



THE SINGARENI COLLIERIES COMPANY LIMITED
(A GOVERNMENT COMPANY)

Corporate Material Procurement Department
P.O.Bhupalpalli Collieries –507101
Bhadradri District, (Telangana State)

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OPEN ENQUIRY

DRAFT NOTICE INVITING TENDER

**FOR Production of coal on cost per ton basis by deploying Longwall
technology at KTK- 5 Incline , Bhupalpalli Area**

TENDER ENQUIRY NO. E1216O0xxx Dated xx.xx.2016

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DISCLAIMER

- 1.1 This document is not an agreement or an offer by SCCL to Bidders or any third party. The purpose of this document is to provide interested parties with information to facilitate the formulation of their Proposal.
- 1.2 This document does not purport to contain all the information each Bidder may require. The Document may not be appropriate for all persons, and it is not possible for SCCL to consider the needs of each party who uses or reads this Document. The concerned parties should conduct their own investigations and analysis and should verify the completeness of the information in this document and obtain independent advice from appropriate sources.
- 1.3 Due care has been taken in formulating the document and the information contained in it. All data pertaining to the present work incorporated in this document is authentic and adequate as per the wisdom and perspective of SCCL. . If any bidder intends to conduct any additional tests, studies or scientific investigations, the same may be permitted by SCCL at the cost of the bidder intending so. Neither SCCL nor its employees or its consultants make any representation or warranty as to the completeness of the information in this document.
- 1.4 Neither SCCL nor its employees or consultants shall have any liability to any Bidder or any other person under the law of contract, tort, the principles of restitution or unjust enrichment or otherwise for any loss, expense or damage which may arise from or be incurred or suffered in connection with this Document, or any matter deemed to form part of this document, the award of the work, or the information and any other information supplied by or on behalf of SCCL or its employees, any consultants or otherwise arising in any way from the selection process for the contract.
- 1.5 The bidder should confirm that the document is complete in all respects. In the event that the Document or any part thereof is mutilated or missing, the Bidder must notify SCCL immediately at the following address:

General Manager (MP)
The Singareni Collieries Company Limited,
Bhupalpalli Collieries, (PO) Khammam District,
Telangana, Pin: 507101.
- 1.6 The Document and the information contained herein are strictly confidential and privileged and are for the exclusive use of the party to whom it is issued. This Document must not be copied or distributed by the recipient to third parties (other than, to the extent required by the applicable law or in confidence to the recipient's professional advisors, provided that such advisors are bound by confidentiality restrictions at least as strict as those contained in this document). In the event that after the issue of the document the recipient does not continue with its involvement in the bidding process for any reason whatsoever, this document and the information contained herein must be kept confidential by such party and its professional advisors at all times.
- 1.7 SCCL reserves the right to change, modify, add, alter the Document or cancel the bidding process without assigning any reasons thereof, at any time during

the bidding process. All parties to whom this Document has been issued shall be intimated of any such change. The Bidders or any third party shall not object to such changes/ modifications/ additions/ alterations explicitly or implicitly. Any such objection by the bidder shall make the Bidder's proposal liable for rejection by SCCL. Further objection by any third party shall be construed as infringement on confidentiality and privileged rights of SCCL with respect to this Document.

- 1.8 The Bidder shall not make any public announcements with respect to this Bidding process or this document. Any public announcements to be made with respect to this bidding process or this Document shall be made exclusively by SCCL. Any breach by the Bidder of this clause shall be deemed to be non-compliance with the terms and conditions of this Document and shall render their bid liable for rejection. SCCL's decision in this regard shall be final and binding upon the Bidder.
- 1.9 The bidder shall bear all costs associated with the preparation and submission of the Technical and Financial Proposals. SCCL and their consultants shall not, under any circumstances, be responsible or liable for any such costs.

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**THE SINGARENI COLLIERIES COMPANY LIMITED
(A GOVERNMENT COMPANY)**

**CORPORATE MATERIAL PROCUREMENT DEPARTMENT
BHUPALPALLI COLLIERIES P.O – 507101
DIST: KHMAMMAM – TELANGANA**

**TELEPHONE: 91-08744-243109,243665 - EPABX: 242301EXTN.3500
TELE FAX: 91-08744-245651 / 242874; e-mail ID: gm_pd@scclmines.com.
Company Web site: www.scclmines.com**

CHAPTER – I

NOTICE INVITING TENDERS (NIT)

Enq.No.E1216O0xxx dt. xxxxx.2016			
Number of Sources	Single	Mode of Tendering	Open
Input Tax Credit on VAT	NA	CENVAT Credit on service tax	Applicable

1. Tenders are invited for **Production of 121.00 Lack Tonnes (LT) of coal over a period of 16 ½ years (including 18 months construction period) on cost per ton basis by deploying Longwall technology at KTK.5 incline Mine – Reg**

The bidder shall deploy all brand new and unused **Longwall Equipment**.
2. **The Estimated value of the enquired work is Rs.500.00 crores. Bidder shall submit bids with EMD of Rs.50,00,000/- (Rupees Fifty Lakhs only) - and EMD in original in the form of Demand Draft is to be submitted to G.M (MP) SCCL, Bhupalpalli. Scanned copy of the same shall be attached in e-procurement portal while submitting the bid (Pl. refer EMD clause at para No. 8).**
3. The original Demand Draft against EMD should reach the Office of G.M (MP) SCCL, Kothagudem within three working days after closing date for submission of bid. Otherwise the tender shall be treated as non-responsive.

A. GENERAL INSTRUCTIONS:

1. Bidders are advised to carefully read this NIT Document
2. SCCL may solicit the bidders consent for extension of the period of validity of the bid. The request and the responses there to shall be made by letter, fax or e-mail. Bidders accepting the request are not permitted to modify the bid.
3. SCCL reserves the right to seek clarifications in respect of the bids / supporting documents etc. from the bidders by letter / e-mail / fax.

4. RIGHT TO REJECT THE OFFERS / CANCEL THE TENDER:

SCCL reserves the right to reject any or all the offers without assigning any reason and to cancel the tender at any stage before release of order / award of contract. The decision taken by SCCL in this regard shall be final.

5. CORRESPONDENCE / DISPUTES DURING ENQUIRY STAGE:

No correspondence / disputes will be entertained before placing order and the decision of the SCCL shall be final. In case of any dispute, after placement of order / contract, the matter will be referred to Arbitration in accordance with the Indian Arbitration Act as detailed at clause 22 hereof. Failing which, any dispute or difference or any matter arising out of Contract or purchase order or incidental there to under this enquiry, shall be subject to jurisdiction as per clause no.24.

Status of tender submitted can be viewed in system track as detailed here under.

Visit www.scclmines.com → ERP Customer/ Vendor report

Please mail to erpvendors_reg@scclmines.com for registration, vendor registration / user changes to view SCCL ERP MM module related to web reports (enquiry status). (Specify your vendor code & e-mail ID) → Login with user ID & Password sent by system generated mail.

6. COMMENCEMENT OF ORDER:

The purchase order shall come in to operation on the day of earliest receipt of communication about the release of purchase order i.e., Letter of Acceptance (LoA).

B. INSTRUCTIONS TO FILL TECHNICAL BID AND TECHNICAL TERMS & CONDITIONS:

7. Bidders are required to quote as per the terms and conditions mentioned in the NIT document. Otherwise the offer is liable for rejection.

C. INSTRUCTIONS TO FILL COMMERCIAL BID AND COMMERCIAL TERMS & CONDITIONS:

8. EARNEST MONEY DEPOSIT (EMD):

a. Submission of EMD:

Bidder shall submit bid along with EMD, unless exempted. Bid submitted without EMD will be summarily rejected. The EMD shall be paid in the form of Demand Draft drawn on any Nationalized / Scheduled Banks located in Bhupalpalli (presently, State Bank of India / State Bank of Hyderabad / Indian Overseas Bank / Andhra Bank / Vijaya Bank / ICICI Bank / HDFC Bank / ING Vysya Bank/ Axis Bank/ Karur Vysya Bank) in favour of The Singareni Collieries Company Limited, payable at Bhupalpalli, Khammam Dist; TELANGANA.

The copy of the Demand Draft is to be scanned and uploaded in the e-portal, otherwise the bid is liable for rejection.

The original Demand Draft against EMD should reach the Office of G.M (MP) SCCL, Bhupalpalli within three working days after last date of submission of bid, otherwise the tender shall be treated as non-responsive.

- i) EMD amount shall be **Rs.50,00,000/-** (Fifty lakhs) as specified.
- ii) No interest will be paid on the EMD.
- iii) EMD of unsuccessful bidders will be refunded immediately after the bidder is declared unsuccessful.
- iv) EMD of successful bidders will be refunded on submission of Performance Bank Guarantee (PBG).
- v) Wherever PBG clause is not applicable, EMD of successful bidder will be refunded after faithful execution of the order.
- vi) EMD paid against earlier enquiry (ies) will not be adjusted for the current enquiry.

b. Exemption for submission of EMD:

The following are exempted from submission of EMD:

- i) All Government Undertakings.
- ii) OEMs, OESs and Foreign manufacturers for supply of spares.
- iii) Foreign manufacturers for capital items, if they are Proven Suppliers to SCCL for the enquired items.
- iv) Firms registered with Directorate General of Supplies & Disposals (DGS&D) for enquired items.
- v) Firms registered under Micro, Small and Medium Enterprises Development (MSMED) Act for enquired items.
- vi) Ancillary Units / Subsidiaries of SCCL.

The Bidder exempted from submission of EMD shall upload the scanned copy of documents online in support of exemption, during bid submission; otherwise the offer is liable for rejection.

c. Forfeiture of EMD:

EMD of the Bidder will be forfeited in the following circumstances:

- i) Withdraws the offer during validity / extended validity period.
- ii) Changes the terms and conditions of the offer during validity / extended validity period.
- iii) Does not accept the LOI / order placed within the offer validity period / extended validity period, in accordance with terms & conditions of NIT, offer & negotiations.
- iv) Breach of contract during execution, wherever PBG clause is not applicable.
- v) The information/documents submitted by the bidder proved to be false/ incorrect.

9. BIDDER'S DETAILS:

Bidder shall furnish the following information:

- a. Name and address, Phone number, Fax number, e-mail ID and Name of the contact person.
- b. Indicate clearly, the constitution of the bidder i.e., Sole Proprietorship, Partnership, Joint Venture company or Consortium, Limited liability company etc., together with names of proprietor, partners and directors whatever is applicable.
- c. Indicate clearly, if it is a Government company, MSME or SCCL ancillary unit or DGS&D registered firm. A copy of valid documentary proof shall be enclosed.

- d. Indicate clearly, whether the bidder is a Manufacturer, Dealer or Trader.
- e. In case of overseas supplies, the country of origin of the materials offered shall be clearly specified.
- f. Banker's Name and address together with Branch Code and IFSC / RTGS Code.
- g. Tax registration and other details to the extent applicable along with documentary evidence. :
 - i) TIN Registration No.
 - ii) VAT Registration No.
 - iii) CST Registration. No.
 - iv) Central Excise Registration No.
 - v) Service Tax Registration No.
 - vi) IT PAN Registration No

10. STATUTORY TAXES, DUTIES AND LEVIES ETC.:

1. Central Excise Duty, Central Sales Tax / VAT, Service Tax, Works Contract Tax, Entry Tax, Royalty, Customs Duty, Countervailing Duty, Special Additional Duty (SAD) and any other statutory Taxes, Duties, Cess, Levies etc., whatever is applicable under Central / State / Provincial Act etc., shall be clearly mentioned in the offer duly indicating the applicable rates as mentioned below:

a. Service Tax (ST), Swacha Bharath Cess (SBC) & Krishi Kalyan Cess:

- i) When the services offered are covered under Service Tax, the bidder shall clearly mention "Service Tax" 'Swacha Bharath' cess and krishi kalyan cess in their bid along with the rate applicable.
- ii) The bidders shall indicate Service Tax Registration No. and the category under which levy of Service Tax is applicable in their offers.
- iii) The successful bidder shall raise Tax Invoices indicating the component of Service Tax, Swacha bharath cess and krishi kalyan cess while claiming payments.
- iv) Following information shall be provided in Tax Invoice by the Service Provider to enable SCCL to avail Cenvat Credit.
 - Sl. No. and Date of the Invoice/Bill for the service rendered.
 - The name & address and registration no. of the service provider.
 - The name & address and registration no. of the service receiver.
 - Description, classification and value of taxable service provided or to be provided.

The service Tax, SBC & Krishi Kalyan Cess payable there on

b. Any other Taxes / Duties applicable:

- i) If any Taxes / Duties / Cess / Levies other than those mentioned above are applicable as per the law of the land prevailing as on the date of submission of

bid, the bidder shall clearly mention them along with rates applicable rates. Otherwise the same will be to the bidder's account.

- ii) In case new Taxes / Duties / Cess / Levies are introduced after submission of the bids, but before opening the price bids, the bidder shall bring to the notice of the SCCL in writing about such changes for loading and evaluating the status, otherwise, the same will be to the bidder's account.
 - iii) In case, the bidder mentions that any / all, Taxes / Duties / Cess / Levies are not applicable and if applicable during the order validity period, the same shall be absorbed by the bidder.
 - iv) During the contractual delivery period / extended delivery period, any upward / downward revision of applicable Taxes / Duties / Cess / **Levies or imposition of new taxes / Duties / Cess / Levies** as per order is to SCCL's account to the extent of revision. However, during the extended delivery period with penalty, any upward revision **or imposition of new taxes / Duties / Cess / Levies etc.**, shall be absorbed by bidder.
- c. Concessional Customs Duty:** Presently no concessional duty under projects imports is envisaged for the proposed work. However, after release of the work order, if the project is eligible for PCD, SCCL arranges MOC recommendation for concessional duty under Projects Imports for the proposed work. The successful bidder shall pass on the total benefit of such concessional duty to SCCL on the imports made by it against the proposed work by way of reducing the total quoted price for extraction of total quantity of 121.00 LT. Thus the cost/tonne of coal shall be reduced proportionately.

The above equipment, if imported under Project Concessional duty (PCD) should not be shifted without prior permission from SCCL.

11. TAX CREDIT (ITC/CENVAT):

- i) SCCL is having centralized registration under Central Excise rules, Service Tax rules and APVAT rules as furnished hereunder:
 - Central Excise Registration No : AAAC8873FEM001
 - Service Tax Registration No : AAAC8873FST001
 - TIN/CST No (Under APVAT Act 2005) : 36150117915
 - PAN (Under Income TAX ACT, 1961) : AAAC8873F
- ii) At the time of evaluation of offers of the bidders, SCCL will consider Tax Credit (ITC/CENVAT) in respect of eligible goods / services indicated in the Commercial Bid Format and their commercial status will be arrived at accordingly.
- iii) Successful bidder shall quote the above registration Nos. / PAN in all his invoices and documents against supplies, wherever required as per the provisions of the statutes, to enable SCCL to avail Tax credit.

12. PERFORMANCE BANK GUARANTEE (PBG):

- a) The successful Bidder shall furnish PBG in the form of an unconditional, irrevocable Bank Guarantee for 10% (Ten Percent) of the annualized contract value, for timely and faithful performance as specified in the contract, at awarded rate which shall be valid till the end of the contract and 3 months grace period thereafter, to the O/o CGM/GM,BHP

- b) The PBG shall be furnished from a Public Sector Bank (SBI & Associates and Nationalized banks) and obtained from the bank branches situated at Hyderabad / Bhupalpalli or operative and payable at bank branches situated at Hyderabad / Bhupalpalli, as per Proforma to be enclosed to the purchase order. The bank guarantee should be executed on Non-Judicial Stamp Paper worth 3% of BG value or Rs. 100/- whichever is less.
- c) The PBG shall be furnished within 30 days from the date of issue of Letter of Intent and shall be kept valid till the end of the contract and 3 months (grace period) and thereafter shall be renewed 3 months prior to expiry of Bank Guarantee in case of the extension of the contract, for the extended period.
- d) The PBG shall be released after satisfactory completion of the contract. SCCL shall have the right to get the PBG extended till such period the contract is extended beyond the specified period, if any.

13. RISK PURCHASE CLAUSE:

In case the contractor fails to deliver the service within the delivery schedule prescribed in the order and SCCL is forced to purchase such service from any other source at a higher price, the contractor shall pay the difference amount to SCCL. The defaulted Contractor shall have no claim over the quantity, which they failed to supply. Additional expenditure if any will be recovered from running bills of defaulted supplier/contractor anywhere in the company. In case the running bills amount is not sufficient, the defaulting Contractor shall pay the amount within 15 days of receipt of the notice from SCCL. Otherwise the amount will be recovered by invoking the PBG and/or from Security deposit.

14. UNSOLICITED DISCOUNT:

Suo-moto reduction shall not be considered for evaluation whether given before or after opening of price bids. If any bidder other than lowest offers suo-moto reduction in the prices after opening of the price bid, the offer shall be rejected out rightly. However, if there is a suo-moto reduction from the lowest bidder adjudged on the basis of comparative statement as per price bids before such reduction, the benefit of suo-moto reduction shall be availed of at the time of placement of order on the lowest bidder. SCCL reserves the right not to accept the lowest bid.

D. INSTRUCTION TO FILL PRICE BID & EVALUATION CRITERIA:

15. BIDDING CURRENCY:

Bidders shall submit price bid format as per E-procurement format only.

E. GENERAL TERMS & CONDITIONS:

16. IN CASE THE ORDER IS FOR SERVICE CONTRACT/SUPPLY OF EQUIPMENT / SPARES AND TO CARRYOUT ERECTION / REPAIR / MAINTENANCE Etc. AT SCCL SITE:

- a. The contractor shall pay not less than minimum wages to his employees deployed at SCCL site, as revised from time to time under the **Minimum Wages Act**, wherever applicable.
- b. The contractor shall contribute towards Provident Fund for his employees deployed at SCCL site, at the rate as revised from time to time under **The Employees Provident Fund and Misc. Provisions Act-1952**, wherever applicable.

- c. The contractor shall pay bonus as prescribed under payment of **Bonus Act**, wherever applicable, subject to a minimum as per law in the absence of adequate profits.
- d. Without prejudice to the Contractor's liabilities under the General conditions of Contract (GCC), the contractor shall at his own cost and initiative at all times up to the successful completion of the contract take out and maintain Insurance cover from any Nationalized insurance Company in India under the **Workmen's Compensation Act** and any other Industrial legislation applicable from time to time in the State of TELANGANA providing for payment of compensation to workmen in the event of death, injury or accident to workmen in the course of or in connection with employment, such policy(ies) in-respect of Workmen Compensation, Insurance to be of value of not less than that of amount as per workmen compensation act.

Should the contractor fail to take out and / or keep in force insurance as provided for in the foregoing sub-clauses, the owner shall be entitled (but without obligation to do so) to take out and keep in force such insurance(s) at the cost and expenses of the contractor in all respects, and without prejudice to any other rights and remedy of the owner in this behalf to deduct the costs and premium incurred therefore from amount becoming due to contractor from time to time.

- e. The contractor shall obtain **Labour Licence** from Assistant Labour Commissioner (Central) of the area wherever applicable and a copy of the same to be submitted to SCCL.
- f. The contractor shall not **Sub- Contract** the work in whole or part without obtaining the prior written consent of SCCL.
The contractor shall, notwithstanding the consent and assignment, remain solely liable and responsible to SCCL, for and in-respect of the due performance of the contract and the Vendor's obligations there under.

17. CANCELLATION OF CONTRACT IN PART OR IN FULL:

If the Contractor, in the opinion of the Singareni Collieries Co. Ltd., fails or neglects to comply with any of the terms and conditions of the contract or with any order issued there under then in such a case the Singareni Collieries Co. Ltd., shall without prejudice to any other right of remedies under this contract have the right and be entitled to cancel the contract by giving fourteen days, notice in writing to the supplier, without being liable to pay any compensation for such cancellation. The contractor, however will be entitled to be paid at contract rates after deduction of any amount due to the Government, for the works already completed, which in the opinion of the Singareni Collieries Co. Ltd., is in accordance with the terms of the contract. In the circumstances aforesaid, the contractor, shall, on demand by the Singareni Collieries Co. Ltd., or the authorised representative thereof, hand over immediately to the Singareni Collieries Co. Ltd., or the authorised representative of the Singareni Collieries co. Ltd., Stores components in possession or custody of the contractor without waiting for the payment of even settlement of any claim already made or intended to be made.

18. CONSEQUENCES OF BREACH:

a. Deliveries:

The work schedules are either furnished in the Purchase Order or given by the respective area. The time and the date of delivery of service, stipulated in the Purchase Order, shall be deemed to be the essence of the contract and work must be completed not later than the dates specified therein. Should the contractor fails to deliver these services within the mutually agreed time

schedules for such services, the Singareni Collieries Co. Ltd., at their option, shall be entitled to take following action against the contractor.

i) S.C.C.L. at their option may recover from the contractor towards liquidated damages a sum as indicated in the order subject to force majeure conditions which are to be substantiated with documentary evidence

Or

ii) Cancel the order and to purchase elsewhere without notice to the contractor on account and at the risk of the contractor, the unexecuted portion of service or otherwise of a similar description (Whether or not the service ordered on others or exactly Complying with order pending, the decision of The GM (MP) in this regard will be final) without cancelling the contract in respect of unexecuted quantity of work.

In the event of action being taken under (ii) The Contractor shall be liable for any loss which The Singareni Collieries Co. Ltd., may sustain on that account, but the Contractor shall not be entitled to any gain on Purchases made against default and to forfeit PBG fully or in part.

b. Whenever under this contract, any such money is recoverable from and payable by contractor, the Singareni Collieries Co. Ltd., shall be entitled to recover such sum by appropriating in part or in whole by deducting any sum due to which at any time there after, may become due from the Contractor in this or any other contract. Should this sum be not sufficient to cover the full amount recoverable, the Contractor shall pay to the Singareni Collieries Co. Ltd., on demand the remaining balance. The contractor shall not be entitled to any gain on any such Purchase.

c. Performance Bank Guarantee will also be forfeited for any breach of contract.

19. LAWS APPLICABLE:

The contract shall be governed by the Laws of Indian Union for the time being in force.

20. INDEMNITY:

The contractor shall keep the company indemnified against all damages caused to the company or employee and / or property of company due to negligence of the contractor and / or it's men and agents. SCCL shall also indemnify the contractor on Reciprocating basis.

21. ARBITRATION:

Normally all disputes should be settled by negotiations between the Company and the concerned parties.

In case any dispute/difference is not settled through negotiations, the respective parties can seek remedy by Arbitration by invoking the same within 120 days of dispute.

(a) In case of any dispute Sole Arbitrator shall be appointed from the list of 3 judicial officers maintained by SCCL duly following the provisions of Arbitration and conciliation act 1996 as amended from time to time. The list of such names shall be forwarded to the party as and when the party requests for resolving the dispute. Such Judicial Officer as chosen by the party will be appointed by the Chairman & Managing Director to adjudicate the dispute as a Sole Arbitrator. The Arbitrator so appointed shall conduct the proceedings in accordance with the Arbitration & Conciliation Act, 1996 as amended from time to time and pass a reasoned award. Both the parties should bear the cost of the arbitration equally.

(b) If the Sole Arbitrator appointed by the Chairman & Managing Director of the Singareni Collieries Company Limited is unable to continue as an Arbitrator for any reasons to be recorded in writing and the Chairman & Managing Director of Singareni Collieries Company Limited thinks fit for appointment of a new Arbitrator in the place of existing Arbitrator, he is having a power to do so. Such new Arbitrator shall be appointed following the same procedure as contemplated in (a) above.

- (c) As and when such new Arbitrator is appointed, he can either continue the arbitration proceedings from the stage where the earlier Arbitrator discontinued his proceedings or alternatively the new Arbitrator may start proceedings de novo if the circumstances warrant him to do so.
- (d) Failing to invoke Arbitration Clause within 120 days of dispute, the matter is to be decided by Civil Courts at **Bhadradi (Kothagudem) District** in Telangana alone and not at any other place.
- (e) Fee and expenses payable to the Sole Arbitrator shall be governed by the Arbitration & Conciliation Act, 1996 as amended from time to time and shall be borne equally by both parties to the dispute.

22. WORK AND PAYMENT DURING ARBITRATION:

Work under the contract, shall if reasonable, continue by mutual agreement during the arbitration proceedings, and no payment due to or payable by the Singareni collieries Co. Ltd., will be withheld without reasonable cause and merely on account of the pendency of such proceedings.

23. JURISDICTION:

The Courts at Bhadradi (Kothagudem) district in the state of TELANGANA only shall have jurisdiction to deal with and decide any legal matter or dispute whatsoever arising out of this contract including disputes arising on encashment of Bank Guarantees.

24. CORRESPONDENCE AFTER PLACING ORDER:

After placing the order, correspondence related to issues regarding service contract, payments & penalties shall be made with the concerned mine only. In case the issues are not settled at Mine level, correspondence shall be made with the area CGM / GM concerned. In case the issues are not settled at area CGM / GM level, correspondence shall be made with GM (Material Procurement). In case the issues are not settled at GM (MP) level, correspondence shall be made with Director (Operations). In case the issues are not settled at Director (Operations) level also, correspondence shall be made with C&MD. Bidder is advised to visit SCCL's web site www.scclmines.com for name and address phone number, and e-mail ID of Mine, area CGMs / GMs, CGM (Purchase), Director (Operations) and C&MD.

25. BRIBES & GIFTS:

Any Bribe, Commission, gift or advantage given, promised or offered by or on behalf of the Supplier or his partner, agent or servant or any one on his or their behalf to any Officer, Servant, representative or agent of the Singareni Collieries Company Limited, or any person on his or their behalf for obtaining or executing of this or any other contract with Singareni Collieries Co. Ltd., shall in addition to any criminal liability which the Supplier may incur, subject the Supplier in the cancellation of this and all other contracts with and also to payment of any loss of damage resulting from any such cancellation to the like extent as is provided in case cancellation under clauses thereof. Any question or dispute to the commission of any offence under present clause shall be settled by the Singareni Collieries Co. Ltd., in such manner and on such evidence of information as they think it sufficient & their decision, shall be final and conclusive.

NOTE : In case any specific mention is made on the above clauses in other Chapters, the same shall prevail over.

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CHAPTER-II

Brief of Tendered Work

Online Tenders in three parts are invited for the following work at KTK.5 incline Bhupalapalli Area.

TENDER ENQUIRY NO. E121600xxx Dated xx.xx.2016	
Description of work	Production of 121.00 LT of coal on cost per ton basis by deploying Longwall technology at KTK.5 incline Mine as per the envisaged Annual Contracted Quantity.
Lead Time for Commencement of Contract	a. The contract work is to be commenced by deploying all brand new & unused Long wall equipment package within 18 months (Eighteen months) from the date of Letter of Acceptance (LOA).
Period of Contract	Period of the contract to complete extraction of 121.000 LT of coal reserves is 18 months of construction period from date of Letter of Acceptance (LOA) plus 15 APPs (Annual Production Periods) @ minimum 7.8 LT per annum approximately.
Location and description of mine	<ul style="list-style-type: none"> • The proposed work is at KTK. No.5 incline of Bhupalapalli area which is located in Prof. Jaya Shanker (Bhupalapalli) district of Telangana State. Good motorable roads connect it to the near by city Warangal and the State Capital, Hyderabad. The Nearest airport to the site where the proposed mine is Rajiv Gandhi International Airport, Shamshabad in Hyderabad. • KTK.-5 Incline is an operating mine in Bhupalapalli area of SCCL having a mine area of 916.48 Ha.
Make of water	Coal seam considered to be of Degree-I gassiness for safety purposes in KTK 5 incline Bhupalapalli area. The make of water or water seepage of present working panels at KTK.5 incline is estimated to be around 200 to 250 GPM (based on data available from the mines). The successful bidder shall make his own arrangements for handling make of water in respective working panels.
Qualifying Requirements	<p>A. Experience of Bidders (Technical Criteria) (Details should be given as at Appendix- II)</p> <p>a) Bidder shall have experience in operation/extraction of coal seams having gradient steeper than 1 in 3 (18.4 degrees) with Powered Support Longwall Technology for not less than a period of (3) three years during the immediately preceding (5) five years, and should have produced not less than 6.5 lakh Tonnes in any one of the five preceding financial years (Y15, 14, 13,12, 11) and should be capable to Procure /Mobilize Powered Support Longwall equipment, other connected equipment, machines and required resources within a period of 18 months from the date of contract coming into-force.</p>

AND

- b) Should have a MOU/Agreement with the proven Powered Support Manufacturer's who have successfully designed, manufactured and supplied atleast 3 Longwall sets in last 7 years (Y 15, 14, 13, 12, 11, 10, 09) out which one set should have been supplied for coal **seams having gradiant steeper than 1 in 3 (18.4 degrees**

Or

Should be the proven manufacturer of Powered support who have successfully designed, manufactured and supplied atleast 3 Longwall sets in last 7 years (Y 15, 14, 13, 12, 11, 10, 09) out which one set should have been supplied for coal **seams having gradiant steeper than 1 in 3 (18.4 degrees** and should be able to procure / mobilize other **connected** equipment, machines and required resources within a period of 18 months from the date of contract coming into-force.

AND

Should have a MOU/Agreement with the mine operator having experience in operation/extraction of coal seams **having gradiant steeper than 1 in 3 (18.4 degrees)** with powered support Longwall Technology for not less than a period of (3) three years during the immediately preceding (5) five years, and should have produced not less than **6.5 lakh** Tonnes in any one of the five preceding financial years (Y15, 14, 13,12, 11).

Or

- c) A joint venture/consortium of not more than 3, having a MOU/Agreement with the Mine Operator having experience in operation/extraction of coal seams **having gradiant steeper than 1 in 3 (18.4 degrees)** with powered support longwall technology for not less than a period of (3) three years during the immediately preceding (5) five years, and should have produced not less than **6.5 lakh** Tonnes in any one of the five preceding financial years (Y15, 14, 13,12, 11) and also with the proven powered support manufacturer who have successfully designed, manufactured and supplied atleast 3 Longwall sets in last 7 years (Y 15, 14, 13, 12, 11, 10, 09) out which one set should have been supplied for coal **seams having gradiant steeper than 1 in 3 (18.4 degrees**

	<p align="center">AND</p> <p>Should be able to procure /mobilize powered support longwall equipment, other <u>connected</u> equipment, machines and required resources within a period of 18 months from the date of contract coming into force.</p> <p>B) Annual Turnover & financial capacity of the Bidders (Details should be given as at Appendix- II)</p> <p>To qualify for award of the contract each bidder/consortium of bidder should fulfil the following:</p> <ul style="list-style-type: none"> i. Shall have audited/certified accounts/ financial statement for the preceding 3 (Three) financial years. ii. Should have a minimum annual turn over of INR 50 Crs. or equivalent US \$ in mining/mining equipment business during preceding 3 financial years ending on 31.03.2016. iii. Should provide evidence of possessing adequate working capital to the extent of Rs.20 Crs. inclusive of access to lines of credit and availability of other financial resources to meet the requirement.
Earnest Money Deposit Amount.	INR . 50,00,000/- (Rupees Fifty lakhs)
Award Criteria	<p>The status of technically and commercially qualified bids shall be evaluated on Landed cost basis. The bidders shall quote for:</p> <ul style="list-style-type: none"> i) Rate per tonne of coal extracted as per scope of the work, technical specification and other provisions indicated in the NIT for entire period of the contract. ii) Service tax, Krishi kalian cess & SBC at applicable rate <p>SCCL will award the Contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined to be the lowest cost per tonne.</p> <p>In case two or more bidders have quoted same rate on total landed cost basis, then the successful bidder will be selected through suitable lottery system to be decided by SCCL.</p>

Note1:

Even though the bidders meet the qualifying criteria, they are subject to be disqualified if they have:

- a. Made misleading or false representations in the forms, statements and

attachments submitted in proof of the qualification requirements; and/or

- b. Record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.
- c. Having negative net-worth in any one of the past three years (based on audited accounts submitted).

Non response to the conditions regarding qualifying requirements & submission of online Tender in the prescribed mode will be considered as “non responsive tender”.

Note2:

A. In case where the Bidder is a **Joint Venture Company**, Joint Venture Company shall comply with the following:

- i) Documentary evidence (Certificate of registration) of formation of the joint venture company must be included with the bid.
- ii) The bid shall include all the information regarding capability, experience as required for a bidder for each partner. For the purpose of eligibility criteria, credentials of the members of a joint venture company will be considered collectively.
- iii) A member of one Joint Venture Company cannot participate in this NIT as a member in any other Joint Venture Company, in which case, all such JV Companies shall be declared disqualified.

Separate bid by a member of a Joint Venture company will not be accepted.

B. In case where the Bidder is a **Bidding Consortium or Joint Venture (JV)**, the Bidder has to furnish a legally enforceable Joint Operating Agreement (JOA) executed between the Lead member and other members of the Bidding Consortium at bidding stage, as per the format A1 enclosed to the NIT document. The number of executants of the JOA shall not exceed three including the Bidder.

The bidders of JV/Consortium nature are required to furnish the legally enforceable Joint Operating Agreement in original within 6 working days from the date of tender closing. Such agreement shall not be modified amended and / or superseded by any agreement, deed or document by the Consortium members.

However, in case the work/service is awarded to a joint venture/consortium participating in the tender, they have to submit VAT, PAN and Service Tax registrations (as applicable in the tender and for the bidder status) on the name of the Joint Venture/Consortium after award of the work/service at the time of execution of Agreement/before the payment of first running on account bill.

The conditions preceding evaluation of the technical and financial capabilities of the Bidders shall be carried out based on the procedure stated below.

The Bidder can submit his Proposal for proposed work as a Single Bidder, a Bidding Consortium/JV, or a Joint Venture company.

In case, Bidder is a Single Company, all the financial and technical criteria shall be met by it self.

In case the Bidder is a Consortium/JV, the technical criteria can be met by any of the members but the turnover and net worth of the Lead member of the Consortium alone shall be considered for meeting financial criteria as per Qualifying Requirements.

“Bidder/ Bidding Company” means

“Bidder/ Bidding Company” shall mean the single registered corporate entity or Joint Venture or consortium of companies that has submitted its Bid in response to this NIT. In case Bidder is Joint Venture, it shall be formed by maximum of three partners. However, a company in the JV cannot participate in this NIT as a member in any other JV, in which case, all such JV Companies shall be declared disqualified. Bidder includes a single entity, a JV and a Bidding consortium, who is participating in this bidding process.

“Bidding Consortium/JV”: If the Bid for the proposed work has been made by more than one company, then this group of companies is referred to as the Bidding Consortium/JV. Bidding Consortium/JV can be of maximum three members.

“Member in Bidding Consortium/JV”: Each individual company in the Bidding Consortium/JV is referred to as a Member in the Bidding Consortium/JV. A member in the Bidding consortium/JV cannot participate in this NIT as a member in any other Bidding Consortium/JV, in which case, all such consortiums shall be declared disqualified.

“Lead Member of the Bidding Consortium/JV: “Lead Member” in case of Bidding Consortium/JV shall mean the member of the Consortium/JV who is so designated by the Bidding Consortium/JV Members and meets the financial qualifications for the Consortium/JV. Lead Member in case of a Bidding Consortium/JV shall be the partner who holds at all times a minimum of 51% of the equity/capital of the Bidding Consortium/Joint Venture. All members in the Consortium/JV shall be jointly and severally responsible for all liabilities including financial, legal, environmental and technical liabilities on behalf of the Bidding Consortium/JV.

The bidder should have registered under appropriate Act of India and having registered office in India to carry out its business activities in India and/ or abroad or a Foreign Company having established office in India and complying with Indian laws.

Other details may be obtained from the Detailed Tender Notice contained in the Tender Document.

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CHAPTER-III

DETAILED TENDER DOCUMENT

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DETAILED TENDER DOCUMENT

1.0 BIDDERS TO PERUSE TENDER DOCUMENT:

Before submission of the Tender, the Bidders are requested to make them selves fully conversant with the scope of work, requirements of the system, drawings, technical specifications, terms and conditions and other details furnished in the Tender Document so that no ambiguity arises at a later stage.

2.0 BIDDERS TO INSPECT SITE AND CONSIDER LOCAL CONDITIONS:

The Bidders shall inspect and examine the site and its surroundings and shall obtain and satisfy themselves (so far as is practicable) before submitting their Tenders on the form and nature of the site including lithology of the strata, the quantities and nature of the work, the prevailing ecological conditions, weather conditions, ground conditions, local conditions, availability of raw materials, labour, water, electricity, all necessary information (as above mentioned) regarding the materials necessary for extraction of coal, the means of access to the site, the accommodation that they may require at the site, the facilities to be extended to them and the difficulties likely to be encountered by them during the execution of the work, the risks, contingencies and other circumstances which may influence or affect their Tenders before quoting for the work.

The Bidders shall also make themselves aware of all their responsibilities, the facilities likely to be extended to them during the execution of the work, the rules and regulations of all statutory bodies and local Government bodies which shall be required to be complied with during the execution of the work.

The Bidders shall confirm that they have visited the site and have made themselves aware of the entire local and statutory conditions and other information likely to influence or effect their offers as per the format given in Appendix-1

3.0 BIDDERS TO BE AWARE OF MARKET PRICES:

The Bidders shall make themselves fully aware of the prevailing market prices of different materials, equipment and accessories, labour costs, etc, in regard to the proposed work. Ignorance on this account shall not be taken to be an excuse by the Bidders for price deviations or delays in filling the Tenders or at any stage thereafter.

4.0 BIDDERS TO QUOTE SPECIFIC RATES:

Every Bidder is expected, before quoting his rates, to study closely the requirements of materials/workmanship and specifications listed under various clauses of the Tender Document. He shall quote specific rates in Indian Rupees for tonne of coal extracted as per the given scope of work . The rates shall be written both in words and figures and units in words. In the event of any discrepancy between the description in words and figures, the description in words shall prevail. The rates for the work shall be inclusive of all incidentals, overheads, Octroi, duties, leads, lifts, carriage, tools, plants, etc., as required for the execution and completion of the work.

5.0 EVALUATION CRITERIA

The status of technically and commercially qualified bids shall be evaluated on Landed cost basis. The bidders shall quote for:

- i) Rate per tonne of coal extracted as per scope of the work, technical specification and other provisions indicated in the NIT for entire period of the contract.
- ii) Service tax, SBC & KKC at applicable rate

SCCL will award the Contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined to be the lowest cost per tonne.

In case two or more bidders have quoted same rate on total landed cost basis, then the successful bidder will be selected through suitable lottery system to be decided by SCCL.

6.0 Negotiations

- 6.1 Negotiations shall be held on the date and at the address, which shall be intimated after the opening of price bid (Financial Proposal). The aim is to mutually agree on all points and sign the Project Agreement.
- 6.2 Negotiations shall include a discussion on the Draft Project Agreement, Technical Proposal, the proposed methodology (work plan), and staffing. SCCL and Bidder called for negotiation shall then work out final staffing, and bar charts indicating activities, staff, periods in the field and in the home office, staff-months, logistics, and reporting. The agreed work plan shall then be incorporated in the "Description of Services" and form part of the Project Agreement. After the negotiations, Project Agreement shall be signed with the successful bidder.
- 6.3 In the case of disqualification of the L1 declared bidder by SCCL, prior to signing of the Agreement, SCCL at its sole discretion may decide the future course of action regarding the bid process

7.0 DEVIATIONS NOT PERMITTED:

Bidders shall take into consideration all the clauses, instructions, technical specifications, drawings and other details given in various chapters of the Tender Document. No deviation(s), from the stated terms, shall be made by the Bidders for the purpose of the Tender. Bidders making such deviation(s) shall be doing so at their own risk and shall thereby make their bids liable for rejection.

8.0 VALIDITY:

The offers shall be kept valid for a period of 180 days (one hundred and eighty days), from the date of opening of the Technical Part.

The price quoted shall also remain valid for the entire period during which the work shall be carried out with only valid changes being made as provided for by the escalation permitted.

The Bidders shall not, during the said period or within the period extended by mutual consent, revoke, cancel or vary their Tenders or any terms thereof without the consent in writing of the

Company. In case any Bidder violates this clause, the company shall be entitled to forfeit the Earnest Money deposited by him and reject his Tender.

9.0 SUFFICIENCY OF TENDER:

The Bidders shall visit the site and satisfy themselves before submitting the tender and ensure that they have taken into account in their bid in respect of any adverse physical conditions and artificial conditions at the site. No claim shall be made against such conditions or entertained by the Company and for any damage done on account of any circumstances beyond the control of the Company other than by provisions contained in **Clauses 22 & 16.1 of Chapter IV.**

10.0 Submission of documents along with Tender Form

Scanned copies of the following documents duly signed by the bidder should be uploaded:

All bidders shall include the following information and documents with their bids (copies of all documentary evidences are to be duly authenticated by the bidders/ constituted attorney of the bidders with full signature and seal. All signed declarations are to be made in the bidder's letter head.)

- a. Copies of original documents defining the constitution or legal status, place of registration and principal place of business; written power of attorney of signatory of the Bid to commit the bidder.
- b. List of major items of equipment proposed to carry out the contract.
- c. Qualifications and experience of key site management and technical personnel proposed for the contract.
- d. In case the bidder is an OEM or OEM dealer, an Undertaking stating that a team of personnel with minimum 3 years of working experience in long wall technology will be deployed.
- e. Evidence of adequacy of working capital for this Contract (access to lines of credit and availability of other financial resources).
- f. Authority to seek references from the bidder's bankers.
- g. Permanent Income Tax Account No. (PAN). However, in case foreign bidder is participating in the bid and not having PAN No. at the time of submission of bid shall have to submit the same before submission of the bills for first payment provided the foreign bidder becomes the successful bidder.
- h. The bidders would give a declaration that they have not been banned or delisted by any Govt. or Quasi-Govt. agencies or PSU's. If a bidder has been banned by any Govt. or Quasi-Govt. agencies or PSU's that fact must be clearly stated and it may not necessarily be a cause for disqualifying him. If this declaration is not given, the bid will be rejected as non-responsive.
- i. The bidder who participated as consortium must submit original copy of JOA for the formation of consortium. Any bid by a consortium without it is likely to be rejected.
- j. A letter indicating the Bidder's acceptance of the Commercial Terms and Conditions, including terms for execution of works (as per the format given in Annexure-1).
- k. Credentials of the Bidders giving full details of the firm, details of similar works done by them, testimonials etc., for the preceding 5 years ending on 31.03.2016
- l. A technical note illustrating the technology proposed to be adopted in the execution of work and other details **as per clause 10.0 hereof.**
- m. Scanned copy of EMD.
- n. Applicability of various taxes and duties along with income tax PAN No. CST /VAT, Excise Duty, Service Tax Registration number etc

- o. Copies of acknowledgement of returns filed and assessment orders passed by concerned authorities, copies of audited balance sheets for the last five financial years together with particulars specified in Appendix-2.
- p. Documentary proof of financial resources as indicated in Appendix-2.
- q. The required documents as mentioned in Appendix - I to VIII and annexures as required by the tender.
- r. Unpriced BoQ/Price bid.

10.1 Opening of part - I:

Part I i.e. the Technno-Commercial part shall be opened on the date informed in the Tender Notice and, after scrutiny, the Bidders shall be short-listed on the basis of technical evaluation.

10.2 Opening of Part II:

Part II i.e., the Price Bid or BOQ shall be opened later of those Bidders whose offers are technically & commercially acceptable.

10.3 Tender documents Property of the Company:

The Tender Documents submitted by all Bidders shall become the property of the Company and the Company shall be under no obligation to return the same to them.

10.4 No details/clarifications accepted after Tender closing date:

No details/clarifications (technical or pricing) regarding the tender will be accepted by SCCL from the Bidders after the Tender closing date unless the same is specifically requested by the Company.

11.0 TECHNICAL NOTE: (scanned copy to be uploaded online)

The Bidders shall indicate the specification of the Longwall technology and associated equipment as a single package likely to be used by them for the coal extraction work. The Bidders shall also state the details of technical and supervisory personnel they shall employ for supervising the work.

The technology for all the jobs involved including development and depillaring operations, support systems and relevant parameters shall be detailed out in a sequential manner as given below:

- a) Methods statement for all operations, including supporting etc.
- b) Details of executive man power, skilled and semi-skilled manpower for the proposed work.

Further, the following shall also be indicated.

- i) Specifications of Long wall equipment such as Shearer, Powered roof supports ,AFC, BSL and other ancilliary equipment including the details of Gate belt conveyer and connectd electricals.
- ii) Method of extraction and disposal of coal.
- iii) Method of supporting and special /Additional support as and when required. Etc.,
- iv) Equipment to be used for each operation with its safety features and statutory approvals.
- v) Details of the coal evacuation system.

- vi) Proposed working method while change in geo-mining conditions like encountering faults
- vii) Proposed face ventilation system.
- viii) Proposed disposal / pumping of water and drainage system.
- ix) Manpower to be deployed at different stages.
- x) The maximum period required for each operation to enable completion of the panels within the scheduled completion date.
- xi) Any other points related to scope of work

12.0 UNDERTAKING BY BIDDERS:

The signing of the Letter of Bid shall be considered to be an undertaking on the part of the Bidder that he has inspected and examined the site and its surroundings and has obtained and satisfied himself (so far as is practicable) on all conditions applicable to it as per clause 2.0 hereof and has also completely examined and studied the matters that may affect the rates or risks under the Contract. Such signature shall be considered as an undertaking on the part of the Bidder to execute the works in the manner stipulated in the terms and conditions of the Tender Document.

13.0 LIABILITY FOR DISQUALIFICATION:

The Bidders who do not comply fully with these instructions or any other conditions of the Tender Document, which may be applicable, shall render themselves liable for disqualification without notice.

14.0 RIGHT TO POSTPONE AND REJECT TENDERS:

The Company reserves the right to postpone the date of receipt and opening of Tenders without assigning any reason whatsoever. It also reserves the full right to reject any or all Tenders and of accepting or rejecting the whole or any portion of any Tender without assigning any reason whatsoever. It also reserves the right to cancel the Tender at any stage without assigning any reason whatsoever.

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

The Company reserves the right to reject a Tender in which a Bidder deliberately gives any wrong information and creates circumstances for the acceptance of his Tender or to rescind a Contract signed with such a Bidder at any stage.

The Company, at its discretion, has right to accept or reject the tender without assigning any reason, whatsoever, irrespective of the commercial status.

15.0 CONTRACT AGREEMENT:

On receipt of order issued by the Company, the successful Bidder shall have to enter into an agreement in the Company's prescribed form (Appendix-IV) for the due fulfillment of the Contract. The above agreement shall have to be entered between the successful Bidder and the General Manager, Bhupalapalli area within 15 days from the date of receipt of the work order, on a non-judicial stamp paper of INR.100 (Rupees one hundred only).

Failure of the Contractor to accept the Work Order issued by the Company and to enter into the agreement within 15 days from the date of receipt of the work order shall entail cancellation of the order and forfeiture of the Earnest Money deposit.

16.0 SCHEDULE FOR COMPLETION:

Longwall Projection Plans:

Seam	Reserves in MT
1 Seam	4.7
2 Bottom	4.9
III Seam	2.5
Total	12.1

16.1 Time for completion

Longwall Production Schedule

Year	I & IIB SEAMS	III SEAM	TOTAL
	Production in LT	Production (LT)	Production in LT
1	7.50	--	7.50
2	7.22	--	7.22
3	8.33	--	8.33
4	7.13	--	7.13
5	8.15	--	8.15
6	6.88	--	6.28
7	9.07	--	9.07
8	6.85	--	6.85
9	8.99	--	8.99
10	11.23	--	11.23
11	6.32	--	5.72
12	8.32	--	8.32
13	--	9.23	9.23
14	--	8.54	8.54
15	--	7.21	7.21
Total	95.99	24.98	120.97

16.2 Delivery of Coal

- (i) The successful bidder shall deliver the Annual Contracted Quantity (“**ACQ**”) of Coal as per the clause 15.1 above. A maximum period of four (4) months shall be allowed for one capital overhaul of entire Long wall package. The period of respective APP, in which the capital overhaul is taken up, shall be extended to the extent of such capital overhaul period

In case of shortfall in ACQ, in that APP after extension as above, penalty is applicable as per clause **no.5.4.2 of Chapter-IV**.

- (ii) At least 60 (sixty) days before any Operating Year, SCCL shall intimate the contractor of the quantity of Coal to be transferred to SCCL in such operating year provided that SCCL may increase or decrease the ACQ for any operating year by 10% from the quantity agreed for the respective year. The agreed ACQ upto +/- 10% of original ACQ shall be the "ACQ" for that year. However, the net effect of such changes in ACQs shall be limited to +/-10% the total guaranteed production of the contract i.e., 121.00 LT
- (iii) The contractor may also alter ACQ to be delivered in an Operating Year by giving at least 60 days notice to SCCL. Such a notice may be served provided that the contractor may not increase or decrease the ACQ by more than 10% (ten percent) in an Operating Year. Any deviation resulting in lower delivery of Coal by the contractor than the permitted 10% deviation shall attract Penalties as described in Clause No.5.4.2 of chapter-IV. However, the excess coal delivered over and above the ACQ will be carried forward to subsequent Operating years for the purpose of application of penalties as described in Clause no.5.4.2.

17.0 Cleaning of Work Site.

On completion of the work, all debris and waste materials shall be removed by the Contractor at his own expense and the site to be handed over to the Company shall be cleaned to the satisfaction of the concerned Area GM.

The Contractor shall there upon intimate the Company officially of having completed the work as per Contract.

18.0 SUBLETTING:

The Contractor shall not sub-let the whole of the works. Further, except where otherwise provided by the Contract, the Contractor shall not sub-let any part of the works without the prior written consent of the GM, Bhupalapalli area. Such consent, if given, shall not relieve the Contractor from any liability or obligation under the Contract and he shall be responsible for the acts, defaults and neglects of any Sub-Contractor, his agents, servants or workmen as fully as if they were the acts, defaults or neglects of the contractor, his agents, servants or workmen. Provided that, the provision of Labour on a piece rate shall not be deemed to be a sub-letting under this clause.

19.0 LAW GOVERNING CONTRACT:

The Contract shall be governed by the law and statutory regulations, as is applicable to Coal Mines in India, and shall be construed in accordance thereto.

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CHAPTER-IV

GENERAL TERMS AND CONDITIONS

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- 19.2 Cessation of Company's Liability
- 20.0 CANCELLATION, TERMINATION AND SUSPENSION OF CONTRACT**
- 20.1 Payment on Cancellation or Termination of Contract
- 20.2 Suspension of Work
- 20.3 Recoveries
- 21.0 FORECLOSURE OF THE CONTRACT**
- 22.0 FORCE MAJEURE**
- 23.0 FOSSILS, VALUABLE TREES, ETC.**

GENERAL TERMS AND CONDITIONS

1.0 DEFINITIONS:

In the Contract (as hereinafter defined) the following words and expressions shall have the meaning hereby assigned to them except where the Contract requires otherwise.

- i) **“Accepting Authority”**: - means 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.
- ii) **“Company”** or **“SCCL”** or **“The S.C.Co.Ltd.”** means The Singareni Collieries Company Limited. P.O. Bhupalpalli Collieries (Pin. 507 101), Telangana, which shall employ the Contractor and within whose jurisdiction the is situated and the legal successors in title to the Company

The Company shall be represented by the following:

- a) **Prior to the award of the Contract:**
By The General Manager, Material Procurement Department,
The S.C.Co.Ltd., P.O. Bhupalpalli Collieries, Pin 507 101, Telangana
Hereinafter referred to as GM (MP)
- b) **After the award of the Contract:**
By The General Manager, **Bhupalapalli area.**
P.O. General Manager Office, Bhupalapalli, Telangana,
Hereinafter referred to as GM, Bhupalapalli area.
- iii) **“Contract”** shall mean the notice inviting tender, the tender as accepted by the company and the formal agreement executed between the company and the Successful bidder together with the documents referred to therein including conditions of contract, special conditions, if any, specifications, designs & drawings including those to be submitted during progress of work, scope of work with rates and amounts.
- iv) **"Contract period"** shall start from the date of commencement of contract and include fifteen APPs of cumulative coal production starting within Twelve months from the date of issuance of Letter of Acceptance (LOA) and shall continue upto three months from last full and final payment released by SCCL to the Contractor after issue of contract completion certificate by SCCL.
- v) **“Contractor/Contractors”** – means the successful Bidder/Bidders who has /have deposited the necessary Earnest Money and has/have been given written intimation about the acceptance of Tender through the letter of acceptance and shall include authorized representative of such individual or persons composing a firm or a Company or the successors of such individual, firm or Company, as the case may be. The Contractor or his representative is treated throughout the Contract Document as if he was a single person.

The existing laws in the area where the contract work is undertaken will be applicable to the Contractor.
- vi) **"Contract Price"** is the amount in INR equal to the product of "Quoted price per tonne of coal" and "sum of the minimum guaranteed production of all APPs in tonnes". It is not the total amount payable to the Contractor which will be dependant of amount of coal produced.

- vii) **“Annualized Contract Value”** – means, the total sum arrived as under:
(“Contract amount ”/ contract APPs i.e., 15 years).
- viii) **“Agreement”** shall mean the agreement as may be entered into between SCCL and the Bidder selected through this competitive bidding process, for execution of the tendered work (“Work”)
- ix) **“Day”** – means a day of 24 hours from midnight (00.00 hours) of the particular day to midnight (24.00 hours) of the next day.
- x) **“Drawings”** – means the drawings referred to in the specifications and any modifications of such drawings approved in writing by the GM, Bhupalapalli area or Agent, KTK.5 incline, Bhupalapalli and such other drawings as may from time to time be furnished or approved in writing by the GM, Bhupalapalli area or Agent, PTK.5 incline, Bhupalapalli .
- xi) **“General Manager, Bhupalapalli area”**– means the General Manager employed by “The Singareni Collieries Company Limited”, incharge of Bhupalapalli area of “The Singareni Collieries Company Limited, abbreviated as GM, Bhupalapalli area, and means the officer authorized and appointed in writing by the Company to act as General Manager, Bhupalapalli Area for the purpose of the Contract.
- xii) **“Letter of Acceptance of Tender”** – means the letter issued by the Company giving intimation to the Bidder that his Tender has been accepted in accordance with the provisions contained in that letter.
- xiii) **“Materials”** – means the materials to be provided by the Contractor and material to be provided by the Company in accordance with the Contract.
- xiv) **“Owner”** – means The Singareni Collieries Company Limited.
- xv) **“Paying Authority”** – means any person who is appointed by the Company from time to time as Paying Authority for the work under the contract, the Contractor being intimated in writing of same by the Company.
- xvi) **“Representative”**– means any resident assistant to the GM, Bhupalapalli area appointed from time to time as GM, Bhupalapalli area’s representative for the Contract with the Contractor being intimated in writing of the same by the GM, Bhupalapalli area. The GM, Bhupalapalli area’s representative (The Agent, KTK.5 incline of Bhupalapalli, unless otherwise informed) shall be entitled to perform any of the powers and authorities of the GM., Bhupalapalli area vested in him by the latter. The GM. Bhupalapalli area’s Representative is treated throughout the Contract Document as if he was single person.
- xvii) **“Statutory personnel”** – means any person or official possessing required qualification and experience required as per DGMS stipulations to carryout statutory inspections under CMR, 1957, Mines Rules, 1966 and Mines Act, 1952.
- xviii) **“Schedule of Rates”** – means the standard schedule of rates prescribed by the Company and the amendments thereof issued by it from time to time.
- xix) **“Work Site/ Site”** – means the lands and other places on, under, in surface or underground in/through which the works are to be executed or carried out and any

other lands or places provided by the Company for working space or any other purpose of the Contract together with such other places as may be specifically designated in the Contract as forming part of the work site/site.

- xx) **“Sub-contract”** – means the person or persons to whom any part of the Contract has been sublet with the consent in writing of the GM, Bhupalapalli area and includes their authorized representatives, successors and permitted assignees. Sub-Contractor includes only those having a direct contract with the Contractor.

The existing laws in the area where the Contract work is undertaken will be applicable to the Sub-Contractor. However, the MOU entered by a PSU shall not be considered as sub-contracting.

- xxi) **“Temporary Works”** – means all temporary works of every kind required in or about the execution, completion or maintenance of the works.
- xxii) **“Work”** - means the works required to be executed in accordance with the Work Order or parts thereof as the case may be and shall include all extra or additional, altered or substituted works or any work of emergent nature, which, in the opinion of the GM, Bhupalapalli area or Agent, KTK.5incline, Bhupalapalli has become necessary during the progress of the works to obviate any risk or accident or failure or become necessary for security.

“Work” of the Contractor or Sub-Contractor includes Labour or material or both.

- xxiii) **“Written Notice”** – means 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 Contractor’s firm or to an officer of the Company or Corporation for whom it is intended, or if delivered to or sent by registered mail/courier service to the last business address known to him who gives the notice.
- xxiv) **“Management Committee”** means the committee formed for smooth execution of the contract which shall comprise the representatives of SCCL and the successful bidder. The Management Committee shall be formed before signing of contract agreement. The Management Committee shall function at three levels viz., mine level, area level and corporate level.

Issues pertaining to site plans, specifications, measurements, manner of execution or anything connected with the work, not specifically provided for herein under or in respect of meaning of any clause of the terms and conditions of order/agreement or any disputes arising during the execution of the contract shall be referred to the Management Committee.

- xxv) **“Bidder’/ Bidding Company” means**
“Bidder/ Bidding Company” shall mean the single registered corporate entity or Joint Venture or consortium of companies that has submitted its Bid in response to this NIT. In case Bidder is Joint Venture, it shall be formed by maximum of three partners. However, a company in the JV cannot participate in this NIT as a member in any other JV, in which case, all such JV Companies shall be declared disqualified. Bidder includes a single entity, a JV and a Bidding consortium, who is participating in this bidding process

“Bidding Consortium/JV”: If the Bid for the proposed work has been made by more than one company, then this group of companies is referred to as the Bidding Consortium/JV. Bidding Consortium/JV can be of maximum three members.

“Member in Bidding Consortium/JV”: Each individual company in the Bidding Consortium/JV is referred to as a Member in the Bidding Consortium/JV. A member in the Bidding consortium/JV cannot participate in this NIT as a member in any other Bidding Consortium/JV, in which case, all such consortiums shall be declared disqualified.

“Lead Member of the Bidding Consortium/JV: “Lead Member” in case of Bidding Consortium/JV shall mean the member of the Consortium/JV who is so designated by the Bidding Consortium/JV Members and meets the financial qualifications for the Consortium/JV. Lead Member in case of a Bidding Consortium/JV shall be the partner who holds at all times a minimum of 51% of the equity/capital of the Bidding Consortium/Joint Venture. All members in the Consortium/JV shall be jointly and severally responsible for all liabilities including financial, legal, environmental and technical liabilities on behalf of the Bidding Consortium/JV.

xxvi) **“ROM Coal”** means Run of Mine coal from the KTK5 Longwall Project;

xxvii) **“Sampling Standards”** means sampling and testing standards for Coal in accordance with the procedure laid down in BIS (436 Part I / Sec 1), 1964, for Manual Sampling , BIS (436 Part I / Sec 2), 1976, for Mechanical Sampling and BIS (1350 Part I), II revision, 1984, for Proximate Analysis respectively. Method of **sampling** shall be decided by SCCL.

xxviii) **“Site Strikes”** means any strike or other industrial action which materially affects the ability to perform the Work;

***“Standard mining conditions”** means the set of mining conditions under which the contract is expected to be executed by the successful bidder. The standard mining conditions are detailed in as Chapter- IX. The rated output and the application of penalties shall be governed by the standard mining conditions specified and relief shall be extended, as applicable and specified in the Chapter-IX.*

In case of any doubt on whether a condition or event falls under the scope of the standard mining conditions or not the same shall be referred to the management committee for decision.

xxix) **“Sub-Contractor”** means TPO’s sub-contractor approved by SCCL.

xxx) **“Technical Information”** means all copyright, patents, designs or other intellectual property rights, techniques, process and know how of SCCL or TPO as the case may be.

xxxi) **“Bank Guarantee”** shall mean the Bank Guarantee to be provided by the bidder to SCCL.

xxxii) **“Date of commencement of Contract”** shall mean the date of issuance of the ‘Letter of Acceptance’.

xxxiii) **“DGMS”** means Directorate General of Mines Safety, the Indian Government Regulatory agency for safety in mines and oil-fields.

- xxxiv) **“Certified (First and Second Class) Manager”** means the person **nominated** by SCCL in accordance with the requirements of Applicable Laws and Regulations, and is in sole charge, subject to the direction, supervision and policies of SCCL and the provisions of this NIT/Project Agreement;
- xxxv) **“Development”** means the extraction of series of roadways parallel to each other and also at angles forming blocks of coal to support super-incumbent strata, in order that their network reach pre-determined boundary.
- xxxvi) **“District” or “Panel”** means independent blocks of coal connected at one end to the main arterial transport and ventilation networks and at the other end extending up to the boundary or barrier of the adjacent district with the barrier extending on the other two sides of the district. The district is as such an independent production unit in an underground mine.
- xxxvii) **“Final Acceptance”** shall mean the owner’s written acceptance of the works performed under the contract after successful completion.
- xxxviii) **“Longwall Technology”** shall mean Shearer along with Powered roof supports, AFC,BSL along with all allied equipment, electricals including Gate end boxes and connected cables etc., used for execution of the present contract shall be deemed as Long wall Technology. All the above equipments of the Long wall technology should be of electrically driven.
- xxxix) **“Designated transfer point” means the point on surface within 100m of pit mouth, but before storage bunker where TPO shall transfer the coal to SCCL under this agreement. SCCL owned automatic belt weighing machine shall be installed at this transfer point to weigh the weight of the coal transferred to SCCL**
- xl) **“Base date” is the reference date for application of annual price escalation. The tender closing date shall be the base date.**
- xli) **“BCM (bcm)”** means bank cubic metre.
- xlii) **“BIS”** means the Bureau of Indian Standards or any successor or any other similar organization mutually agreed to by the Parties, which performs substantially the same role as that currently performed by the Bureau of Indian Standards
- xliii) **“Month”** shall mean a calendar month according to the Gregorian calendar.
- xliv) **“Quarter”** means a period of 3 consecutive months starting from 1st day of the month till the last day of the 3rd consecutive month. For eg: 1st April to 30th June.
- However, if the contract commences in the middle of the month, then the 1st quarter will be from the date of commencement till the last day of the 4th consecutive month thereafter.
- xlvi) **“Annual Contracted Quantity” or “ACQ”** means the quantity of Coal to be delivered annually by the successful bidder to SCCL which shall be equal to the quantity specified in clause 15 of Chapter-III for the respective APP(s).

- xlvi) “Quarterly Contracted Quantity” or “QCQ” is the quantity of coal to be delivered by the successful bidder at designated delivery point in an operating quarter.
- xlvii) “**Annual Production Period**” (APP) shall mean 305 working days starting from 1st day of the succeeding month immediately following the date of commencement of production with Long wall Equipment. In case of stoppages for which SCCL is responsible and for the reasons stated in standard mining conditions indicated at chapter IX , working weekly rest days and public holidays will be allowed to compensate such stoppages. Stoppages of less than half an hour shall be disregarded entirely for the purpose of accumulation. One day of additional work shall be allowed for every 20 hrs. of stoppages accumulated. The actual hours worked on any Sunday or a Public holiday will reduce the accumulated hours of stoppages on ‘hour by hour’ basis. However, if there are no accumulated working hours lost and still weekly rest days and public holidays are allowed to work with mutual consent the same will be treated as working day for the purpose of Production. Every APP therefore shall last for 305 working days from commencement plus any extensions as provided in the sub clause till accumulated hours of stoppages are made zero. Each of the subsequent APPs shall commence on the expiry of the previous APP.

However, In case of stoppages for which the contractor is responsible, working on weekly rest days and public holidays will not be allowed to compensate such stoppages

Time required for shifting of the equipments from one longwall panel to another longwall panel , time period required in shifting the equipments from one seam to another seam and time period required for overhauling the equipments shall not be included in the APP.

- xlvi) 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 Contract execution.
- xlix) “Mine Safety Management Plan” means the mine safety management plan as approved by the Colliery Manager in accordance with Coal Mines Regulations 1957 (CMR 1957) which shall comprise of standing order / safe operating procedures for various equipment deployed by the successful bidder and various activities incidental to the execution of the contract..
- i) “**Depillaring**” means extraction of coal blocks formed after development of gate road ways with a reasonable percentage of recovery of coal, leaving void underground. The method of depillaring extraction should be approved in writing by DGMS.
- ii) “**Specification**” shall mean the technical specifications forming a part of the contract and such other schedules and drawings as may be mutually agreed upon.

2.0 DISCREPANCIES IN TENDER DOCUMENT & ADJUSTMENTS THEREOF:

If any discrepancies are detected in any Tender submitted by any Bidder between/in:

- i) The description in words and figures, the rate which corresponds to the words quoted by the bidder shall be taken to be correct.
- ii) The amount quoted by the bidder due to a calculation mistake in the product of any unit rate and quantity, the unit rate quoted by the bidder shall be regarded as firm and the incorrect amount corrected.

- iii) The totaling or carrying forward in the amount quoted by the bidder, the same shall be corrected.

The tendered sum so corrected and altered shall be substantiated for the sum originally tendered and considered for acceptance in the letter of intent instead of the original sum quoted by the Bidder along with the other Tender/Tenders. Rounding off to the nearest rupee shall be done in the final summary of the amount rather than in totals of various sections of the offer.

Further, after the award of the work, except for and to the extent otherwise specifically provided by the contract, the provisions of the Tender Document and General Terms & Conditions shall prevail over those of any other part of the Contract regarding any provisions other than technical specifications and quantities. However, in case of any ambiguities or discrepancies remaining in the Contract Documents during the execution of the work, the same shall be explained and adjusted by the Agent, KTK.5 Incline, BHP and who shall thereupon issue to the Contractor instructions regarding the manner in which the work is to be carried out.

3.0 SECURITY DEPOSIT

Security Deposit is the guarantee kept with the Company during the contract period. Security deposit is intended to secure the performance of the entire Contract. Security Deposit shall consist of two parts;

- i) Performance Bank Guarantee to be submitted on award of work as mentioned at clause no.12 of Chapter – I and
- ii) Retention Money / Further Security Deposit (FSD).

The security deposit shall bear no interest. The EMD paid by the successful Bidder shall be returned by the company on submission of PBG as detailed at **clause no.12 of Chapter-I**. 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 EMD.

3.1 Retention Money shall be deducted to the extent of 1 % from running bills.

3.2 Refund of the Security Deposit

Performance Bank Guarantee shall be refunded within 60 days of the issue of Contract completion certificate by SCCL and the Retention Money will be refunded annually as mentioned **at clause no.11.3 of this chapter**. The refund of Performance bank guarantee and Retention money shall be subject to company's right to deduct/ appropriate its dues against the Contractor under this contract or under any other contract.

3.3 Liberty to Deduct Dues:

The security deposit shall remain at the disposal of the Company as security for the satisfactory execution and completion of the work in accordance with the terms and conditions and technical specifications specified in the Tender Document and the Work Order.

In the event of failure by the Contractor to fulfill the Contract requirements, the Company shall be at liberty to deduct/appropriate from the Security Deposit such sums which 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 be restored by further deduction from the Contractor's subsequent running on account bills, if any.

In the event of invoking of Bank Guarantee due to any reasons what so ever, the same shall be replenished within 15 days of invocation.

The refund of the 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 and shall be also governed by **clause 3.2 & 11.8 hereof**.

4.0 SCOPE AND TIME SCHEDULE OF WORK:

The scope and time schedule of work in detail is given in **Chapter-VI** of this Tender Document.

5.0 SCHEDULE OF WORKS, EXTENSION THEREOF, DEFAULTS & PENALTIES:

5.1 Schedule of Works:

Time is the essence of the Contract and as such all works shall be completed within the time stipulated in the Tender Document.

i) Date of Commencement:

- a. The successful Bidder shall commence the work by deploying all brand new & unused Long wall equipment and its ancillaries within 18 months (Eighteen months) from the date of Letter of Acceptance (LOA).

ii) Period for Completion of work:

Period of contract:

The period of Contract, unless extended, will be 16 ½ years from the date of letter of Acceptance (LoA) or 15 years from the date of start of production of Coal or till completion of extraction of 121.00 Lakh tonnes of coal, whichever is earlier.

iii) Date of completion

The date of completion of contract shall be deemed to be the date on which:

- a) The Company is officially intimated of the completion of work and
- b) The Agent, KTK.5 incline accepts the same as being completed as per the scope of work, which would be deemed to include all the variations required/permitted to be made by them.

5.2 Programme to be furnished:

Within 30 (thirty) days of the date of issue of the Letter of Acceptance, the Contractor shall furnish to the GM, Bhupalapalli area and obtain his approval for detailed production schedule of activities or Annual operation Plan for the entire contract period for achieving the total guaranteed production duly incorporating month-wise, quarter wise (QCQ) and year wise targeted coal production (ACQ). The schedule submitted by the Contractor, along with any adjustments thereof as may be suggested by the GM, Bhupalapalli area, shall be the mutually agreed schedule and that will form part of the contract.

The Contractor shall submit detailed particulars, in writing, of the Contractor's arrangements for the carrying out of the whole work, or any part thereof, and the initial installation/construction period together with its approvals/exemptions & Test certificates and Temporary Works which he intends to supply, use or construct, as the case may be, whenever so required of him by the GM, Bhupalapalli area or Agent, KTK.5 incline.

The submission to and approval by the GM, Bhupalapalli area or Agent, KTK.5 incline of such a work schedule or the furnishing of such particulars, of various arrangements shall not relieve the Contractor of any of his duties or responsibilities under the Contract.

5.3 Extension of time of Completion:

The events that shall fairly entitle the Contractor to request the company for an extension of time are as follows:

- i) Force Majeure as per clause 22.0 hereof
- ii) Serious loss or damage by fire.
- iii) Non-availability of stores, which is the responsibility of the Company to supply, as per Contract.
- iv) Delay on the part of the contractors or tradesman engaged by the Company, not forming part of the Contract, holding up further progress of the work.
- v) Delay in supply of tools and plant to be made available by the Company.
- vi) Any modified or additional work:
The time for completion as per the original contract 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 GM, Bhupalapalli area.
- vii) Suspension of work, if the works are suspended for any reason other than any default on the part of the Contractor.
- viii) Any other causes which, at the sole discretion of the GM; Bhupalapalli area is beyond the control of the Contractor.

A Site Register shall be maintained by both the Agent, KTK.5 incline, Bhupalapalli and the Contractor at the site to record various hindrances, as stated above, encountered during the course of the works.

The Contractor shall request the Company in writing for extension of time within 15 (fifteen) days of the happening of such event causing delay stating, also, the period for which extension is required. The Company may, considering the genuinity of the request, grant a reasonable extension of time for the completion of the work. Such extension shall be communicated to the Contractor in writing by the GM, Bhupalapalli area within 30 (thirty) days of the date of the receipt of such request.

The decision of the GM, Bhupalapalli area, about whether the grounds shown for the extension of time are reasonable or not, shall be final.

Provisional extension of time may also be granted by the GM, Bhupalapalli Area during the course of the work, on written request for extension of time within 30 (thirty) days of happening of such events as stated above, reserving the Company's right to impose/waive penalty at the time of granting final extension of time as per the Contractual terms. 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 of both. The extension shall have to be by both parties agreement, express or implied.

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 GM, Bhupalapalli area or Agent, KTK.5incline, Bhupalapalli .

5.4 Liquidated Damages for Defaults:

5.4.1 For Delay in Commencing Works

If the Contractor, without reasonable cause or valid reasons, commits default in commencing the execution of the work within the aforesaid time limit, 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, to forfeit the Earnest Money/Security Deposit amount and to rescind the Letter of acceptance / Work Order.

5.4.2 For shortfall in production

In case, the Contractor fails to extract the agreed quarterly contracted quantity (which shall be proportionate to guaranteed ACQ as per the mutually agreed schedules submitted vide **clause 5.2** hereof), SCCL shall impose commitment charges / Liquidated Damages for the shortfall in production below the level of 90% of the targetted annual production @ **10%** of order price per ton on the shortfall of production.

- 5.4.3 a) The aggregate of such **commitment charges / Liquidated Damages** shall not exceed 15 %(fifteen per cent) of the total contract value.)
- b) SCCL shall adjust the amount of commitment charges / Liquidated Damages against the bills submitted by the Contractor and/or any payment to be made to the contractor by ECL. SCCL will also be at liberty to encash the performance bank guarantee provided by the Contractor for realizing the commitment charges / Liquidated Damages and the said amount shall be replenished subsequently by the contractor.
- c) The Company may, without prejudice to any other method of recovery, deduct such amount from any money due to or which may become due to the Contractor in other works being executed at SCCL. The deduction of such an amount shall not relieve the Contractor from his obligation to complete the works or from any other of his obligations and liabilities under the Contract.
- d) Commitment charges / Liquidated Damages shall be for the delays directly attributable to the Contractor and exempted for force majeure conditions vide **clause 22 hereof**, subject to documentary evidence.
- e) If the total guaranteed production is completed within the scheduled completion period, including force majeure conditions, the penalties so recovered will be refunded along with the final bill.
- f) In case the work is completed during the extended period with penalties, the penalties so recovered will not be refunded.

5.5 Waiving off of Penalties:

The Company may, at its sole discretion, waive the penalty **imposed** on a request received from the Contractor, indicating valid and acceptable reasons, if the entire work is completed within the date as specified in Contract/work Order or validity extended date. In the case of such waiver, if any amount has already been deducted from the Contractor, the same shall be refunded along with the final payment **as per clause 11.8**. Such refunded amount shall, however, not carry any interest.

5.6 Engaging other agencies:

If the progress of the work or of any part of the work as per clause 5.2 is unsatisfactory, after giving the Contractor 15 days' notice in writing, to complete the backlog / residual work, and the contractor failing to do so, GM, Bhupalapalli area shall be entitled to arrange, either wholly or partly, by employing another Agency for the job, even at higher rate, or by workmen of the Company debiting the total cost involved in engaging one or more Agencies for the job or in executing the work by workmen of the Company, as the case may be, to the Contractor. The GM, Bhupalapalli area's decision regarding the quantum of cost for the work so done, even if it is more than the Contractor's agreement value for the work, and the certificate issued by him for the purpose shall be final and conclusive.

6 INSURANCE:

6.1 Insurance against accident to workmen:

The Contractor shall, at all times during the currency of the Contract, indemnify the Company against all claims, damages or compensation in consequence of any accident or injury to any workman or other person in the employment of the Contractor/ any sub-contractor in the Contractor's employment, under the provision of the Workmen's compensation Act or any other law relating thereto and shall take out an insurance policy covering all risks, claims damages, compensation, proceedings, cost charges and expenses, whatsoever in respect thereof, payable under the same.

Provided always that in respect of any persons employed by any sub-Contractor in the Contractor's employment, the Contractor's obligation to insure as aforesaid under this sub-clause shall be satisfied if the sub-contractor has insured such that all the Contractor's obligation under this clause are fulfilled.

The Company shall not be bound to contest any claim made against it under section 12, sub-section (1) of the Workmen's Compensation Act, except on the written request of the Contractor or upon his giving to the company full security for all costs for which the company might become liable, in consequence of contesting such claim.

6.2 Insurance Policies to be pledged/ shown to the Company

The Contractor shall take out the various insurance policies required vide this clause with an insurer in India in terms approved by the Company (such approval shall not be unreasonably withheld). He shall deposit with the company the insurance policy (ies) required vide clause 6.1 and the other policies required vide this clause and also receipts of all such insurance policies.

The Contractor shall ensure that the insurance policies are kept alive till the full expiry of the Contract by timely payment of premium and are not to be cancelled without the approval of the Company. A provision to this effect shall be made in all insurance policies taken out by him and similar insurance policies taken out by his sub-contractors, if any. The cost premia shall be done by the Contractor or his sub-contractors, as the case may be, and they shall be deemed to have been included in the tendered rate.

6.3 Remedy on Contractor's failure to insure:

In the event of Contractor's failure to effect and keep in force any of the insurance policies referred to hereof or any other insurance which he may be required to effect under the terms of the Contract then, and in any such cases, the Company can effect and keep in force any such insurance policies and pay such premium or premia as may be necessary for the purpose and from time to time deduct the aforesaid amount so paid by the Company from any

moneys which may become due to the Contractor or recover the same as a debt due from the Contractor.

7.0 PLANT, MATERIALS & OTHER FACILITIES:

The Contractor shall be solely responsible to arrange, supply and provide, at his own expense, all the installation works, construction works, temporary works, stores and materials (both for temporary and permanent works), save as mentioned hereunder, labour (including the supervision thereof), transport to or from the site and in and about the works and other things of every kind required for carrying out extraction of coal. This contract is to include all labour, material, moulds, tools, implements, consumables/spares for maintenance and every other thing necessary for carrying on and completing the extraction of guaranteed quantity in conformity with the plans and specifications (herewith attached) and with such additional drawings descriptions and instructions as may from time to time be furnished while work is in progress.

Provided that,

- The equipment and machinery used for each operation should conform to stipulations as per DGMS requirements and also as per relevant conditions mentioned in Coal Mines Regulations, 1957 and other laws applicable to coal mines.
- The contractor should use only DGMS approved equipments complying with all the requirements.
- All the electrical installations shall satisfy the requirements of CEAR, 2010 (Central Electricity Authority Regulations, 2010)
- The contractor shall also arrange to obtain necessary approvals / exemptions required for execution of the works, from DGMS / other statutory authorities.
- SCCL shall provide necessary possible assistance.

The Company does not undertake any responsibility for the supply of any materials to the contractor except for certain specified items, at the rate indicated there in. The materials to be supplied by the Company shall be issued at the main stores, colliery stores/ stockyard only. Any damage or loss of the equipment supplied by SCCL during execution of work, the loss should be borne by the contractor either by way of repairing damaged equipment **to the satisfaction of SCCL** or replacing the same with new equipment.

7.1 Plant, temporary works & materials:

i) Purchase/Supply of Long wall by Contactor

Contractor has to purchase and operate Long wall along with its back up arrangements, accessories, electrical and spares for execution of the contract.

The Long wall along with its back up arrangements, accessories, electricals and spares which is to be purchased or supplied by the Contractor shall be suitable to work as per the technical specification and scope given in this Tender document.

The back up arrangements should be of matching capacity which include Shearer, Powered roof supports ,AFC ,BSL and other ancilliaries ,other Electricals including Gate end boxes and connected cables etc.

All the above equipments of the Longwall package should be of electrically driven.

ii) Exclusive use of plant, etc., for the works.

All the installation works, construction works, temporary works, **plant and** materials provided by the Contractor (such as Shearer, Powered roof supports ,AFC ,BSL and other ancillaries ,other Electricals including Gate end boxes and connected cables etc. erection tools, machine tools, power tools, tackles, hoists, cranes, cables, slings, skids, welding machines, instruments, materials & supplies required for unloading, transporting, storing testing & commissioning that may be required to accomplish the extraction works) shall, when brought to the site, be deemed to be exclusively used for the and completion of the works and held in lien by the Company and the Contractor shall not remove the same or any part thereof (save for the purpose of moving it from one part of the site to another) without the consent in writing of the concerned GMs of the areas which shall not be unreasonably withheld.

In case the Contractor obtains any plant, equipment and / or materials directly from the Company under the provisions of the Contract or under any permits or licenses issued by the Government through or on the recommendations of the Company, the same shall be used by him solely for the purpose of the Contract. Permits and licenses of a temporary nature necessary for the execution of the works shall be secured by the Contractor. The Contractor shall pay all royalties, rents, taxes, licenses and permit fees, etc.

The Contractor shall bear the cost of loading, transportation to the site, unloading, storing under adequate cover as may be necessary for the proper storage and use of all plant, equipment and materials.

All charges on account of Octroi, terminal or sales tax and other duties on plant, equipment and materials obtained for works from any source shall be borne by the Contractor.

iii) Approval of materials etc. not implied

The operation of sub-clause (i) hereof shall not be deemed to imply any approval by the G.M, Bhupalapalli area or Agent,KTK.5 Incline, of the materials or other matter referred to therein nor shall it prevent the rejection of any such materials at any time by the GM, BHP Area.

iv) Removal of installations etc.

On completion or on termination of the Contract and on complete recovery of all types of advances paid by the Company, if any, the Contractor with due permission of the Agent,KTK.5 Incline, BHP shall be entitled to remove at his expenses from the site all the said installations works/construction works/temporary works remaining thereon and all surplus materials originally brought by him to the site, and upon such removal the same shall become the property of the Contractor.

Any surplus materials issued by the Company, remaining after completion or termination of the Contract, shall be returned by the Contractor at his cost to the place of the issue and the G.M, Bhupalapalli area shall accept the same at rates not exceeding the rates at which these were originally issued taking into consideration the deterioration or damage, if any, that may have been caused to the materials during the custody of the Contractor. In the event of the Contractor failing to return the surplus materials out of those supplied by the Company, the G.M, Bhupalapalli area may, by giving notice in writing, require the Contractor to pay, in addition to any other liability that the Contractor might incur in this regard, double the issue rates for such surplus materials, which are not returned, or 115% of the prevailing market rate including sales and other taxes during the period of the work, whichever is more.

v) Company not liable for damage to plant etc.

The Company shall not at any time be liable for the loss of, theft or damage to any of the said installation works/construction works/ temporary works or materials during this period of contract, for which the responsibility shall lie entirely on the Contractor, as mentioned in clause 16.1 and 22.0 hereof.

vi) Supply of support materials and cement etc.

The Company shall not supply the required roof support items such as bolts, girders, bars, arches, resin capsules, bricks and Cement etc. except the materials as mentioned in chapter-VII.

7.2 Materials (including Coal/Stone/Muck) obtained from extraction of coal:

All materials including Coal/Stone/Muck obtained from extraction at the site, in the course of execution of the work, shall be the property of the Company and the same may be issued to the Contractor, if required for use in the works, at the discretion of the GM, Bhupalapalli area.

7.3 Other facilities:

Land for Contractor's office, stores, temporary housing, etc. will be provided by SCCL as per provisions of chapter VII and no rent shall be charged for the land made available for this purpose.

8.0 SETTING OUT:

8.1 Possession of site:

Save in so far as the contract may prescribe, the extent of portions of the site which the contractor shall be given possession from time to time and the order in which such portions shall be made available to him and subject to any requirement in contract as to the order in which the works shall be executed, the company shall, with the GM, Bhupalapalli area's written order to commence the works, give to the contractor possession of as much of the site as may be required to enable the contractor to commence and proceed with the Programme, referred to in clause 5.2. Otherwise in accordance with such reasonable proposals of the contractor as he shall make, by notice in writing to the GM, Bhupalpalli Area or Agent,KTK.5 Incline, BHP and shall from time to time, as the works proceed, give to the contractor possession of such further portions of the work site as may be required to enable the contractor to proceed with the extraction works in accordance with the said Programme or proposals (as the case may be).

The extraction, pumping, ventilation, coal transport arrangements and other activities being undertaken for the purposes of SCCL shall not be hampered/intervened by the contractor during extraction works. Any modification or coordination in this regard shall be discussed and finalized with the Agent,KTK.5 Incline, BHP .

If the Contractor suffers delay from the failure on the part of the Company to give possession of portion of the site, in accordance with the terms of this clause, the GM, Bhupalpalli Area shall grant an extension of time for the completion of the works.

8.2 Expenses for way-leaves:

The Contractor shall bear all expenses and charges for special or temporary way-leaves required by him in connection with access to the site, disposal of coal/muck from the site and any other purpose connected with the tender.

8.3 Usage of necessary instruments, data, etc:

The contractor shall be responsible for and shall have all necessary instruments, appliances and labour for the correct and proper setting out of the works including therein the correctness of the positions, reduced levels, verticality, dimensions and alignment of all parts of the work and marking out the correct layout with reference to the permanent bench mark and reference lines. The basic reference lines and one permanent benchmark shall be given, by the Agent, KTK.5 incline, Bhupalpalli in writing, to the Contractor as basic data.

The survey and drawing instruments, plumb lines, reference points and bench marks etc. used by the Contractor shall be to the satisfaction of the Agent, KTK.5 incline, Bhupalpalli.

If at any time during the progress of the works any error appears in the position, levels, direction, dimensions or alignment of any part of the works, the Contractor, on being required to do so by the Agent, KTK.5 incline, Bhupalpalli shall, at his own expense, rectify such error to the satisfaction of the Agent, KTK.5 incline, Bhupalpalli. Where as such error is based on incorrect data supplied in writing by the Agent, KTK.5 incline, Bhupalpalli. The expense of rectifying the same shall be borne by the Company.

The checking of any setting out or any line or level by the Agent, KTK.5 incline, Bhupalpalli shall not in any way relieve the Contractor of his responsibility for the correctness thereof and the Contractor shall carefully protect and preserve all bench marks, sight rails, pegs and other things used in setting out the works.

9.0 QUALITY ASSURANCE – MATERIALS & WORKMANSHIP:

The Contractor shall carry out and complete the works in every respect in accordance with the Contract and assure the quality of all works as per the norms/guidelines laid down therein and any follow-up design drawings provided by the GM, Bhupalapalli area or Agent, KTK.5 Incline, BHP for the work. The Contractor shall ensure that the work conforms strictly to the specifications and drawings of the Contract and to any further drawings, detailed instructions/directions in writing that the GM, Bhupalapalli area or Agent, KTK.5 Incline, BHP may issue, from time to time, to the Contractor. All such drawings, instructions/directions shall be consistent with the Contract documents and should be reasonably inferable there from, along with clarifications/explanations thereof, if necessary.

The Contractor shall be responsible for correct and complete execution of the work in a workman-like manner with specified materials, which shall be in conformity with the specifications/schedule of work as per the Contract. The materials shall be subject to the approval of the Company and the Contractor shall furnish proof to satisfy the GM, Bhupalapalli area or Agent, KTK.5 Incline, BHP of the same, if so required by the later.

All items to be purchased from the market by the Contractor including items like Cement and Steel shall be procured from such manufacturers who hold valid licenses conforming to relevant BIS standards for manufacturing such items, whenever such standards existed, and from reputed manufacturers in other cases.

The Contractor shall immediately after the award of work draw up a schedule giving dates for submission of samples for testing for the approval of the Agent, KTK.5 incline, Bhupalpalli, who, if the same is acceptable to him, shall approve it promptly.

On receipt of the samples as per schedule, the Agent, KTK.5 Incline, BHP shall arrange to examine/test with reasonable promptness ensuring conformity of the samples with the required specifications and complying with the requirements as per Contract documents. The Contractor shall not start bringing materials to the site unless the respective samples are

approved and shall thereupon bring only materials conforming to approved samples to the site.

Samples for testing are to be supplied by the Contractor at his own cost. The cost involved in such testing of samples, too, shall be borne by the Contractor. Even if any test is ordered by the GM, Bhupalapalli area and the Agent, KTK.5 Incline, Bhupalpalli, to be carried out by any independent person or agency at any place other than the site, the cost of materials and testing charge, etc. shall be borne by the Contractor. If the test shows that the materials are not in accordance with the specifications, the said materials shall not be used in the work and removed from the site by the Contractor within a fortnight at his own cost.

9.1 Storage of Materials:

Materials shall be so stored as to ensure the preservation of the quality and fitness for the work. When considered necessary by the Agent, KTK.5 Incline, BHP they shall be placed on wooden platforms or other hard, clean surfaces and not directly on the ground.

Materials shall be placed under cover when so directed by the Agent, KTK.5 Incline, BHP and the Contractor shall erect and maintain at his own cost temporary weatherproof sheds at the work site for the purpose. Stored materials shall be so located as to facilitate prompt inspection. All stored materials shall be inspected at the time of use in the work, even though they may have been inspected and approved before being placed in storage or during storage.

9.2 Workmanship:

Save in so far as is legally or physically impossible, the Contractor shall execute, complete and maintain the works strictly in accordance with the Contract, to the satisfaction of the Agent, KTK.5 Incline, Kothagude and shall comply with and adhere strictly to their instructions and directions on any matter (Whether mentioned in the Contract or not) touching or concerning the works.

9.3 Access to the works:

The GM, Bhupalapalli area or Agent, KTK.5 Incline, BHP or Manager of the mine encompassing the work site and statutory authorities shall at all times have access to the works, workshops and places where work is in progress or from where raw materials or manufactured articles are being obtained for the works and the Contractor shall afford every facility and assistance in or for obtaining the right to such access.

9.4 Inspection of works:

All works, under execution/ completed by the Contractor in pursuance of the Contract, shall be open for inspection and supervision at all times by the Col Manager or Agent, KTK.5 Incline, Bhupalpalli, who shall afford every facility and assistance in the same.

All works shall also be opened for inspection at all times to the Agent/Manager of the Mine or statutory authorities who shall satisfy themselves that the safety and all other aspects of the works are as per the prevailing provisions of the Mines Act, 1952 Coal Mines Regulations CMR, 1957 and other rules, regulations & bylaws framed there under. Any deficiency noted during such inspections shall be pointed out to the Contractor through the Agent, KTK.5 Incline, BHP and the Contractor shall take all the necessary steps to urgently rectify the same to the satisfaction of the Agent/Manager of the mine.

9.5 Examination of work before covering up:

No work shall be covered up or put out of view without the approval of the Agent, KTK.5 Incline, BHP and the Contractor shall afford full opportunity to the Agent, KTK.5 Incline, BHP to examine any work which is about to be covered up or put out of view and to examine foundations before permanent work is placed thereon. The Contractor shall give due notice in

writing to the Agent, KTK.5 Incline, BHP whenever any such work is ready or about to be ready for examination and the Agent, KTK.5 Incline, BHP shall, without unreasonable delay, unless he considers it unnecessary and advises the Contractor accordingly, attend for the purpose of examining such work.

9.6 Uncovering and making openings:

The Contractor shall uncover any part or parts of the works or make openings in or through the same as the Agent, KTK.5 Incline, BHP may from time to time direct and shall reinstate and make good such part or parts to the satisfaction of the Agent, KTK.5 Incline, Bhupalpalli. If any such part or parts has/have been covered up or put out of view after compliance with the requirements of this clause and are found to be executed in accordance with the Contract, the expenses of uncovering, making openings or reinstating and making good the same shall be borne by the Company but in any other case all such expenses shall be borne by the Contractor.

9.7 Urgent repairs:

If by reason of any accident or other event occurring to, in or in connection with the works or any part thereof, either during the execution of the works or during the defects Liability Period, any remedial or other works or repair shall in the opinion of the GM, Bhupalpalli Area or Agent, KTK.5 Incline, BHP be urgently necessary for security and the Contractor is unable or unwilling to do such work or repair at once, the Company may, with its own or other workmen, do such work or repair as the GM, Bhupalpalli Area or Agent, KTK.5 Incline, BHP may consider necessary. If the work of repair, so done by the Company, is work which, in the opinion of the GM, Bhupalpalli Area or Agent, KTK.5 Incline, BHP the Contractor was liable to do at his own expense under the Contract, all costs and charges properly incurred by the Company in so doing shall, on demand, be paid by the Contractor to the Company or may be deducted by the Company from any moneys due or which may become due to the Contractor. Provided always that the GM, Bhupalapalli area or Agent, KTK.5 Incline, BHP (as the case may be) shall, as soon after the occurrence of any such emergency as may be reasonably practicable, notify the Contractor thereof in writing.

9.8 Power to reject materials and work:

The Company shall have full powers to reject any materials or work owing to a defect therein for any of the following reasons:

- i) Materials not of the required quality and standard;
- ii) Work not conforming to the required specifications;
- iii) Poor workmanship;
- iv) Work not in accordance with the sample approved by GM, Bhupalapalli area/ or Agent, KTK.5 incline, Bhupalpalli .

9.9 Power to terminate Contract:

The Company may terminate the Contract in case the work has to be stopped owing to the imposition of, or change, in any law by the Government. The work will be terminated and payments will be made only for the portion of the work executed on the principle of quantum merit.

9.10 Removal/Repair of Improper Materials/Work:

The G.M, Bhupalapalli area or Agent, KTK.5 incline, Bhupalpalli shall during the progress of the works have the power to order in writing, from time to time, of

- i) The removal from the site of any materials, which in the opinion of GM, Bhupalpalli Area or Agent, KTK.5 Incline, BHP are not in accordance with the Contract/ Work Order/ approved sample,
- ii) The substitution with proper and suitable materials, and

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

The Contractor shall forthwith replace the materials/remedy the defect at his own expense and no further work shall be done pending such replacement of materials/rectification of work, if so instructed by GM, Bhupalapalli area or Agent, KTK.5 Incline, Bhupalpalli.

In the case of default on the part of the Contractor to remove and replace defective material lying at the site or to comply with any other instruction of the GM, Bhupalapalli area or Agent, KTK.5 Incline, BHP made under the provisions of this clause within 10 days after issue of notice by the GM, Bhupalapalli area or Agent, KTK.5 Incline, Bhupalpalli the GM, Bhupalapalli area or Agent, KTK.5 Incline, BHP shall be at liberty to dispose off such material in any manner and procure the proper materials for replacement and/or to carry out the rectification(s) in any manner considered advisable under the circumstances or to employ any other agency(ies) to carry out the same without any further written notice to the Contractor and the entire expenses consequent thereupon & for the delay for such procurement/rectification shall be borne by the Contractor.

In the case of default on the part of the Contractor to rectify the defects in any items of work, executed by the Contractor, which are unsatisfactory or not according to the specifications laid down in the Contract/work order, within the time and in the manner specified by the GM, Bhupalapalli area or Agent, KTK.5 Incline, Bhupalpalli, the work shall be redone or rectified by the Company at the risk and cost of the Contractor.

9.11 Devaluation of Materials and work:

In lieu of rejecting any item of work done/materials supplied which is not in conformity with the Contract/Work Order/approved samples, the GM, Bhupalapalli area or any other officer nominated by the Company for the purpose may allow such work or materials to remain, provided the GM, Bhupalapalli area / the officer nominated by the Company for such purpose is satisfied with the strength and structural safety of the work/the quality of the materials and, in that case, shall make such deduction for the difference in value as, in his opinion, may be reasonable.

9.12 Final Inspection of works:

The GM, Bhupalapalli area or any other officer nominated by the Company for the purpose shall make final inspection of all work included in the Contract/ Work Order, or any portion thereof, or any completed structure forming part of the work of the Contract, as soon as practicable after notification by the Contractor that the work is completed and ready for acceptance. If the work is not acceptable to the GM, Bhupalapalli area and / or any other officer nominated by the Company at the time of such inspection, he shall inform the Contractor in writing as to the particular defects to be remedied before final acceptance can be made.

9.13 Site Order Book:

The Site Order Book is a register which shall be purchased and maintained on the site of works by the Contractor and shall not be removed there from under any circumstances. It shall become the property of the Company and shall be duly certified by the Agent, KTK.5 Incline, BHP regarding the number of pages it contains. Each page shall be numbered and the name of the work, the name of the Contractor, the reference of the Contract/ Work Order and the aforesaid certificate shall be recorded on its first page.

The Agent, KTK.5 Incline, BHP shall duly record his observations regarding any work, which needs action on the part of the Contractor like improvement in the quality of work, failure to adhere to the scheduled Programme as per Contract/ Work Order etc. The Contractor shall

promptly sign the Site Order Book and note the orders given therein by the Agent, KTK.5 Incline, BHP and comply with them. The compliance shall be reported by the Contractor in writing to the Agent, KTK.5 Incline, BHP in time so that the same can be checked and recorded in the Site Order Book.

The Site Order Book shall be referred by the GM, Bhupalapalli area at the time of making both running on account and final bills of the Contractor. A certificate to this effect shall be recorded in the Measurement books by the GM, Bhupalapalli area or Agent, KTK.5 Incline, BHP

10.0 Measurement of Coal

10.1 Method of measurement & record

1. Each day's total Coal delivered at Designated Transfer Point i.e., discharge end of the gate belt conveyor belt (delivered between 7 AM till the 7 AM next day) shall be treated as one "Consignment". Each consignment shall be measured by belt weighing machine provided and maintained by SCCL at gate belt conveyor or at any other belt mutually agreed by both SCCL & the firm. Authorised person of the SCCL and CONTRACTOR shall be present to witness the recording of weighment of each Consignment and sign the challan (dispatch advice along with weighment, date, time, competent person details, etc). SCCL shall keep a spare belt weighing machine available at the mine as stand by for immediate replacement.
2. The belt weighing machine shall be calibrated and stamped as per the schedule specified by the Department of weights & measures of the State in which the mine is located. Wherever possible, it would be cross checked by underground survey. In case of panel extraction, cross checking by underground survey will be done, if feasible. In case of breakdown of belt weighing machine, measurement by underground survey of face advance will be adopted.
3. Calibration of belt weighing machine and measurements shall be taken jointly by the Engineer-in-Charge or his authorized representative and by the Contractor or his authorized representative.
4. Before taking up calibration of weightometer(s) or measurements of any work, the Engineer-in-Charge or the person deputed by him for the purpose shall intimate the Contractor to attend or to send his representative to attend the calibration / measurement. Every calibration / measurement thus taken shall be signed and dated by both the parties on the site on completion of the calibration / measurement.
5. In the event of failure on the part of Contractor to attend or to send his authorized representative to attend the calibration / measurement after receiving the intimation, the calibration / measurement taken by the Engineer-in-Charge or by his authorized representative shall be taken to be the correct measurement.
6. Quantity of coal produced shall also be regularly calculated on volumetric basis, based on survey measurements conducted by survey personnel of SCCL. Authorised person of Contractor may accompany the survey team during the survey measurements. The survey volume measurement and the actual Coal dispatched on weighment basis shall be used to arithmetically calculate the density of Coal.
7. In case of any unprecedented failure of the weighing arrangements provided by SCCL, the previous months' density calculated as above shall be considered for volumetric calculation of the Coal produced and transferred to SCCL, provided that, if such failure

of weighment arrangement occurs before the data is generated, specific gravity of the Coal produced shall be considered as 1.4.

8. SCCL and the Contractor shall conduct a joint survey measurement to determine the progress of the Works at the end of each calendar month,. This measurement shall be completed by the 5th day of the following month and summarized by the Contractor on a Progress Certificate to be delivered to SCCL.
9. Within 2 weeks of receipt from the Contractor, SCCL shall check the Progress Certificate then subject to Clause 11, approve and return the Progress Certificate to the Contractor.
10. If either Party fails or neglects upon being given notice, to attend any joint survey or measurement, the other Party shall be entitled to proceed with the survey or measurement on it's own, and the results so obtained shall be deemed to have been obtained pursuant to a joint survey or measurement.
11. After the completion of the joint survey, Contractor shall issue a progress certificate and shall submit it to SCCL within 5 days of completion of survey.

10.2 Disputed Measurement

1. If SCCL disputes any aspect of a Progress Certificate, it shall within 10 (ten) working days after receipt of the Progress Certificate notify the contractor in writing of all aspects that it disputes, and to the extent to which it is able to calculate them, provide details of the adjustments that it requires. SCCL may request the contractor to provide such further information as it requires to determine the amounts in dispute and if so requested, the contractor shall provide such further information as soon as practicable and in any event no later than 5 (five) days after being so requested. If upon receipt of such further information SCCL no longer disputes any aspect of the Progress Certificate, SCCL shall approve the Progress Certificate without delay.
2. If the contractor notifies SCCL in writing that it agrees with the adjustments requested by SCCL, then the contractor shall revise the Progress Certificate accordingly and SCCL shall approve such revised Progress Certificate without delay.
3. If the contractor notifies SCCL in writing that it disagrees with the adjustments requested by SCCL, then the Contractor may revise the Progress Certificate to show the amount with which SCCL agrees and SCCL shall approve such revised Progress Certificate without delay. The Mine site personnel of both the parties shall endeavor to agree the disputed amount before the next month's survey or measurement.

10.3 Quality of Coal

1. The Contractor shall adopt prudent industrial practices to avoid mixture of foreign materials like stones and metallic objects during mining of Coal and take measures to the satisfaction of SCCL to ensure that to the extent possible no stones or foreign material extraneous to Coal shall be delivered. The Contractor shall use magnetic separators before belt weighing machine (s), so as to ensure supply of coal free from tramp iron and metallic foreign material.

2. Coal delivered to SCCL at the Designated Transfer Point shall be crushed to the size of (-) 200mm coal.

11 PAYMENT

11.1 Currencies

All amounts stated in this contract are stated in INDIAN NATIONAL RUPEES (INR) i.e. lawful currency of India unless otherwise stated.

11.2 Coal delivery and Invoicing

In consideration of the contractor performing the works, SCCL shall pay to the contractor, agreed contract price per tonne from commencement of coal production

The contractor shall submit the invoices in triplicate in complete manner on monthly basis for coal delivered. Contractor shall raise Tax Invoice for the work executed during the relevant period with the details of service tax shown separately.

11.3 Preparation & submission of running on account bills

The tonne of coal extracted shall be payable monthly. The contractor shall submit bills, complete in all respects, within (7) days from the end of the month. SCCL shall make payment after 7 days but within 30 days of the submission of the bill, complete in all respects. Cost per Tonne for the respective year shall be paid after adjusting the tax deduction at source and for penalties if any. Payment shall not be delayed for want of assessment of penalties.

From the running bills of the contractor, Retention money of 1% of the Invoice value shall be deducted as further security deposit (FSD). The amount so recovered shall be refunded annually (on submission of documentary evidence) after ensuring that the contractor has fulfilled the statutory obligations like payment of minimum wages, workmen compensation, CMPF/EPF, ESI etc., as per the provisions of the contract. FSD shall be refunded after making necessary deductions for penalties, if any, payable by the contractor. Further, the retention money is liable for forfeiture in case of failure of the contractor to execute the order as per order/terms in addition to other guarantee amounts.

11.4 Inspection of Bills:

The GM, Bhupalpalli Area shall arrange for the scrutiny of the running on account bills, in an expeditious manner, satisfying himself from the technical point of view as conforming to the measurements as recorded in the measurement book.

Evaluation for the work done upto the date of completion, as per the measurements entered in the measurement book shall be based on the approved rate in the Contract order/ agreement.

11.5 Certification & Payment of bills:

Interim payments shall be made by the Paying Authority against running on account bills for Contractual works on the GM, Bhupalapalli area certifying on them the amount for such works to which the Contractor is considered entitled, after deducting the amounts already paid and the security deposit and such other amounts as may be deductible or recoverable in terms of the Work Order/Contract within 30 days of submission of running on account bills.

In case due to some unavoidable circumstances and no fault of the contractor the interim payments are delayed for more than 30 days of submission of the R.A. Bills an interim Adhoc payment upto 70% of the payable amount after deducting the eligible deductions will be made to the contractor subject to approval of GM,BHP area.

The Company reserves 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 fact that the such disputed claims of the Contractor are the subject matter of arbitration or not.

The amount of such over-payments shall be recovered from subsequent bills under the contract, failing that from the Contractor's security deposit or from the Contractor's claim under any other contract with the company or the Contractor shall pay the amount of over-payment on demand. In case of Contractor's non-payment on such demand, the same shall be realized from the Contractor's dues, if any, with SCCL.

11.6 Taxes and duties.

- a) The quoted rates shall be inclusive of the all taxes, duties, Octroi etc., applicable for such kind of work except service tax and Swachh Bharath Cess, and no separate payment shall be made for the same. Income Tax or any other tax as applicable will be deducted from contractor's bills at source as per prevailing rules.
- b) The proposed work attracts Service tax, Krushi Kalyan Cess & Swachh Bharath Cess which shall be paid by the SCCL against tax invoice at the rate applicable in force during the execution of the work in the contract period. The bidder shall clearly mention "Service Tax" in their bid along with the rate applicable. Offers submitted with "Service Tax" as Inclusive are liable for rejection.
- c) Introduction / withdrawal of any taxes / duties or upward / downward revision of applicable rates during the scheduled contract period shall be to SCCL's account, except taxes under Income Tax Act.
- d) Income Tax shall be deducted from the running bills of successful bidder as per provisions of Income Tax Act and rule made there under from time to time.
- e) The successful bidder should have been registered with the service tax department. The successful bidder shall enclose a copy of registration certificate along with the offer.
- f) Present applicable rate of Service tax is 14%. Present applicable rate of Swachh Bhrah Cess & Krushi Kalyan Cess are 0.5% each on the value of the taxable service.

11.7 Payment of Service Tax etc.,

Service provider shall issue tax invoice setting out quantity of work executed and basic value of work executed in the tax invoice. All taxes, including service tax, as applicable for the relevant period during which work has been executed and consideration is being claimed shall be clearly and separately claimed in the invoice.

The tax invoice shall be issued by the Contractor for the quantity of work done and consideration receivable as per the measurements recorded in the measurements book (MB)

11.8 Final Bill:

On completion of the works to the satisfaction of the GM, Bhupalapalli area or Agent, KTK.5 Incline, BHP the Contractor shall submit a certified final bill and account accompanied with all relevant vouchers and documents.

The payments shall be released through the GM, Bhupalapalli area and the Paying Authority against the final bill subject to all deductions having been made on account of the materials supplied, (if any) and any other dues payable by the Contractor to the Company, the preparation and sanctioning of a final deviation estimate/revised estimate for the Contract by the Company, regularizing therein the extra items and excess quantities of work and further subject to the Contractor having given no claim certificate to the GM, Bhupalapalli area. The Contractor shall indemnify the Company against proof of depositing royalty on account of minor minerals used in the work before the final bill is processed for payments. No interest shall be payable on the amounts, under the terms of the Agreement / Work Order.

12.0 COMPLETION CERTIFICATE:

The Contractor shall give notice of the completion of work to the GM, Bhupalapalli area or Agent, KTK.5 Incline, BHP as soon as the work is completed, except in cases where the Contract provides for a 'Performance Test' before the issue of completion certificate, in which case the issue of completion certificate shall be in accordance with the procedure specified therein. The GM, Bhupalapalli area or Agent, KTK.5 Incline, BHP shall within 30 days from the receipt thereof, inspect the work and ascertain the defects / deficiencies, if any, to be rectified by the Contractor as also the items, if any, for which payment shall be made at reduced rate.

If the defects, according to the GM, Bhupalapalli area or Agent, KTK.5 Incline, BHP are of a major nature, the rectification of which is necessary for the satisfactory performance of the Contract, he shall intimate the Contractor in writing of the defects and instruct him to rectify the defects/remove the deficiencies within the period and in the manner to be specified therein. In such cases, completion certificate shall be issued by the GM, Bhupalapalli area after the above rectification(s) are carried out/deficiencies are removed by the Contractor to the satisfaction of GM, Bhupalapalli area or Agent, KTK.5 Incline, BHP

If there are no defects to be rectified or if the defects/deficiencies are of a minor nature and the GM, Bhupalapalli area or Agent, KTK.5 Incline, BHP is satisfied of the arrangements made by the Contractor for rectification of the same or if, in the event of the Contractor's failure to rectify the defects for any reason whatsoever, the GM, Bhupalapalli Area or Agent, KTK.5 Incline, BHP is satisfied that the defects can be rectified by the Company by its own or other means and the security deposit of the Contractor and the performance bank guarantee shall be sufficient to cover the cost thereof, he shall issue necessary instructions to the Contractor to clear the site/place of work or all debris/waste materials, sheds, surplus materials, etc., and, on the compliance thereof, the completion certificate may be issued 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 rates indicating the reasons thereof.

12.1 Contractor to hand over completed works immediately.

The Contractor shall be under obligation to hand over to the Company the vacant possession of the works immediately following their completion failing which the GM, Bhupalapalli area can impose to levy upon the Contractor upto 5% of the total Contract value for the delay in handing over the vacant possession of the completed works, after giving a 15 (fifteen) days notice to the Contractor.

13.0 Opportunities for other contractors:

The Company reserves the rights to let other Contractors also work at the same site. The Contractor, in accordance with the requirements of the GM, Bhupalapalli area or Agent, KTK.5 Incline, BHP shall operate with the other Contractors and with the Company's workmen and afford them all reasonable opportunities for arranging for and carrying out their work. However, if the Contractor, on the written request of the Agent, KTK.5 Incline, BHP makes available to any other Contractor of agency, or to the Company, any roads or ways for the maintenance of which the Contractor is responsible or permits the use of the Contractor's plants on the site or provides any other service of whatsoever nature, the Company shall pay to the Contractor, in respect of such use of service, such sum or sums, as shall be reasonable in the opinion of the GM, Bhupalpalli Area.

14.0 Interference with SCCL's work and adjoining properties:

All operations necessary for the execution of the extraction and any temporary works shall, so far as compliance with the requirements of the Contract permits, be carried on so as not to interfere unnecessarily or improperly with SCCL's works/extractions or SCCL's convenience or its access or its adjoining properties, public convenience or to the access, use and occupation of public or private roads and foot paths or to or of properties whether in possession of the Company or of any other person and the Contractor shall save harmless and indemnify the Company in respect of all claims, demands, proceedings, damages, cost, charges and expenses whatsoever arising out of or in relation to any such matters in so far as the Contractor is responsible thereof.

15.0 Extraordinary Transport/Traffic in underground or surface:

The Contractor shall use every reasonable means to prevent any of the underground routes or surface routes connecting to the work site from being damaged by any transport/traffic of the Contractor or any of his sub-Contractors. He shall, in particular, select such routes, choose and use such vehicles and restrict and distribute loads so that any such extraordinary traffic as shall inevitably arise from the movement of men and material from and to the site shall be limited as far as reasonably possible and so that no unnecessary damage to the Company's properties.

15.1 Special Loads:

Should it be found necessary for the Contractor to transport or move, one or more of machinery or equipment or any part of machinery or equipment over Company's road, public road, highway, bridge, any other public road at SURFACE or haulage road, travelling road or any other roadway or places in UNDERGROUND, the movement whereof is likely to damage any of the above or damage to SCCL's installation/structure/property unless special protection or strengthening is carried out, then the Contractor shall, before transporting or moving such machinery or equipment or any part of machinery or equipment on to such Company's road, public road, highway, bridge, any other public road at SURFACE or haulage road, travelling road or any other roadway or places in UNDERGROUND give notice to the GM, Bhupalapalli area or Agent, KTK.5 Incline, BHP of the weight and other particulars of the machinery or equipment or any part of machinery or equipment to be transported or moved and his proposals for safe mode of transport. Unless the GM, Bhupalpalli Area or Agent, KTK.5 incline, Bhupalpalli permits or directs in writing the Contractor shall not carry out such transport of machinery or equipment.

15.2 Settlement (of extraordinary transport/traffic) claims in case of damage to Public/Company's property:

If during the progress of the works or at any time thereafter, the Contractor receives any claim arising out of the execution of the works in respect of damage to the Company's road, public road, highway, bridge, any other public road at SURFACE or haulage road, travelling road or any other roadway or places or SCCL's installation/structure/property in UNDERGROUND he shall immediately report the same to GM, Bhupalapalli area or Agent, KTK.5 Incline, BHP. Thereafter, the Company shall negotiate the settlement of and pay all sums due in respect of such claim in case of damage to public road or property. In case of damage to SCCL's property, GM, Bhupalapalli area or Agent, KTK.5 incline shall decide upon the value/compensation to be paid by the Contractor. Further, provided always that if and so far as any such claims or part thereof, in the opinion of the GM, Bhupalapalli Area are due to any failure on the part of the Contractor to observe and perform his obligations under this clause, then the amount settled/ paid by SCCL towards settlement of claim or the amount directed by the GM, Bhupalapalli area against damage to Company's property shall be paid by the Contractor to the Company.

16 CONTRACTOR'S RESPONSIBILITIES:

From the commencement to the completion of the works including temporary work, the Contractor shall take full responsibility for the care thereof and in case any damage, loss or injury shall happen to the works or to any temporary works from any cause whatsoever (save and except the excepted risks as defined in sub-clause 1 of this clause) the Contractor shall, at his own cost, repair and make good the same so that, on completion, the works shall be in good order and condition & in conformity in every respect with the requirements of the Contract and to satisfaction of the instructions of GM, Bhupalapalli area. In the event of any such damage, loss or injury happening from any of the excepted risks, the Contractor shall, if and to the extent required by the GM, Bhupalapalli area or Agent, KTK.5 Incline, BHP and subject always to the provisions of clause 6.0 hereof, repair and make good the same as aforesaid at the cost of the Contractor.

16.1 Excepted Risks:

The "Excepted Risks" are hostilities (whether war be declared or not), invasion, acts of foreign enemies, rebellion, revolution, insurrection, or military or usurped power, civil war or (otherwise than among the Contractor's own employees) riot, commotion or disorder or use or occupation by the Company of any portion of the works, in respect of which a certificate of completion has been issued, or a cause solely due to the GM, Bhupalapalli area or Agent, KTK.5 Incline, BHP design of the works or any such operation of the forces of nature as reasonable foresight and ability on the part of the Contractor could not foresee or reasonably provide against (all of which are herein collectively referred to as "the excepted risks").

16.2 Superintendence for the Works:

The Contractor shall give or provide all necessary superintendence during the execution of the works and as long thereafter as the GM, Bhupalapalli area or Agent, KTK.5 Incline, BHP may consider necessary for the proper fulfilling of the Contractor's obligations under the Contract. For the purpose, the Contractor shall keep on the work site during the progress of the Contract, as his representative, a competent and experienced Resident Engineer and assistants exclusively for the work, approved in writing by the GM, Bhupalapalli Area or Agent, KTK.5 incline, Bhupalapalli, (which approval may at any time be withdrawn). Such authorised Contractor's Resident Engineer and assistants are to be constantly on the works and give their whole time to the superintendence of the same. If such approval is withdrawn

by the GM, Bhupalpalli Area or Agent, KTK.5 Incline, Bhupalpalli, the Contractor shall, as soon as is practicable (having regard to the requirement of replacing him as hereinafter mentioned), after receiving written notice of such withdrawal, remove the Resident Engineer or his assistant from the site and shall not thereafter employ him again on the site in any capacity and shall replace him by another Resident Engineer or assistant, approved by the GM, Bhupalpalli Area. Such authorized Resident Engineer shall receive, on behalf of the Contractor, directions and instructions from the GM, Bhupalpalli Area or Agent, KTK.5 Incline, BHP .

The Contractor shall intimate the Agent, KTK.5 Incline, BHP, in writing, the names, qualifications, experience and full postal address of each and every technical personnel employed by him at the site.

The Contractor shall not be allowed to execute the work unless he engages the required technical staff at the site as stated above. The delay on this account, if any, shall be the Contractor's responsibility.

The bidder or the firm shall be permitted to deploy the manpower according to the requirements to meet the targeted progress of work.

However, the bidder shall submit an organization chart along with the bid showing relative relationship and areas of responsibilities of all official / supervisory personnel it intends to deploy for executing the work.

All important instructions shall be confirmed to the Contractor in writing. If the Contractor, while progressing with the works, finds any discrepancy between any drawing, forming part of the Contract documents, and the physical conditions of the locality or any errors or omissions in any drawings, except those prepared by himself and not approved by the Agent, KTK.5 Incline, BHP, it shall be his duty to immediately inform the Agent, KTK.5 Incline, BHP, in writing, and the Agent, KTK.5 Incline, BHP, shall verify the same. Any work done after such discovery and without intimation as indicated above shall be done at the risk of the Contractor.

16.3 Watching & Lighting:

The Contractor shall, in connection with the works, provide and maintain, at his own cost, all lights, guards and fencing, when and where necessary or required by the Agent, KTK.5 Incline, BHP or by any duly constituted authority, for the protection of the works and materials at the site, the safety of workmen and the convenience of the public.

16.4 Engagement of labour and other employees:

The Contractor shall make his own arrangements for the engagement of all labour and other employees, local or otherwise, and, save in so far as the Contract otherwise provides, for the transport, housing, feeding and payment thereof. The Contractor shall release all labour and other employees, local or otherwise, after completion of the works, before claiming the final bill.

The Contractor shall provide and employ on the site in connection with the execution and maintenance of the works and to comply with the statutory requirements:

- i) Only such technical assistants as are skilled and experienced in their respective callings and such sub-agents, foremen and leading hands as are competent to give proper supervision to the work they are required to supervise, and
- ii) Such competent, skilled, semi-skilled and unskilled labour as is necessary for the proper and timely execution and maintenance of the work.

The Agent, KTK.5 Incline, BHP shall be at liberty to object and require the Contractor to remove from the works, within three hours of the receipt of such orders, any person employed by the Contractor in or about the execution or maintenance of the works, for, if in the opinion of the Agent, KTK.5 Incline, BHP such person has committed misconduct or incompetence or negligence in the proper performance of his duties and such person shall not be again employed upon the works without the written permission of the Agent, KTK.5 Incline, BHP. Any person so removed from the works shall be replaced as soon as possible by a competent substitute approved by the Agent, KTK.5 Incline, BHP.

16.5 Various safety rules to be followed and gadgets to be provided by Contractor.

Bidders are requested to note that various safety appliances mentioned hereunder are to be provided to their employees and in the equipment as a part of overall work and rate quoted by the bidders. Shall be inclusive of provision of these safety appliances; No separate rates shall be paid for any other appliances.

- i. The contractor shall provide all safety appliances to all the employees and to the equipment such as Miners Helmet, Miners Safety Shoes, Miners Safety Belt, Audio visual alarms on moving machinery, Fire extinguishers etc. and ensure that they are put into use as required under law.
- ii. The contractor shall maintain proper communication arrangements at the work area with proper co-ordination with SCCL authorities.
- iii. Prepare written Safe Operating Procedure (SOP) for the work to be carried out, including an assessment of risk, wherever possible and safe methods to deal with the same.
- iv. Provide a copy of the SOP to the person designated by the mine authorities who shall be supervising the work.
- v. Keep an up-to-date SOP and provide a copy of changes to a person designated by the mine authorities.
- vi. Ensure that all works are carried out in accordance with the applicable laws and SOP and for the purpose he shall deploy adequate qualified and competent personnel for the purpose of carrying out the job in a safe manner.
- vii. For any work of a specified scope/nature, develop and provide to the mine owner a site specific code of practice.
- viii. Ensure that all sub-contractors engaged by him if any, shall comply with the provisions of contract and shall be liable for ensuring compliance of all safety laws by him.
- ix. All persons deployed by the contractor for working in a mine must undergo vocational training, initial and periodical medical examination. They should be issued identification cards stating the name of the contractor and the work and its validity period, indicating the status of Vocational Training & Initial Medical Examination etc.
- x. The successful bidder shall submit to DGMS returns indicating – Name of his firm, Registration Number, Name and address of person heading the firm, nature of work, type of deployment of work persons, number of work persons deployed, how many work persons hold Vocational Training certificates, how many work persons have

undergone Initial Medical Examination and type of medical coverage given to the work persons. The return shall be submitted quarterly (by 10th of April, July, October and January of each year) for contracts of more than one year and for contracts of less than one year, return shall be submitted monthly. However, these are subject to change from time to time.

16.6 Responsibilities of Contractor's employees

- i. An employee must, while at work, take reasonable care for the health and safety of people who are at the place of work and who may be affected by the employee's acts or omissions.
- ii. An employee must, while at work, comply with any requirement under the Act or regulations in the interest of health, safety and welfare of the employees or any other person.
- iii. Every person deployed by the Contractor in a mine must wear safety gadgets provided by the successful bidder.

16.7 STATUTORY RULES

- a) The Contractor shall comply with all applicable Rules, Regulations, Acts and permissions etc. issued from time to time for carrying out the subject work viz. Coal Mines Regulations, Mines Rules, Mines Act, Indian Electricity Rules, DGMS permission conditions, Minimum Wages Act, Workmen Compensation Act, Coal Mines Provident Fund Act, Insurance Act, Explosives Act and Environment Act etc. and obtain all statutory licenses, for the safety and welfare of the employees engaged by him to carry out the subject work.
- b) The minimum wages to be paid to the workers as per latest notification issued by Commissioner of Labour, Government of Telangana, w.e.f. 01.04.2016 are furnished below. However, these wages are subject to revision from time to time by Government of Telangana.

Sl. No.	Category	Amount Rs.Ps.
1	Skilled	365.68 per day
2	Semi skilled	333.52 per day
3	Un-skilled	305.37 per day

The Contractor shall pay wages to the employees not less than the wages prescribed under Minimum Wage Act and the payment to the employees shall be made through bank as indicated in the prescribed column of wage sheet. A certificate to this effect issued by the authorized official shall be submitted by Agent, KTK.5 incline, Bhupalpalli.

The Contractor shall make necessary arrangements for enrolling all his workmen and staff as the members of the CMPF. He shall deduct the employee's contribution towards CMPF and pension from their wages and deposit along with employer's matching share with the concerned Regional Commissioner, CMPF. A certificate to this effect issued by the authorized official shall be submitted by Agent, KTK.5 incline, Bhupalpalli.

c) The details of present CMPF contribution are furnished hereunder for compliance.

i. Employee's contribution

PF (Refundable)	@ 10.5/6%	}	12.00%
Pension contribution (Non-Refundable)	@ 1.1/6%		

Additional pension contribution 2.00%
(Non-Refundable)

Increment contribution Rs.1.88/man shift.
(Non-refundable)

(This element is constant, even though the minimum wages have been revised.)

ii. Employer's (Contractors) contribution

PF (Refundable)	@ 10.5/6%	}	12.00%
Pension contribution (Non-Refundable)	@ 1.1/6%		

Administrative charges 0.82%

Total contribution towards CMPF 26.82%+ Rs.1.88 per man shift

Alternatively, the successful bidder can opt the provisions of Employees Provident Fund (EPF) of Government of Telengana.

- d) The Contractor shall possess a license as required under Contract Labour (Regulation and abolition) Act, 1970 and Contract Labour (Regulation and Abolition) Central Rules 1971 and satisfy all the provisions of the Act.
- e) The Contractor shall follow rules, if any, imposed by local/state/ central authorities.
- f) The Contractor shall indemnify the Company (SCCL) from any liability be falling on SCCL due to any commission/ omission by himself or by his representative or by his employee or by any third party in execution of contract. If the SCCL is made liable for such claims by any court or authority, the same shall be reimbursed to the SCCL by the Contractor, as if the SCCL has paid on their behalf.
- g) During the course of execution of the work, if any accident occurs whether major or minor, the Contractor or his supervisory staff shall inform the same immediately without any delay to the Colliery Manager/ Agent,KTK.5incline/General Manager concerned to take steps in accordance with the Mines Act and other relevant laws. Otherwise, the contractor or his supervisory staff will be prosecuted for violation of the Mines Act and other relevant laws.

- h) Execution of the work with Contract Labour is prohibited vide notification u/s 10(1) Contract Labour (Regulation & Abolition) act S.O. 2063, dated 21.6.88. Hence, the Contractor shall execute the work with his employees/ workmen only. The bidder has to submit an affidavit in the proforma prescribed in APPENDIX – V along with the tender.
- i) The terms and conditions, if any, that will be stipulated from time to time by Government authorities concerned, including DGMS, will be binding on the Contractor.

16.8 Other Terms and Conditions

- i) Employment of local labour : The Contractor is to employ, to the extent possible, local affected people and pay wages not less than the minimum wages fixed by the Law of the Land.
- ii) The Contractor should not engage workmen below 18 years of age.
- iii) Statutory supervision will be arranged by SCCL. All the persons deployed at work site by the Contractor shall be under the statutory control of SCCL supervisors. The successful bidder shall engage qualified persons as in-charges of various operations.

16.9 Other Responsibilities

i. Attendance of Contractor's employees

The Contractor shall maintain an attendance register of all employees working under him at the site in which the attendance of all the persons working on a particular date and at a particular time shall be available for inspection by the GM, Bhupalpalli Area or his representative or by the Company or by the Statutory Authorities.

ii. Training and medical examination of labour

The Contractor shall ensure that persons engaged by him for tunnel extraction work are sent for medical examination and they should be trained at MVTC, as per the prevailing Vocational Training Rules for Coal Mines, before they are engaged on work. An amount of Rs.15/- per person for training and Rs.2425/- per person for medical examination would be recovered from the contractor's bills. Contractor should be advised to maintain details of all the persons employed by him in B – register. The Contractor shall not lay a claim on the Company for the employment of such trained labour at any subsequent date.

iii. Adherence to all labour laws

It shall be the responsibility of the Contractor to strictly adhere to the entire requirements under the labour laws and other enactment as may be applicable to labour from time to time.

The Contractor shall possess a licence as required under Contract Labour (Regulation and abolition) Act, 1970 and Contract labour (Regulation and Abolition) Central Rules 1972 and satisfy all the provisions of the Act.

iv. Safety of Labour:

Precautions shall be exercised at all times by the Contractor for the protection of all persons engaged by him, Company employees and property. The safety required or recommended by all applicable laws, codes, statutes and regulations, especially with respect to coal mines, shall be observed by the Contractor. In case of accidents, the Contractor shall be responsible for compliance with all the requirements imposed by the Workmen's Compensation Act or any other similar laws in force and the Contractor shall indemnify the Company against any claim on this account.

v. Alcoholic liquor or drugs

The Contractor shall not, otherwise than in accordance with the Statutes, Ordinances and Government Regulations or Orders, for the time being in force, import, sell, gift, barter or otherwise dispose of any alcoholic liquor or drugs or permit or suffer any such importation, sale, gift, barter or disposal by his sub-contractors, agents or employees.

vi. Arms and ammunition:

The Contractor shall not give or barter or otherwise dispose off to any person or persons any arms or ammunition of any kind or permit or suffer the same as aforesaid.

vii. Festivals and religion

The Contractor shall, in all dealings with labour and other employees in his employment, pay due regard to all recognized festivals, days of rest and religious or other customs, as per Telengana State Rules.

viii. Health, sanitation and epidemics:

The Contractor shall, at his own expense, provide reasonable facilities for complying with all the rules and provisions relating to health and sanitation of the persons employed by him. The Contractor shall strictly prohibit the committing of nuisance at any other place. In the event of any outbreak or illness of an epidemic nature amongst the employees of the Contractor, the Contractor shall comply with and carry out such orders and regulations as may be made by the Company or the local medical or sanitary authorities for the purpose of dealing with and overcoming the same.

The Company shall provide medical attention to the Contractor's employees, as available with it within the /mine and ambulatory facilities, as per the guidance of the medical practitioner on chargeable basis as per Company Rules.

ix. Disorderly conduct:

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

x. Observance by sub-Contractors:

The Contractor shall be responsible for observance by his sub-Contractors of all the fore-going provisions.

xi. Claims of Contractor's labour and other employees:

The Contractor shall make payments to all workers/employees engaged by him for the job of extraction of coal as per the extant Act, Rules for such jobs.

The payments shall be made at a place and on dates approved by the Company. Such payments shall be made, at the option of the Company, in the presence of an officer authorized by it for the purpose who shall thereupon also certify on each bill that the payment has been made in his presence.

All books of account for such payments shall be maintained properly by the Contractor and an officer authorized by the Company for the purpose shall have the right of access for inspection of such books.

xii. Contractor's failure regarding claims of his labour and other employees:

The Company shall have the right to deduct from any such due or which may become due to the Contractor any amount required for making good the loss suffered by Contractor's labour and other employees by reason of non-fulfillment of the conditions

of the Contract for the benefit of the Contractor's employees, non-payment of wages etc. or of deductions made from their wages which are not justifiable according to the statutory provisions/wages in force.

xiii. Return of Labour and other employees:

The Contractor shall, if required by the Agent, KTK.5 Incline, BHP, deliver to the Agent, KTK.5 Incline, BHP at his office a return in detail such form and at such intervals as the Agent, KTK.5 Incline, Bhupalpalli may prescribe showing the supervisory staff and the number of the several classes of workers and other employees employed, from time to time, by the Contractor on the site and such information relating the extraction of coal as the Agent, KTK.5 Incline, Bhupalpalli may require.

17 FIRM PRICES, ESCALATION RATES:

The payment to be made to the Contractor shall be adjusted for such increase or decrease as per the provisions detailed hereunder.

The amount of the Contract shall accordingly be varied subject to the condition that such compensation for escalation in price shall be available only for the work done during the stipulated period of the Contract including such period for the Contract as is validly extended under the provisions of the Contract without any penal action.

The base index shall be the one relating to the last date on which the tender, or revised price bid, was stipulated to be received, whichever is later.

The price escalation shall be applicable **as on base date** which can be escalated in accordance with the clause 17.1. **The date of application of PVC shall be 1st of April of every year.**

First price revision shall be given on 1st April subsequent to base date. Subsequent revisions shall be given once in a year on 1st April of every year.

The **price per ton** shall be exclusive of the applicable service tax, which shall be paid at the prevailing rates **from time to time against tax invoice.**

Bidder shall consider CENVAT credit available against Service Tax while offering the **price per to.**

If any new taxes are introduced in relation to the service provided by the successful bidder in place of / in addition to service tax during the currency of the contract period such new tax shall be paid extra at the applicable rate for the rest of the contract period against appropriate invoice.

Note: As per the knowledge of the SCCL, for the present scope of work Service tax is applicable under the category "Mining of Mineral, Oil and Gas service". As such the successful bidder shall have to submit valid Service Tax Registration Certificate under above category, before commencement of the work

17.1 For the period from **1st April subsequent to base date to the end of the contract**, the following shall be applicable:

- (a) The 60% of the **price** quoted /Ton shall be considered as variable component and shall be escalated annually based on Formula for Escalation Rate provided below.
- (b) The escalation rate applicable for payment for an operating year shall be calculated 15 (fifteen) days prior to the start of the operating year and shall be notified by SCCL.

Annual Price variation to the **price per ton** shall be calculated as per the formula given hereunder:

SL No	Component Index	Weight
1	All India Consumer Price Index (AICPI) numbers for industrial workers [All India (2)] as published by RBI – Table 35 (E1)	0.10
2	All India Wholesale Price Index (AIWPI) numbers for Heavy Machinery and Parts as published by RBI – Table 38 (E2)	0.35
3	All India Wholesale Price Index (AIWPI) numbers for Electricity as published by RBI – Table 38 (E3)	0.08
4	Interest on loans - LIBOR (E4)	0.04
5	All India Wholesale Price Index (AIWPI) numbers for All commodities as published by RBI – Table 38 (E5)	0.03

$$MFr = MFc \times (0.40 + 0.10 \times E1r/E1c + 0.35 \times E2r/E2c + 0.08 \times E3r/E3c + 0.04 \times E4r/E4c + 0.03 \times E5r/E5c)$$

where

MFr = Revised Price per ton for the next financial year.

MFc = Awarded Price per ton for the first year / Price per ton for the current financial year.

E1r = Average of AICPI numbers for Industrial Workers wages for the previous calendar year.

E1c = AICPI numbers for Industrial Workers wages as on base date / considered for previous revision.

E2r = Average of AIWPI numbers for Heavy Machinery and Parts for the previous calendar year.

E2c = AIWPI numbers for Heavy Machinery and Parts as on base date / considered for previous revision.

E3r = Average of AIWPI numbers for Electricity for the previous calendar year.

E3c = AIWPI numbers for Electricity as on base date / considered for previous revision.

E4r = Average rates of Interest on loans - LIBOR for the previous calendar year.

E4c = Rate of Interest on loans - LIBOR as on base date / considered for previous revision.

E5r = Average of AICPI numbers All commodities for the previous calendar year.

E5c = AICPI numbers All commodities as on base date / considered for previous revision.

Once the contract is finalized with the bidder as per agreed price, terms and conditions the awarded price shall be considered as the Price per ton for the First year.

The Price per ton for the First year of the contract is effective / applicable from the base date (i.e. tender closing date) to 31st March of the financial year in which the base date falls.

The indices pertaining to the month in which the base date falls shall be considered as indices as on base date.

First price revision shall be given on 1st April subsequent to base date. Subsequent revisions shall be given once in a year on 1st April of every year.

The revised Price per tons shall be applicable from 1st of April of the next financial year which shall be calculated as per the above formula and shall be informed to the Successful bidder by 15th of March every year.

The variable component of the Annual Price per ton shall be escalated/de-escalated as per the above formula.

18.0 Remedy on Contractor's Failure to carry out required work:

If the Contractor fails to do any such work required by GM, Bhupalapalli area or Agent, KTK.5 Incline, BHP as aforesaid, the Company shall be entitled to carry out such work by its own workmen or by other Contractors and cost there of shall be recovered from the Contractor.

19.0 Maintenance Certificate :

The Contract shall not be considered as completed until a Maintenance Certificate shall have been signed by the GM, Bhupalapalli area and delivered to the Contractor stating that the works have been completed and maintained to his satisfaction. The Maintenance Certificate shall be given by the GM, Bhupalapalli area thirty (30) days after the expiration of the contract completion period as per NIT.

Maintenance Certificate means the certificate which would be issued by the GM/ Bhupalpalli, after successful completion of works at the respective site as per NIT.

19.1 Approval only by Maintenance Certificate :

No certificate, other than the maintenance certificate referred above, shall be deemed to constitute approval of any work or other matter in respect of which it is issued or shall be taken as an admission of the due performance of the Contract or any part thereof or of the accuracy of any claim or demand made by the Contractor or of additional or varied work having been ordered by the GM, Bhupalapalli area nor shall any other certificate conclude or prejudice any of the powers of the GM, Bhupalapalli area.

19.2 Cessation of Company's Liability:

The Company shall not be liable to the Contractor for any matter or thing arising out of or in connection with the Contract or the execution of the works unless the Contractor shall have a claim in writing in respect thereof before giving the Maintenance certificate under this clause.

20.0 CANCELLATION, TERMINATION AND SUSPENSION OF CONTRACT:

- a) The Company shall, in addition to other remedial steps to be taken as provided in the conditions of the Contract, be entitled to cancel/terminate the Contract in full, or in part, after giving 15 days notice in writing, to the Contractor for the following reasons.
- i) Without reasonable excuse fails to commence the works within 18 months from the date of issue of Lol, or
 - ii) Suspends the progress of the works for 30 days, even after receiving a written notice to proceed with the works from the GM, Bhupalapalli area or Agent,KTK.5 Incline, BHP or
 - iii) Makes a default in proceeding with the works with due diligence and continues to do so even after receiving a notice in writing from the GM, Bhupalapalli area or Agent,KTK.5 Incline, BHP for the same, then on the expiry of the period as specified in the notice, or
 - iv) Commits a 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 its remedy to the satisfaction of the GM, Bhupalapalli area or Agent,KTK.5 Incline, BHP even after receiving a notice in writing to do so from the GM, Bhupalpalli Area or Agent,KTK.5 Incline, BHP then on the expiry of the period as specified in the notice, or
 - v) Obtains the Contract from the Company as a result of ring tendering or other non-bonafide methods of competitive tendering, or
 - vi) Offers or gives or agrees to give any person in the service of the Company, or to any other person on the said person's behalf, any gift or consideration of any kind as an inducement or reward for any acts of favour in relation to obtaining or execution of this or any other Contract for his Company, or
 - vii) fails to complete the work, or items of work with individual dates of completion, on or before the date or dates of completion or Company's approved extended date/dates of completion, as applicable, then on the expiry of the period as may be specified by the GM, Bhupalapalli area or Agent,KTK.5 Incline, BHP in a notice in writing, or
 - viii) Fails to remove materials from the site or to pull down and replace work even after 30 days of receiving a written notice from the GM, Bhupalapalli area or Agent, KTK.5 Incline, BHP that the said materials or work had been condemned and rejected by the GM, Bhupalapalli area or Agent,KTK.5 Incline, BHP or
 - ix) Transfers, sublets or assigns the entire work or any portion thereof to a sub-Contractor, without the prior approval in writing from the GM, Bhupalapalli area or
 - x) Being an individual, in the case of a proprietary concern, or any of its partners, in the case of a partnership firm, is declared insolvent under the provisions of the Insolvency Act, 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 the Insolvency Act, or
 - xi) If the Company and its affairs are under liquidation either by a resolution passed by the said Company or if, by an order of court, not being voluntary liquidation proceedings for the purpose of amalgamation or reorganization, a receiver or a manager is appointed by the court on the application by the debenture holders of the said Company, if any, or suffers an execution being levied on his goods and estates and allows it to be continued for a period of 15 days, or
 - xii) In the case of proprietary concern, proprietor expires or, in the case of a partnership concern, any of the partners expire and the legal representative of the deceased

- proprietor or the other surviving partners of the partnership concern are not to the Company's satisfaction as being 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,
- xii) Due to imposition of/change in law by the Government, if the work is to be stopped, the work shall be terminated and payments shall be made only for the portion of the works executed on the principle of quantum merit. No payments shall be made for the shifting of equipment or personnel.
- b) On cancellation or termination of the Contract for the above reasons, the GM, Bhupalpalli Area shall have powers:
- i) To insist the firm not to shift any materials, equipment, stores etc., thereon;
 - ii) To carry out the incomplete work by any means at the risk and cost of the Contractor;
 - iii) To give the Contractor, or his representative on the work, 10 days notice in writing for taking the final measurement for the works executed till the date of cancellation or termination of the Contract. The GM, Bhupalapalli area shall fix the time for taking such final measurement and intimate the Contractor in writing. The final measurement shall be carried out at the said appointed time notwithstanding whether the Contractor is present at the site or not. Any claim regarding the final measurement which the Contractor might make shall be made in writing within 10 days of the taking of such measurement by the GM, Bhupalapalli area. As aforesaid and if no such claim is received, the Contractor shall be deemed to have accepted the above measurement and any claim made thereafter, in this respect, shall not be entertained.
 - iv) To determine the amount to be recovered from the Contractor for completing the remaining work or in the event of the remaining work not being completed, the loss/damage suffered, if any, by the Company after giving credit for the value of the work executed by the Contractor upto the time of cancellation less on account payments made till date and the value of his materials, plant, equipment, etc., taken possession of, after cancellation.

If such amount determined as above were to exceed the sum that would have been payable to the Contractor on due completion by him then the Contractor shall, upon demand, pay to the Company such excess amount and it shall be deemed to be a debt due from the Contractor to the Company and shall be recoverable from him accordingly. The need for the 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 the death/demise of the Contractor.

20.1 Payment on Cancellation or Termination of Contract:

If the Company shall enter and expel the Contractor after the Contract is cancelled or terminated, it shall not be liable to pay the Contractor any money on account of the Contract until the expiration of the "Defects Liability Period" and thereafter until the costs of completion and maintenance, damages for delay in completion, if any, and all other expenses incurred by the Company have been ascertained and the amount thereof certified by the GM, Bhupalapalli area. The Contractor shall then be entitled to receive only such sum or sums, if any, that the GM, Bhupalapalli area may certify would have been due to him upon due completion by him for all works executed prior to the date of termination, at the rates and prices provided in the Contract, which have not already been covered by interim payments made to the Contractor, after deducting the said amount for the costs of completion and maintenance and damages for delay in completion, if any, and all other expenses incurred by the Company. Such sums that the Contractor shall be entitled to receive shall include-

- i) The cost of materials or goods reasonably ordered for the works or temporary works which shall have been delivered to the Contractor or of which the Contractor is legally liable to accept delivery, such materials or goods becoming the property of the Company for which payment was made by the contractor or the contractor shall take away such items at his cost and in such case there shall be no dues payable by SCCL to the contractor in respect of such materials or goods.
- ii) A sum to be certified by the GM, Bhupalpalli Area being the amount of any expenditure reasonably incurred by the Contractor in the expectation of completing the whole of the works in so far as such expenditure shall not have been covered by the payments already mentioned in this clause.
- iii) Any additional sum payable under the provisions of this clause.

20.2 Suspension of Work:

The Company, through the GM, Bhupalapalli area or Agent, KTK.5 Incline, BHP shall have power, to direct the Contractor, in writing, to suspend the work or any part thereof, for such period and in such manner as may be specified therein, on account of any default on the part of the Contractor, or for want of proper execution of the work for reasons other than any default on the part of the Contractor, or on ground of safety of the work.

During the period of such suspension, for any reasons whatsoever, the Contractor shall properly protect and secure the works to the fullest extent necessary.

If the total duration of the suspension(s) exceeds forty five (45) days for the total Contract period, the extra cost considering all running wages, salaries, depreciation, and maintenance of plant and site costs and general overhead costs of the Contract incurred by the Contractor in carrying out the suspension order under this clause shall be borne by the Company unless such suspension is:

due to default of the Contractor, or otherwise provided for in the Contract or such suspension order, or necessary for the proper execution of the work owing to weather conditions affecting the safety or quality of the works, or Necessary for the safety of the works or any part thereof.

Provided that the Contractor shall not be entitled to claim any such extra cost unless he gives a notice in writing, of his intention to claim to the GM, Bhupalapalli area within 30 days of the GM, Bhupalpalli Area or Agent, KTK.5 Incline, Bhupalpalli's order. The GM, Bhupalapalli area shall determine and settle such extra payment to be made to the Contractor in respect of such claim as shall, in the opinion of the GM, Bhupalapalli area, be fair and reasonable.

Extension of time for the completion of works under the Contract shall be allowed by the Company equal to the period of suspension, if the works are suspended for any reason other than any default on the part of the Contractor.

20.3 Recoveries:

In the event of termination or suspension of the Contract, on account of breach on the part of the contractor, the EMD, Retention Money/FSD and PBG shall be forfeited. Any dues of this work shall be recovered from the bills of the existing work and from the bills of any other works present or future done by the contractor.

21.0 FORECLOSURE OF THE CONTRACT:

If, at any time after the acceptance of the tender through the letter of intent, the Company decides to abandon the Contract for any reason, whatsoever, the Company, through its GM, Bhupalapalli area shall give a notice in writing to this effect to the Contractor.

Incase of termination/foreclosure of contract for what so ever reason by the Company, the SCCL shall show an alternate worksite within the Company at the same Contract rates and at the same terms & conditions as of this document and the contract order.

In the event of abandonment, the Company shall be liable to –

Show an alternate worksite in the Company

Pay a reasonable amount assessed and certified by GM, Bhupalapalli area to be the expenditure incurred, if any, by the Contractor on preliminary works at the site, e.g. temporary access road, labour and staff quarters, office accommodation, storage of materials, transport and installation of the plant at the site, electrical distribution network, water supply system, etc.,

Pay the Contractor at the Contract rates for the works executed and measured at the site up to the date of such abandonment,

Pay, at the discretion of the Company for the plant and materials brought to the site, or scheduled to be delivered at the site for which the Contractor is legally liable to pay, for use in the works already carried out but for the fore-closure, including the cost of purchase, transportation and delivery of such plant and materials, provided the plant and materials to be taken over by the company, are in good condition. However the Company may allow the contractor, at the discretion of GM, Bhupalpalli Area to retain the plant and materials in full or in part, if so desired by him, and to be transported by the Contractor from the site to any destination at his own cost.

Take back the materials issued by the Company but remaining unused, if any, at the work site on the date of abandonment/reduction of the work, at the original issue price less a reasonable allowance for any deterioration or damage caused while in the custody of the Contractor.

Pay for the transportation of tools and plants of the Contractor from the site to the Contractor's place or to any other destination of the Contractor's choice, whichever is less.

The Contractor shall, if required by the GM, Bhupalpalli Area or Agent, KTK.5 Incline, Bhupalapally, furnish them the books of accounts, papers, relevant documents as may be necessary to enable the GM, Bhupalapalli area to assess the amounts payable under this clause. The Contractor shall not have any claim for compensation for abandonment of the work, other than vide the terms specified above.

22.0 FORCE MAJEURE:

Neither of the parties hereto shall be considered in the default in performance is prevented or delayed by the events such as war, including civil war (whether declared or not), civil commotion, insurgency, hostilities, revolution, riots, conflagration, epidemics, accident resulting in loss of life, fire, flood, sudden inrush of water which cannot be tackled by normal pumping, drought, fault, or cause beyond the reasonable control of the party affected provided notice in writing is given within 15 days failing which within the shortest possible period by Contractor to GM, Bhupalpalli Area and vice-versa.

Soon after the cause of force majeure has been removed the party whose ability to perform its obligation has been affected shall notify the other party of such cessation and of the actual delay occurred in such affected activity adducing cessation and of the actual delay occurred in such affected activity adducing necessary evidence in support thereof. From the date of

occurrence of a case of Force Majeure, the obligation of the party affected shall be suspended during the continuance of any inability so caused until the cause itself and the inability resulting there from have been removed and the agreed time of completion of the respective obligations under this agreement shall stand extended by a period equal to the period of delay occasioned by such events.

Should one or both parties be prevented from fulfilling the obligations by a State of Force Majeure lasting for a period of more than one month, the two parties shall consult each other and decide on the future execution of the agreement. In case of termination of work due to the Force Majeure conditions, the Company shall pay to Contractor towards all works done by the Contractor up to the date of happening of the Force Majeure event.

Note: For the purpose of above clause, "A Fault" is defined as:

A sudden upward or downward displacement of the coal seam/section which may result in missing of entire thickness of coal seam and/or intrusion of sand stone band in the working section for more than 50% of the working section.

23.0 FOSSILS, VALUABLE TREES, ETC.

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

No fruit trees or valuable plants or trees, with trunk diameter exceeding 150 mtr, shall be pulled out, destroyed or damaged by the Contractor or any of his employees/sub-Contractors without the prior permission of the Company, failing which the cost of such trees or plants and any litigation arising as a result of the felling, damage or destruction of any tree without the permission of the GM, Bhupalapalli area, shall be deducted from the Contractor's dues at the rate to be decided by the Company. The rates quoted are supposed to include the clearance of shrubs and jungles and removal of such trees upto 150 mtrs.

CHAPTER-V

TECHNICAL INFORMATION

1. LOCATION

KTK-5 & 5A Incline Mine: KTK-5 & 5A mine is located in Jaya shaker Bhupalapalli district of Telangana and falls in the Topo-sheet No.56N/15 of Survey of India. This mine forms the part of the Bhupalpalli Block-III (Geological Block) lying between East Longitude of E 79⁰51'03" to 79⁰ 52'52" and North Latitude of N 18⁰ 25' 48" to 18⁰ 26' 24".

Location Plan of KTK.No.5 Incline is enclosed as Plate No.1

Surface plan of KTK.No.5 Incline is enclosed as Plate No.2

2. COMMUNICATION

The Parkal- Mahadevpur State Highway passing over the mid of KTK-5 Incline mine connects this project to other parts of the State. The state capital, Hyderabad is at a distance of 200 km from Bhupalpalli.

The nearest Railhead is Jammikunta on the Kazipet-Balharshah line of South Central Railway and is located at a distance of about 44 Km W-SW of Bhupalpalli as the crow flies. Approach to the mine and other communication facilities are well developed.

3. PROJECT BACKGROUND

The KTK-5 Incline is an operating mine in Bhupalpalli Area of SCCL. This mine forms a part of Bhupalpalli mining lease and a part of KTK 5& 5A incline additional mining lease. At KTK 5 Incline tunneling work was started in September 1993 and the mine has been producing coal from January 1995 onwards. In KTK 5A Incline tunneling started in July 1997 and producing coal from July 2000 onwards. Initially the mine was developed with conventional Bord & Pillar with manual mining and later switched over to semi-mechanization i.e. loading operations is mechanized with SDLs. At present 12 No's of SDLs are working in this mine. The coal seams are extending further to the dip. The average daily production achieved during 2014-15 is 1150T with an average daily employment of 1250.

Exploration: The KTK-5 & 5A incline is carved out of the Geological Blocks, Bhupalpalli Block-III and a small part of KTK 5&5A Inclines Dip side Block. Drilling in Bhupalpalli Block-III was carried out during the period 1970-1982. Geological Report on Bhupalpalli Block-III, was submitted in 1985, proving reserves up to 300-m depth line of No-III seam at KTK-5&5A Inclines Block. The dip side property of KTK-5&5A Inclines was taken up for detailed investigation up to 600-m depth. Data of 137 bore holes with a total meterage of 49961m was considered in preparation of this Geo-model. Overall borehole density in the block area of 4.77 Sq Km is around 28 per Sq.Km.

The detailed exploration in KTK-5&5A Inclines dip side block has established the presence of 11 co-relatable coal seams viz. IB, INDEX, IA, I, II (Top), II (Bottom), IIIB, IIIA, III, IVA & IV seams in descending order. All the seams are considered for qualitative and quantitative assessment. Out of the 11 assessed, only 3 seams i.e. I seam, II Bottom seam and III seam are considered for extraction.

Seam gradient is 1 in 2.5 to 1 in 3. To work an underground mine with such a steep gradient, the height should be comfortable. Hence, thickness of at least 1.8m is considered as the minimum working thickness.

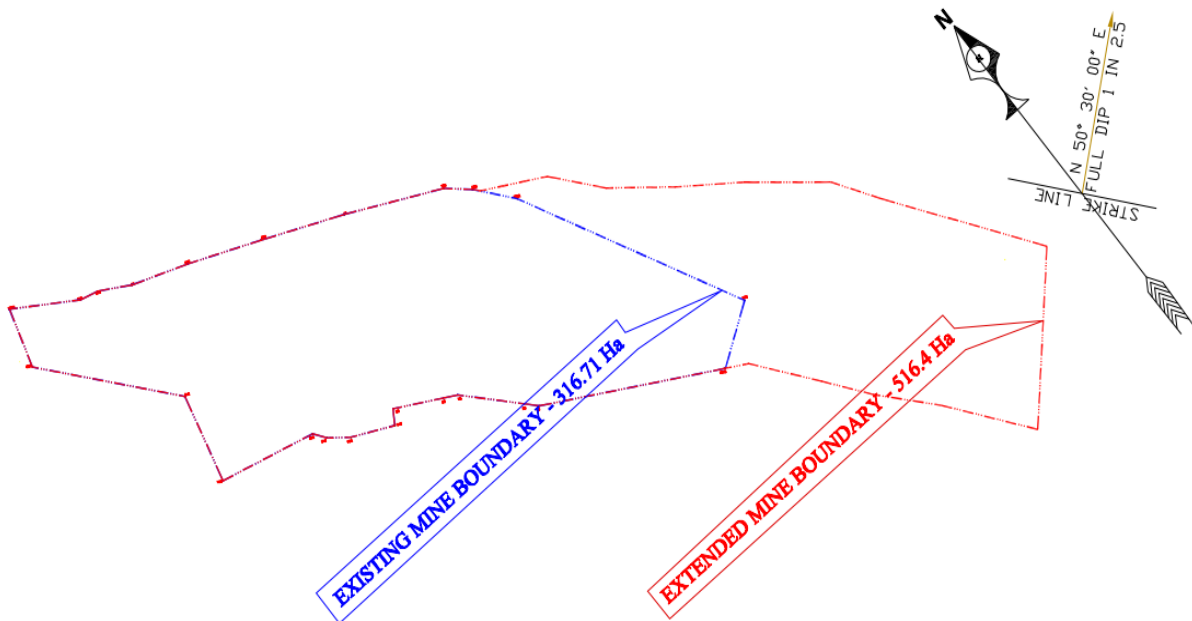


Figure No.5.1: Boundary of Existing Mine and Proposed expansion

Envisaged Method - Longwall Mining: Longwall is the only best, economically viable bulk production technology even at greater depths and steep gradient. Geomining conditions are favorable for application of Longwall technology in all the three seams. Hence among the alternatives studied, **Longwall Mining Method** is found to be suitable for getting bulk production with safety.

Thus at **KTK 5 Incline having a gradient of 1 in 2.8, with limited reserves and developed pillars, Shortwall / Longwall mining is proposed to extract coal with enhanced production, improved safety, conservation, productivity and also to make the mine economically viable.**

4. PROPOSAL OF KTK-5 LW CONTRACTUAL PROPERTY

It is proposed to liquidate south side property of No.I seam, II Bottom seams of existing KTK-5 Incline Mine and to develop and liquidate all the three seams i.e. No.I Seam, II Bottom Seam and III Seams in the dip side extension property with Longwall Technology in the existing and extended area as shown in the figures 5.2, 5.3 & 5.4. It is proposed to utilize the some of the level & dip galleries driven and projected for the purpose of working by conventional Bord & Pillar method as gate roads to form Longwall Panels of widths ranging from 100mt-130mt. All the roadways that are proposed to be utilized as trunk/gate roads would be driven by SCCL with conventional drilling and blasting and the loading operations by SDLs. The Longwall mining operations are being planned to produce an average yearly output of 0.8 MTPA in 15 years of Longwall project life with a total 121 lakhs.

The current Longwall proposal envisages the extraction of 121 LT of extractable reserves from I seam, II Bottom seam and III seam. Extractable reserves in the

present working mine area are 34 LT where as the extractable reserves from the proposed annexed dip side area is 87 LT

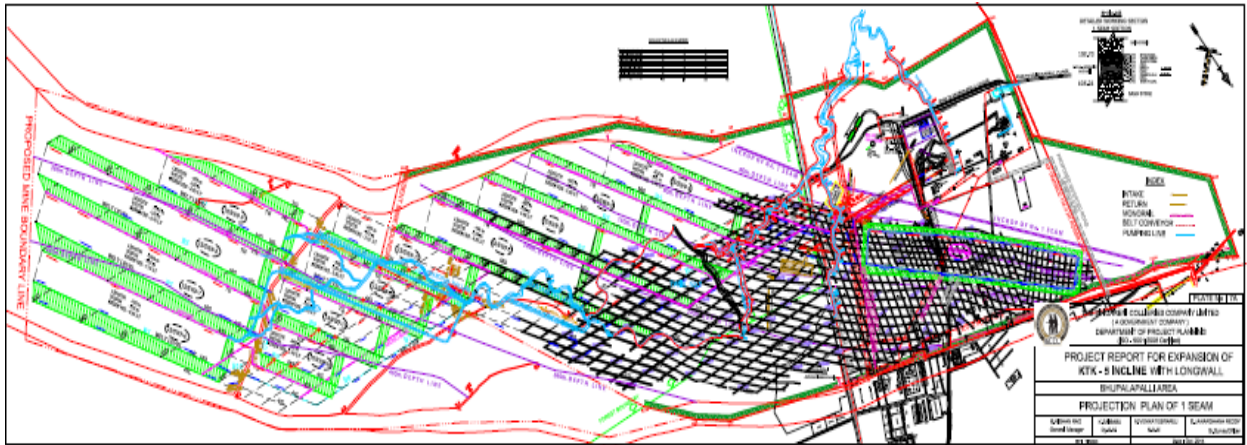


Fig.5.2. Projection Plan of No.I Seam

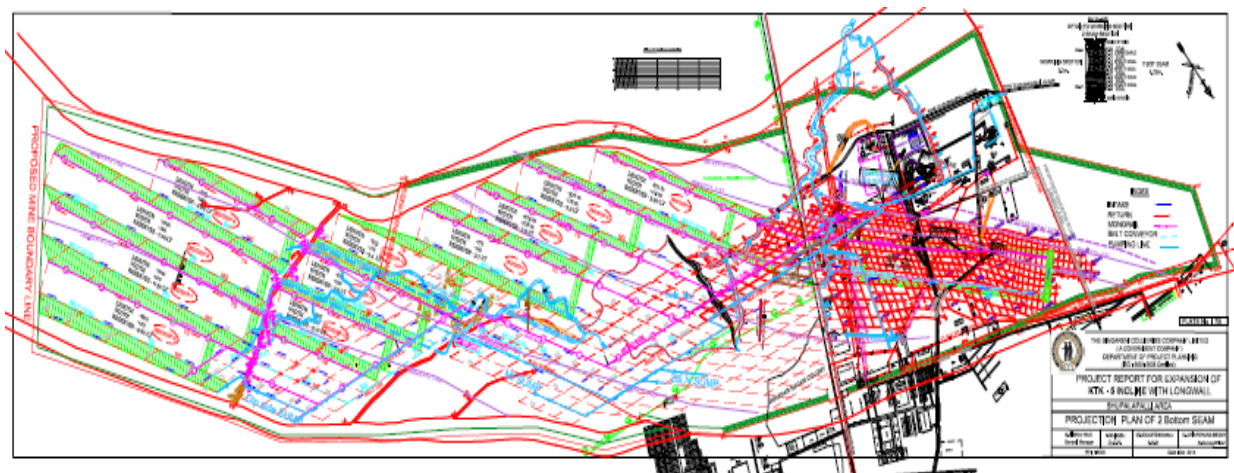


Fig.5.3. Projection Plan of No.II Bottom Seam

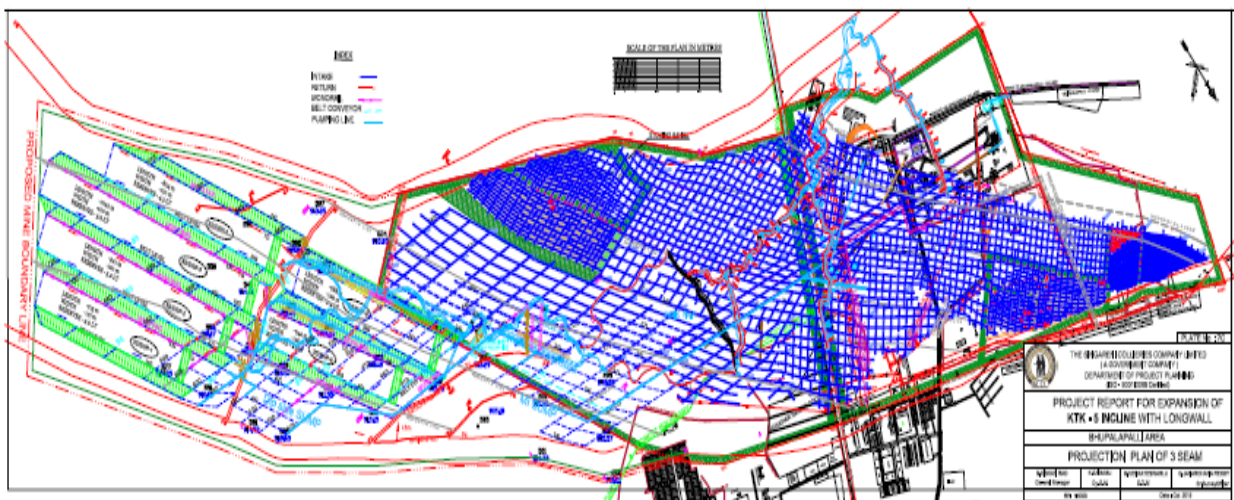


Fig.5.4. Projection Plan of No.III Seam

5. GEOLOGICAL AND EXTRACTABLE RESERVES (MT)

Geological and Extractable reserves of KTK-5 Incline Longwall are given in Table 5.1, 5.2 and 5.3 as follows:

Table 5.1. Geological & Extractable reserves in the Existing Mine boundary (Mt)

Seam	Geological Reserves	Extractable reserves	Already Extracted	balance Extractable
I	8.19	3.85	0.63	3.22
II Bottom	9.88	4.28	0.74	3.54
III	10.12	4.67	2.68	1.99
Total	28.19	12.80	4.05	8.75

Table 5.2. Geological & Extractable reserves in the Expansion Area (Mt)

Seam	Geological Reserves	Extractable reserves		
		Development	Longwall	Total
I	6.58	0.49	3.0	3.5
II Bottom	7.25	0.63	3.2	3.8
III	6.28	0.60	2.5	3.1
Total	20.11	1.72	8.7	10.4

Table 5.3. Total reserves extractable by Longwall (Mt)

Seam	Existing Area	Expansion Area	Total
I	1.7	3.0	4.7
II Bottom	1.7	3.2	4.9
III	0.0	2.5	2.5
Total	3.40	8.7	12.1

6. Table 5.4: SALIENT FEATURES OF THE KTK-5 LW PROJECT

Number of seams present	11
Names of the seams present	IB, Index, IA, 1, II Top, II Bottom, IIIB, IIIA, III, IVA and IV seams
Seams considered for extraction	3 (1 Seam, 2 Bottom Seam, 3Seam)
Total Geological reserves (KTK5+Expansion)	97.0 MT
Geological reserves of seams	48.3 MT

considered for extraction (KTK5+Expansion)	
Total Extractable reserves (KTK5+Expansion)	23.2 MT
Overall % of extraction of coal	24.0%
General gradient of the seams	1 in 2.8 to 1 in 3.0
Technology proposed	Longwall Technology
Seams where Longwall mining is proposed	I Seam and II Bottom Seam
Existing Mine take area	I Seam, II Bottom Seam, III Seam
Expansion project	
Area identified for Longwall mining	Virgin area and Suitable area of developed pillars
Trunk Road/Gate Road Development	Road headers
	1 Seam - 13
	2 Bottom Seam - 12
	3 Seam - 6
	Total - 31
Number of Panels	1 Seam 4.7 MT
	2 Bottom 4.9 MT
	3 Seam 2.50 MT
	Total 12.1 MT
Extractable Reserves by proposed Longwall	
PRS cycles required	32000
Peak Output expected from LW Panel	1.12 MTPA
Average (Rated) capacity of Longwall Project	0.8 MTPA
Life of the Longwall Project	17 Years (including 2 years construction period)
Grade	
I & II seams	G10/G11
III seam	G5
Maximum depth of proposed workings	620 m
R&R	Nil.
Mode of dispatch	Pit head bunkers of 2X100 T capacity are envisaged to deliver ROM coal
Washing of coal	Nil

7. Production capacity, quality and Life of the Project

The rated capacity of the Longwall Project is 0.80 MTPA and the peak production expected from Longwall Mining is 1.123 MTPA. Production capacity has been arrived considering 305 working days per annum. The mine produces G-10 and G-5 grades throughout the life. Separate dispatch points are envisaged for smooth dispatch of different grades of coal. Seam wise production details from Longwall panels given as follows:

Table 5.5. Seam Wise Annual Production - Longwall

Year	Area	Seam	Panels	Production Target (LT)	Panel Dimensions Length(m) x Width(m)	Average Thickness(m)	Remarks
1	Existing area	I Seam	Panel No.1& No.2	7.50	P1-748 x134 P2-565x108	P1-3.03 P2-2.52	
2	Existing area	I Seam	Panel No.3 & No.4 & No.5	7.22	P3-563x118 P4-634x121 P5-980x134	P3-2.35 P4-2.79 P5-2.63	
3	Existing area	I Seam IIB Seam	Panel No.5 & Panel No.1 & No.2	8.33	P5 – P1-771x116 P2-574x108	P5 -- P1-2.71 P2-2.71	
4	Existing area	IIB Seam	Panel No.3, No.4 & No.5	7.13	P3-576x116 P4-671x119 P5-860x134	P3-3.16 P4-3.06 P5-3.16	
5	Existing Expansion property	II B Seam I Seam	Panel No.5 Panel No.6 & 7	8.15	P5— P6-930x120 P7-1064x119	P5— P6-2.65 P7-2.84	
6	Expansion property	I Seam	Panel No.7 & 8	6.88	P7- P8-1110x120	P7— P8-3.03	Mid life overhaul
7	Expansion property	I Seam	Panel No.8, No.9 & No.10	9.07	P8— P9-629x120 P10-345x120 P11-	P8-- P9-3.33 P10-3.00 P11-2.29	

					491x120		
8	Expansion property	I Seam	Panel No.11, No.12 & No.13	6.85	P11— P12- 568x120 P13- 653x122	P11-- P12-2.70 P13-2.64	
9	Expansion property	I Seam & II B seam	Panel No.13 Panel No.6&7	8.99	P13— P6- 802x120 P7- 1041x120	P13-- P6-3.11 P7-3.28	
10	Expansion property	II B seam	Panel No.7&8	11.23	P7— P8- 1091x120	P7-- P8-3.42	
11	Expansion property	IIB seam	Panel No.9&10	6.23	P9- 673x120 P10- 537x120	P9-3.20 P10-3.06	Mid life overhaul
12	Expansion property	IIB seam	Panel No.11 &12	8.32	P11- 614x120 P12- 613x116	P11-3.19 P12-3.25	
13	Expansion property	III Seam	Panel No.1,2 &3	9.23	P1- 715x117 P2- 921x120 P3- 1042x120	P1-3.40 P2-3.36 P3-3.20	
14	Expansion property	III Seam	Panel No.3,4 &5	8.54	P3-- P4- 824x120 P5- 644x120	P3-- P4-3.13 P3-2.71	
15	Expansion property	III Seam	Panel No.5 &6	7.21	P5- P6- 688x120	P5— P6-2.49	
Total (in Lakh tonnes)				121.00			

5.1. Implementation of the Project

Initially, Longwall working is planned in the existing mine take area. Later on all development activities in extension property will commence after obtaining all necessary statutory clearances. Permissions/approvals like Mining Plan, Environmental Clearance, Forest clearance, Mining Lease etc which are required for operating in the extension property will be obtained by SCCL.

5.2. MINING SCHEME

5.2.1. Manner of Extraction Proposed:

The extraction proposed under the scope of this Project is entirely by **LONGWALL CAVING METHOD**. The sequence of extraction in caving method should be in **descending** order. Hence initially extraction in 1 Seam is taken up followed by extraction in 2 Bottom seam beneath the de-coaled areas of 1 Seam. Finally 3 Seam will be extracted beneath the settled goaf of I Seam and II Bottom Seams. The strategy would be to introduce the Longwall technology in the I Seam property of the present working boundary of the mine to achieve production to the tune of 0.80 MTPA followed by II Bottom seam. Then to shift the Longwall equipment sequentially to 1 Seam, 2 Bottom Seam and 3 Seam of the expansion area

The method of work involves the preparation of Longwall panel by driving gate roadways are drawn by SCCL and extraction of coal by Longwall method. The extraction sequence is in descending order. Coal from the three seams i.e. I Seam and II Bottom Seam and III Seams is proposed to be extracted by Longwall mining. Total 31 numbers of panels are considered for Longwall mining in all the three seams i.e.No I Seam, No II Bottom seam and, No III Seam.

Table 5.6. Seam wise proposed number of Longwall panels

Sl. No.	Seam	Virgin Area	Developed Pillars
1	I	12	1
2	II Bottom	11	1
3	III	6	0
Total		29	2

The length of panels varies from 345 meters to 1110 meters. The face length (panel width) varies from 100 meters to 134 meters. The gate roads of the panels are kept slightly raising to facilitate self drainage and face dip is proposed along the full dip of the seam.

Longwall panels are formed by development of Gate Roadways from trunks up to the boundary line. At the end Tail gate and Main Gate are joined together with face dip and Long wall equipment is installed in this chamber. Extraction of panel commences from boundary towards trunk roadways (retreating with caving).

The operating height of chock ranges from less than or equal to 1.8m and upto a maximum height of more than or equal to 3.6m to extract all the panels with the same set of equipment. While forming the panels and deciding the face lengths due consideration was also given for superimposition of panel barriers of two seams.

5.2.2. Support System

The support system during Panel development, drivage of Trunks and gate roadways is by full column resin grouted steel bolts as per approved SSR.

In Longwall mining, when the face is retreating, the abutment pressures rise rapidly ahead of face and then the stress falls off rapidly to the normal. Keeping this stress variation in view, support system for abutment pressure during extraction should be by cable bolts or hydraulic props with link bars as per the approved support plan However, subject to the recommendations of scientific agency, support system may be reviewed and replaced with suitable system if necessary.

5.2.3. Ventilation

Sufficient ventilation as per statute will be provided by SCCL at the intake/inlet of the panel.

5.3. EQUIPMENT CONFIGURATION

The Longwall equipment to be deployed by the successful bidder in this project for the working of Longwall panels shall be capable of producing about 1.12 MTPA of coal consisting of Powered Roof Supports with minimum of **120T/m² support density 2-leg IFS type PRS having an** operating height ranges from less than or equal to 1.8m to a maximum height of more than or equal to 3.6m. PRS shall be designed for at least 30,000 cycles. The equipment shall possess all the required safety appliances specified by DGMS authorities during the approval and during the Longwall operation.

5.4. GEOLOGY

The block is located in the north-western part of Mulug Coal belt. It forms as lenticular block as it is enclosed by two major faults F₁- F₁ & F₂-F₂ (strike to oblique in nature). **Bore hole section of KTK-5 Incline Project is enclosed as Plate No.3.** Sequence of Coal Seams is given below.

Table No. 5.7: Sequence of Coal Seams

Seam parting	Lithology	Thickness range (As encountered from Boreholes) (m)	
		Min	Max
BARREN MEASURES			
Parting	Grey white sst with clay bands	15.25	21.20
IB-Seam	Coal	0.23	2.17
Parting	Grey, sst	4.25	10.90
Index Seam	Coal	0.18	1.08
Parting	Grey sand stone	2.47	12.58
IA seam	Coal with bands	0.62	2.57
Parting	Grey sst with Thin clay/shale bands	15.0	35.50
I Seam	Coal with clay/ shale bands	1.50	4.15
Parting	Grey sst with thin shale / clay bands	12.64	22.26
II (Top)	Coal	0.30	2.12
Parting	Carb shale, shale, clays, sst	2.33	14.33
II (Bottom)	Coal with shale / clay bands	1.10	4.23
Parting	Grey white sst with coal, clay/shale bands	28.30	44.60
III B seam	Coal	0.16	1.80
Parting	Grey white sst	11.20	18.72
III A seam	Coal	0.10	1.12
Parting	Grey white sst	11.06	17.80
III Seam	Coal	0.60	3.66
Parting	Grey white sst	2.28	13.56
IV A Seam	Coal	0.68	1.77
Parting	Grey white sst	18.56	23.17
IV Seam	Coal	0.22	1.34
Parting	Grey white sst		

TALCHIR FORMATION

6.1.1. STRUCTURE

The coal seams trend in a NW-SE direction and dip towards northeast. The gradient varies from 1 in 2.83 in the NW part to 1 in 3.6 in the SE part of the block. Based on the interpretation of the sub surface data, a total of 9 faults have been deciphered while preparing the KTK- 5&5A incline dip side block geological report. The details of the faults such as trend, amount of throw, linear extent and the evidence for faults are furnished in below Table 5.8.

Table No. 5.8: Description of Faults

SL.NO	FAULT NO.	TYPE	TREND	THROW DIRECTION & MOUNT	LINEAR EXTENT(M)
1	F ₁ -F ₁	Strike	NW-SE	S-W & 300+m	4600 +
2	F ₂ -F ₂	Strike	NW-SE	S-W & 250-330m	1800+
3	F ₃ - F ₃	Oblique	E-W	South & 20m	275+
4	F ₆ - F ₆	Oblique	NE-SW	E & 10-15m	750+
5	F ₇ - F ₇	Oblique	NW-SE	NW & 10m	850
6	F ₈ - F ₈	Oblique	NE-SW	E & 20m	900
7	F ₉ - F ₉	Oblique	E-W	Oblique to Strike 5 m	450

6.2.3. Geo-Engineering studies: The roof and floor rocks and all the coal seams of BH.No-482 & 577 were referred to Regional Analytical Lab, Kothagudem apart from the RQD studies. National Institute of Rock Mechanics (NIRM) conducted “Hydro fracture” studies in two boreholes viz. BH.No.501 & 502.

Table 5.9. PMP details of Roof and Floor strata are given in the following table:

Strata		Roof of I Seam	Floor of I Seam	Roof of II Bot Seam	Floor of II Bot Seam	Roof of III Seam	Floor of III Seam
Density	(gm/cc)	2.02-2.30	2.15-2.29	2.28-2.32	2.19-2.32	2.12-2.34	2.22-2.29
Tensile Strength	(kg/cm ²)	12.23-33.78	15.03-29.71	23.67-50.28	14.64-43.27	11.30-42.40	14.31-34.43
Compressive Strength	(kg/cm ²)	144-384	142-316	257-388	166-457	164-492	194-431
Youngs Modulus X 10 ⁵	(kg/cm ²)	0.36-0.91	0.36-0.69	0.58-1.26	0.41-0.96	0.40-1.09	0.09-0.91
Shear Strength	(kg/cm ²)	30.41-81.77	33.47-70.21	56.95-127.63	35.7-101.2	34.64-100.53	38.81-90.01
Impact	Index	48.18-	48.15-	50.20-	48.58-	48.54-	45.61-

Strength		52.47	51.25	56.62	53.77	55.02	53.31
Proto dyaknov Strength	Index	0.54-1.65	0.52-1.36	1.07-2.85	0.63-2.05	0.71-2.40	0.77-1.62
RQD %		43-100	52-96	76-93	71-100	63-100	42-99

6.2. Description of Coal Seams

The detailed exploration in KTK-5&5A Inclines dip side block has established the presence of 11 correlatable coal seams viz. IB, INDEX, IA, I, II (Top), II (Bottom), IIIB, IIIA, III, IVA & IV seams in descending order. All the seams are considered for qualitative and quantitative assessment.

Thickness Computation: Based on the total percentage of ash and moisture content, the carbonaceous matter has been classified as coal upto 40%, shaly coal from 40% to 55% and carbonaceous shale from 55% to 75% range. Beyond 75% limit they are treated as non-combustible bands.

In-Band Thickness: The in-band thickness of the seam is computed by considering coal, shaly coal and **carbonaceous** shale up to 1 m thickness within the seam. The inert bands like sandstone, clays, shales, carb clays and sandy shales of thickness more than 0.05 m are excluded.

Quality of Coal Seams: The coal cores were analysed at Regional Analytical Laboratory, Kothagudem and Coal Survey Laboratory, Nagpur. The grades of the coal seams referred in the succeeding pages are on the basis of 60% RH at 40°C// Brief details of all the assessed coal seams tabulated are given in the tables no 5.10 to 5.11.

Table No 5.10: Details of Coal seams

SL. NO.	SEAM DETAILS	IB	INDEX	IA	I	II TOP	II BOT	III B	III A	III	IV A	IV
1	Depth range (m)											
	Minimum (Roof)	154.8	161.55	172.42	207.26	227.37	232.07	278.38	296.25	309.28	320.16	341.61
	Maximum (Roof)	473.7	480.64	490.48	522.61	539.98	553.47	600.27	611.13	623.59	639.2	658.54
2	Seam thickness (m)											
	Minimum	0.23	0.18	0.62	0.45	0.3	1.1	0.16	0.1	0.8	0.65	0.2
	Maximum	2.17	1.08	2.57	4.15	2.22	4.23	1.8	1.12	3.66	1.77	1.51
3	Moisture %											
	Minimum	5.25	5.36	4.65	4.79	4.51	3.14	2.2	2.2	4.88	5.3	2.2
	Maximum	6.94	6.04	6.68	5.94	6.23	6.01	6.65	6.78	6.93	7.24	7.18
4	Ash %											
	Minimum	31.85	28.87	16.8	30.21	24.92	27.94	17.81	16.18	12.69	10.73	10.55
	Maximum	41.35	39.77	37.61	41.95	42.94	48.65	29.52	44.65	32.9	29.38	35.33
5	UHV (k.cal/kg)											
	Min/Grade	2469/F	2672/F	3067/F	2400/F	2386/G	1527/G	4147/E	2083/G	3686/E	4015/E	3252/F
	Max/Grade	3710/ E	3833/E	5675/B	4350/D	4775/D	4734/D	5513/C	6016/B	6277/A	6424/A	6485/A

Table No.5.11: PARTING DETAILS

Parting between	I B & Index	Index & IA	IA & I	I & II Top	II(Top) & II Bot	II(Bot) & IIIB	IIIB&IIIA	IIIA & III	IIIA&IVA	IVA & IV
Minimum (m)	4.25	2.47	15.7	12.84	2.33	28.3	10.85	8.96	2.28	18.5
Maximum (m)	10.9	12.58	35.5	22.6	14.48	45.06	19.45	17.8	13.56	23.17
Lithology	SST	SST	Sand stone with thin clay/shale bands	Grey sst with thin clay/shale bands	Grey sst with carb clay/shale bands	Sandstone with carb Shale, shale and clay bands	Sst	Sst	Sst with thin carb shale, shale and coal bands	Sst

5.5. Mine Entries, Underground Tunnels and Strata Bunkers

5.5.1. Mine Entries

KTK-5 Incline is the working mine having well established infrastructure like Shafts and Inclines. This mine is having two sections having independent inclines and a common shaft serving for both the sections. In KTK-5A Incline section, pair of inclines was driven from surface to II (bottom) seam. Similarly Pair of inclines was driven from surface to III seam in KTK 5 incline section. The up cast shaft of 5.5 m dia with a depth of 50m connected to only No. 3 Seam is serving both KTK 5 and KTK 5A incline sections.

Haulage inclines: Two independent haulage inclines were driven from surface to II Bottom seam and III Seam respectively. The dimensions of both the inclines are 4.2 m x 2.8 m. While introducing Longwall technology, roadway way dimension may have to be increased at required places, which shall be done by SCCL to cater the transport needs of heavy Longwall equipment. The lengths of the tunnels to II seam and III seam are 150m and 170m resp. This incline shall be used for transport of material and shall also be used for movement of heavy machinery in and out of the mine.

Man way dip: Two independent inclines were driven from surface to II Bottom seam and III Seam as man way inclines. The lengths of the tunnels to II seam and III seam are 150m and 170m respectively and the dimensions are 4.2 m x 2.8 m. One of these tunnels is proposed to be utilized for coal evacuation. Proposed belt conveyor system will have to be established in the man way dip tunnel of KTK 5A incline section. Road way dimensions are sufficient to accommodate the proposed belt conveyor as the men transport system is established in Man way dip of KTK 5 incline section. Thus these two incline shall be used for transport of coal out of the mine and for transport of men in and out of the mine respectively.

Return Shaft: The up cast shaft of 5.5 m diameter with a depth of 50m connected to only No. 3 Seam is serving both KTK 5 and KTK 5A incline sections. This shaft will be utilized as return airshaft for the entire life of the proposed Longwall project also.

Table No.5.12: Details existing entries (**Inclines**)

KTK 5 SECTION

Sl.No	Name	Length	Width	Height	Purpose / Intake/Return	Connected to
1.	M.W.D (5 Incline)	190 M	4.2M	2.8M	Travelling (Intake)	3 Seam
2.	M.I.D (5 Incline)	170 M	4.2M	2.8M	Haulage (Intake)	3 Seam

KTK5A SECTION

Sl.No	Name	Length	Width	Height	Purpose / Intake/Return	Connected to
1.	M.W.D (5A Incline)	160 M	4.2M	2.8M	Travelling (Intake)	2 Seam

2.	M.I.D (5A Incline)	150 M.	4.2M	2.8M	Haulage (Intake)	2 Seam
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In this project it is proposed to utilise the existing entries for the extraction of coal from the dip side expansion area. For the transport of men & material with mono-rail system, it is proposed to drive a new tunnel from surface to II Seam which will also serve as intake airway supplying fresh air.

As explained above, the mine would be worked with the existing openings (four inclines and one shaft) apart from the new tunnel of 198m length. These openings would be utilized for the following:

- Transportation of coal from underground i.e. as coal transport route
- *Man way dip of KTK 5A section*
- Transportation of men & material i.e. as mono-rail transport route - *New tunnel proposed at KTK 5A section*
- Main return route i.e., up-cast shaft - *Existing return shaft*

5.5.2. PROPOSED UNDERGROUND TUNNELS

In-seam tunnels are required to be driven in all the three seams to cross the fault F8 and in I and II Bottom seams to cross fault F7. These in-seam tunnels are to be driven by the successful bidder.

Inter seam tunnels are required from II Bottom seam to I seam and III seam for different purposes like Belt conveyor, mono rail, return airway etc. These inter seam tunnels will be driven by SCCL.

Details of the tunnels (in-seam and inter seam tunnels) in all the three seams are given in the tables from Table No. 5.15 to 5.17. The purpose of each tunnel like haulage, belt conveyor, men transport, drainage, ventilation etc is also given against each tunnel.

Existing tunnel located at 24 L of III seam between I seam and III seams can be utilized for extending the mono-rail transport system to III seam.

Table No. 5.13: DETAILS OF THE TUNNELS - 1 SEAM

Description	Length in M	Gradient	Size	Purpose
INSEAM TUNNELS TO CROSS FAULT "F7" AT 33L	36	1 IN 15	4.5MX3.0M	Monorail/HAULGE
INSEAM TUNNELS TO CROSS FAULT "F7" AT 34L	34	1 IN 12	4.5MX3.0M	TRAVELLING/Intake
INSEAM TUNNELS TO CROSS FAULT -F8 FOR MG6	67	1 IN 4	4.5MX3.0M	BELT CONVEYOR
INSEAM TUNNELS TO CROSS FAULT -F8 FOR TG6	55	1 IN 30	4.5MX3.0M	Monorail/HAULAGE
INSEAM TUNNELS TO CROSS FAULT -F8 FOR MG7	54	1 IN 30	4.5MX3.0M	BELT CONVEYOR
INSEAM TUNNELS TO CROSS FAULT -F8 FOR TG7	70	LEVEL	4.5MX3.0M	Monorail/HAULAGE
INSEAM TUNNELS TO CROSS FAULT -F8 FOR MG8	67	LEVEL	4.5MX3.0M	BELT CONVEYOR
INSEAM TUNNELS TO CROSS FAULT -F8 FOR TG8	56	LEVEL	4.5MX3.0M	Monorail/HAULAGE
INSEAM TUNNELS TO CROSS FAULT -F8 FOR MG9	50	1 IN 25	4.5MX3.0M	BELT CONVEYOR
INSEAM TUNNELS TO CROSS FAULT -F8 FOR TG9	60	1 IN 30	4.5MX3.0M	Monorail/HAULAGE
INSEAM TUNNELS TO CROSS FAULT -F8 FOR COMPANION LEVEL OF SWP-8	35	1 IN 3	4.0MX3.0M	RETURN

Table No. 5.14: DETAILS OF THE TUNNELS – 2 BOTTOM SEAM

Description	Length in m	Gradient	Size	Purpose
INSEAM TUNNEL AT 29L (FAULT -F7)	30	Level	4.5MX3.0M	Monorail/HAULAGE
INSEAM BELT TUNNEL AT 30L UPTO STRATA BUNKERS (FAULT -F7)	41	Level	4.0MX2.5M	BELT/BUNKERS
INSEAM TUNNEL AT 29L TO CROSS FAULT -F7	23	1 in 10	4.5MX3.0M	Travelling/Intake
INSEAM TUNNELS TO CROSS FAULT -F8 AT 40L	27	1 in 25	4.0MX3.0M	DEWATERING
INSEAM TUNNELS TO CROSS FAULT -F8 FOR TG6, 39L	56	1 in 25	4.5MX3.0M	Monorail/HAULAGE
INSEAM TUNNELS TO CROSS FAULT -F8 FOR MG7, 38L	58	1 in 30	4.5MX3.0M	BELT CONVEYOR
INSEAM TUNNELS TO CROSS FAULT -F8 AT 37L	46	1 in 12	4.5MX3.0M	Monorail/HAULAGE
INSEAM TUNNELS TO CROSS FAULT -F8 FOR TG7	61	Level	4.5MX3.0M	BELT CONVEYOR
INSEAM TUNNELS TO CROSS FAULT -F8 FOR MG8	62	Level	4.5MX3.0M	HAULAGE
INSEAM TUNNELS TO CROSS FAULT -F8 FOR TG8	67	1 in 22	4.5MX3.0M	BELT CONVEYOR
INSEAM TUNNELS TO CROSS FAULT -F8 FOR MG9	56	1 in 15	4.5MX3.0M	Monorail/HAULAGE
INSEAM TUNNELS TO CROSS FAULT -F8 FOR TG9	56	1 in 20	4.5MX3.0M	BELT CONVEYOR
INSEAM TUNNELS TO CROSS FAULT -F8 AT 29L	30	1 in 3	4.0MX3.0M	RETURN

Table No. 5.15: DETAILS OF THE TUNNELS - 3 SEAM

Description	Length in m	Gradient	Size	Purpose
INSEAM TUNNELS TO CROSS FAULT -F8 AT 43L	25	1 IN 2.5	4.5MX3.0M	Monorail/HAULAGE
INSEAM TUNNELS TO CROSS FAULT -F8 FOR MG2 AT 42L	62	1 IN 5	4.5MX3.0M	BELT CONVEYOR
INSEAM TUNNELS TO CROSS FAULT -F8 FOR TG2 AT 41L	93	1 IN 30	4.5MX3.0M	Monorail/HAULAGE
INSEAM TUNNELS TO CROSS FAULT -F8 FOR MG3 AT 40L	75	1 IN 35	4.5MX3.0M	BELT CONVEYOR
INSEAM TUNNELS TO CROSS FAULT -F8 FOR TG3 AT 38L	74	LEVEL	4.5MX3.0M	Monorail/HAULAGE
INSEAM TUNNELS TO CROSS FAULT -F8 FOR MG4 AT 37L	51	1 IN 5	4.5MX3.0M	BELT CONVEYOR
INSEAM TUNNELS TO CROSS FAULT -F8 FOR TG4 AT 35L	51	1 IN 4.5	4.5MX3.0M	Monorail/HAULAGE
INSEAM TUNNELS TO CROSS FAULT -F8 AT 34L	34	1 IN 3	4.5MX3.0M	Return

Note: There is approximately 1662 m length of inseam tunnels are to be driven while driving trunk and gate roadways which is in the scope of the successful bidder. Inter seam tunnels are in the scope of SCCL.

Proposed Belt Layouts is enclosed as Plate No.5 in which the strata bunkers are shown tentatively which may vary at the time of execution based on the geo-mining conditions and operational issues. Proposed Haulage Layouts is enclosed as Plate No.4

5.6. Mining System

5.6.1. Introduction of Mining method

The extraction proposed under the scope of this Project is entirely by **LONGWALL CAVING METHOD**. The sequence of extraction in caving method should be in **descending** order. Hence initially extraction in 1 Seam is taken up followed by extraction in 2 Bottom seam beneath the de-coaled areas of 1 Seam. Finally 3 Seam will be extracted beneath the settled goaf of 1 Seam and 2 Bottom Seams. The strategy would be to introduce the Longwall technology in the I Seam property of the present working boundary of the mine to achieve production to the tune of 0.8 MTPA followed by 2 Bottom seam. Then to shift the Longwall equipment sequentially to 1 Seam, 2 Bottom Seam and 3 Seam of the expansion area.

5.6.2. Development layout

5.6.2.1. I Seam

The mode of entry to I Seam is through the tunnels connected to Main incline and Man way dip incline of KTK 5A section. For the transport of men & material with mono-rail system, it is proposed to drive a new tunnel from surface to II bottom Seam which will also serve as intake airway supplying fresh air. Road ways in II Bottom seam are to be extended by around 120m for connecting the proposed mono-rail tunnel. These three inclined tunnels will be utilized for coal, men and material transport respectively. Entire Ventilation air will have to pass through the return Shaft connected to III Seam. Return air from I seam will pass to II seam through Tunnels and will then be going to III seam through the tunnels between II Seam and III Seam.

Present Mine Boundary: Major part of the seam has already been developed. In addition to the small patch of developed galleries amenable for **Shortwall** mining, the virgin patch in south side of the main dips is proposed for Longwall working. Roadways required for transport and ventilation are already developed. Roadways developed in apparent dip from 11D to 19 Dip are utilised for transport and ventilation purpose. For establishing the coal transport circuit with belt conveyor, a tunnel is proposed at 15LN/11D connecting the Man Way Dip of 2Bottom Seam. The gate road development required for Panel-1 is already undertaken at 24L and 25L of I seam and will be continued at 29L and 30L. Hence the gate road development envisaged under this project is from panel 2 only.

Expansion area: For approaching the Longwall property in expansion area, trunk road ways are to be developed towards south from the existing roadways below 30L. Total of 4 roadways (30L, 32L, 33L & 34L) are proposed in level direction in which two will serve as intakes and other two as return. Whereas 5 roadways are proposed in dip direction after fault F7 in which three will serve as intakes and other two as return. Development of these trunks in the expansion area is to be continued with Road headers.

Four tunnels are proposed in the dip trunk areas from II seam to I seam for transport of coal, men and material and as return airway respectively. Gate road drivage is to

be taken up towards south from these trunks. As the trunk roadways cannot be accommodated after the fault F8, the gate roadways are designed to have tunnels in them at fault F8. Extraction of these Longwall panels will have a break at these tunnels.

Full section development is proposed to be done. Minimum height and width of the gate roadways is 2.5 m and 4.8m respectively. Where ever the height is less than 2.5m, bottom is to be cut to make a minimum height of 2.5m.

No sumps are proposed in I seam as the pumping is proposed to be undertaken from II seam. Bore holes shall be drilled at regular intervals for draining water to II seam. Two inter seam tunnels from I seam to II seam are proposed as drainage tunnels at the bottom most level beyond fault F8 from 45L of I seam. *Details of the tunnels proposed to be driven from I seam were given in the table No. 5.15.*

The detailed projection plan of I Seam is presented at Plate No.6.

5.6.2.2. II Bottom Seam

The virgin patch in south side of the main dips and virgin patch in the expansion area is proposed for Longwall mining in addition to the small amenable patch of developed galleries. Main incline dip, Man way Dip and the proposed new mono-rail tunnel of KTK 5A incline section are connected to II Bottom Seam. These three inclined tunnels will be utilized for coal, men and material transport and ventilation. Development is done in this seam to the north side of Main inclines up to 23L. Trunk dips are now being continued beyond 23L. ***Development of the trunk roadways in the existing property will be continued with SDLs by SCCL. However, in case of any necessity, the required trunk road development in the existing property may also have to be done by successful bidder. Development of the trunk roadways and gate roadways including in seam tunnels in proposed Longwall workings of all three workable seams within the expansion area is to be done by the successful bidder for the continued working of Longwall panels.***

For working of the property with Longwall, 5 numbers of trunk roadways are proposed along the Manway dip and main incline dip. Belt conveyor is proposed in the Dip which is in line with the Manway dip. These 5 trunk roadways will serve the purpose of transport and ventilation during the working of Longwall. For approaching the Longwall property in expansion area, same number of trunk road ways are to be developed in level towards south from the main trunk roadways below 27L (27L to 31L) and in dip direction after fault F7. Out of five trunk roadways, three will serve as intakes and other two as return. Transport of coal, men and material is envisaged through these three intake roadways. Gate road drivage of Longwall panels is to be taken up towards south from these trunks. Similar to the gate road development in I Seam, these gate roadways are also designed to have tunnels in them at fault F8 as the trunk roadways cannot be accommodated after the fault F8.

Minimum height and width of the trunk/gate roadways is 2.5 m and 4.8m respectively. Where ever the height of II Bottom seam is less than 2.5m, bottom is to be cut to make a minimum height of 2.5m by leaving 0.5m of coal layer in roof. In order to

maintain favorable cross gradient in the gate roadways, bottom blasting is to be done on raise side of the gallery.

Immediate roof of II Bottom seam is not consistent. Layers of clay/shaly coal/carbonaceous shale/shale are observed in the immediate roof in major part of II Bottom seam proposed for Longwall mining. Workability of II Bottom seam was referred to CIMFR and their recommendation is to work along the stone floor by leaving a layer of coal in the roof against the shale layers. Hence the working section and the supporting system shall be as per the recommendations of CIMFR. Accordingly gate roads are proposed along the bottom section of II Bottom seam by leaving a coal layer of atleast 0.5m against the shale/clay **roof as shown in Figure No.5.5.**

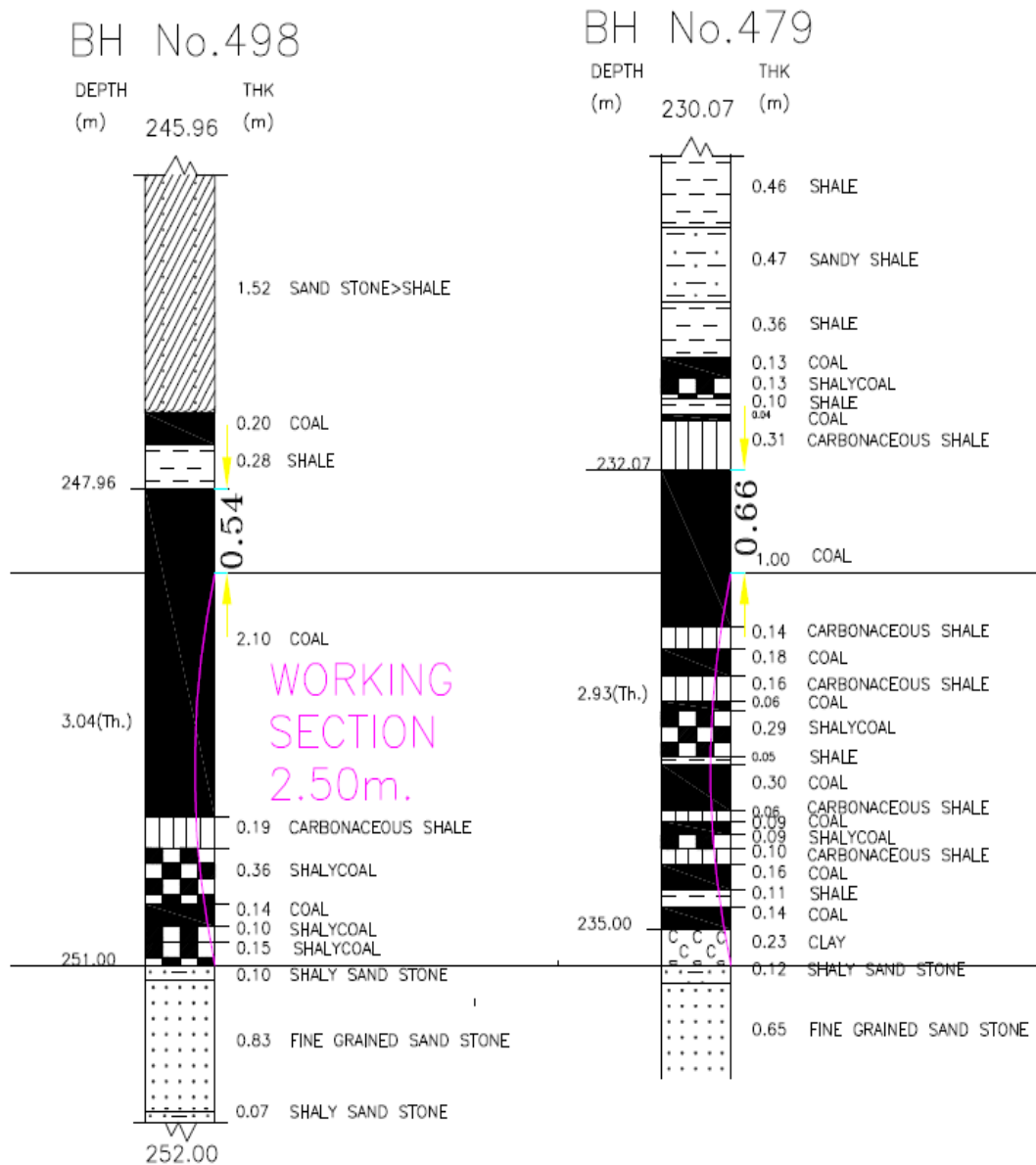


Figure No.5.5: Working section of II Bottom seam

Evacuation of total coal produced from the proposed Longwall project will have to be dealt with the belt conveyor planned in II Seam. Coal from Longwall panels of III seam also will come in to the bunkers proposed over II seam and then will be transported to surface through series of belt conveyors.

Return air from II seam will be going to III seam through the tunnels between II Seam and III Seam. And then the entire return air will have to pass through the return Shaft connected to III Seam.

In addition to the sump proposed at the end of main trunk dips, another small sump is planned at the dip most point before the fault F8. As no sumps are proposed in I seam, pumping proposed in II seam has to handle the make of water from I seam also. Hence sumps of sufficient capacity are proposed in II seam as shown in the projection plan. *Details of the inseam tunnels in II seam proposed to cross the fault F8 and inter seam tunnels proposed to be driven from II seam to I seam are given in the **table No. 5.16.***

The detailed projection plan of II Bottom Seam is presented at Plate No. 7.

5.6.2.3. III Seam

Entire property of III seam within the present working boundary is already developed through the Main incline and Man way dip incline of KTK 5 section. Depillaring is being done with sand stowing. No property is available for extraction through Longwall technology within the present working boundary. Hence Longwall panels proposed in III seam are in the expansion area only. The two inclined tunnels i.e. MW dip & MI dip will be utilized for transport of men and material during the extended life of the mine by annexing the dip side property.

For approaching the Longwall property in expansion area, six numbers of trunk road ways are to be developed from 42Dip south/34Level. Out of 6 roadways proposed in dip direction, four will serve as intakes and other two as return. A tunnel of length 153m is proposed from 42D/31L connecting the 30L of 2Bottom Seam for establishing the belt conveyor circuit.

Gate road drivage is to be taken up towards south from these trunks. Similar to I and II seams, the gate roadways are designed to have tunnels in them at fault F8. Extraction of these Longwall panels will be separated at these tunnels.

Full section development is proposed to be done. Minimum height and width of the gate roadways is 2.5 m and 4.8m respectively. In order to maintain favorable cross gradient in the gate roadways, bottom blasting is to be done on raise side of the gallery. Ventilation circuit is simple as the return Shaft is connected to III Seam.

In addition to the sump proposed at the end of main trunk dips, two more sumps are planned at the dip most point before and after the fault F8. As the water from the overlying seams has to be drained before coal extraction from III seam Longwall panels, the sump/pumping capacity should be sufficient to deal with the maker of water of all the seams. Hence sumps of sufficient capacity are proposed in

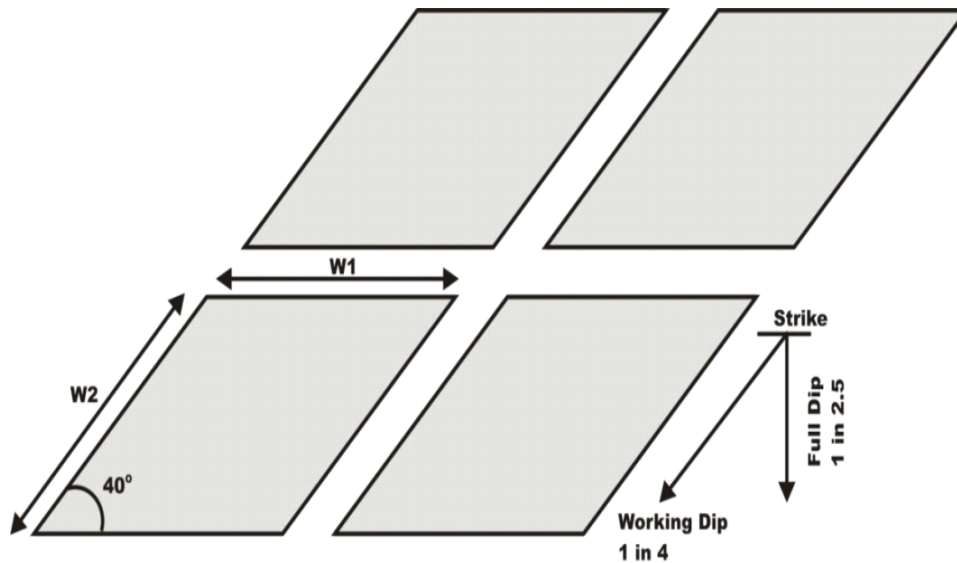
III seam as shown in the projection plan. Details of the tunnels proposed to be driven from III seam were given in the table No. 5.17.

The detailed projection plan of III Seam is presented at Plate No. 8.

5.6.3. System of Development

It is proposed for panel development and Longwall extraction in continuous succession to avoid long exposure of the galleries. Though the analysis of the physico-mechanical properties of the strata reveals that the roof is competent, it is always advisable not to allow the long standing pillars. To match the progress of development drivages with the Longwall extraction, some of the panels may have to be developed two years before the starting of Longwall panels. Every effort is made to maintain the vertical super-imposition of the panel barriers in all the seams.

For the maneuverability of the equipment proposed for development, apparent dip development with rhombus shaped pillars having a gradient flatter than 1 in 4 is proposed (shown in the Figure No.5.6).



(Not to the scale)

Figure No.5.6: Apparent Dip development with Rhombus Pillars

Gallery dimensions proposed in the panels are 4.8m wide and height equivalent to the seam height (between 2.5m to 3.5m). The height of at least 2.5m is required for the operational convenience like men and material transport apart from supplying required ventilation. To maintain the cross gradient of the roadways, stone floor cutting is required. This stone cutting and lifting of muck shall be done separately avoiding the contamination of coal. Coal transportation is through the series of conveyor belts up to surface bunkers.

Double entry system of gate road development is being proposed leaving a barrier pillar of adequate size in between. It is planned to develop twin gate roadways with interconnection at every 200m interval between twin roads for better ventilation. During the development of face dip, initially the connection is made between TG and

MG with a width of 4.8m and later on it will be widened to facilitate installation of Longwall equipment.

For the proposed twin gate road system with cross connections, it is proposed to utilise the existing SDLs till the start of the road header operations by the successful bidder. To match with the progress of Longwall working, four road headers in two pairs are proposed to be operated simultaneously. Two districts with two Road headers in each district will be able to complete the gate road development well before the Longwall panel preparation.

Working of Longwall can broadly be divided as development (Trunk development & Gate Road development) and Longwall extraction. Seam wise development drivage of Trunks and Gate roadways required for working by Longwall is worked out to be approximately 1,00,000 m (one lakh meters). The details of Trunks and Gate Roadways are given in the following Tables (from table No.5.19 to 5.22).

Note: Drivage of Trunks and Gate roadways including in seam tunnels required for Longwall workings are in the scope of the successful bidder.

Table No.5.16: Gate road Development drivage -I Seam

Panel	Drivage Length m	Avg. Thickness m
IS_GATEROAD-2	2192	2.45
IS_GATEROAD-3	2125	2.66
IS_GATEROAD-4	1354	2.90
IS_GATEROAD-6	2721	2.73
IS_GATEROAD-7	2578	2.98
IS_GATEROAD-8	2639	3.04
IS_GATEROAD-9	1200	3.41
IS_GATEROAD-10	453	2.73
IS_GATEROAD-11	775	2.24
IS_GATEROAD-12	968	2.91
IS_GR6A/SUMP	2683	2.61
IS_PANEL-1	194	3.03
IS_PANEL-2	150	2.52
IS_PANEL-3	165	2.35
IS_PANEL-4	169	2.79
IS_PANEL-6	116	2.65
IS_PANEL-7	115	2.84
IS_PANEL-8	115	3.03
IS_PANEL-9	118	3.33
IS_PANEL-10	127	3.00
IS_PANEL-11	116	2.29
IS_PANEL-12	116	2.70
IS_PANEL-13	102	2.64
Total	16974	

Table No.5.17: Gate road Development drivage -III Seam

Panel	Drivage Lengths in m	Avg. Thickness
3S_GATEROAD-1	3393	3.30
3S_GATEROAD-2	2229	3.30
3S_GATEROAD-3	2578	3.13
3S_GATEROAD-4	1810	3.12
3S_GATEROAD-5	926	2.78
3S_GATEROAD-6	959	2.37
3S_GRSUMP	3189	3.09
3S_PANEL-1	115	3.40
3S_PANEL-2	115	3.36
3S_PANEL-3	115	3.20
3S_PANEL-4	117	3.13
3S_PANEL-5	360	2.71
3S_PANEL-6	116	2.49
Total	16022	

Table No.5.18: Gate road Development drivage -II Bottom Seam

Panel	Drivage Length m	Avg. Thickness m
IIBS_GATEROAD-1A	2195	2.88
IIBS_GATEROAD-1B	2322	2.75
IIBS_GATEROAD-2	2136	3.04
IIBS_GATEROAD-3	2089	3.17
IIBS_GATEROAD-4	1858	2.69
IIBS_GATEROAD-6	2694	3.21
IIBS_GATEROAD-7	2593	3.38
IIBS_GATEROAD-8	2646	3.32
IIBS_GATEROAD-9	1706	2.95
IIBS_GATEROAD-10	881	3.06
IIBS_GATEROAD-11	1100	3.21
IIBS_GRSUMP	2910	2.91
IIBS_PANEL-1	110	2.71
IIBS_PANEL-2	104	2.71
IIBS_PANEL-3	111	3.16
IIBS_PANEL-4	115	3.06
IIBS_PANEL-6	123	3.11
IIBS_PANEL-7	115	3.28
IIBS_PANEL-8	118	3.42
IIBS_PANEL-9	115	3.20
IIBS_PANEL-10	115	3.06
IIBS_PANEL-11	115	3.19
IIBS_PANEL-12	106	3.25

Total	26377
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Table No.5.19: Trunk road Development drivage

Panel	Drivage Lengths m	Avg. Thickness
I SEAM LEVEL TRUNKS - EXISTING PROPERTY	1936	3.17
I SEAM TRUNKS - EXTN.PROPERTY	7458	2.67
IIB SEAM DIPTRUNKS_EXISTING PROPERTY	12849	3.06
IIB SEAM LEVEL TRUNKS_EXISTING PROPERTY	2231	2.76
IIB SEAM_TRUNKS_EXTENSION PROPERTY	8895	2.99
3S_TRUNKS_EXTENSION PROPERTY	9068	2.38
TOTAL	42438	

To handle the heavy equipment of Longwall system, it is proposed to have mono rail system which can handle men and material for operating the mine with **Longwall technology**.

This mono rail system is proposed to be established in the new tunnel proposed at KTK 5A section. The powered roof supports and other Longwall equipment will be transported up to the Longwall face through the mono rail arrangement.

Trunk roadways are categorized into Intake airways and return airways. Three trunks are utilized for intake and remaining two trunks for return air.

For preparation of Longwall panels in the developed area, widening and splitting of pillars is to be done at required places for having the straight Main Gate Road (MG) or Longwall face.

5.6.4. Longwall Extraction

The method of work involves the preparation of Longwall panel by driving gate roads and extraction of coal by Longwall method. The extraction sequence is in descending order. Coal from the three seams i.e. I Seam and II Bottom Seam and III Seams is proposed to be extracted by Longwall mining. Hence initially extraction in I Seam is taken up followed by extraction in II Bottom seam and finally from III Seam beneath the de-coaled area of I & II Bottom seams.

Total 31 numbers of panels are considered for Longwall mining in all the three seams i.e. No I Seam, No II Bottom seam and, No III Seam.

Table No.5.20: Seam wise proposed number of Longwall panels

Sl. No.	Seam	Virgin Area	Developed Pillars
1	I Seam	12	1
2	II Bottom	11	1
3	III Seam	6	0

The length of panels varies from 345 meters to 1110 meters. The face length (panel width) varies from 100 meters to 134 meters. The gate roads of the panels are kept slightly raising to facilitate self drainage and face dip is proposed along the full dip of the seam.

Longwall panels are formed by development of Gate Roadways from trunks up to the boundary line. At the end, Tail gate and Main Gate are joined together with face dip and Long wall equipment is installed in this chamber. Extraction of panel commences from boundary towards trunk roadways (retreating with caving).

The Longwall panels planned are as shown in Projection Plans (Plate No 6, 7 and 8). Sequence of development and extraction of Longwall panels is as follows and may vary subject to the conditions of the seam/mine.

A minimum period of one and half years is to be allowed between the completion of extraction of LW panels in the in overlying seam and commencement of extraction of LW panles in the bottom seam to allow the settling of goaf. The operating chock height ranges from less than or equal to 1.8m and upto a maximum height of more than or equal to 3.6m. While forming the panels and deciding the face lengths due consideration was also given for superimposition of panel barriers of two seams. Shearer shall be so designed that it must able to pass when the shield supports are in closed condition.

Table 5.21. Sequence of Development and extraction of seam wise Long wall panels in the Mine.

Description	LW Panel Numbers	Seam wise extraction
Phase-1	IS_PANEL No-1 to IS_PANEL No-5	1seam (Existing property)
Phase-2	IIBS_PANEL No-1 to IIBS_PANEL No-5	2B seam (Existing property)
Phase-3	IS_PANEL No-6 to IS_PANEL No-12	1 seam (Expansion property)
Phase-4	IIBS_PANEL No-6 to IIBS_PANEL No-11	2B seam (Expansion property)
Phase-5	IIIS_PANEL No-1 to	3 seam (Expansion property)

	IIIS_PANEL No-6	
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NOTE: The sequence of extraction shown above is only tentative and it may be altered based on the prevailing situations at that time with the mutual consent of SCCL and successful bidder.

A seasonal nallah (Nallah no.4) is flowing over the area proposed for Longwall mining. It is proposed to divert the Nallah at three different places over a length of 2.55 km (435m+815m+1300m). Diversion proposed is for a length of 435m with 10m width for extracting coal from Panel No.1 of 1 & 2 seams, for a length of 815m and 1300m with 5m width for extracting coal from Panel No.12 & 13 of 1seam & Panel No.11 & 12 of II Bottom seam and Panel No.6 of No 3 seam. Among other diversions proposed are the diversion of the HT over head lines of SCCL supplying power to the mine (over a length of 1.0 km) and the diversion of approach/coal transport road of KTK-5 incline belonging to SCCL (over a length of 1.6 km).

Extraction with developed galleries: The major constraint for extracting developed pillars by Mechanized Shortwall equipment is the likely strata control problems while negotiating developed dip-rise galleries. Changing the orientation of the Shortwall face to form a diagonal line of extraction will allow cutting the dip-rise galleries at different points and not at one time across the length of the face, in its advance in the direction of strike. Additional supports in the original galleries are proposed to counter front abutment pressure. The advance gallery supports (Powered Supports and mobile supports) installed ahead of the face line is to be shifted with retreat of the Shortwall face with the help of anchor props, chain and hydraulic rams to bear front abutment pressure.

Required steps are to be taken to mitigate the Strata Control problems while extracting Shortwall Panels.

Panel wise reserves of the Longwall Panels with average GCV are given in the following Tables (from table No.5.24 to 5.26).

Table No. 5.22 : Details of Longwall Panels - I Seam (length-m & reserves-LT)

Panel No	Panel Length	Width of Panel	Avg. Thickness	Extractable reserves LT	Quality GCV
IS_PANEL-1	748	134	3.03	4.8	4153
IS_PANEL-2	565	108	2.52	2.4	3983
IS_PANEL-3	563	118	2.35	2.4	4308
IS_PANEL-4	634	121	2.79	3.4	4377
IS_PANEL-5	980	134	2.63	4.0	4374
IS_PANEL-6	930	120	2.65	4.6	4233
IS_PANEL-7	1064	119	2.84	5.7	4336
IS_PANEL-8	1110	120	3.03	6.3	4352
IS_PANEL-9	629	120	3.33	4.0	4291
IS_PANEL-10	345	120	3.00	1.9	4578

IS_PANEL-11	491	120	2.29	2.1	4516
IS_PANEL-12	568	120	2.70	2.9	4346
IS_PANEL-13	653	122	2.64	3.1	4332
Total	9280			4.7MT	

Table No. 5.23 : Longwall Panel details-II Bottom Seam (length-m & reserves-LT)

Panel No	Panel Length	Width of Panel	Avg. Thickness	Extractable reserves	Quality GCV
IIBS_PANEL-1	771	116	2.71	3.7	4670
IIBS_PANEL-2	574	108	2.71	2.6	4606
IIBS_PANEL-3	576	116	3.16	3.3	4294
IIBS_PANEL-4	671	119	3.06	3.9	4409
IIBS_PANEL-5	860	134	3.16	3.9	4546
IIBS_PANEL-6	802	120	3.11	4.6	4523
IIBS_PANEL-7	1041	120	3.28	6.3	4421
IIBS_PANEL-8	1091	120	3.42	7.0	4458
IIBS_PANEL-9	673	120	3.20	4.0	4519
IIBS_PANEL-10	537	120	3.06	3.1	4199
IIBS_PANEL-11	614	120	3.19	3.6	4437
IIBS_PANEL-12	613	116	3.25	3.4	4540
Total	8823 m			4.9 MT	

Table No. 5.24 : Details of Longwall Panels - III Seam

Panel No	Panel Length	Width of Panel (m)	Avg. Thickness (m)	Extractable reserves (LT)	Quality GCV
IIIS_PANEL-1	715	117	3.40	4.0	5919
IIIS_PANEL-2	921	120	3.36	5.2	5924
IIIS_PANEL-3	1042	120	3.20	5.6	5971
IIIS_PANEL-4	824	120	3.13	4.3	6032
IIIS_PANEL-5	644	120	2.71	2.9	5894
IIIS_PANEL-6	688	120	2.49	2.9	5943
Total	4834			2.5 MT	

5.6.5. SUPPORT CAPACITY

The assessment of cavability is done by determining the caving index number. Cavability Index is calculated as per the CMRI method expressed as follows:

$$I = \frac{L^{n_t} t^{0.5}}{5}$$

Where

I = Cavability Index

t = Thickness of bed (m)

Sc = Compressive strength (kg/cm²)

L = Average length of core (cm)

Average length of core (ALS) may also be calculated from RQD by the following empirical equation:

$$L = (RQD - 26.75)/3.03 \quad (\text{Not applicable for RQD less than 40\%})$$

The value of $n = 1.2$ in case of uniform massive rocks with weighted average of RQD > 67%,

$n = 1.1$ for RQD < 67 % with frequent presence of easily parting planes

and $n = 1.0$ for RQD < 33%

Table no.5.25: Roof Classification based on Cavability Index

Category	Nature of Caving	Range of Cavability Index
Category-I	Easily cavable	$I < 2000 \text{ Sm}$
Category-II	Moderately cavable	$2000 \leq I < 5000$
Category-III	Cavable with difficulty	$5000 \leq I < 10000$
Category-IV	Cavable with Substantial difficulty	$10000 \leq I < 14000$
Category-V	Cavable with extreme difficulty	≥ 14000

The calculation of cavability Index of Roof of I Seam, II Bottom seam and III Seam as per the core sample of BH No-577 is as shown in the following tables.

Table no.5.26: CAVING INDEX NUMBER OF STRATA OVERLYING I SEAM (AS PER BH-577)

BED NO	Depth from (M)	THICK in m	Discription of STRATA	RQ D %	Comp. strength kg/sq.cm	Avg. Length of core	Cavability Index	Classification
1	474.8 3	0.97	Fine grained.GW .Sst.	90	362	20.87	2733	Moderately cavable
2	475.8	0.56	Fine to medium grained.GW .Sst.	98	298	23.51	1972	Easily cavable
3	476.3 6	0.91	VeryFine grained GW .Sst.	86	377	19.55	2549	Moderately cavable
4	477.2 7	0.57	VeryFine grained GW .Sst.	88	384	20.21	2138	Moderately cavable
5	477.8 4	0.53	Fine to medium grained.GW .Sst.	87	294	19.88	1548	Easily cavable
6	478.3 7	0.43	Fine to medium grained.GW .Sst.	96	286	22.85	1603	Easily cavable
7	478.8	1.79	Fine to medium grained.GW .Sst.	99	314	23.84	3778	Moderately cavable
8	480.5 9	1.21	Medium grained. G.Sst.	95	313	22.52	2892	Moderately cavable
9	481.8	1.82	Medium to Course grained.G.Sst.	99	233	23.84	2827	Moderately cavable
10	483.6 2	1.11	Fine grained.G.Sst.	99	313	23.84	2966	Moderately cavable
11	484.7 3	3.27	Medium to Course grained.G.Sst.	98	271	23.51	4334	Moderately cavable
12	488	0.15	Fine to Medium grained. G.Sst.	100	263	24.17	931	Easily cavable
13	488.1 5	1.3	Medium grained.G.Sst.	100	228	24.17	2377	Moderately cavable

14	489.4 5	1.62	Medium to Course grained.G.Sst.	100	249	24.17	2898	Moderately cavable
15	491.0 7	0.13	VeryFine grained GW.Sst.	100	287	24.17	946	Easily cavable
16	491.2	1.55	VeryCourse grained.GW Sst.	100	254	24.17	2891	Moderately cavable
17	492.7 5	0.5	Medium to Course grained.G.Sst.	100	278	24.17	1797	Easily cavable
18	493.2 5	0.25	VeryFine grained.GW.Sst.	100	279	24.17	1275	Easily cavable
19	493.5	6	FMedium grained.G.Sst.	100	242	24.17	5419	cavable with difficulty
20	499.5	5.1	FMedium grained.G.Sst.	98	292	23.51	5832	cavable with difficulty

Table no.5.27: CAVING INDEX NUMBER OF STRATA OVERLYING II (Bottom) SEAM (AS PER BH-577)

BED NO	Depth from (M)	THICK in m	Discription of STRATA	RQ D %	Comp. strength kg/sq.cm	Avg. Lengt h of core	Cavab ility Index	Classification
1	507.14	0.34	Fine grained GW.Sst.	38	280.00	3.71	138	Easily cavable
2	507.48	0.85	Fine to medium grained G.Sst.	29	280.00	0.74	38	Easily cavable
3	508.33	2.27	Medium to Course grainedG.Sst.	96	316.00	22.85	4069	Moderately cavable
4	510.60	3.00	Medium to Course grainedG.Sst.	98	277.00	23.51	4243	Moderately cavable
5	513.6	5.25	Medium to Course grainedG.Sst.	95	260	22.52	5004	cavable with difficulty
6	518.85	2.75	Medium to Course grainedG.Sst.	95	277.00	22.52	3858	Moderately cavable
7	521.60	0.37	Medium to Course grained	83	276.00	18.56	1118	Easily cavable

			Pyritic Sst.					
8	522	1.87	II Top seam - Coal	-	-	-	-	Easily cavable
9	523.84	0.52	Shaly Sst. Dark Grey	35	438	2.72	190	Easily cavable
10	524.36	1.89	Fine grained Grey Sst.	92	617	21.53	6750	cavable with difficulty
11	526.25	3.34	Fine to Medium grained Grey Sst.	93	261	21.86	3866	Moderately cavable
12	529.59	0.40	Dark Grey Shaly Sst. Clay Galls	70	241	14.27	741	Easily cavable
13	529.99	2.31	Fine to Medium grained Grey Sst.	90	257	20.87	2994	Moderately cavable
14	532.30	1.00	Fine to Medium grained Grey Sst.	76	388	16.25	2203	Moderately cavable
15	533.30	0.47	Shaly Sst. Dark Grey	85	348	19.22	1657	Easily cavable
16	533.77	2.35	Fine to Medium grained Grey Sst.	92	367	21.53	4477	Moderately cavable

Table no.5.28: CAVING INDEX NUMBER OF STRATA OVERLYING III SEAM (AS PER BH-577)

BED NO	Depth from (M)	THICK in m	Description of STRATA	RQD %	Comp. strength kg/sq.c m	Avg. Length of core	Cavability Index	Classification
1	581.6	3	Fine to medium grained GW.Sst.	89	342	20.54	4455	Moderately cavable
2	584.6	0.28	Fine to medium grained GW.Sst.	96	321	22.85	1452	Easily cavable

3	584.88	0.18	Fine grained G.Sst.	94	382	22.19	1337	Easily cavable
4	585.06	3.15	Medium to Course grained.G.Sst.	95	280	22.52	4174	Moderately cavable
5	588.21	0.28	Fine grained G.Sst.	99	377	23.84	1794	Easily cavable
6	588.49	0.4	Course grained G.Sst.	100	354	24.17	2047	Moderately cavable
7	588.89	0.13	Fine grained G.Sst.	99	465	23.84	1508	Easily cavable
8	589.02	2.08	Medium to Course grained.G.Sst.	99	348	23.84	4514	Moderately cavable
9	591.1	2.19	Medium to Course grained Sst.	97	294	23.18	3783	Moderately cavable
10	593.3	0.77	Coal IIIA Seam	-	-	-	-	Easily cavable
11	594.1	0.21	Sandy Shale	-	-	-	-	Easily cavable
12	594.27	0.93	Very Fine grained G.Sst.	88	437	20.21	3108	Moderately cavable
13	595.2	0.49	Medium to Course grained.G.Sst.	98	454	23.51	2811	Moderately cavable
14	595.69	0.15	Fine grained.G.Sst.	99	437	23.84	1522	Easily cavable
15	595.8	0.07	Shaly sand stone	-	-	-	-	Easily cavable
16	595.91	0.38	Fine to medium grained G.Sst.	100	321	24.17	1809	Easily cavable
17	596.29	2.09	Medium to Course grained.G.Sst.	100	277	24.17	3661	Moderately cavable
18	598.38	0.97	Fine to Medium grained.G.Sst.	99	372	23.84	3295	Moderately cavable
19	599.35	0.21	Course to VCG .G.Sst.	99	424	23.84	1747	Easily cavable
20	599.56	0.91	Fine to Medium grained.G.Sst.	100	431	24.17	3759	Moderately cavable
21	600.47	1.13	Course grained. G.Sst.	99	304	23.84	2906	Moderately cavable
22	601.6	1.19	Course to VCG G.Sst.	99	320	23.84	3139	Moderately cavable
23	602.79	1.99	Fine to Medium grained.G.Sst.	99	439	23.84	5569	cavable with difficulty
24	604.78	0.93	Fine grained.G.Sst.	99	492	23.84	4267	Moderately cavable
25	605.71	1.4	Medium to Course grained.G.Sst.	99	293	23.84	3118	Moderately cavable
26	607.11	0.41	Fine to Very Finegrained.G.Sst.	76	527	16.25	1916	Easily cavable

Estimation of Support Resistance: Following relationship is used to correlate maximum deterioration in roof condition (maximum convergence) during first weight and periodic weights considering the influence of above mentioned factors

$$C_m = \left(\frac{A}{P} + 9.6h \right) + \left(\frac{K * I}{K_1 + 1.5} - 23 \right)$$

Where,

A = Constant depending upon the category of the roof,

1440 for Category I & II

1700 for Category III & IV

1900 for Category V

C_m = Max convergence during first weight & periodic weights, mm/m

P = Mean Support resistance, T/ m²

I = Cavability index of strong bed,

h = height of extraction, m

K_1 = a factor depending on the thickness 't' of cavable bed in between strong bed and the coal seam in terms of height of extraction,

2 for 't' up to 2 ,

3 for 't' from above 2 to 4

5 for 't' from above 4 to 8

10 for 't' above 8

K = 0.025 for sst

With the help of the above relationship, the maximum convergence is projected at the proposed Longwall face giving different values of mean load density. A value of mean load density would be chosen which would give safe roof condition during the occasions of weighting. For Indian geo-mining conditions for limited and acceptable degradation of the roof a maximum convergence at the face may be taken as 70 mm/m. and accordingly the value of effective support resistance to confine the face convergence within permissible limit (70mm/m) is ascertained. Effective Support Resistance for different heights of extraction from 2.0m to 3.5m is calculated.

From the Effective Support Resistance, Rated Support Resistance is calculated with a safety factor of 1.3 taking the following deficiencies into account.

I. Leakage in leg circuit : 10%

II. Setting load deficiencies : 10%

III. Miscellaneous (deviation from normal span, Premature bleeding of leg circuits, etc.) : 10%

The calculation of Effective and Rated Support Resistance for working of I Seam, II Bottom seam and III Seam considering the strongest bed overlying the seam (as per the core sample of BH No-577) is as shown in the following tables.

The strongest bed is almost 5.0m over the seam. The immediate roof layer and the layer above that are massive in nature. Hence whatever is the capacity of the supports, induced caving may be required. Hence, break is to be induced in the roof strata along the barrier followed by regular induced blasting.

Table no.5.29: Calculation of Support Resistance Requirement - I Seam

Cavability Index	Height of extraction	Constant A	Max. Conv.-Cm	Factor K1	Support Resistance	
					Effective	Rated
5832	2	1700	60	2	76.8	99.8
5832	2.5	1700	60	2	98.0	127.4
5832	3	1700	60	2	135.5	176.2
5832	3.5	1700	60	2	219.6	285.4
5832	2	1700	70	2	52.9	68.8
5832	2.5	1700	70	2	62.2	80.8
5832	3	1700	70	2	75.4	98.0
5832	3.5	1700	70	2	95.8	124.6
5832	2	1700	80	2	40.3	52.4
5832	2.5	1700	80	2	45.5	59.2
5832	3	1700	80	2	52.2	67.9
5832	3.5	1700	80	2	61.3	79.7
5832	2	1700	90	2	32.6	42.4
5832	2.5	1700	90	2	35.9	46.7
5832	3	1700	90	2	40.0	51.9
5832	3.5	1700	90	2	45.0	58.6

Table no.5.30: Calculation of Support Resistance Requirement - II Bottom Seam

Cavability Index	Height of extraction	Constant A	Max. Conv.-Cm	Factor K1	Support Resistance	
					Effective	Rated
6750	2	1700	60	3	64.6	84.0
6750	2.5	1700	60	3	79.1	102.8
6750	3	1700	60	3	101.8	132.3
6750	3.5	1700	60	3	142.9	185.7
6750	2	1700	70	3	46.8	60.9
6750	2.5	1700	70	3	54.0	70.2
6750	3	1700	70	3	63.7	82.8
6750	3.5	1700	70	3	77.6	100.9
6750	2	1700	80	3	36.7	47.7
6750	2.5	1700	80	3	41.0	53.3
6750	3	1700	80	3	46.3	60.2
6750	3.5	1700	80	3	53.3	69.3
6750	2	1700	90	3	30.2	39.3
6750	2.5	1700	90	3	33.0	42.9
6750	3	1700	90	3	36.4	47.3
6750	3.5	1700	90	3	40.6	52.7

Table no.5.31: Calculation of Support Resistance Requirement - III Seam

Cavability Index	Height of extraction	Constant A	Max. Conv.-	Factor K1	Support Resistance
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			Cm		Effective	Rated
5569	2	1700	60	2	70.8	92.0
5569	2.5	1700	60	2	88.4	115.0
5569	3	1700	60	2	117.9	153.2
5569	3.5	1700	60	2	176.7	229.7
5569	2	1700	70	2	50.0	65.0
5569	2.5	1700	70	2	58.2	75.6
5569	3	1700	70	2	69.6	90.5
5569	3.5	1700	70	2	86.6	112.6
5569	2	1700	80	2	38.6	50.2
5569	2.5	1700	80	2	43.3	56.3
5569	3	1700	80	2	49.4	64.2
5569	3.5	1700	80	2	57.4	74.6
5569	2	1700	90	2	31.5	40.9
5569	2.5	1700	90	2	34.5	44.9
5569	3	1700	90	2	38.3	49.8
5569	3.5	1700	90	2	42.9	55.8

As given in the above calculations, the support resistance required for working I seam with allowable convergence of 70mm is around **120T/ m²**. **Considering the above conditions, supports of capacity sufficient to offer atleast 120T/ m² of Support density is proposed for the Longwall panels of KTK 5 Incline. However, a study is to be conducted by the scientific agencies to confirm the specifications of the Powered Roof Supports.**

5.7. COAL HANDLING ARRANGEMENTS

The surface coal handling arrangements consist of gantry and lorry loading bunkers etc. The coal from the mine is envisaged to be transported by conveyor belts to the surface bunkers proposed near the man way incline of KTK 5A Section.

SCCL will ensure uninterrupted coal dispatch by stocking the coal on surface. If required SCCL will deploy its own FEL and Tippers to dispatch the coal from the mine site.

5.8. POWER SUPPLY

This mine is having the source of power of 33KV from 132 KV /33KV sub-station, Chelpur and is having sufficient spare capacity. Power from the 33 KV sub-station at Chelpur was brought up to Bhupalpalli Area Workshop at 33 KV. Presently, power is drawn from this point at 33 KV to three numbers of transformers near mine pit mouths by an overhead line. Required power for Longwall operation is to be drawn by the successful bidder from spare capacity available at the pit mouth.

- Source of power Supply : Nearest Chelpur 132/33 KV Sub-station
- Receiving voltage : 33 KV OHT Line
- Metering equipment : Incoming/outgoing of 33 KV/3.3KV Substations

KTK-5 PMP SUMMARY

STRATA		ROOF OF I SEAM	Parting between I & II	Parting between II & III SEAM	Parting between III & IV SEAMS	Floor of IV Seam
Density (gms / c.c)	MIN	2.00	1.99	1.32	2.04	2.27
	MAX	2.32	2.33	2.38	2.43	2.31
Tensile strength Kg/cm ²	MIN	5.91	12.69	11.3	14.31	23.37
	MAX	64.08	34.06	72.8	42.28	46.16
Compressive Strength	MIN	80	107.00	141	172	282
	MAX	384	467.00	527	483	479
Youn's Modulus x 105 Kg/cm ²	MIN	0.11	0.20	0.22	0.09	0.63
	MAX	0.82	0.84	1.09	1.09	1.00
Strength kg/cm ²	MIN	16.43	20.47	31.19	38.18	58.82
	MAX	112.77	91.39	137.82	90.01	107.75
Impact Strength Index	MIN	47.08	47.53	48.15	45.61	50.65
	MAX	52.47	53.95	55.02	54.23	54.16
Protodyakov Index	MIN	0.37	0.25	0.33	0.52	1.19
	MAX	2.28	2.81	2.49	2.17	2.16

The following list of Drawings/ Plans are enclosed as Plate No.1 to Plate No.8 :

Plate No.	Description
1.	Location Plan of KTK-.5 Incline.
2.	Surface plan of KTK-5 Incline.
3.	Bore hole section
4.	Proposed Haulage Layout/ Mono rail layouts
5.	Proposed Belt Layouts of all the seams
6.	Projection Plan of No.II seam
7.	Projection Plan of No.II Bottom seam
8.	Projection Plan of No.III Seam

CHAPTER-VI

1.0 SCOPE WORK OF SUCCESSFUL BIDDER:

- 1.1 The successful bidder shall provide Longwall mining technology/package for the designed Longwall panels and extract coal from these panels. The successful bidder shall operate and maintain the Longwall technology to ensure the production and transfer of coal at a pre-designated transfer point at surface i.e. up to the surface storage bunkers with with utmost consideration to conservation of coal, safety of the mine and the persons employed therein.
- 1.2 The mining operations shall involve extraction of coal from the Longwall panels, drivage of trunk roadways and gate roadways including in seam tunnels of about 1662 m required for drivage of gate roadways/trunk roadways (tunnel details described in chapter-V) and face dip and its widening to the extent required.
- 1.3 The successful bidder shall be required to abide by all statutory rules, regulations and laws as applicable from time to time including but not limiting to those related to Government licenses, workmen compensation, insurance etc.
- 1.4 The successful bidder is responsible for the installation, operation and maintenance of Longwall equipment and its ancillaries and auxiliaries in connection with Longwall operations, gate belt including maintenance of the Longwall workshop.
- 1.5 Transportation of the equipment (to & fro) from surface to Longwall panels. Salvaging and shifting of Longwall, gate belt equipment from panel to panel in the mine.
- 1.6 The successful bidder shall provide the manpower required for the above scope.
- 1.7 Seeking and getting required approvals from DGMS for the machinery the successful bidder is proposing to deploy in the underground mine and related safe working procedures for safe and efficient mine working.
- 1.8 Compliance of all regulatory and statutory requirements on behalf of SCCL.
- 1.9 The successful bidder shall abide by the Coal Mines Regulations, 1957, Safety Rules and Regulations as specified under CEAR, 2010 or any other existing or future statutes that may be applicable from time to time.
- 1.10 Strata monitoring required as per Longwall mining requirements and also as required by DGMS or other statutory bodies from time to time.
- 1.11 Electric power shall be supplied to the successful bidder at free of cost at surface substation. Successful bidder has to make his own arrangements for transformation, transmission and distribution of power supplied by the SCCL.
- 1.12 Pumping of water along gate roadways and Longwall face shall be responsibility of the successful bidder.
- 1.13 Establish suitable communication network all along the gate belts and Longwall face.
- 1.14 Provision and maintenance of auto environment monitoring system at the Longwall face.
- 1.15 Good housekeeping along the gate roadways, Longwall face and at the coal transfer point. Dusting and water spraying
- 1.16 In case of need for blasting, the required explosive material shall be supplied by SCCL along with shotfirer as and when required. Blasting operations is the responsibility of the successful bidder.

1.17 Providing supports as per SSR and in compliance of statute for safe and stable mine workings including gate roadways. Any additional supporting incidental to Longwall operations.

1.18 Any other activity incidental to construction, operation and maintenance of the Longwall panel, gate roadways apart from the indicated list as above.

2.0 TIME SCHEDULE & OBLIGATIONS OF SUCCESSFUL BIDDER:

1. The scope of work shall include all the obligations covered in the various parts of the Tender document i.e. NIT. The scope of work shall also include the following:
2. The successful successful bidder has to deploy (including transportation of the Longwall equipment from surface to underground), operate and maintain the Longwall equipment at KTK-5 incline Bhupalapalli area of SCCL to produce the minimum guaranteed production of coal as per mutually agreed schedules & transport coal from face up to the pre weigh bin/ other suitable weighing arrangement provided at surface.
3. The successful Successful bidder has to make own arrangement for Transportation of the Longwall equipment from Surface to Longwall site. SCCL shall provide the facility of mono-rail system for the transportation of men and material from surface to underground.
4. However, before bidding, the successful bidders are requested to visit the site, assess the scope of work and quote accordingly.
5. The successful bidder is required to commence coal production within 18 months from the date of Letter of Acceptance. Yearly production schedules (ACQs) shall be drawn with mutual agreement as detailed at clause no.5.2 of chapter-IV.
6. These figures are subjected to variance depending upon change in standard mining condition detailed at Chapter – IX. The revision of ACQ will be decided by Area Management Committee at the end of every production year duly verifying the record maintained to that effect.
7. The successful bidder shall design, engineer, finance, procure, install, operate and maintain the entire **new Longwall Package** to ensure extraction of coal of predetermined quality for the specified duration for SCCL.
8. The successful bidder shall deploy the equipment supplied by the proven manufacturer only. The successful successful bidder shall procure all kinds of spares and consumables required to operate the Long wall Package during the contract period and also materials required for supporting the roof.

9. **Approval of equipment:** For equipment and machinery and goods to be supplied under the contract which require permission by Director General of Mines Safety (DGMS), Dhanbad, India for use in coal mines, such required permission and approvals shall be obtained by the successful bidder at his own cost. Any addition /alteration suggested by DGMS while approving the equipment are to be undertaken by the successful bidder and cost of such addition / alteration on the equipment shall be borne by successful bidder only.
10. The successful bidder shall ensure for the maximum recovery of coal without violating any provisions of Coal Mine related Acts and Laws and safety.
11. The successful bidder shall plan, design and develop the panel and face. The successful bidder shall prepare Annual Operation Plan for achieving ACQ by incorporating month-wise coal production. Implementation of the above operational plan and panel wise sequence of extraction shall be implemented only after approval Agent KTK-5 Mine of SCCL. Any change in Annual Operational Plan during course of implementation, shall be effected only with approval of SCCL.
12. The successful bidder shall procure, install and maintain of all the facilities required. This will include face communication, support, lighting, pumping, loading, support material, ventilation at the face and environment monitoring within the district.

However, the successful bidder can make use of the existing EPBX facility of SCCL.

13. The successful bidder shall support the roof suitable in accordance with approved SSR under Coal Mines Regulation 108 of CMR 1957.
14. **Scientific study & DGMS permissions:**
The successful bidder shall arrange for detailed scientific study and design for extraction, and obtain all the required permissions including DGMS permissions for deployment of Longwall Package in the above mine. However, SCCL shall provide necessary support wherever it is required and beyond the control of the firm to fulfill the statutory obligations. The study scientific reports readily available with SCC will be given
15. **Total reserves to be extracted:**
The extractable reserves of *12.1 MT indicated are* tentative and may vary. However, the firm shall make efforts to maximize the extractable reserves based on the design and approvals given by the DGMS.

16. **Drivage of Trunk roadways and Gate roadways**

Drivage of trunk road ways and gate roadways including in seam tunnels in connection with the Trunk and Gate roadways are to be driven by the successful bidder in commensurate with the extraction of Longwall panels. Approximately 100 KM drivage is required for the Trunk and Gate Roadways and it is the responsibility of the successful bidder.

17. Sequence of Operation:

The Sequence of extraction given at chapter-V may vary due to various conditions as specified hereunder and the required permissions shall be planned to the scope of firm with due approval of GM, Bhupalpalli (Area) and DGMS Authority.

Sequence of operation may vary subject to change in geological conditions, scientific studies recommendations, and DGMS conditions imposed from time to time.

18. Design of panels & method of extraction: The firm shall obtain the same based on the scientific study and DGMS approval for the same.

19. Induced Blasting : If required, the successful bidder/Successful bidder/firm shall arrange for Induced blasting, as per permission conditions stipulated by DGMS authority. For carrying out Induced Blasting, drilling of long holes from surface (as stipulated by DGMS authority) with their own equipment shall be the scope of firm. Blasting operation with required explosives and shot firer, shall be carried out by SCCL.

20. Strata control: The implementation & monitoring of the strata control based on the recommendation of scientific study and approvals given by DGMS authorities is to the scope of the firm under the supervision of SCCL.

The SCCL shall not have any responsibility in this regard except overall supervision of the implementation & monitoring works.

21. Coal measurement system for payment: Measurement shall be as per the measurement taken with belt weighing machine/ Pre weigh bin/ other suitable weighing system at surface with weighted average/volumetric calculations. The firm shall deliver the coal crushed to the size of (-) 200 mm.

22. Ventilation: SCCL shall supply the required quantity of air as per the statute at the entrance of the panel. The required arrangements for coursing of the air within the panel as per statute shall be the responsibility of the firm.

23. Pumping & Drainage: Pumping, Drainage & management of water within the working panel is to the scope of firm.

24. Power: SCCL shall provide power at 33 KV voltage at surface on free of cost. The arrangements required for power distribution from surface to underground is to the scope of the firm.

25. Water: The water at the required pressure, quality & quantity upto entry of Longwall Panel shall be supplied by SCCL. The distribution of water within the panel shall be to the scope of the firm. Testing charges of the water samples, if any, required shall be to the account of the firm.

26. Men transport: The available men transport facilities at the mine shall be extended by SCCL for transportation of the personnel of the firm.

27. **Material transport:** The material transport **facilities** up to the entry of the panel from the surface of the mine shall be provided by SCCL.
28. **Supervision:** Statutory supervision shall be to the scope of the SCCL. However, firm also has to deploy persons holding overmen certificate of competency (under CMR 1957 issued by DGMS) as supervisors in each shift. The firm shall deploy the required number of qualified & competent persons for carrying out various jobs in a safe manner as per the DGMS permission/Law prevailing.
29. **Lighting:** Lighting within the panel shall be the firm's responsibility.
30. **Safety precautions against Fire, gases, inundation etc. including management of underground environment within the working panel is to the scope of the successful bidder.**

The safety management plan is to be prepared and implemented. The SCCL shall not have any responsibility in this regard except overall supervision of the implementation & monitoring of the same.

The implementation & monitoring of the safety management plan provided by SCCL is to the scope of the firm under the supervision of SCCL. Any additional requirement as per the instructions of the DGMS authorities from time to time shall also be included and to the scope of the firm.

- 30(a) **Isolation Stoppings/Fire Stoppings:** Providing Isolation Stoppings/ Fire Stoppings shall be in the scope of SCCL.
31. **Prevention of contamination of coal with foreign material:** The firm shall make arrangement for separation of foreign material like iron steel etc. by providing a magnetic separator at the discharge end before the belt weigh machine/ pre weigh bin/ other suitable weighment system.
32. **Scope of work Supporting of Roof and sides:**

Supply, drilling and grouting of 22mm dia roof bolts of length 1.8m and 2.4m with resin grout in conjunction with end assembly including domed washer plate, conical torque seat and shear pin breakout nuts.

 - 32.1. Bolting shall be done as per SSR (systematic support rules) provided by the Agent, KTK.5 incline / Colliery Manager, Bhupalpalli in the roof and sides all along face dip, trunk and gate roadways whenever required.
 - 32.2. The whole diameter for fixing roof bolts shall not exceed 27mm. Length of bolts used shall be of 1.8 m & 2.4 m in roof & 1.8 m in ribs.
 - 32.3. Whenever bad strata encountered or likely to encounter or in any unusual geo-mining conditions experienced which is not normal to the seam during extraction, additional bolting/supporting shall be done as per the direction of GM. Bhupalapalli area, Agent, KTK.5 incline / Colliery Manager, Bhupalpalli and also based on the recommendations of the Scientific agency and approval of the DGMS from time to time.

32.4. The grouting shall be done with (dual speed) resin capsules of 24mm dia x 450mm length fast set and 24 mm dia x 450mm length slow set in case of 1.8m bolts and 24mm dia x 450 mm length fast set and 24mm dia x 800mm length slow set capsule in case of 2.4 m bolts.

33. Supporting

Lithology of immediate roof and floor of workable seams is as under.

I Seam	<i>Immediate Roof</i>	Sand stone with thin clay/shale bands
	<i>Floor</i>	Grey sst with thin clay/shale bands
II Bottom Seam	<i>Immediate Roof</i>	Grey sst with carb clay/shale bands
	<i>Floor</i>	Sandstone with carb Shale, shale and clay bands
III Seam	<i>Immediate Roof</i>	Sand stone
	<i>Floor</i>	Sst with thin carb shale, shale and coal bands

- a) **Support in Gate Roadways:** Width of the Gate Roadways will be 4.8 m. The freshly exposed roof will be supported by 5 roof bolts in each row with an interval of 1.0m between rows and 1.2m between bolts. Length of the roof bolts will be 1.8m.
- b) **Support in Face Dip:** Width of the face dip gallery will be 4.8 m initially and it will be widened later as per the DGMS permission. Hence, the roof will be supported by 5 rows of roof bolts at an interval of 1.0m between rows and 1.2m between bolts.
- c) **Side Support :** Side of galleries/gate roadways will be supported with two GRP bolts (Cuttable bolts) to prevent side falls wherever required.

Note: The support mentioned above is only tentative and may vary based on the directions given by various statutory authorities from time to time. Quality and Standard components & properties required for resin capsules and steel bolts to be used by the Successful bidder during extraction of coal and they shall comply with the requirements of DGMS Tech. circular No. 10 of 2009 & circular 3 of 2010 and further amendments issued by DGMS from time to time .

34. Quality Testing of Resin and Steel bolts

Atleast 2 samples in 1000 pieces of roof bolts and its accessories received by the Successful bidder from manufacturers shall be subjected to the tests as prescribed in the DGMS (tech) circular No. 3 of 2010, at Company's Regional Laboratories on chargeable basis. The samples, so tested shall confirm the requirements of the above mentioned circular.

Atleast 1 sample out of 1000 resin capsules received by the Successful bidder from manufacturers shall be subjected to the tests as prescribed in the DGMS (tech) circular No. 10 of 2009 at Company's Regional Laboratories on chargeable basis and also at manufacturing unit. Such test at manufacturing unit shall be done under the supervision of a representative of SCCL authorized by GM. Bhupalpalli Area.

35. Performance test of bolting system

The performance of the bolting shall be ascertained by the successful bidder by testing atleast 10% of the installed bolts and also at random, for its anchorage strength. The roof bolt assembly shall not fail upto 20T load during anchorage tests. If failed, the extraction by the Successful bidder shall be stopped forthwith. The reason for the failure shall be analysed by the Successful bidder and the face shall not be progressed further until the failure is rectified to the satisfaction of GM, Bhupalapalli area or Agent, KTK-5incline / Colliery Manager, Bhupalpalli

Every such stoppage shall be considered as working hours of Successful bidder only. The place at which bolts failed shall be re-supported by the successful bidder at his costs to the satisfaction of GM. Bhupalapalli area or Agent / Colliery Manager, KTK-5incline, Bhupalpalli.

36. Monitoring of roof conditions:

The roof conditions in Trunk roadways, Gate roadways, face dip and other strategic locations such as convergence, tell tales etc shall be monitored by the successful bidder as per the approved scheme. SCCL shall oversee the monitoring.

If the convergence or tell tale reading exceeds the pre determined levels, Colliery Manager/Agent, KTK.5incline shall arrange for a meeting immediately with the successful bidder for determining further course of action. The successful bidder shall arrange for additional support as advised by Manager, KTK-5 Incline wherever is required.

37. Additional supports in the already supported area:

In case of any bad strata or roof dilation or convergence is encountered in the already supported area, additional supporting like Cable bolts, w-straps and wire mesh etc., shall be erected as advised by GM, Bhupalapalli Area or Agent, KTK, 5 incline / Colliery Manager, Bhupalpalli.

38. Installation, operation and maintenance of machinery.

The successful bidder shall make all the arrangements for proper installation, operation and maintenance of all plant and machinery associated with the above extraction works.

Procurement of all material for operation and maintenance of all the equipment required for extractions within the face/panel shall be to the scope of successful bidder.

39. Stone Cutting:

Stone cutting may be required for the reasons like change in geo-mining conditions, thinning down of the working seam, change over in working section etc., The successful bidder shall have to make arrangements for stone cutting either by blasting or machine cutting wherever is required.

40. Provision of Labour

In addition to the requirement in clause 16.2 of Chapter IV, The Successful bidder shall deploy required number of certified/skilled/semi-skilled labour for proper/efficient/safe installation, operation and maintenance of various plants, machinery, handling of equipment/ materials, ventilation, transport of men/materials, transport of coal and for any other works connected to the extraction of coal. The Successful bidder shall deploy adequate skilled staff in each shift. The delay on this account, if any, shall be the Successful bidder's responsibility.

All Engineers, qualified mining sirdars and overman, Electricians, Fitters, operators, skilled and semi-skilled labour shall be authorised to work and carry out specified duties within the Successful bidders scope/ premise/connected to extraction works at KTK-5 Incline basing on their qualified certificates, medical examination and training certificate issued from MVTC of SCCL.

No Engineers, degree or diploma holders (mining and E&M), qualified mining sirdars and overman, Electricians, Fitters, operators, Skilled and semi-skilled Labour shall be permitted/ allowed to work and carry out specified duties by the Successful bidder within the Successful bidder's scope/premise/connected to the extraction work unless they are authorized by the Agent, KTK.5 Incline, BHP to carry out the work and specified duties.

No Engineers, qualified mining sirdars and overman, Electricians, Fitters, operators, Skilled and semi-skilled Labour shall be permitted/ allowed to work and assigned to carry out any other work other than the work/duties authorized/specified by the Agent, KTK.5incline, Bhupalpalli.

41. OBLIGATIONS OF SUCCESSFUL BIDDER

- i) Successful bidder, before starting the work, shall furnish to the mine management the list of equipments, proposed to be deployed for the work. No equipments shall be deployed for the work without the approval of SCCL.
- ii) The SCCL shall have the right to inspect or arrange inspection of the equipments deployed by Successful bidder for the work at any time and declare any equipment unsafe and ask for its immediate withdrawal from the

- site/ operation. Successful bidder shall ensure prompt/ immediate compliance of the same.
- iii) Successful bidder shall at his own cost, arrange for regular checking/ maintenance/ repair of the equipment and keep them in good and safe condition at all times. Proper records of such checking/ maintenance/ repair shall be maintained in a Log Book kept for the purpose, which shall be readily available for inspection whenever required.
 - iv) Only experienced, skilled and disciplined worker of sound health, good behavior and antecedents having experience shall be deployed by Successful bidder to operate the equipments deployed for the work.
 - v) The work may be executed round the clock on all the days of week, if required or as directed by the mine management and Successful bidder shall be obliged to comply with the same.
 - vi) Successful bidder shall maintain proper records in English/Telugu of the equipments/persons etc. deployed for the work, work done, daily attendance of the employee, payment to the employees etc. and the SCCL shall have the right of access and inspect of these records or to call for any or all these records or ask Successful bidder to submit such reports as it considers necessary and Successful bidder shall be bound to comply with such instructions.
 - vii) The SCCL shall have no responsibility/ liability whatsoever for compensation payment in case of accident / damage to Successful bidder's equipments in the transit or while engaged in the work.
 - viii) Successful bidder shall familiarize himself and fully comply with the provisions of all the Acts/ Rules/ Regulations/ Bye-laws and orders of the Local authority/ Municipality/ State Govt./ Central Govt. applicable to the worker, Mines Act, Payment of Wages Act, Workmen's Compensation Act, etc. and shall be fully responsible and liable for due observance of the same. The SCCL shall have no responsibility / liability whatsoever on these account and Successful bidder shall fully indemnify the Company against any claim/ dispute / reference Award, etc. arising out of the same.
 - ix) Successful bidder shall post adequate number of competent, experienced, skilled and disciplined persons having good antecedents for satisfactory execution of the work. A list of all such persons shall be kept in the office of Successful bidder and a copy of the same shall be furnished to the mine management as and when required. All these persons shall be in the direct employment and under direct administrative control of Successful bidder and the management shall have no responsibility / liability whatsoever in this regard.
 - x) Successful bidder shall issue an identity card/ employment card to each employee with photograph duly attested by him which the employee shall always carry with him, while on work and produce for inspection whenever required.
 - xi) Successful bidder shall not engage any person less than 18 years of age or female as date of deployment as required by relevant law.

- xii) Successful bidder shall not pay less than the minimum wages to the workers engaged by them as per the Minimum Wages Act or such other legislation or award or the minimum wages fixed by the State Government as may be in force.
- xiii) Successful bidder shall make payment to his employees at the place (s) and manner specified by the mine management and in the presence of the authorized representative of SCCL who shall duly witness all payments by Successful bidder to his employees. For this purpose Successful bidder shall notify to the mine management the wage period (s) day/ date and time of payment.
- xiv) Successful bidder shall prepare the wage sheet for his employees in duplicate, a copy of which shall be regularly submitted to the mine management.
- xv) Successful bidder shall make timely payment of all salary / wages / dues to his employees and shall also provide all benefits to his employees as per various Acts/ Rules, Regulations, Orders applicable to the work e.g. Bonus under the Coal Mines Bonus Scheme and Payment of Bonus Act. Sunday Wages, Overtime, Holiday Wages, Leave Wages, Sick Leave etc.
- xvi) Successful bidder shall also comply with the provisions of the Coal Mines Provident Fund Scheme and regularly deposit the contributions in accordance with the same. The company shall have no liability whatsoever in this regard.
- xvii) The responsibility of Successful bidder in respect of all-payments to his employees will be complete and absolute. The company shall have no liability whatsoever in this regard and shall be fully indemnified by Successful bidder against any claim arising out of any non pay-payment/ short-payment/ dispute/ award.
- xviii) Successful bidder shall provide footwear, helmets and other protective equipments, to his employees as provided in law at his own cost.
- xix) Payment to Successful bidder will be done through Electronic mode. For this the desired information are to be furnished by the successful bidder after becoming successful.
- xx) The Successful bidder shall keep the Company indemnified against all damages caused to any employee and / or property of company due to negligence of the Successful bidder and / or its men and agents. SCCL shall also indemnify the successful bidder on vice-versa.

NOTES

- i) The successful bidder at the discretion of SCCL, may be advised to execute the scope of work envisaged, as per the specific site conditions during the time of execution.
- ii) All the information given above is subject to prevailing local conditions and subject to confirmation/modification by the GM, Bhupalapalli Area or Agent, KTK-5 Incline / Colliery Manager, Bhupalpalli .

- iii) The extraction and supporting work shall be executed as advised by the Agent, KTK. 5 Incline / Colliery Manager, KTK-5 Bhupalpalli based on the Site conditions.
- iv) The coal seams proposed of KTK-5 Incline, Bhupalpalli are considered is Degree-I gassiness.
- iv) Special Conditions/ Support: In case during the extraction, the strata require the usage of special methods of extraction or support like cable bolting, the Successful bidder shall seek the opinion of the GM, Bhupalapalli Area or Agent, KTK-5 incline / Colliery Manager, Bhupalpalli and abide by his decision regarding the usage of the same in such strata.
- v) To ensure completion schedule, the operation should be planned by taking care of all exigencies.

2.0 Scope of work of SCCL – SCCL shall undertake the following activities:

- 2.1 SCCL shall provide Longwall maintenance shed, Longwall platform, Longwall store, rooms for supervisors & technicians on the surface.
- 2.2. Providing adequate ventilation as per the statute.
- 2.3. Isolation stoppings/ permanent stoppings required as per the statute.
- 2.4. Drivage of inter seam tunnels as per requirement.
- 2.5. Drivage of drift tunnel from surface to No.II seam for mono rail arrangement.
- 2.6. Mono-rail arrangement for men and material transportation.
- 2.7 . SCCL shall engage required supervisory personnel as compliance with prevailing law statutory supervision and the employees of successful bidder shall abide by the safety Instructions in all matters.
- 2.8. Required electrical power at 33KV shall be provided by SCCL at the surface Sub station.
- 2.9. Pumping of water from the below underground sumps to surface. However, the successful bidder is responsible for arranging pumping of drainage water along the gate roadways up to main sump.
- 2.10. Water supply raw/drinking (sand bed filtered water) at designated point along the trunk dips at corresponding gate roadway of Longwall panels.
- 2.11. Medical assistance to the employees/ family members of the successful bidder can be provided by SCCL at SCCL Area Hospital, Bhupalpalli on chargeable basis.
- 2.12. SCCL shall undertake monitoring and management of Surface Subsidence.
- 2.13. Provision of Miner's cap lamps to the employees of the successful bidder.
- 2.14. Sealing of goaved out Longwall panels (preparation and construction of isolation stoppings) and drainage, inspection and environmental monitoring of the goaved out Longwall panels.

- 2.15. SCCL shall obtain and maintain all the approvals as detailed in Annexure-I. In case of the approval from DGMS, successful bidder shall prepare and obtain approvals for their equipment.
- 2.17. SCCL shall assist the successful bidder to facilitate in obtaining all necessary Permissions required from statutory authorities from time to time.
- 2.18. Measurement of quantity of coal:
Payment of bills shall be made on the basis of volumetric calculation of the Longwall panel/block as per the weighment made by the belt weighers/ pre-weigh bin or other suitable weighing arrangements at the coal transfer point at surface.
- 2.19. The successful bidder shall adhere to the specified horizon of coal seams while working as shown to avoid contamination of coal. During the course of drivage any slush generated should be removed. The same is to be transported to surface.

CHAPTER-VII

FACILITIES TO BE PROVIDED BY THE COMPANY

1. The Company shall provide the following facilities to the Successful bidder as per clause 7 of Chapter IV.

i) Supply of electricity:

- SCCL shall supply electricity at 33 KV power at surface on free of cost. The successful bidder shall step down to the required operating voltages.
- The successful bidder shall make all arrangements of transformation, transmission and distribution of electric power to the face equipment and as required duly complying with the **Central Electricity Authority Regulations, 2010 (CEAR-2010)** and also the guidelines established by DGMS or any other statutory authorities.
- The required cables, connectors and couplers from successful bidder's Power center/ Load center to the various face equipment is successful bidder's responsibility.
- The shifting of Power center/ Load center when the face advances is successful bidder's responsibility.
- The Company shall in no way be responsible for any interruption/breakdown to the supply of electric power beyond its control.

ii) Supply of Water:

- The Company will arrange water treated/filtered at free of cost at the entrance of the working panel.
- There from, the Successful bidder shall make necessary arrangements at his own cost for the distribution of water for the use of his employees, machines etc.
- The shifting of water pipelines within the panel when the face advances is successful bidders responsibility.
- For the above purpose, the required length of pipelines, connectors and bolts shall be procured by the successful bidder.
- The quantum of water supplied will be @ 250LPM with 20 Bar pressure. If the successful bidder's actual requirement during the execution of the contract is more, SCCL will arrange for the same with mutual consent.

ii) Space for go downs/stores shall be provided by SCCL on free of charge.

iii) Unfurnished residential housing facilities for the Successful bidder's supervisory personnel, as detailed below, will be provided on rental basis approximately at a distance of 5Km from the site

- a) 4 Nos. unfurnished, self-contained, NC Type quarters or equivalent suitable for officers.

- b) 10 Nos.-Unfurnished quarters or equivalent self contained accommodation suitable for supervisors (T2 Type).

For the above accommodation rent, electricity and water charges along with taxes as applicable from time to time will be levied.

Successful bidder shall maintain these quarters in a properly manner and hand over back in good condition to SCCL after their contract is completed/ terminated. It will be the responsibility of the successful bidder for making other arrangements at his cost.

- iv) Land for providing temporary accommodation will be provided for workers near the mine site, on free of charge. The Company shall also provide the following facilities to the Successful bidder.
- a) Vocational training & medical examination would be provided at free of cost, subject to the existing practices of the S. C. Co. Limited.
- b) Medical facilities on chargeable basis, from the existing medical centers on "Out Patient basis" at Bhupalapalli area Dispensary and Main Hospital, Bhupalapalli.

2. In addition to the above, the Company shall provide the following additional facilities to the Successful bidder, on free of charge.

- i) Cap lamps and flame safety lamps for Successful bidder's workers and supervisory personnel, shift wise at Bhupalpalli KTK .5 Incline Mine. The place of issue, number of Cap lamps and flame safety lamps to be provided to the Successful bidder shall be determined by the GM, Bhupalpalli Area or Agent, KTK.5 Incline, BHP
- ii) The Successful bidder shall ensure that the cap lamps are duly returned to the lamp room, in proper condition, at the end of each shift. For any damage to, or loss of any cap lamp by the Successful bidder's men, the Successful bidder is liable to be charged, by the Company, at rates to be fixed by the GM, Bhupalapalli area.
- iii) Statutory supervision, such as Under Manager, Pit Engineer, Overman, Electrical Supervisor, Mechanical Charge-hand and Mining Sirdar to carry out statutory supervision. However, Successful bidder has to appoint qualified certificate holder to carry out all the electrical installations, repairs and maintenance in the Successful bidders scope.

Shot firing operations if required, shall be done only by the Company's shot firer/sirdar.

CHAPTER-VIII
BILL OF QUANTITIES AND FORMAT FOR PRICE BID

1. The price bid is to be filled in as per the bill of quantities in the format given in E-portal
2. The rate shall be quoted against the item given in clause 4.0 hereof, The work for which rate has been invited shall be deemed to include thereof the provision of all labour, materials, all plant, temporary works, Scientific Studies if any, and everything whether of a temporary or permanent nature required in and for such completion guaranteed production. The rate for the work shall be deemed to include there of all the charges for any ancillary works required to be done for the execution of the contract including the supports required as per the relevant Systematic Support Rules (SSR) whether temporary or permanent in nature and no additional claims for any ancillary work shall be entertained.
3. The Contractor shall be responsible for carrying out the works in accordance with the detailed drawings supplied by the Company within the permissible limits specified by this tender document and as directed by GM, Bhupalpalli area. No Claims for any additional muck handling, additional supporting in the already supported area by the Contractor, advance supporting like fore poling, lining, rock bolting, placing of W-straps, wire mesh etc., other than the Additional supports to counter bad strata/geological disturbances, Special supports such as Cable bolting and Cement injection as certified by GM, Bhupalapalli area or Agent, KTK.5 incline, Bhupalpalli shall be allowed beyond the dimensions specified in the detailed drawings.
3. Price for Mining of 121.000 Lakh tonnes of coal with Long wall Technology at KTK-5 Incline, Bhupalapalli area of SCCL along with drivage of Trunks and gate roadways required for preparation of Longwall panels.

Note: Quoted rates should be

in INR only.

Description of Work	Unit of Work	Approximate Qty. (Tonnes)	Rate for extraction / Tonnes in Rs	Contract Value in Rs.
		a	b	a x b
Extraction of coal with Long wall Technology as per the scope of work, technical specification and other provisions given in the NIT	Ton	1,21,00,000	-----	-----
Drivage of trunk roadways, gate roadways along with in seam tunnels for preparation of Longwall panels and its supporting as per the scope of work, technical specification and other provisions given in the NIT	meter s	1,00,000	---	---

Description of Work	Unit of Work	Approximate Qty. (Tonnes)	Rate for extraction / Tonnes in Rs	Contract Value in Rs.
		a	b	a x b
<i>Service tax, Krushi Kalyan Cess & Swacha Bharath Cess applicable @</i>				

1. The rate of Service Tax will be as applicable on the last date of submission of tender.
2. SCCL will award the Contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined to be the lowest cost per tonne on landed cost basis.
3. In case two or more bidders have quoted same rate on total landed cost basis, then the successful bidder will be selected through suitable lottery system to be decided by SCCL.

(Signature of Tenderer with seal)

CHAPTER-IX
STANDARD MINING CONDITIONS
For extraction of coal with Long wall at Bhupalpalli

To avoid disputes in case of encountering non-standard mining conditions, the following guidelines are prepared to revise the ACQ by area management committee at the end of every production year duly verifying the record maintained to that effect.

a) Powered Roof Supports and other equipment dimensions :

The operating chock height ranges from less than or equal to 1.8m and upto a maximum height of greater than or equal to 3.6m. While forming the panels and deciding the face lengths due consideration was also given for superimposition of panel barriers of two seams. Shearer shall be so designed that it must be able to pass when the shield supports are in closed condition. Other LW equipment shall be deployed in commensurate with the guaranteed production from Longwall Mining.

b) Inrush of Water:

- Normal ground water seepage is measured as 200 to 250 GPM.
- In the event of abnormal inrush of water resulting in Disruptions to the normal working for production by more than one hour not attributable to the contractor, the target/extraction per month shall be reduced proportionately.
- In the event of Disruptions to the normal working for production of less than 1 hour not attributable to the contractor shall be disregarded.

c) Methane:

- In the event of liberation of methane exceeding 1.25% & resulting in Disruptions to the normal working for production by more than 1 hour not attributable to the contractor, the target/extraction per month shall be reduced proportionately.
- In the event of Disruptions to the normal working for production of less than 1 hour not attributable to the contractor shall be disregarded

d) Spontaneous Combustions:

- In the event of occurrence of spontaneous heating & resulting in Disruptions to the normal working for production by more than 1 hour not attributable to the contractor, the target/extraction per month shall be reduced proportionately.
- In the event of Disruptions to the normal working for production of less than 1 hour not attributable to the contractor shall be disregarded

e) Mine Safety:

- In the event of Disruptions to the normal working for production by more than 1 hour not attributable to the contractor, the target/extraction per month shall be reduced proportionately.

- In the event of Disruptions to the normal working for production of less than 1 hour not attributable to the contractor shall be disregarded

f) Electrical Power:

- In the event of Disruptions to the normal working for production by more than 1 hour not attributable to the contractor, the target/extraction per month shall be reduced proportionately.
- In the event of Disruptions to the normal working for production of less than 1 hour not attributable to the contractor shall be disregarded

g) Water Supply:

- In the event of Disruptions to the normal working for production by more than 1 hour not attributable to the contractor, the target/extraction per month shall be reduced proportionately.
- In the event of Disruptions to the normal working for production of less than 1 hour not attributable to the contractor shall be disregarded

h) Ventilation:

- In the event of Disruptions to the normal working for production of more than 1 hour not attributable to the contractor, the target/extraction per month shall be reduced proportionately.
- In the event of Disruptions to the normal working for production of less than 1 hour not attributable to the contractor shall be disregarded

i) Working Hours of the Trunk Conveyors maintained by SCCL.

- The Contractor shall transport the coal produced from the extraction and shall dump it over trunk belt conveyors belonging to SCCL at the start/entrance of the proposed panel at underground from where SCCL shall evacuate the coal.
- For the purpose of standard mining condition, the working hours of trunk belt conveyors will be considered as 18 hours per day.
- In the event of Disruptions to the normal working for production of less than 1 hour not attributable to the contractor shall be disregarded.
- In case of Disruptions to the normal working for production of 1 hour and more than 1 hour not attributable to the contractor, the target/extraction per month shall be reduced proportionately.
- In case of Disruptions to the normal working for production of 1 hour and more than 1 hour not attributable to the contractor, the target/extraction per month shall be reduced proportionately.

j) Discipline:

- In the event of disruption to the normal working for production by more than 1 hour not attributable to the contractor during the contract period due to any indiscipline action of SCCL employees for the reasons not

attributable to the successful Bidder, the Target/Extraction per month shall be reduced proportionately.

- **Roof caving:** In the event of roof caving/ other disturbances caused due to unforeseen strata related conditions at the working face causing disruption to normal working, the production loss during the disrupted period shall be calculated proportionately, and the target/extraction per month shall be reduced proportionately.

Note:

1. Such occurrences shall be declared and recorded and certified by the Representatives of SCCL at mine level and the successful Bidder, the same shall be verified and certified by Area Level Management Committee and the summary of such occurrences shall be approved by Corporate Management Committee.
2. **Disruption means** – It shall occur when face is otherwise ready to produce and the men to operate are available in the face. But for the interruption caused by the reason in the clause mentioned, the face in all respects would have produced to the full extent.

Annexure-1

List of Permissions/Approvals for KTK No. 5 Incline

A. Already available:

S.No.	Permission/Approvals/Notices	Details	SCCL's responsibility	Contractor's responsibility
1	a) Mining Lease : All mining leases(3) for the project have been obtained. b) Diversion of Forest land of 144 Ha.	a) G.O.Ms.No.14 dt: 09.03.2010 (2792 Ha. Renewal for 20 years) b)G.O.Ms.No.44 dt: 13.05.2002(renewal for 30 years)	Maintain Maintain	
2	Mining Plan	Prepared by SCCL and submitted to MoC, New Delhi for approval.		
Mining & Electricals				
4	Permission for solid blasting with P-5 explosives in No.1 seam under Reg.168(15), 173(a) and 175(5) of CMR,1957	H1/010076/perm/2007/1371-73 Hyderabad dt: 20.07.2007	Maintain	compliance
5	SSR for No.1 seam under Reg.108 of CMR	H1/010086/perm/616Hyderabad dt: 12.03.2009	Maintain	compliance
6	Permission to develop workings in No.1 seam along apparent dip of 1 in 5 forming rhombus shaped pillars under Reg.99(2) & (3) of CMR,1957.	H1/01060/Perm/10/947, dt: 13.08.2010	Maintain	compliance
7	SSR for No.2 seam under Reg.108 of CMR,1957.	H1/010086/Perm/13 Hyderabad, dt: 12.03.2009	Maintain	compliance
8	Classification of No.2 seam gassiness under Reg.116 of CMR,1957.	H1/1764/Hyderabad, dt: 28.07.2009	Maintain	compliance
9	Permission for solid blasting with P-5 explosives in No.2 seam under Reg.168(15), 173(a) and 175(5) of CMR,1957	H1/010060/perm/2002/1805-06, Hyderabad, dt: 08.08.2002	Maintain	compliance
10	Permission to develop workings in No.2 seam along apparent dip of 1 in 5 forming rhombus shaped pillars under Reg.99(2) & (3) of CMR,1957.	H1/01060/perm/10/942, Hyderabad, Dt: 13.08.2010	Maintain	compliance

11	Permission for solid blasting with P-5 explosives in No.3 seam under Reg. 168(15), 173(a) & 175(5) of CMR,1957.	H1/KTK5/Perm/99 /1975-76 Hyderabad, dt: 26.06.1999	Maintain	compliance
12	SSR for No.3 seam under Reg.108 of CMR,1957.	H1/010086/Perm/ 610, dt: 12.03.2009	Maintain	compliance
13	Permission to develop workings in No.3 seam along apparent dip of 1 in 5 forming rhombus shaped pillars under Reg.99(2) & (3) of CMR,1957.	H1/01060/perm/1 0/ 937,Hyderabad, Dt: 13.08.2010	Maintain	compliance
14	Permission to bring into use certain 3.3 HT VCBs, 315KVA transformer/ transwitches, 150HP hauler at surface and underground sub-stations both in No.2 and No.3 seams under Rule 63 of IER, 1956.	SCZE/SCCL/KTK- 5/ 43/11-03/15/ 996 dt: 17.04.2015.	Maintain	compliance
15	Permission to develop workings beneath and within 45m of AP Transco lines in No.1,2 & 3 seams under Reg.105(1) and 126(2) of CMR,1957	1 Seam: H1/01060/Perm/10/ 947 2 Seam: H1/01060/Perm/10/ 942 3 Seam: H1/01060/Perm/10/ 937Hyderabad Dt: 13.08.2010	Maintain	compliance
16	Permission to bring into use certain 3.3 HT VCBs, 315KVA transformer/ transwitches at surface and underground sub-stations in the mine.	1) SCZE/SCCL/KTK- 5/ 43/11-03/15/ 996 dt:17.04.2015. 2) SCZE/SCCL/KTK- 5/ 43/11-02/15/ 998 dt:17.04.2015.	Maintain	compliance
Environmental				
17	Environment Clearance	J- 11015/312/2007- 1A.II (M) dt: 31.10.2008 for 0.30 MTPA with a peak production of 0.60 MTPA.	Maintenance and compliance	compliance to the extent of operations in Under Ground

18	Consent order for Establishment	60/PCB/CFE/RO-WGL/ O/2009-590 dt: 04.06.2009.	Maintenance and compliance	
19	Consent order for Operation	APPCB 58/10471/ZO-Hyd/HO/CFO/2013-5675, dt: 18.12.2013 valid upto 30.06.2015	Maintenance and compliance	
20	Ground water clearance	1862/T/2003-04/755, dt. 05.11.2005.	Maintenance and compliance	

B. Permissions/Approvals/Notices to be obtained

S.No.	Permission/Approvals/Notices etc	SCCL's responsibility	Contractor's responsibility	Remarks
1	Longwall equipment permission under Reg.181 of CMR, 1957. a. Electricals & belt conveyors b. LW-PRS supports c. Shearer AFC, BSL, Power pack-hoses & electricals d. Monitoring system – sensors e. Communication system f. Auxiliary equipment, if any.		Obtain and Maintain	
2.	Permission for extraction of LW panels in 1, 2 Bottom & 3 seams and widening of installation chamber in all panels under Reg.100A & 99(2) of CMR, 1957	To Obtain and Maintain	Provide required assistance and compliance	

Note: During contract period as per the sequence of extraction at least 9 months before application are to be submitted for permission for each panel separately.

3.	<p>Permission for use of mono rail system for transport of men under Reg.88 of CMR, 1957.</p> <p>Note: To be applied for each seam at least 6 months ahead separately.</p>	Obtain and Maintain		
4.	<p>Heightening of areas required to facilitate the crossing of mono rails under belt conveyors, air crossings and haulage roadways etc. in No. 1, 2 & 3 seams under Reg.99(2) of CMR, 1957</p> <p>Note: To be applied for each seam at least 6 months ahead separately.</p>	To Obtain and Maintain		
5	<p>Permission/Notice for development of cut through in the barrier between gate roadways at various intervals required during installation and salvaging under Reg.101 of CMR, 1957.</p> <p>Note: During contract period as per the sequence of extraction at least 6months before application is to be submitted for permission for each panel separately.</p>	To Obtain and Maintain	Provide required assistance and compliance	
6.	<p>Permission for alteration of ventilation during commissioning of MMV fans under Reg.146 of CMR, 1957.</p>	To Obtain and Maintain		
7.	<p>Permission for reorganization of the ventilation system for installation & use of booster fans under Reg.146 of CMR, 1957 for each seam</p> <p>Note: To be applied for each seam at least 6months ahead separately.</p>	To Obtain and Maintain		

8.	Permission for use of belt conveyors in UG in trunk roadways, main/tail gates under Reg.92 of CMR, 1957 for each seam. Note: To be applied for each seam at least 6months ahead separately.	To Obtain and Maintain	Provide required assistance and compliance for the belt conveyors along gate roads	
9.	Change of mine boundary under Reg,.107 of CMR, 1957 (rise & south side)	To Obtain and Maintain		
10	Permission for use of various HT electrical equipment in each seam prior to energizing under Rule 63 of IER, 2008 shall be submitted from time to time. Note: Each occasion	To Obtain and Maintain	Provide required assistance and compliance for the equipment deployed by the contractor	
11	Notices for use of various LT electrical equipment in each seam under Rule 111 of CEAR, 2010 shall be submitted from time to time.	To Obtain and Maintain	Provide required assistance for the equipment deployed by the contractor	
Note: each occasion				
12	Submission of monthly, quarterly, half yearly and annual returns required under, Mines Act, 1952, Mines Rules, 1955, CEAR,2010 & CMR, 1957 to various authorities. Note: As & when required	Compliance	Compliance	
13.	Submission of monthly, quarterly, half yearly and annual returns applicable for Contract Labour under Applicable Laws. Note: As & when required	Compliance	Compliance	

Note: The above list is not exhaustive and due to variance in conditions or changes in applicable Laws, any additional permissions/approvals/notices required other than the above need to be obtained as per the situation during the contract period.

Annexure-2**A. Infrastructure facilities presently available at KTK No. 5 Incline**

S.No.	Description
1	Filter bed (1.5 lakh gallons capacity)
2	33 KV/3.3KV outdoor Sub-station (2 x 1600 KVA and 1 x 2000 KVA)
3	WBM Internal roads
4	Two pairs of tunnels (4.2 x 3.4m & 4.2 x 3.0m cross section) each pair driven and connected to No.2 & 3 Seams.
5	Mine take area land of 17.5Ha was acquired for office use
6	Portable magazine of 1.0 ton capacity
7	BT approach road to the mine connecting to the state highway suitable for 40 T carriage
8	Main Mechanical Ventilator (2 x 300 HP)
9	Haulage for material and coal transport
10	Water required @250 GPM sand bed filtered
11	Main sump with adequate pumping arrangement
12	Administrative building
13	Communication facility including Broad band Internet connectivity for SCCL use.
14	Pit-stores building for SCCL use

Annexure-3**List of Scientific Investigations completed by SCCL at KTK No.5 Incline.**

S.No.	Scientific Investigations	Conducted by
1	Optimisation of Pillar Parameters for Development and Final Extraction of Highly Inclined seams.	NIRM
2	Stability of rhombus shaped pillars & galleries and design of SSR for No.2 & 3 seams	NIRM
3	Scientific study for the workability of 2 seam.	CIMFR
4	Degree of gassiness of No.1, 2 & 3 seams for classification.	UCE (K.U), Kothagudem.
5	RMR study of No. 1, 2 & 3 seams for design of SSR.	Exploration Dept., SCCL.
6	Ventilation Study	R&D SCCL

Plate -1

Location Plan of KTK.No.5 Incline.

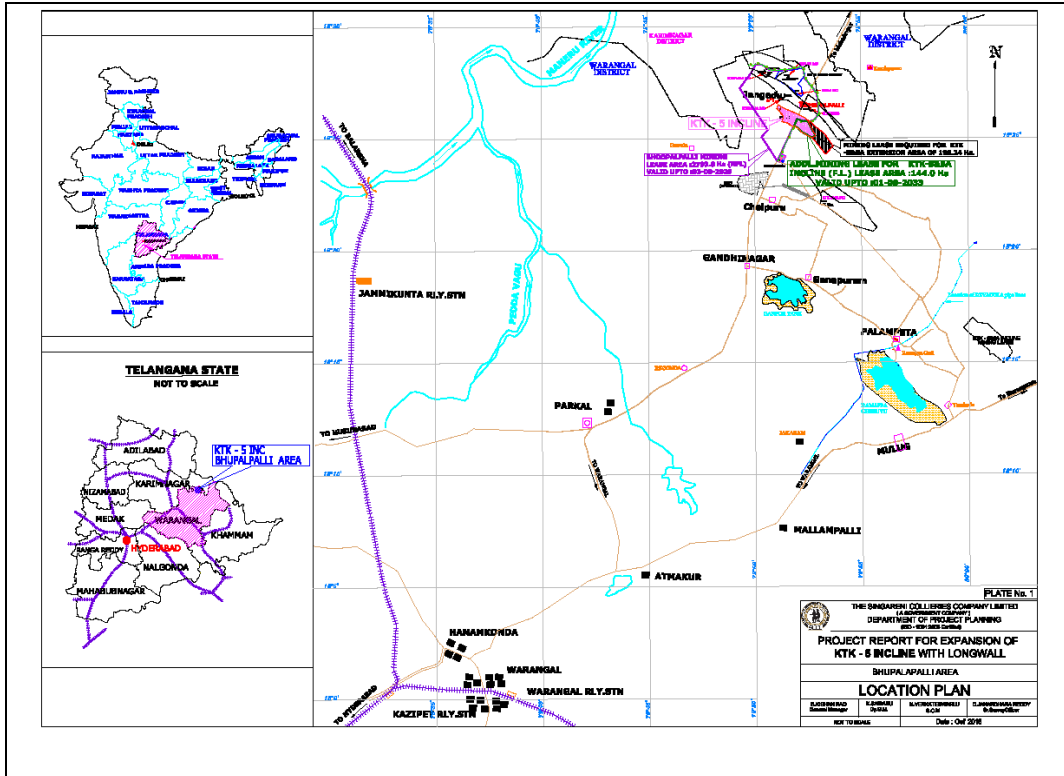


Plate – 2
Surface plan of KTK.No.5 Incline

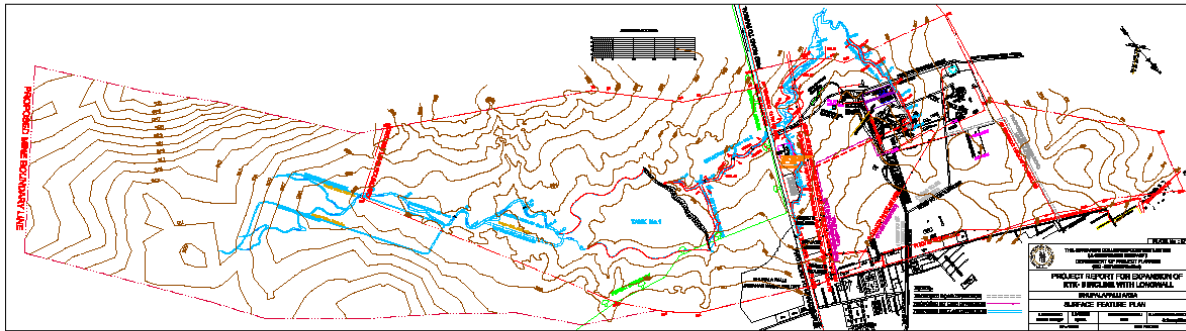


Plate – 3
Bore hole section

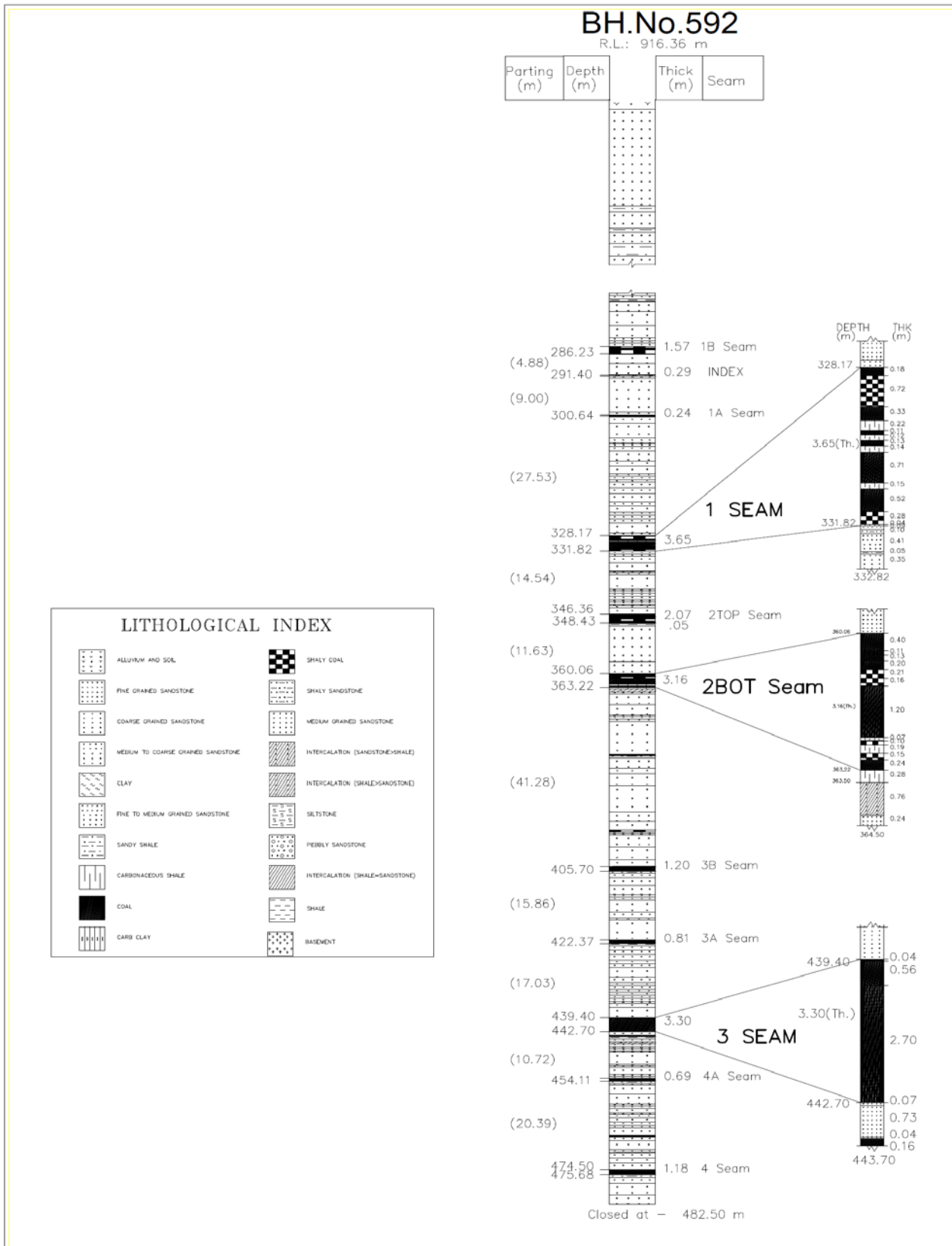
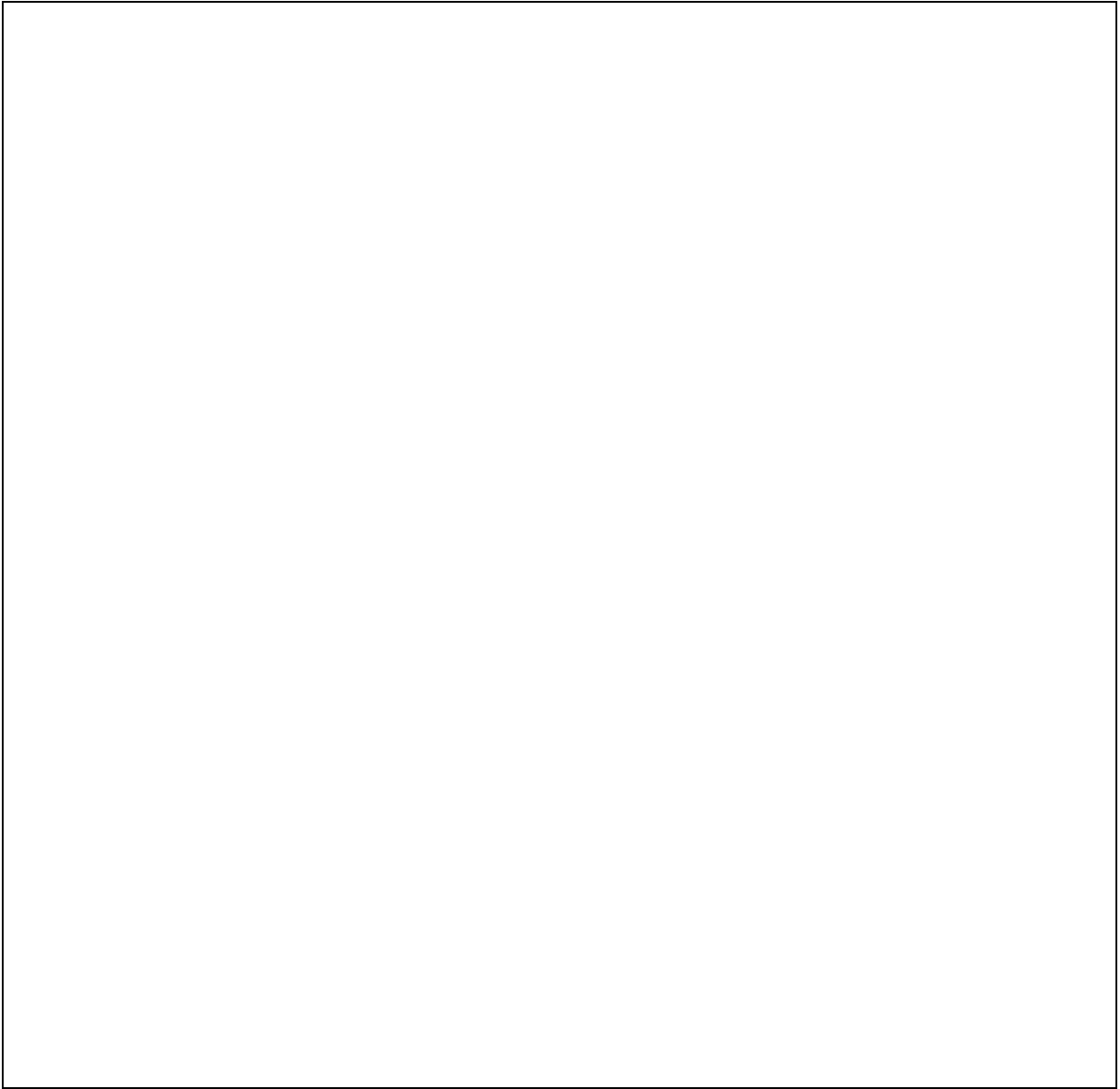
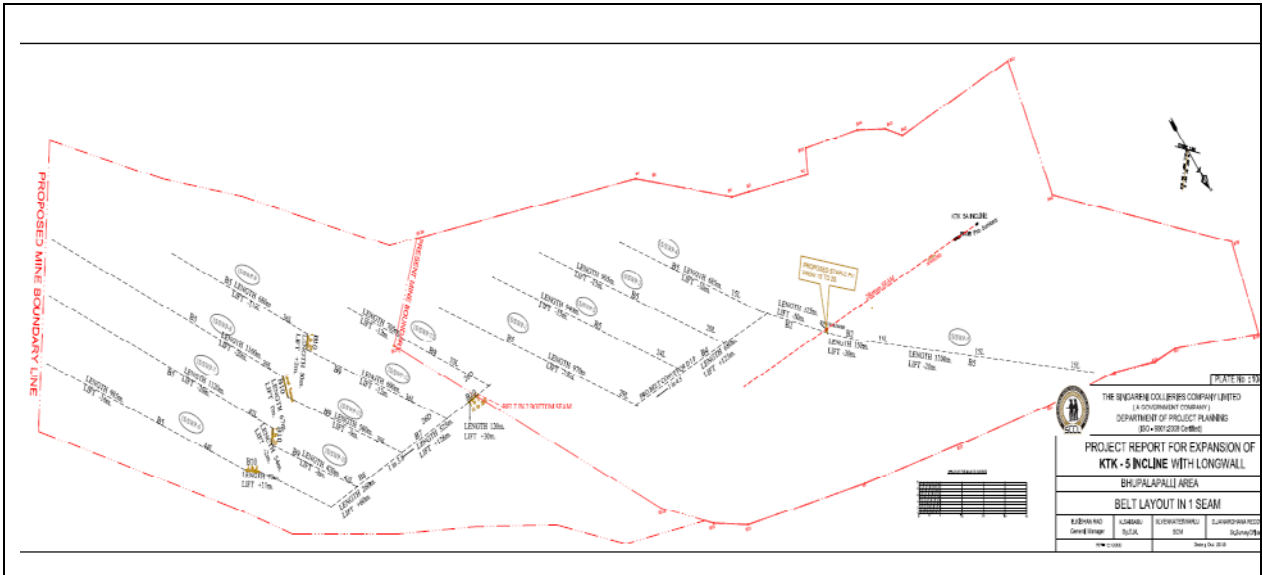


Plate – 4
Proposed Haulage Layout

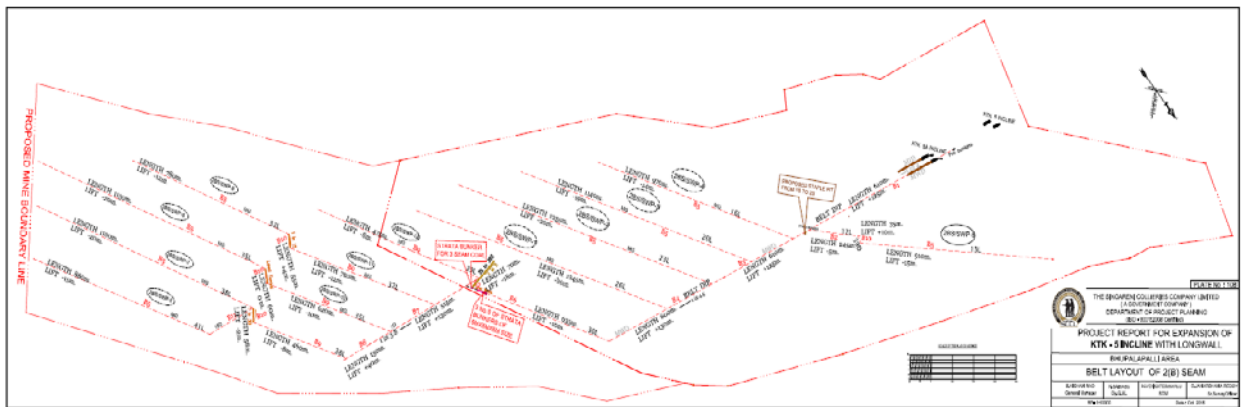


**Plate – 5
Belt Layouts**

No.1 Seam



2B Seam



3Seam

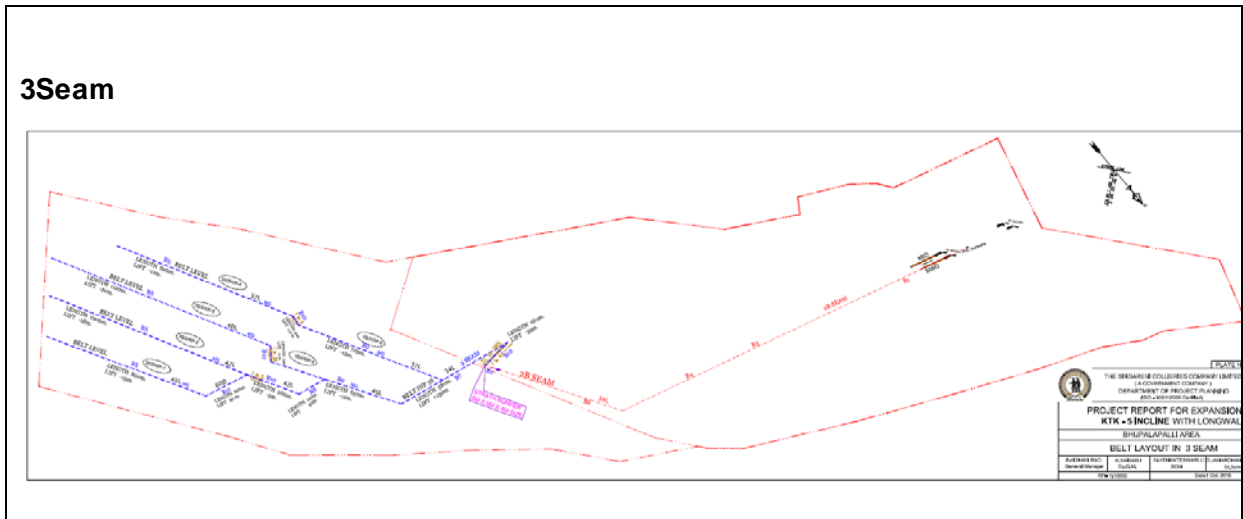


Plate – 6
Projection Plan of No.1 seam

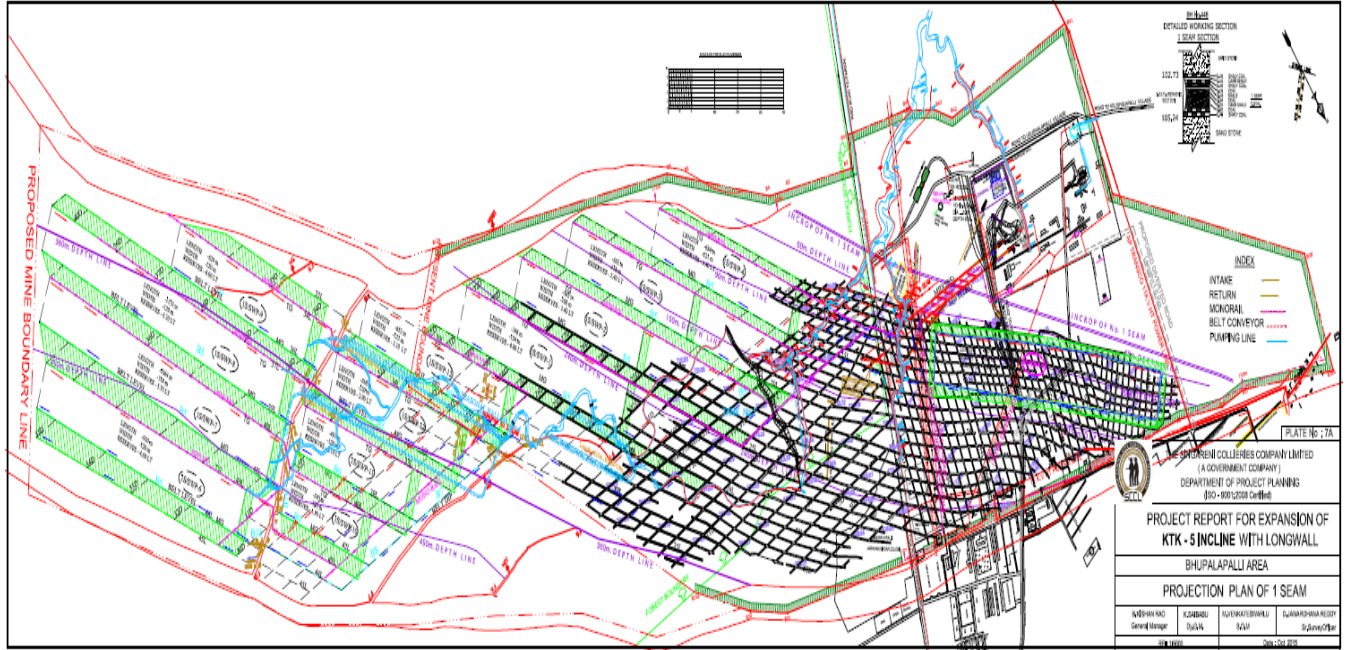


Plate – 7
Projection Plan of No.2 Bottom seam

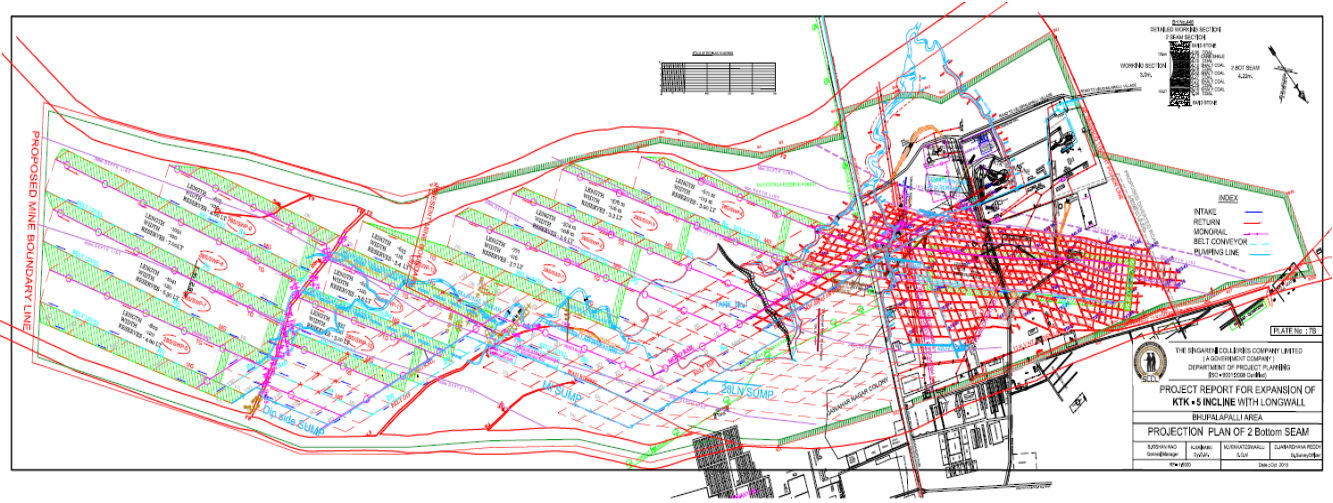
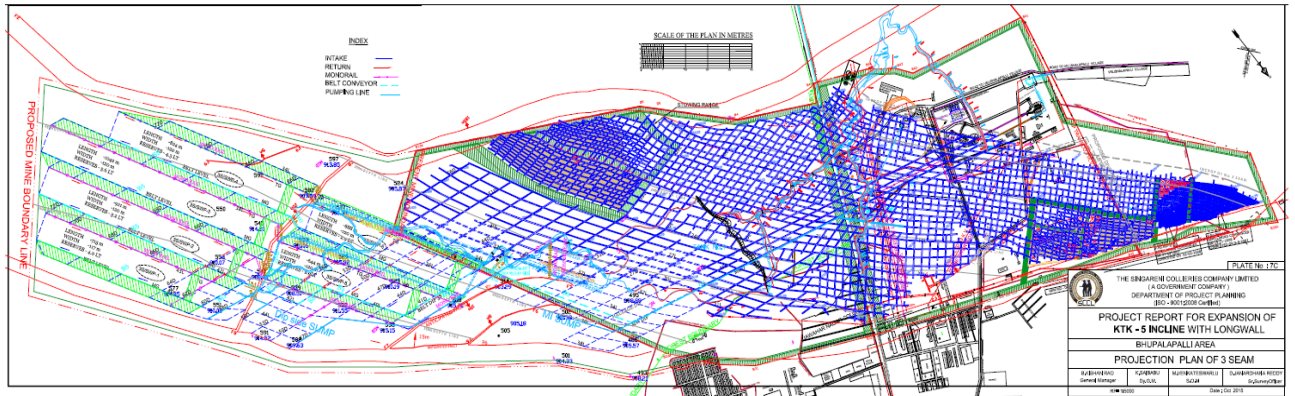


Plate – 8
Projection Plan of No.3 seam



Appendix-I

FORMAT FOR COVERING LETTER

(Bidders are required to fill up the blank spaces in this Tender Form)

To

Dear Sirs,

Having examined the Tender Document for the works explained therein and having visited the site and made ourselves aware of all the local and statutory conditions and other information likely to influence or affect our offer, we, the undersigned, offer to complete the guaranteed production envisaged in the NIT in conformity with the provisions of the Tender Document for the respective rates mentioned in the Schedule of Quantities.

We understand that, if our Tender is accepted, the Contract is to commence as mentioned at clause no.5.1 of chapter-IV and we undertake to commence, and to complete and deliver the whole of the works comprised in the Contract with in a period of 15 years, calculated from the last day of the aforesaid period i.e. from the date of commencement.

We have deposited an **Earnest Money for INR 50, 00,000 (Rupees fifty Lakhs only)** by way of a Bank Draft from drawn in favour of your Company which amount is not to bear any interest. We do hereby agree that this sum shall be forfeited by SCCL in the event our tender is accepted and we fail to execute the Contract when called upon to do so.

We agree to abide by this Tender for the period of 180 days from the date fixed for receiving the same and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Unless and until a formal Agreement is prepared and executed, this tender together with the company's written acceptance thereof, shall constitute a binding Contract between us.

We understand that you are not bound to accept the lowest or any tender you may receive. We also understand that you may accept the tenders in part also.

Yours truly,

(Signature of the Bidder)

Appendix – II**FORMAT FOR SUBMITTING PARTICULARS OF THE BIDDER**

TENDER NOTICE No: E1216O0271 dt.27.9.2016

DATE:

PART 1-A**PARTICULARS OF BIDDER****1. NAME, ADDRESS AND OWNERSHIP STATUS OF BIDDER****I) If a Company /JV company /CONSORTIUM**

Name of the Company:

Date and place of registration:

Memorandum & Articles of
Association:Names of the all the Directors:
Full postal address of the registered
Office & all the Directors.
DETAILS OF JV/Consortium**II) Registration details**

- a) Income Tax PAN No.
- b) TIN No.
- c) VAT/CST Registration No.
- d) Excise Duty Registration No.
- e) Service Tax Registration No.

2. FINANCIAL RESOURCES:

- i) The bidder has to furnish documentary evidence to prove availability of minimum working capital of about INR. 20,00,00,000 (Twenty Crores) or equivalent Foreign Currency inclusive of access to lines of credit and availability of other financial resources to meet the requirement.

(For calculating equivalent Foreign Currency, the Bill selling rate of SBI on the last date of submission of bid shall be considered.)

Solvency certificate in support of evidence of adequacy of working capital for this contract should be issued by bank for liquid assets or revenue authorities of not less than the rank of MRO for immovable property or separately from both the authorities along with bid. The date of issue of such solvency certificates shall not precede by more than **Six** months from the date of submission of the bid.

Annual Turnover of the Bidder: State Bank of India or any nationalized bank's reference / audited documents certified by a chartered accountancy firm, which is recognized by ICAI or by a firm authorized by accounting authority of the country of the Bidder to the effect that minimum turnover in any activity of value INR. 50,00, 00,000 (Rupees fifty crores) in any one financial year during the last five financial years ending on 31.03.2016. All documents submitted must be countersigned by the Company Secretary of the Bidder (or Lead Member of JV/Bidding Consortium).

In case, Bidders have their financial statements in the currency other than Indian Rupees, for the purpose of evaluation, the financial results shall be converted into Indian Rupees at exchange rate issued by Reserve Bank of India prevailing on the balance sheet date for that financial year. In case financial statements of the bidder are in any language other than English, bidder shall also submit a copy of financial statements in English duly certified by an advocate entitled to practice in any High Court in India.

- ii) Documentary evidence to show the bidder's ownership of major assets, if any.
- iii) Copies of acknowledgement of IT returns filed for the last '3' years and assessment orders passed by respective authorities.
- iv) Copies of balance sheet certified by a Chartered Accountant for the last five financial years.

3. TECHNICAL RESOURCES:

- i) List of technical personnel available with the Contractor along with their qualifications.
- ii) List of equipment/machines with documentary evidence.

4. EARNEST MONEY:

Deposit of Earnest Money by :
Draft No :
Drawn on :

Issued by :
Amount (INR) :
Valid upto :

6. ACCEPTANCE BY THE BIDDER OF THE GENERAL TERMS AND CONDITIONS AS PER TENDER DOCUMENT (attach signed copies).

1. Performance of the Equipments (Long wall Technology) as per qualifying requirements of Technical Criteria:

Sl. No.	Name of the Manufacturer / Operator	Year of supply of the equipment package	Name and address of Mine / Project where the proposed equipment package were deployed	Year wise production of the package during equipment's life

2. Any other proofs to satisfy the qualifying requirement of the NIT

Signature of the Bidder.

Note: Separate sheets may be attached to furnish details, if necessary.

Appendix – III**FORMAT FOR AGREEMENT**

THIS AGREEMENT made the Day ofBETWEENof(hereinafter called “the Company”) of the one part andof(hereinafter called “the Contractor”) of the other part, WHEREAS the Company is desirous that certain works should be completed, viz., And has accepted a Tender by the Contractor for the, completion of such works.

NOW THIS AGREEMENT WITNESSETH as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.,
 - i) The Tender document supplied against Tender Notice No.....
 - ii) Work Order No-....
 - iii) Negotiations dated
3. In consideration of the payments to be made by the Company to the Contractor, as hereinafter mentioned the Contractor hereby covenants with the Company to construct, complete and maintain the Works in conformity, in all respects, with the provisions of the Contract.
4. The Company hereby covenants to pay the Contractor in consideration of the, completion and maintenance of the Works, the Contract Price at the times and in the manner prescribed by the Contract.

Signed by the Contractor

Address

In the presence of witness

Signed by on behalf of the Company

Designation

In the presence of witness

Designation

APPENDIX - IV
BILLING FORMAT

MEASUREMENT BOOK

NAME OF THE WORK :

WORK ORDER NO. :

AGENCY :

COMPLETION PERIOD :

AWARDED AMOUNT :

DATE OF STARTING
(ZERO DATE) :

DUE DATE OF COMPLETION :

M.B NO. :

CHARGED TO :

CHARGE CODE :

SIGN. OF AGENT, KTK.5**INCLINE/AGENT**

No.	P.O Item No.	Description of work	Total tonnage of Extraction		Quantities of work done			Rate in INR	Unit	Amount			Qty. executed beyond the scope	Remarks
			As on	Last month	Paid as per last Bill	Since last bill	Total upto date			Paid as per last bill	Since last bill	Total upto date		

A permanent file may please be built up with the following certificates/ Documents, duly numbering the papers serially and sent to F & A Dept. along with the Bill prepared by the contractor, pay-sheet, the Measurement Book duly certified by Manager / Agent, KTK.5incline authorized for the contract by the General Manager, Bhupalapalli area.

1. Letter authorizing the Manager/Agent, KTK.5 Incline, BHP by the General Manager, Bhupalapalli area is to be obtained as per the Purchase Order no.--- unless otherwise specified.
2. Details of employees engaged given by the Contractor are to be produced as per Clause No._____ of the Order.
3. Statutory Form on the firms /joint venture's, S.T. No., and Income Tax No. of the Contractors as per Clause No._____ of the Order

4. Details of Contractor's Resident Engineer and his assistants as approved by GM, Bhupalapalli area or Agent, KTK.5 Incline, BHPis to be produced as per clause No.
5. Persons engaged by the Contractor in extraction of coal and sent to Medical examination and trained at M.V.T.C as per prevailing Vocational Training rules for Coal Mines before they are engaged on work. Letter of proof to be produced as per clause No.
6. Indemnity bond by the Contractor against any claim in case of accidents is to be produced as per Clause No.
7. Indemnity by the Contractor against proof of depositing Royalty on account of Minor Minerals used in the work before the final bill is processed for payment as per clause No.
8. GM, Bhupalapalli area approved detailed time-schedule of activities as per clause No.
9. License No. as acquired under the Contract Labour (Regulation and Abolition) Act,1970 and Contract Labour (Regulation and Abolition) Central Rules 1971 as per cause No. I)
10. Certificate of Commencement of Work (i.e Date of commencement) as per clause No.
11. Insurance Policies pledged/shown to the S.C.C L. as per clause No.
12. Certification about maintenance of a Separate "SITE REGISTER" by Agent, KTK.5 Incline, Bhupalapalli.
13. Certification by the Agent, KTK.5 incline regarding maintenance of the following by the Contractor:-
 - SITE ORDER BOOK to receive and record site orders.
 - All Book of Accounts regarding payments to Contractor's Labour and other employees
 - SITE REGISTER for recording hindrances (which is required to verify the genuinity for entitlement of extension of time of completion, if required)
 - Record of Materials supplied by the Company and consumed for the work (proper accounting of materials received and consumed)
 - B-Register and other registers as per statute
 - Record of the Explosives and Accessories (Type-wise) issued to him and used by him on daily basis and strictly complying with all statutory provisions in this respect.

The following components of recoveries must be recorded in each and every R.A.BILL, though there is no recovery proposed in the bill (mark as NIL. If there is no recovery):-

RECOVERIES:

I. Cost of Materials: INR

- | | | | |
|----|------------------------------|---|--------------------|
| 1. | Explosives (if any) | : | Enclosed |
| 2. | Detonators (delay) (if any) | : | day-wise |
| 3. | Shot firing cable (if any) | : | issue statements : |
| 4. | Others (Please specify) | : | |

II. Cost of Services provided by SCCL on chargeable basis:-

- | | | |
|--|---|---|
| 1. Vocational Training Charges | : | Ensured from the concerned department and enclosed supporting documents |
| 2. Rent for a) Quarters b) Co's Plant and Machinery (if any) | : | |
| 3. Value of work done by the Company for the contractor.(if any) | : | |
| 4. Damages to company's property. (if any) | : | |
| 5. Others (Please specify) | : | |
| 6. Royalties/cess | : | |
| 7. S.T and other Taxes | : | |
| 8. Against Complaints from Contract labours (if any) | : | |
| 9. Income Tax | : | |
| 10. Others., if any | ; | |

The following certificates are to be recorded in each and every R.A Bill:-

<u>CERTIFICATIONS</u>
<p>1. No labour, Materials, installation works, construction works, temporary works or anything whether of a temporary or permanent nature required in and for the extraction of coal with Longwall, completion and maintenance of the various works detailed in the scope of work and Time Schedule have been provided by the Company except those recoveries mentioned in the bill.</p> <p>2. The contractor has disposed the coal/muck at the specified areas and levelled the dumps as directed by the under-signed.</p> <p>3. The dirty water discharged is coursed through settling tanks before releasing it to the natural drainage.</p> <p>4. Maintaining the site Register and all Records as per terms and conditions of the Order.</p> <p>5. Off-set survey has been made at a distance of 5m or as advised along the extraction, etc.</p> <p>6. Consulted the site Order Book and the Contractor has complied with the orders.</p> <p>7. Satisfied with the strength and structural safety of the work/the quality of the materials</p> <p>8. Satisfied myself from the technical point of view as confirmed with the specifications and the bill of quantities.</p>
<u>AGENT, KTK.5 INCLINE OF SCCL.</u>

The following joint certification is to be enclosed to each and every R.A Bill:

R.A. BILL No.	<u>CERTIFICATE</u>
<ol style="list-style-type: none"> 1. All the measurements have been taken jointly for all items of work which are carried out till _____(date) in accordance with the scope of work of the contract and have a financial value, entered, checked and no work is covered up or put out of view without the recording. 2. Measurements for the quantum of excavation and supporting work done in the extraction of coal with Longwall etc., are made in accordance with the drawings/specifications included in the contract. 3. There are no rejected materials /persons at site. 	
REPRESENTATIVE OF THE CONTRACTOR	AGENT, KTK.5 INCLINE OF S.C.C.L
Enclosed: Information as per condition	Duly recorded in M.B.

APPENDIX - V
(Refer clause No. 16.7h)

PRO-FORMA

AFFIDAVIT

(To be submitted by the bidder along with the tender)
(To be executed on Non Judicial Stamp paper worth Rs.10/-)

I, _____ working as _____ of M/s _____ registered under _____ and having its registered office at _____ hereby solemnly declare and state as under:

i) I am authorised to make this affidavit on behalf of M/s _____

We, M/s _____ intend to submit our offer to the Singareni Collieries Company Limited (SCCL) for undertaking the work of coal extraction with cointinuous Miner as per scope of work, at Bhupalpalli, KTK 5 incline of SCCL with reference to their enquiry No. ----- Dtd. -----.

We have read the terms and conditions of tender document of the above said work and under stood the same in their proper perspective.

ii) In compliance with the para No. 16.7 h Chapter-IV of terms and conditions of tender documents, we are submitting this affidavit.

iii) In case the SCCL awards the aforesaid work to us, we hereby confirm that we shall deploy or engage only workmen who are our regular employees to execute the aforesaid work of the SCCL.

iv) We also hereby confirm that we shall not deploy or engage any contract labour for executing the aforesaid work of the SCCL.

v) We also agree to comply with the applicable laws for executing the aforesaid work of the SCCL.

For and on behalf of the _____

DEPONENT

Solemnly affirmed before me this day _____

NOTARY PUBLIC/ EXECUTIVE MAGISTRATE

APPENDIX – VI

Proposed Instrumentation & Strata Monitoring Mechanism

The monitoring of gate roadways is very much essential for assessing the stability of gate roadways and for better strata control/management. The monitoring should start from the day on which the Roadheaders starts driving the roadway; not just after the retreat has started. Further this monitoring is a statutory obligation on the part of mine operators.

- a) Pressure Guages and Continuous Pressure Recorders
- b) Convergence Indicator
- c) Tell tales- Dual Height Telltales, Rotary Telltales & Remote type Telltales
- d) Borehole Extensometers
- e) Load cells
- f) Stress cells etc.
- g) Instrumented roof bolts

With the use of latest software and the data obtained from the strata monitoring, required alterations in the support system can be done. Adequate number of pressure gauges and online continuous pressure recorders would monitor Longwall face.

Health monitoring of Chock shield Supports

- Monitoring of faulty or defective bleed valves daily
- Checking for blocked or damaged filters daily
- Drop in pressure in supports after 24 hours of the power pack shut off shall be checked once in 7days
- Entire bleed valves/ yield valves shall be checked and tested once in three months
- Total pressure drop in percentage from the gate road having power pack to the other gate road with flow meter once in 7days
- Rate of flow of fluid from power pack to the system once in 7 days

Description of different types of instruments to be installed in the panel is given below:

Continuous Pressure Recorders: Besides Pressure Guages Continuous Pressure Recorders are set at Strategic locations of a Chock Shield (i.e., at every 10 or 15 chocks interval) to monitor the continuous pressures observed in a Longwall Face.

Stress meters: Design of underground structures and pattern of excavation is greatly influenced by the quantity and range of mining induced stress (vertical). Vibrating wire type stress meter is used to monitor the mining induced vertical stress developed over the pillars. It is a reliable and preferred instrument for long term monitoring due to use of frequency as output signal rather than voltage in case of conventional electrical resistance or piezoelectric transducers. The stress meter is installed into the horizontally drilled borehole in the pillars by setting tool and tightened with wedge and platen assembly.

Dual Height Telltales: This instrument provides visual indication of movement of roof strata in the opening of a coal seam. Remedial actions may be taken if the observed value exceeds the cut off value.

Rotary Telltales: When the movement of roof strata is low, then this instrument is used to measure the movement of roof strata (<10mm) as this instrument magnifies vertical displacement into a rotational movement i.e. 5mm = 60° of rotation. During development, the amount of roof movement is low, under this condition, this instrument may provide better information.

Borehole extensometers (BHEs): This instrument is basically used for monitoring the separation of different roof stratum during drivage of an opening in the rock. It may be a single, double or multi-point anchor type instrument, depending on the number of roof horizons of interest. It is always good to place these instruments in a downward hole to understand the complete nature of bed separation because the instrument installed in upward hole, generally, get damaged with fall/major movement of immediate roof strata.

Instrumented roof bolts: For monitoring of load distribution along the full column grouted roof bolts, "instrumented bolts" are used, in which strain gauges are fixed along the length of roof/cable bolts at different intervals. Rock bolt load cells of mechanical, electrical or vibrating wire type are also used to measure the load in roof bolt.

APPENDIX – VII
BROAD TECHNICAL SPECIFICATION OF LONGWALL EQUIPMENT, SAFETY DEVICES
AND OTHER ANCILLIARIES PROPOSED TO BE DEPLOYED

Broad Technical specifications of all the Longwall equipment proposed to be deployed by the prospective bidder shall be uploaded by the prospective bidder along with the technical bid.

Signature of Bidder

NOTE: Separate sheets may be attached to
furnish details, if necessary.

Appendix - VIII**A1 – Format of Joint Operating Agreement**

(To be submitted on a non-judicial stamp paper, of appropriate value in accordance with the Indian Stamp Act)

Tender No.

This Joint Operating Agreement (JOA) agreed and signed this day of between having its registered office at “..... (hereinafter called Lead Member) and (hereinafter called Associate Member) to form a consortium / Joint venture to participate in the Tender Floated by SCCL for Extraction of Coal with Long wall at Bhupalpalli .

In case of Joint Venture, Lead Member and Associate Member would have _____ %, _____ %, _____ % and _____ % equity stake respectively in the Joint Venture.

It is further agreed by & between the consortium/Joint Venture members that the responsibilities and roles of each member shall be as under:

Responsibilities and Role of Lead Member is as under

1. The Lead Member shall act as Bidder under this Invitation of Bid.
2. The Lead Member shall be fully competent and authorized on behalf of the consortium/Joint Venture to sign and submit the bid, offer any clarification to the bid as & when required by SCCL, discuss and negotiate any aspect of the bid including the price, financials and structure of the proposed work at Bhupalpalli .
3. Lead Member of the consortium/Joint Venture shall be fully competent and authorized to enter into and sign any agreement with SCCL for any aspect under Tender No. The Lead Member shall also be fully authorized to nominate a person to sign the bid and all related documents.
4. The Lead Member shall be responsible for all financial aspects of the NIT, Bid and Tender Document (Agreement) including furnishing securities, bringing the necessary financial capital for execution, etc under above mentioned NIT.
5. The Lead Member shall also be responsible for all liaison activities with all agencies including Government of India, SCCL, etc.
6. The Lead Member shall be fully competent and authorized to incur liabilities and receive instructions on behalf of the consortium and its members. The Lead Member shall also be fully authorized and competent for entire execution of the agreement including to receive payments there under. All such actions of the Lead Member shall be deemed to be on behalf of the Consortium/Joint Venture.
7. All members of the Consortium / JV Company shall be jointly and severally responsible for financial, legal, environmental, technical, and other aspects, liabilities and consequences of the tendered work on behalf of the Consortium/Joint Venture.

Responsibilities and Role of as Associate Member.

Responsibilities and Role of as Associate Member.

8. The associate member(s) shall provide all technical inputs from the mines for SCCL to meet its requirement. The associate member shall ensure the satisfactory performance of the mining activities for SCCL.

9. The Members of Consortium/Joint Venture hereby irrevocably and unconditionally undertakes, agrees ,acknowledges and warrants that:
 - (a) It is duly organized and validly existing under the laws of the jurisdiction of their organization, with full power, authority and capability to enter into this JOA and to perform all acts and obligations contemplated herein;
 - (b) The signature and delivery of this JOA on its behalf and the exercise of its rights and performance of its obligations under this JOA have been duly authorised;
 - (c) This JOA has been duly signed and delivered by it and its obligations described in this JOA are legal, valid and binding obligations of such Party; and
 - (d) The execution and/or performance of this JOA:
 - (i) will not conflict with or violate any provision of any of its constitutional documents/charters or other organizational document;
 - (ii) will not require any notice to or filing with, or any Approval of, any Authority or the consent of any third party;
 - (iii) will not conflict with, result in a breach of, constitute (with or without due notice or lapse of time or both) a default under, result in the acceleration of obligations under, create in any person the right to terminate, modify or cancel, or require any notice, consent or waiver under, any contract or instrument to which such Party is a party or by which such Party is bound or to which any of such Party's assets are subject;
 - (iv) will not violate any Applicable Law or any order, writ, injunction, or decree applicable to it;
 - (e) This JOA shall be construed and interpreted in accordance with the laws of India. In the event of any dispute or claim of any kind whatsoever that may arise between the Parties or SCCL as a result of construction, interpretation or application of any of the terms and conditions of this JOA, such dispute shall be settled in accordance with Contract Agreement.
 - (f) The Parties hereby acknowledge and agree that this JOA has been executed for the sole benefit of SCCL and for the specific purpose of ensuring that SCCL receives the benefits of the Bidder's services under and in accordance with the Contract Agreement. Accordingly, SCCL shall, notwithstanding anything contained herein, at all times have the right to enforce the performance by the Members of Consortium/Joint Venture of their obligations pursuant to this JOA

read with the Contract Agreement and Members of Consortium/Joint Venture hereby irrevocably and unconditionally waive any defence, rights or protection that they may have in law, contract or otherwise in this regard.

- (g) None of the Members of Consortium/Joint Venture shall assign or delegate its rights, duties or obligations under this JOA and the Contract Agreement in any manner whatsoever.
- (h) The terms and conditions of this JOA shall not be amended or modified.

IN WITNESS WHEREOF, the Parties have, through their authorised representatives, executed these presents and affixed the coBHPon seals of their respective companies on the day, month and year first mentioned above.

<p>Signed on behalf of Lead Member of Consortium/Joint Venture.</p> <p>.....</p> <p>.....</p>	<p>Signed on behalf of associate member of Consortium/Joint Venture</p> <p>(Signature with Name and seal)</p>
<p>Signed on behalf of associate member of Consortium/Joint Venture</p> <p>(Signature with Name and seal)</p>	

Appendix.IX

INFORMATION TO THE BIDDERS FOR SUBMISSION OF BIDS
THROUGH E-PROCUREMENT**THE SINGARENI COLLIERIES COMPANY LIMITED
(A Govt. Company)**

Corporate Material Procurement Department,
P.O.Bhupalpalli Collieries –507101
KhaBHPam District, TELANGANA

Fax: 08744 -245651
Telephone: 08744 - 243109
E.Mail: gm_pd@scclmines.com

Tenders are invited on-line on the website <https://singareni-tenders.gov.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.

All bids are to be submitted on-line on the website <https://singareni-tenders.gov.in> No bid shall be accepted off-line. Only Earnest Money Deposit is to be submitted Offline.

1.0 Submission of Bid

- 1.1 In order to submit the Bid, the bidders have to get themselves registered online on the e-Procurement portal (<https://singareni-tenders.gov.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 upto the chain of trust to the root certificate of CCA. The online Registration of the Bidders on the portal will be free of cost and one time activity only. The registration should be in the name of bidder, whereas DSC holder may be either bidder himself or his duly authorized person.
- 1.2 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 COMMERCIAL & General Terms & Conditions and other terms, if any, along with on-line undertaking in support of the authenticity of the declarations regarding the facts, figures, information and documents furnished by the Bidder on-line in order to become an eligible bidder. No conditional bid shall be allowed/accepted.
- 1.3 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 is found to be wrong or misleading at any stage, they will be liable to punitive action.

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

The physical signature in the Letter of Bid (LOB) will be accepted without questioning the identity of person signing the Letter of Bid as it contains digital signature of DSC holder.

Note: *If the DSC holder is bidding on-line on behalf of the bidder, the power of Attorney or authorization (self authenticated and attested by public Notary) is to be uploaded along with the LOB in a single .pdf as mentioned in the Annexure. If the bidder himself is the DSC holder bidding on-line then power of Attorney or authorization is not required.*

- 1.5 **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.**

- 1.6 The bidder will have to upload scanned copies of various documents required for eligibility and all other documents as specified in NIT, in 'Techno-COMMERCIAL Bid' in Cover I (Part I & II) and 'Price Bid' in Cover II (Part – III)

- 1.7 The Techno-COMMERCIAL bid will be opened on the pre-scheduled date and time of tender opening. The Techno COMMERCIAL bids (Cover- I) will be decrypted on-line and will be opened by the "Bid Opener" with their Digital Signature Certificates. The Bidders may view the bid opening remotely on their personalized dash board under the link "Bid Opening (Live)" and can see the documents submitted by all participating bidders.

- 1.8 Tender will be opened on the pre-scheduled date irrespective of the number of offers received. Even in case of receipt of single offer, the same is to be opened for evaluation. In case no offers are received tender will be automatically be cancelled with competent approval.

2.0 PRICE BID/BOQ:

The Price Bid containing the Bill of Quantity (BOQ1) in Excel Format will be uploaded during tender creation.

- 2.1 Submission of information/Price in 'BOQ1: The Price bid/BOQ1 shall be downloaded by the bidder and after quoting the rates, taxes & duties etc. for the items being quoted.
 - 2.2 Thereafter, the bidder must upload the same Excel file during bid submission in Cover-II.
- 3.0 Cost of Bidding:** The bidder shall bear all costs associated with the preparation and submission of his bid and SCCL will in no case be responsible and liable for those costs.
- 4.0 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 last date for seeking clarification by bidder will be as per TIME SCHEDULE given in NIT and the last date of giving clarification on-line will be up to 07 (seven) days before the last date of submission of bid. However, clarifications of Bid dates are as per critical dates in e-portal.
- 5.0 Modification / Withdrawal of Bid :**
Modification of the submitted bid shall be allowed online only before the deadline of submission of tender and the bidder may modify and resubmit the bid on-line as many times as he may wish.

Bidders may withdraw their bids online within the end date of submission.
- 6.0 Evaluation of Bid:**
- 6.1 The bidder will have to upload scanned copies of various documents as specified in NIT for the evaluation process, document in support of exemption of EMD (if applicable) for technical evaluation.
 - 6.2 After receipt of EMD (wherever applicable, Cover-I documents shall be decrypted and opened on-line, on the pre-scheduled date and time by the Bid Openers with their Digital Signature Certificate(DSC). The submitted bids shall be evaluated for General, Technical, and COMMERCIAL terms & conditions.
 - 6.3 Initially, there will be a technical scrutiny report and COMMERCIAL scrutiny report generated by the system itself. The copies of system generated technical and COMMERCIAL scrutiny reports shall be available in the system and may be downloaded by technical department and MP/Purchase department respectively for separately carrying out the technical and COMMERCIAL scrutiny. Subsequently, technical and COMMERCIAL scrutiny generated by the system shall be scrutinised/ verified by the concerned departments in light of documents uploaded by the bidders in respect of bidders qualified based upon template response only.

The system will generate a auto-response sheet based on the bidders' value. However, It will be scrutinized by Tender coBHPittee member of SCCL based on the uploaded documents. The suBHPary of Tender coBHPittee recoBHPendation of the Techno-COMMERCIAL Evaluation will be made available in the portal.

- 6.4 After evaluation of Techno-COMMERCIAL bid, all the bidders will get the information regarding status of their eligibility along with the date of Price-bid opening on their personalized dash board and also by system generated e-mail. It will be the bidder's responsibility to check the status of their Bid online at least once daily, after the opening of Techno-COMMERCIAL bid till opening of the Price-bid. No separate coBHPunication will be made to the bidder in this regard.

The Price-bid of the successful bidders (qualified in Techno-COMMERCIAL bid) will be decrypted and opened on-line, on the pre-scheduled date and time by the Bid Openers with their Digital Signature Certificate (DSC). The participating bidders may view the opening of Price-bids remotely on-line. The bidders will get the information regarding the status of their financial bid and ranking of bidders on website.

SCCL reserves the right to verify any of the documents uploaded by the bidder at any stage. All coBHPunication will be on e-mail and SMS basis. No separate coBHPunication 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 i.e. within 10 days.

7.0 Shortfall Document:

The Purchaser may ask for shortfall documents during the evaluation of the bids. These documents shall not be relating to submission of EMD. Request for documents and the response shall be in writing and no changes in the prices of the bid shall be sought, offered or permitted. No modification of the bid and any form of coBHPunication with SCCL or submission of any additional documents, not specifically asked for by SCCL, will be allowed and even submitted they will not be considered by the purchaser.

These documents may be allowed to be uploaded within the specified time period of 10 (ten) days. The above documents will be specified on-line under the link uploaded shortfall document, by evaluator normally within 10 days of techno-COMMERCIAL Bid (Cover-I) opening, indicating the start date and end date giving 10 days' time for online submission by bidder. The bidders will get this information on their personalized dashboard under "upload shortfall document/ information" link.

Additionally, information shall also be sent by system generated email and SMS, but it will be the bidders responsibility to check the updated status/ information on their personalized dashboard at least once daily after opening of bid. No separate coBHPunication will be required in this regard. Non receipt of email and SMS will not be accepted as a reason of non-submission of documents within prescribed time. The bidder will upload/re-upload the requested documents within the specified period and no additional time will be allowed for on-line submission of documents.

- 8.0 The final technical and COMMERCIAL evaluation of the bids shall be done by the concerned Technical & COMMERCIAL departments, which shall require approval of concerned HOD.
- 9.0 After the techno-COMMERCIAL evaluation, as above, case may be put up to the appropriate level of tender coBHPittee for deliberations and recoBHPendations in respect of listing of techno-COMMERCIALy acceptable bidders.
- 10.0 After the short listing of techno-COMMERCIALy acceptable bidders as above, the date and time of opening of Price bid shall be uploaded in the Portal and shortlisted firm shall also be informed through system generated email and SMS alert.
- 11.0 The Price bid of shortlisted bidders (qualified in techno-COMMERCIAL bid) will be decrypted and opened on the scheduled date and after the pre-scheduled time by the Bid Openers with their Digital Signature Certificate. The bidder may view the Price Bid opening on-line remotely on their personalized dashboard under the link "Bid Opening (Live)" and can see the Price Bid/BOQ submitted by all shortlisted bidders. The Price Bids and system generated comparative statement will be downloaded and will be signed by the officers opening the Price Bids.
- 12.0 A system generated comparative statement of landed cost; will be duly checked and vetted by the associate finance, before the case is put up for further bid, the Comparative Statement of Prices indicating the rates quoted by all the bidders and item wise L-1 rank will be generated by the system which will be visible to all the participating bidders on-line.
- 13.0 All the details of Techno COMMERCIAL 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.

Appendix - X
Format of Letter of Bid (LOB)

LETTER HEAD OF BIDDER

To,
The General Manager (MP)
The Singareni Collieries Company Limited.,
Kothagudem Post.
Bhadradi Kothagudem District.
PIN - 507101

Sub : Letter of Bid for Extraction of Coal with Longwall Technology at KTK No.5
Incline, BHP

Ref: Enq.No.E121600xxx dt.xx.xx.2016

Dear Sirs,

I/We offer for Extraction of Coal with Long wall at Bhupalpalli in accordance with the conditions of the NIT document as available in e-procurement portal.

This Bid and your subsequent Supply/Purchase Order shall constitute a binding contract between us.

I/We hereby confirm our acceptance of all the terms and conditions of the NIT document unconditionally.

If any information furnished by **me/us** online towards eligibility in this tender 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 SCCL.

DSC Holder

If the DSC holder is bidding online on behalf of the bidder, then the scanned copy of Power of Attorney duly notarized on a non-judicial stamp paper of Rs 10 as per format mentioned on next page shall be uploaded along with this Letter of Bid on second page. However, If the bidder himself is the DSC holder, bidding on-line, then no specific document is required.

Yours faithfully,

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

1. Name of Authorised Signatory :
2. Type of Authorisation :
3. Name of the Bidder :
4. Address :
5. e-Mail Address :
6. Mobile/Telephone Number :
7. FAX Number :
8. Place :
9. Date :

Format for Authorisation to DSC holder bidding online on behalf of bidder.

NON JUDICIAL STAMP PAPER OF Rs 10/-

I /We do hereby authorise M/s/Mr/..... Address
 for online bidding on behalf of me/us for the e-tenders invited
 by The Singareni Collieries Company Limited, Bhupalpalli on <https://singareni-tenders.gov.in>.

Signature/Seal of the DSC Holder

Authorised for online bidding on
 behalf of the bidder.

Signature & Seal of the bidder

Authorising the DSC Holder for
 On line bidding.

Signature & Seal of the NOTARY |

Sub : Extraction of Coal with Long wall at Bhupalpalli

Ref: Enq.No.E1216O0xxx Dtd.xx.xx.2016

Acceptance of COMMERCIAL terms and conditions by the Bidder.

SI No	COMMERCIAL Terms of NIT	Acceptance of Bidder
1	Instructions to Bidder (Submission/Evaluation of Bid, etc)	Accepted
2	Bid Validity	Accepted
3	Submission of Cenvat Invoice /tax invoice	Accepted
4	Applicable Taxes & Duties	Accepted
5	Liquidated damages/CoBHPitment charges	Accepted
6	Method of measurement	Accepted
7	Lead time to start the work & work completion period	Accepted
8	Payment Terms	Accepted
9	Risk Purchase	Accepted
10	Force Majeure	Accepted
11	Security Deposit	Accepted
12	Currency of Bid (Only in INR)	Accepted
13	Arbitration clause	Accepted
14	Jurisdiction of Court'	Accepted
15	All other Terms and Conditions	Accepted

Signature of the Bidder

Seal of the Firm

THE SINGARENI COLLIERIES COMPANY LIMITED			
OTHER COMMERCIAL INFORMATION			
NIT NO. & DATE : Enq.No.E1216O0xxx Dtd.xx.xx.2016			
TENDER : Extraction of Coal with Long wall at Bhupalpalli			
SI No	Particulars	Details	Remarks, if any
1	Details of EMD (if submitted)		
2	Document reference no & date		
3	Issued by		
4	Registration Number		
5	Name of the Registering Authority.		
6	Validity of offer (180 Days From date of Opening of Techno-COMMERCIAL Bid)		SSS
7	Service Tax Details		
8	Service Tax Regn. No		
9	PAN NO		
10	Payment details (for EFT)		
11	Account Name		
12	Banker's Name		
13	Branch		
14	Address, City/Town, District, State		
15	Account type		
16	A/c No & EFT No		
17	IFSC Code		
18	MSME (Applicable/Not Applicable)		
19	If applicable, indicate Registration No. & Registering Authority		
20	Vendor Code of the bidder.		

Appendix - XIII

CHECK-LIST**Bidders are requested to ensure submission of scanned copies of the following documents**

- a. Copies of original documents defining the constitution or legal status, place of registration and principal place of business; written power of attorney of signatory of the Bid to coBHPit the bidder.
- b. List of major items of equipment proposed to carry out the contract along with technical specifications and safety features.
- c. Qualifications and experience of key site management and technical personnel proposed for the contract.
- d. Evidence of adequacy of working capital for this Contract (access to lines of credit and availability of other financial resources).
- e. Authority to seek references from the bidder's bankers.
- f. Permanent Income Tax Account No. (PAN). However, in case foreign bidder is participating the bid and is not having PAN No. at the time of submission of bid shall have to submit the same before submission of the bills for first payment provided the foreign bidder becomes the successful bidder.
- g. The bidders would give a declaration that they have not been banned or delisted by any Govt. or Quasi-Govt. agencies or PSU's. If a bidder has been banned by any Govt. or Quasi-Govt. agencies or PSU's that fact must be clearly stated and it may not necessarily be a cause for disqualifying him. If this declaration is not given, the bid will be rejected as non-responsive.
- h. The bidder who participated as consortium must submit original copy of JOA for the formation of consortium. Any bid by a consortium without it, is likely to be rejected.
- i. A letter indicating the Bidder's acceptance of the COMMERCIAL Terms and Conditions, including terms for execution of works (as per the format given in Annexure-1).
- j. Credentials of the Bidders giving full details of the firm, details of similar works done by them, testimonials etc., for the preceding 5 years ending on 31.03.2016
- k. A technical note illustrating the technology proposed to be adopted in the execution of work and other details as per clause 10.0 of Chapter-III
- l. Scanned copy of EMD.
- m. Applicability of various taxes and duties along with income tax PAN No. CST /VAT, Excise Duty, Service Tax Registration number etc., to the extent applicable
- n. Copies of acknowledgement of returns filed and assessment orders passed by concerned authorities, copies of audited balance sheets for the last five financial years together with particulars specified in Appendix-2.
- o. Documentary proof of financial resources as indicated in Appendix-2.
- p. The required documents as mentioned in Appendix - I to VIII and annexures as required by the tender.
- q. Unpriced BoQ/Price bid.
- r. Any other proof documents as required by the NIT.

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