with respect to coal field and adjacent Blocks** : Khariaparha-Grindola-Bandbahal block is having Madhupur block to its NE, Orient west block to its East and Tingardih East in the NW direction and Kuraloi-A is at South of the block.
8. **Accessibility** : The area is well connected by road and rail Network. Belpahar is the nearest railway station on the Howrah-Bombay main line of the South Eastern Railway which is situated East of the block. The main road within the block is connected to the National Highway-49 connecting the district headquarters Sundargarh, Jharsuguda and Raigarh passes Through the present area. The villages within the block are well connected by fair weather Metaled roads. The other railway station, Jharsuguda is about 25km away from this area.
9. **Area** : 22.69 sq. km.
10. **Total meterage drilled in the block** : Total – 14742.60m
Khariaparha – 3396.35m
Bandbahal- 6410.45m
Grindola- 4935.80 m.

- 11. No of boreholes drilled** : Total-21bhs
(Khariaparha -6bhs. IBKH-1 to IBKH-6)

(Grindola -7bhs. IBGD-1 to IBGD-7)

(Bandbahal -8bhs. IBBA-1 to IBBA-8)
- 12. No of boreholes Geophysically logged** : Total-
17bhs
(Khariaparha-5bhs, Bandbahal-7bhs &Grindola-5bhs)
- 13. Objective** : 1. To prove the existence and continuity of coal seams occurring in the Khariaparha-Grindola-Bandbahal block, IB Valley CF

2. To establish the lay, disposition and potentiality of coal seams.

3. To assess the coal reserve (proved category) of the block.

14. Block boundary coordinates

SNo.	EASTING	NORTHING
1	2982351.83	874487.86
2	2983535.50	872791.20
3	2985594.84	871366.06
4	2985579.87	871300.92
5	2985557.15	871202.04
6	2985534.43	871103.17
7	2985511.71	871004.30
8	2985488.99	870905.42
9	2985466.27	870806.55
10	2985466.30	870804.43
11	2985468.10	870748.68
12	2985469.63	870643.82
13	2985470.89	870584.32
14	2985472.28	870506.70
15	2985472.53	870475.92
16	2985473.44	870433.96
17	2985473.90	870398.09
18	2985474.62	870366.51
19	2985474.71	870329.29
20	2985475.01	870290.61
21	2985475.04	870264.93
22	2985475.71	870238.57
23	2985476.03	870197.96
24	2985476.98	870154.99
25	2985477.75	870108.07
26	2985477.70	870084.48
27	2985478.32	870047.65
28	2985478.78	870005.49
29	2985479.50	869955.91
30	2985480.13	869931.62
31	2985481.20	869870.91
32	2985481.28	869846.22
33	2985481.48	869825.72
34	2985482.10	869800.74
35	2985482.65	869764.85
36	2985483.10	869740.54
37	2985483.14	869722.43
38	2985483.86	869694.41
39	2985483.79	869673.61
40	2985484.00	869655.50

SNo.	EASTING	NORTHING
41	2985484.68	869629.97
42	2985484.44	869622.44
43	2985485.06	869593.61
44	2985485.19	869569.43
45	2985485.91	869535.42
46	2985486.29	869500.75
47	2985486.95	869473.86
48	2985486.78	869452.56
49	2985487.20	869427.99
50	2985487.18	869413.18
51	2985487.57	869394.33
52	2985488.01	869370.37
53	2985488.13	869347.09
54	2985415.76	869270.52
55	2985343.39	869193.95
56	2985271.02	869117.38
57	2985198.65	869040.81
58	2985126.29	868964.24
59	2984984.15	869119.50
60	2984796.29	869344.39
61	2984671.94	869476.68
62	2984502.61	869669.83
63	2984309.46	869870.91
64	2984156.27	870051.36
65	2984078.48	870129.15
66	2983910.20	870321.24
67	2983748.28	870500.62
68	2983622.87	870622.86
69	2983541.90	870664.14
70	2983402.20	870721.29
71	2983294.25	870751.45
72	2983183.13	870791.14
73	2983032.31	870853.05
74	2982967.64	870895.46
75	2982361.78	871060.83
76	2982328.59	871069.56
77	2982284.09	871070.14
78	2982251.13	871058.33
79	2982159.54	871029.73
80	2982111.94	871006.74

SNo.	EASTING	NORTHING
81	2982069.50	870987.83
82	2982031.49	870973.65
83	2981927.84	870959.16
84	2981787.36	870956.88
85	2981665.45	870999.17
86	2981561.90	871049.76
87	2981469.01	871094.91
88	2981392.35	871136.88
89	2981227.29	871274.96
90	2981148.45	871345.38
91	2981098.35	871390.48
92	2981030.54	871437.18
93	2980997.37	871451.44
94	2980924.50	871475.79
95	2980864.02	871481.40
96	2980773.30	871487.83
97	2980743.06	871491.03
98	2980697.37	871528.23
99	2980653.14	871544.88
100	2980600.80	871571.02
101	2980535.95	871615.35
102	2980492.50	871672.29
103	2980473.39	871720.51
104	2980476.41	871779.77
105	2980484.01	871852.18
106	2980474.23	871898.55
107	2980447.71	871925.97
108	2980391.69	871949.22
109	2980361.96	871966.12
110	2980328.03	871966.95
111	2980286.02	871996.24
112	2980190.23	872067.47
113	2980122.46	872132.35
114	2980084.12	872149.79
115	2980058.31	872153.77
116	2979981.60	872150.71
117	2979932.16	872136.56
118	2979879.04	872123.99
119	2979829.58	872095.61
120	2979761.79	872057.80

SNo.	EASTING	NORTHING
121	2979721.20	872040.73
122	2979641.26	872011.87
123	2979577.30	871989.57
124	2979502.28	871968.61
125	2979444.48	871955.52
126	2979406.39	871964.79
127	2979331.43	871988.59
128	2979201.14	871999.31
129	2979065.69	872021.03
130	2978956.74	872026.44
131	2978956.09	872816.22
132	2979484.42	873110.06
133	2979520.00	874478.52
134	2978675.68	874470.47
135	2978676.07	875468.76
136	2978964.04	875767.25
137	2978964.65	875840.75
138	2979022.19	875923.23
139	2979082.09	876009.09
140	2979141.99	876094.95
141	2979201.88	876180.81
142	2979261.78	876266.67
143	2979321.68	876352.53
144	2979381.57	876438.39
145	2979441.47	876524.25
146	2979501.36	876610.11
147	2979561.26	876695.96
148	2979621.16	876781.82
149	2979681.05	876867.68
150	2979740.95	876953.54
151	2979800.84	877039.40
152	2981031.96	875952.37
153	2981992.56	875329.27

15. Jobs to be carried out for Detailed Exploration:

SI No	Job Description	Quantum of Job
1	2D Seismic Reflection Survey using Explosive/Vibrator as source, 120 number of Channels, 30 fold data coverage even at the block boundary with Geophone Group interval of 10m for Target depth of around 1000 m	102 line km
2	Seismic Refraction survey for Static corrections to the Reflection data	102 line km
3	CORING DRILLING: Meterage to be drilled: 18800m in 23nos. of boreholes (@1bh per Sq.km) to aid Seismic data processing and interpretation job	Up to 600 m BH depth 13800m
		600 m to 800 m depth 3900m
		800 m to 1000 m depth 1100m
		Up to 600 m BH depth 69550m
		600 m to 800 m depth 18100m
		800 m to 1000 m depth 5850m
		Up to 600 m BH depth 83350 m
	TOTAL. meterage to be drilled: 1,12,300 m in 140 nos. of BHs for the entire job	600 m to 800 m depth 22000m
		800 m to 1000 m depth 6950m
4	GEOPHYSICAL LOGGING: Geophysical logging of boreholes with parameters P and S full wave Sonic, Density, Caliper, Natural Gamma, Single Point Resistance and 16"-64" Resistivity must be recorded	a) To aid seismic work (23bhs) 18800 m
		b) For detailed GR preparation (50% of 117bhs, say 59bhs) 46750m
		c) Total meterage for 82 bhs 65550m

16. Type of tendering : Outsource the above job through Global e-Tender process(from Survey, 2D Seismic survey, Drilling up to Geological Report Preparation excluding Chemical analysis of Coal cores)

17. Thickness Details of Geological Formations encountered in GSI boreholes:

Formation	Tentative Thickness Range (m)
Kamthi	0m -76.0m
Raniganj	4m – 176m
Barren Measure	0m – 33m
Barakar	295m – 624m
Talchir	5m+

Note: The above data has been taken from GSI boreholes drilled within the area.

- 18. Dip & Strike of Formation** : General strike of bed is NW-SE in the North and NE-SW in the South and dipping towards South. The Dip amount varies from 2^0 - 5^0 .
- 19. No. of coal seams** : 4 coal seam zones of Raniganj Formation (R-I, R-II, R-III and R-IV in ascending order) and 4 regional Barakar coal seam zones/seams (Rampur, Lajkura, Parkhani and Belpahar in ascending order) found in the blocks. In addition to the said seams IB seam also found in Khariaparha & Grindola block (i.e. total 9 seams zones)
- 20. Depth range of occurrence** : The coal seams of Raniganj formation were intersected in between 13.64m-249.99m while coal seam zones/ seams of Barakar formation were intersected within 59.56m-861.75m depth. The maximum depth of the borehole is likely to be 1000m.
- 21. Limitation** : 1. The meterage required to be drilled in the block has been assessed considering the target seam as Seam IB.
2. The IB seam has been encountered in 5 boreholes out of 21 boreholes drilled by GSI having a thickness of 2.5m. Hence, the meterage assessed (i.e. 112300m) may change proportionately.
3. Initially 23 no. of proposed boreholes (18800m) to support Seismic data processing & interpretation should be taken up. The balance meterage of 112300m in the block to be drilled in further exploration which may change in due course of operation

BLOCK BOUNDARY OF KHAIRAPARHA-GRINDOLA-BANDBAHAL BLOCK WITH ADJACENT BLOCKS, IB VALLEY COALFIELD

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