

BHARAT COKING COAL LIMITED

(A Subsidiary of Coal India Ltd) **EXCAVATION WORKSHOP: SINIDIH** (ISO 9001: 2008, ISO 14001: 2004 & OHSAS18001:2007 certified) **PIN - 828128** Phone: 0326-2392114

JHARKHAND

REF NO:-BCCL/EXCV/SWS/ 2011-12/ 816

DATE:- 16/11/12

LIMITED TENDER SPEED POST

To,

1) M/s Biecco Lawrie Ltd, 6, Mayurbhanj Road, KOLKATA – 700 023 2) M/s Bharat Heavy Electricals Ltd, Electrical Machine Repair Plant, Plot No – D1, Cross Road 'C', Road No –16 MIDC, Andheri (East), MUMBAI – 400 093

Sub: -- <u>Quotation for rewinding & overhauling of 14nos DC Motor / Generator</u> (BHEL / KEC Make) of 4.6 / 5.0 M³ EKG / EQC Shovel

Dear Sir,

Sealed quotations in single bid (techno-commercial & price bid in one envelope) are invited from you for the following job as given below.

<u>SI. No.</u>	Items	<u>Quantity</u>	Estimated cost (Rs)
01	List of assay along with specification is enclosed		
	In annexure 'A'	14Nos	61, 39,170.30

Price is to be quoted for each job separately as per our scope of work. (Price break up as per scope of work are to be given.)

JOB REQUIREMENTS:

JOB REQUIREMENT OF INDIVIDUAL ASSYS ARE AS PER ANNEXURE - B

General Job description

ARMATURE

I)Core lamination dismantling, re-lamination (if required new lamination to be provided) & re-staggering after removal of old coils. Before fitment of the coils FLUX LOOP test of the armature core to be done & test result to be provided. ii) The armature shaft to be checked for firm fitting (pressed) in the core & all dimensions of both side shaft extensions, accordingly corrective actions to be taken to avoid fitment problem of both end attachments. iii) Rewinding of armature with new coil & commutator of class-H / F insulation as per insulation & test scheme enclosed iv) Slot liner if used, to be of nomex or equivalent only. v) Class - H / F varnish of Dr. Beck make only to be used.

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vi) Coil end connections with commutator risers to be TIG welded / soldered. vii) Slot wedges made out of epoxy - glass laminated sheet as per IS to be used. viii) End bindings to be of RESIGLASS only, ix) Commutator turning & proper mica undercutting as per requirement, x) HV test of complete armature at 2KV DC for one minute, x) Epoxy- gel coat finish / painting of complete armature, xi) Dynamic balancing of the complete armature. xii) Testing of complete armature for all required tests & all test certificates are to be submitted along with rewind armature.

STATOR

- i) Replacement of MP & CP coil as par enclosed specification
- ii) Inter- connection by **new silicon rubber insulated multi-stand copper cable** as per required size & copper lugs as per motor manufacturer drawing.
- iii) Supply & fitting of new rocker arms, Carbon brush holder & carbon brush. The grade of carbon brush will be eqvt. to Assam Carbon make EG –236S (For BHEL make DC generator)/ EG 251 (For BHEL make DC motors) / EG 224 (For KEC make DC motor & generator both).

ASSEMBLY

- i) Supply & fitting of new bearings (As mentioned for individual model in the specification sheet).
- ii) Assembling & testing at rated voltage of complete motor / generator supplying & fitting all required hardware items.
- iii) Test certificates to be provided.

The specification of coils & commutators are enclosed in annexure 'C '

<u>Note: -</u> The assys are to be reconditioned in all respect (as good as a new one), considering all aspect to fulfill our requirement. The assembly as a whole will be under the purview of the guarantee clause.

TEST CERTIFICATES TO BE PROVIDED: -

- i) FLUX LOOP test result of the armature core.
- ii) If new shaft fitted, material test certificate for composition & X- ray / UV test for cracks & voids.
- iii) Copper test certificate of coils & commutators. Insulation test certificate as per this NIT requirements,
- iv) Resistance / voltage drop test of armature & pole coil windings.
- v) Final HV test certificates
- vi) Dynamic Balancing certificates
- vii) No load / full load test results.

Inspection Clause: - The assys are to be repaired as per our check sheet, which will be provided along with the work order. The inspection of the motor will be done at our workshop on receipt after repair.

IMORTANT NOTE: - In any case the inherent design dimensions & parameters of the assys in respect of both mechanical & electrical aspect will not be altered unless any prior written permission given from our end.

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<u>SALVAGED COPPER VALUE</u>. Value of scrap copper is to be mentioned separately for each job if scrap copper retained by you.

Terms & conditions: As per annexure 'D' enclosed.

Please confirm acceptance of all terms & conditions of this NIT in your offer. The deviations if any to be clearly indicated in separate sheet.

You are requested to inspect the failed assy. in dismantled condition at Sinidih Excavation Workshop P.O.-Tundoo, Dist. - Dhanbad (JHARKHAND) on any working day at 9.00 AM to 4.00PM for assessment of actual job involvement in line of our tentative job requirement as stated above. Your sealed offer containing complete technical & commercial details along with rate in single bid should reach at the office of the General Manager (Excvn), BCCL, Level – IV, Koyla Bhawan, KoylaNagar, Dhanbad - 826005 (JHARKHAND) on or before 16/12 /2011 up to 1.00 PM. No further extension for joint inspection & offer submission date will be given i.e. you have to complete joint inspection as well as submission of offer positively within the given schedule. The tender can also be seen in our website http:/ bccl.gov.in

The opening date & time of your bid will be on 16/12/2011 at 4.00 P.M. at the office of General Manager (Excvn), **Koyla Bhawan, KoylaNagar**

Encl: As above.

Yours faithfully,

<u>General Manager (Excvn)</u> Sinidih Excavation Workshop

<u>ANNEX – 'A</u>

List of motor/generator with specification

SI No	Assy Description	Specification	Qty
01	200KW Hoist Motor Make - BHEL	Capacity– 200KW, Voltage – 440, Amps- 490, RPM –750, EXCITATION VOLT – SEPARATE 85V Amps, Duty Cycle – 75%, Class of Insulation – H, BHEL make model – MDME 810 Bearings – NJ326C3(CE & NCE), Separately forced cool	01No
02	54KW Crowd Motor Make - BHEL	Capacity– 54KW, Voltage – 395, Amps- 150, RPM –1200, EXCITATION VOLT – SEPARATE 85V Amps, Duty Cycle – Continuous, Class of Insulation – H, BHEL make model – DME 52, Bearings – NJ2316C3(CE & NCE), Separately forced cool	05Nos
03	54KW Crowd Motor Make - KEC	Capacity– 54KW, Voltage – 395, Amps- 150, RPM –1200, EXCITATION VOLT – SEPARATE 85V Amps, Duty Cycle – Continuous, Class of Insulation – H, KEC make model – KMDC - 808spl, Bearings – NJ 317C3(CE & NCE), Separately forced cool	01No
04	54KW Propel Motor Make - BHEL	Capacity– 54KW, Voltage – 395, Amps- 150, RPM –1200, EXCITATION VOLT – SEPARATE 85V Amps, Duty Cycle – 45 minute, Class of Insulation – H, BHEL make model – DME 52(45 min), Bearings – NJ2316C3(CE & NCE), Self cooled	01No
05	200KW Hoist Generator Make - BHEL	Capacity– 200KW, Voltage – 460, Amps- 435, RPM –1480, EXCITATION – SEPARATE (12.7 + 12.7 Amps) & SELF – 3.0 Amps, Duty Cycle – Continuous, Class of Insulation – F, BHEL make model – DGE 200 Bearings –6318C3(CE) & N320C3(NCE),	01No
06	120KWSwing Generator Make - BHEL	Capacity–120KW, Voltage – 610, Amps- 164, RPM –1480, EXCITATION – SEPARATE (8.7 +8.7 Amps) & SELF – 2.04 Amps, Duty Cycle – Continuous, Class of Insulation – F, BHEL make model – DGE 1200, Bearings –6317C3(CE) & N320C3(NCE),	01No
07	132KW Swing Generator Make - KEC	Capacity- 132 / 120KW, Voltage - 610, Amps- 217, RPM -1480, EXCITATION - SEPARATE (8.7 +8.7 Amps) & SELF - 2.04 Amps, Duty Cycle - Continuous, Class of Insulation - F, KEC make model - KMDC814spl, Bearings -KEC 6315C3(CE) & N319C3(NCE)	01No

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08	42KW Crowd Generator Make	Capacity–42KW, Voltage – 375, Amps- 112	01No
	– BHEL	– BHEL , RPM –1480, EXCITATION – SEPARATE	
		(10+10Amps) & SELF – 2.0 Amps, Duty	
		Cycle – Continuous, Class of Insulation – F,	
		BHEL make model – DGE 400 Bearings –	
		6314C3(CE) & N318C3(NCE),	
09	50KW Crowd Generator Make	Capacity–50KW, Voltage – 375, Amps- 133	02Nos
	- KEC	, RPM –1480, EXCITATION – SEPARATE	
		(10+10Amps) & SELF – 2.0 Amps, Duty	
		Cycle – Continuous, Class of Insulation – F,	
	KEC make model – KMDC810spl Bearings –		
		6315C3(CE) & N317C3(NCE)	
		TOTAL	14 Nos

6	5	4	3	2	1	SL NO	
54KW CROWD MOTOR	54KW CROWD MOTOR	54KW CROWD MOTOR	54KW CROWD MOTOR	54KW CROWD MOTOR	200KW HOIST MOTOR	Dscription	A S S Y
472 - 64	NIL	30573 - A - 435 - 06 - 2	NIL	30456 - A - 435 - 01- 1	30842-A-435-03-1	Assy. Si No	D E T A
BHEL	BHEL		BHEL	BHEL	BHEL	Make	L S
REWINDING WITH NEW ARMATURE COIL	REWINDING WITH NEW ARMATURE COIL	REWINDING WITH NEW ARMATURE COIL	REWINDING WITH NEW ARMATURE COIL	REWINDING WITH NEW ARMATURE COIL	REWINDING WITH NEW ARMATURE COIL	ARM WNDG	
REPLACEMENT WITH NEW COMMUTATOR	REPLACEMENT WITH NEW COMMUTATOR	REPLACEMENT WITH NEW COMMUTATOR	REPLACEMENT WITH NEW COMMUTATOR	REPLACEMENT WITH NEW COMMUTATOR	REPLACEMENT WITH NEW COMMUTATOR	COMMUTATOR	
CORE LAMINATION REINSULATION & RESTAGGERING	CORE LAMINATION REINSULATION & RESTAGGERING	CORE LAMINATION REINSULATION & RESTAGGERING	CORE LAMINATION REINSULATION & RESTAGGERING	CORE LAMINATION REINSULATION & RESTAGGERING	CORE LAMINATION REINSULATION & RESTAGGERING	ARMATURE CORE	M
REPLACE - MENT WITH NEW SHAFT	REPLACE - MENT WITH NEW SHAFT	REPLACE - MENT WITH NEW SHAFT	REPLACE - MENT WITH NEW SHAFT	REPLACE - MENT WITH NEW SHAFT	ОК	ARMATURE SHAFT	J R J O
REPLACEMENT WITH NEW COIL.	REPLACEMENT WITH NEW COIL.	REPLACEMENT WITH NEW COIL.	REPLACEMENT WITH NEW COIL.	REPLACEMENT WITH NEW COIL.	RE- INSULATION.	MP COIL	B R E Q
REPLACEMENT WITH NEW COIL.	REPLACEMENT WITH NEW COIL.	REPLACEMENT WITH NEW COIL.	REPLACEMENT WITH NEW COIL.	REPLACEMENT WITH NEW COIL.	RE - INSULATION	CP COIL	U I R E
RE-PLACEMENT REQD.	RE-PLACEMENT REQD.	RE-PLACEMENT REQD.	RE-PLACEMENT REQD.	RE-PLACEMENT REQD.	RE-PLACEMENT REQD.	CONNECTION CABLES	M E N T
REPLACE -MENT WITH NEW BEARING.	REPLACE -MENT WITH NEW BEARING.	REPLACE -MENT WITH NEW BEARING.	REPLACE -MENT WITH NEW BEARING.	REPLACE -MENT WITH NEW BEARING.	REPLACE -MENT WITH NEW BEARINGS.	BEARINGS	
BOLTS, INSPECTION COVERS, BEARING HOUSING COVERS, FOUNDATION LEGS MISSING OR DAMAGED / TO BE PROVIDED OR REFABRICATED					BOLTS & INSPECTION COVERS MISSING / TO BE PROVIDED	YOKE BODY	

ASSY-WISE JOB REQUIREMENT

ANNEXURE - B

14	13	12	11	10	9	8	7
50KW CROWD GEN	50KW CROWD GEN	42KW CROWD GEN	132KW S/P GEN	120KW S/P GEN	192KW HOIST GEN	54KW PROPEL MOTOR	54KW CROWD MOTOR
06100683 - 06	96101090 - 01	21149	98020213 - 03	30670 - A - 438 - 03	21160	30596 -A - 435 - 01 - 12	921423 - 08
KEC	KEC	RUSSIAN	KEC	BHEL	USSR / BHEL	BHEL	KEC
REWINDING WITH NEW ARMATURE COIL	REWINDING WITH NEW ARMATURE COIL	REWINDING WITH NEW ARMATURE COIL	REWINDING WITH NEW ARMATURE COIL				
REPLACEMENT WITH NEW COMMUTATOR	REPLACEMENT WITH NEW COMMUTATOR	REPLACEMENT WITH NEW COMMUTATOR	REPLACEMENT WITH NEW COMMUTATOR				
CORE LAMINATION REINSULATION & RESTAGGERING	CORE LAMINATION REINSULATION & RESTAGGERING	CORE LAMINATION REINSULATION & RESTAGGERING	CORE LAMINATION REINSULATION & RESTAGGERING	CORE LAMINATION REINSULATION & RESTAGGERING	CORE LAMINATION REINSULATION & RESTAGGERING	CORE LAMINATION REINSULATION & RESTAGGERING	CORE LAMINATION REINSULATION & RESTAGGERING
ОК	ОК	ОК	ОК	ОК	ОК	REPLACE - MENT WITH NEW SHAFT	REPLACE - MENT WITH NEW SHAFT
REPLACEMENT WITH NEW COIL.	REPLACEMENT WITH NEW COIL.	REPLACEMENT WITH NEW COIL.					
REPLACEMENT WITH NEW COIL.	REPLACEMENT WITH NEW COIL.	REPLACEMENT WITH NEW COIL.					
RE-PLACEMENT REQD.	RE-PLACEMENT REQD.	RE-PLACEMENT REQD.	RE-PLACEMENT REQD.	RE-PLACEMENT REQD.	RE-PLACEMENT REQD.	RE-PLACEMENT REQD.	RE-PLACEMENT REQD.
REPLACE -MENT WITH NEW BEARINGS.	REPLACE -MENT WITH NEW BEARING.	REPLACE -MENT WITH NEW BEARINGS.	REPLACE -MENT WITH NEW BEARING.	REPLACE -MENT WITH NEW BEARING.	REPLACE -MENT WITH NEW BEARINGS.	REPLACE -MENT WITH NEW BEARING.	REPLACE -MENT WITH NEW BEARING.
BOLTS & BEARING HOUSING ITEMS MISSING OR DAMAGED / TO BE PROVIDED	BOLTS & BEARING HOUSING ITEMS MISSING OR DAMAGED / TO BE PROVIDED	BOLTS & BEARING HOUSING ITEMS MISSING OR DAMAGED / TO BE PROVIDED	BOLTS & BEARING HOUSING ITEMS MISSING OR DAMAGED / TO BE PROVIDED	BOLTS & BEARING HOUSING ITEMS MISSING OR DAMAGED / TO BE PROVIDED	BOLTS & BEARING HOUSING ITEMS MISSING OR DAMAGED / TO BE PROVIDED	BOLTS & ROCKER HOUSING MISSING OR DAMAGED / TO BE PROVIDED	

NB - ALL ASSY TO BE PROVIDED WITH NEW ROCKER (brush holder) ARMS, CARBON BRUSH HOLDER, CARBON BRUSH & TERMINAL BOARDS AS PER REQUIREMENT.

(1) TECHNICAL SPECIFICATION OF COILS & COMMUTATOR

CONDUCTOR FOR ALL COILS: -

99.94% or above electrolytic grade class - F / class - H (for motor coils only) **enameled** copper strip/round conductor as per original size with class -F / class - H (for motor coils only) varnished double glass covering as per IS specification no. - 10114.

HOWEVER, <u>FOR COMPOLE COILS OF BHEL MAKE ONLY</u> THE CONDUCTOR WILL BE 99.94% OR ABOVE ELECTROLYTIC GRADE & ANNEALED COPPER STRIP WITHOUT ANY SHARP EDGE, CRACKS & VOIDS.

INSULATION SCHEME : -

A) ARMATURE COILS FOR D. C. GENERATOR / MOTOR

i) Interlayer separation by 3 mills silicone glass-mica sheet throughout the coil length.

ii) Coil conductors to be bunched together without void or bulged out portion. Bend protection by TEFLON FER tape only.

iii) Slot portion insulation to be mould with samicaflex & epoxy bonding for a minimum dielectric strength of 2KV DC for one minute.

iv) Overhang portion insulation by samicaflex tapes only.

v) Conductor lead taping by samica tape & 3 mills superfine quality glass-fiber tape with proper varnishing. Conductor end leads are to be tinned properly with 2% silver contained solder.

vi) Overhang portion to be final taped by 5 mills superfine quality glass-fiber tape as per IS: 5352-13-4 half - overlap & to be varnished properly.

vii) Class of insulation - Class-F (for generator coils) / class - H (for motor coils).

B) MAIN POLE COIL ASSY. FOR DC GENERATORS

i) The conductor to be wound as per size of coil with layer to layer epoxy bonding without any bulged out portion and smooth corner finish, so that the gap between core & coil inside wall will be uniform for all four sides at the time of fitting. Proper bindings of the coil packs are to be provided for firm holding of the coil layers. The end connection terminals are to be properly secured within the coil pack & to be tinned properly.

For BHEL/ USSR make no overall taping of the coils are required. For KEC make, the coils are to be formed in pre-mould glass-epoxy based bobbin.

ii) Spray type epoxy based insulating paint to be used for final finish.

iii) Coil pack separators as per size of the coils & core made out of high quality glass epoxy laminated sheet (specific gravity not less than 1.8) are to be provided. The thickness of the sheets will be ranging from 2mm to 4mm & four nos for each coil assly.

iv) Class of insulation -'F'

C) COMPOLE COIL ASSLY. FOR DC GENERATOR

For commutating coils:--

i) Inter layer separation & bonding by PERMACEL * INTERCEM or eqvt. epoxy resin based ceramic sheet with proper curing at required temp. & pressure for gapless & void free rigid bonding of the layers.

ii) No overall taping of any kind will be provided considering the heat dissipation factors, but proper end connection leads to be provided.

For stabilizing coils:--

The stabilizing coils are to be wound with layer to layer epoxy bonding & overall taping of the coil packs to be provided with SAMICAFLEX tape & PERMACEL P--300 or eqvt. tapes. All end connection leads are to be provided with appropriate size Silicon rubber insulated multi core copper cable including end lugging etc.

iii) Coil pack separators as per size of coil & core made out of high quality epoxy- laminated glass-fiber sheet (specific gravity not less than 1.8) are to be provided. Thickness of sheet ranging from 2mm to 4mm & three nos. for each coil are required.

iv) Spray type epoxy paint are to be used for final coating & finish.

v) Class of insulation: -- 'F'.

For KIRLOSKAR Make the insulation scheme will be same as MP Coil in pre - mould glass -epoxy bobbin.

D) MAIN POLE COIL FOR DC MOTORS

i) For BHEL / USSR make - conductor to be wound as per size of coil in layers with layer to layer epoxy bonding as per the shape of original coils sample.

For Kirloskar make - Conductors to be wound in layers with layer to layer epoxy bonding in a pre-mould bobbin made out of high quality glass epoxy & as per shape & size of original sample coils.

ii) For both type proper end terminal connectors are to be provided. The terminal connectors are to be properly secured within the coil pack to avoid any chance of breakage or loosening of the connectors.

iii) For BHEL / USSR make - The coil conductor pack to be wrapped with multi layer samicaflex tape only with epoxy bonding for ground insulation. Overall taping to be done by PERMACEL *P-- 300 or eqvt. tape completely cured at 125 deg. C for 8 hours as per process of curing . For Kirloskar make, no ground insulation is required.

iv) Spray type epoxy paint to be used for final finish for both the models.

v) Class of insulation --'H'

E) COMPOLE COIL FOR DC MOTOR

I) Inter layer separation & bonding by PERMACEL * INTERCEM or epoxy resin based ceramic sheet with proper curing at required temperature & pressure for gapless & void free rigid bonding of the layers.

ii) Ground insulation by SAMICAFLEX tapes with epoxy bonding. Overall taping by PERMACEL*P--300 or eqvt. tape completely cured as per process of curing as stated above.

For Kirloskar make bobbin as per size of coil & core made out of glass epoxy to be used in which the conductor are to be wound in layers with epoxy resin bonding.

iii) Spray type epoxy paint to be used for final finish.

iv) Class of insulation--'H'.

TESTING OF THE COILS

i) Conductor test certificate indicating size of conductor for conductivity, enamel grade & chemical grade of copper from GOVT. APPROVED test house/ conductor manufacturer or by the OEM for each set of coils.

ii) High voltage test by the coil manufacturer for each set of coils.

iii) Inter-turn insulation / impulse test/tan-delta test certificate and short circuit test for each set of coils

iv) Resistance / voltage drop test for each set of coils.

COMMUTATORS

All commutators are to be strictly as per IS: 5885 - 1977.

i) Type of segment: - High conductivity hard drawn oxygen free silver bearing (silver content 0.06% or more) copper trapezoidal section with proper vee-groove & dimensions. The hardness & electrical conductivity will be as per IS--4519/1977& without any sharp edge, crack, void, concave/convex surface, pitting marks etc.

ii) Inter-segment insulation: - Alkyd vinyle treated hard pressed commutator mica sheet of appropriate size with proper thermal compressive & bonding property.

iii) Mica V-cones; - All mica vee-cones are to be formed separately by alkyd vinyle as per size of segment groove in separate moulds with commutator mica sheet.

iv) Steel V-rings: - Steel vee - rings are to be made from forged steel/high quality structural steel with provision of nut -bolts/check-nuts fastening arrangement as per requirements. The commutator hub is to be of same materials. Proper locking of each part is to be done so that the complete commutator must act as a rigid single piece. All Vee rings must be projected from the copper segments on both sides.

v) Sealing:- Gaps between vee-ring & copper segments are to be sealed with high quality RTV silicone sealant. The vee-ring projected portion to be banded with resi-glass only.

vi) Risers: - Risers for flexible/ sprocket type are to be made out of virgin silver bearing copper sheet & must be tinned. Size & shape will be as per sample/ drawing.

vii) Ground insulation: - 5KV for one minute & bar to bar test at 500 volts.

viii) Class of insulation - Class 'F' (for generators)/class-'H' (for motors).

ix) Seasoning: - All commutators must be seasoned static & dynamically as per IS recommended load & cycles depending on duty & size of the commutator. Spin test certificate at a speed of 1.2 times of the rated rpm of the commutator to be done.

x) Dynamic balancing: - All commutators are to be dynamically balanced at following RPM.

a) For all generators -- 2000 rpm b) For hoist motor of EKG--1000 rpm.

c) For other motors --1500 rpm.

Testing:-

- i) Copper & silver percentageii) Following test s are to be done by the commutator manufacturer.

ii) Following test s are to be done by the commutator manufacturer.
* High voltage test
* Dynamic Balancing
* Bar to bar test.
* Spin test & seasoning certificate for each commutator to be submitted at following speed.
* For generators of EKG/EQC--1800rpm.
* For hoist motor of EKG --1000 rpm.
* For other motors-- 1500 rpm.
ALL THE ABOVE TEST CERTIFICATES ARE TO BE ATTACHED WITH THE CHECK SHEET OF EACH JOB.

TERMS & CONDITIONS

Tender should strictly comply with the following instructions:

1. The tenderer is required to submit their bid in SINGLE LAC/PVC SEALED COVERS prominently super scribed the tender no and due date of opening as indicated clearly in tender document.

2. EARNEST MONEY DEPOSIT: - NOT APPLICABLE FOR PSU.

3. INTEGRITY PACT

BCCL HAS SIGNED M.O.U WITH M/S. TRANSPARENCY INTERNATIONAL INDIA FOR IMPLEMENTATION OF INTEGRITY PACT. THE INTEGRITY PACT DOCUMENT TO BE SIGNED BY THE BIDDERS IS ENCLOSED. SUBMISSION OF INTEGRITY PACT DOCUMENT DULY SIGNED, STAMPED AND ACCEPTED IS MANDATORY FOR THIS TENDER. THEREFORE, THE TENDERERS ARE ADVISED TO SUBMIT THE INTEGRITY PACT DOCUMENT DULY SIGNED, STAMPED AND ACCEPTED IN A SEPARATE SEALED ENVELOPE SUPERSCRIBING "INTEGRITY PACT AGAINST TENDER NO. BCCL/EXCV/SWS/2011-12/816 dt 16/11/2011due on 16/12/2011.

IN CASE THIS IS NOT SUBMITTED IN A SEPARATE COVER ALONGWITH THE TENDER, THE TENDER MAY BE CONSIDERED AS UNRESPONSIVE AND MAY NOT BE CONSIDERED FURTHER FOR EVALUATION.

Independent External Monitor for this tender is

Sri Ashok Kr. Chakraborty (Retd.) BB-69, Sector- I Salt Lake City KOLKATA-700064

4. TECHNO COMMERCIAL BID

A). **TECHNICAL:** will consist of full details of the firm, technical resources, List of P&M available, information on the supplies / works of similar equipment/ stores to different parties, testimonials and documentary evidence in support of satisfactory performance and any other relevant information, full details and specification of items quoted for the job / supply against this NIT with technical literature, drawings etc. wherever DGMS approval is required a copy of valid DGMS and ISI license to be enclosed. In technical offer acceptance of NIT job requirements, specifications & test requirements are mandatory.

B). COMMERCIAL:

i) Will consist of ownership status; viz. company, partnership, Govt. Undertakings etc.

ii) <u>Financial dat</u>a: - Current Income tax clearance certificate / PAN certificate, service tax registration certificate, Bankers certificate of financial soundness, valid sales tax clearance certificate / TIN certificate, details of registration/ enlistment with Govt. / Semi govt. organization etc (DGS&D/NSIC/SSI/CIL or any other PSU etc.).

All the testimonials and above information should be submitted duly authenticated with stamp. All the papers of the tender documents must be serially numbered and attested.

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<u>iii) PRICE VARIATION</u>: The rates quoted in price bid should be on "FIRM" basis with no escalation clause whatsoever during the tenure of the contract. The firms have to clearly mention regarding the taxes which will be charged extra on basic price and to & fro transportation including packing & forwarding charges and any other charge applicable to them.

Those tenderer who still insist for a price variation clause in their bid, linked to the prices announced by the Govt. Bodies/ PSUs only, they must indicate the logic of price variation and ceiling of variation. In such a case their quoted price shall be loaded with ceiling of price variation, for comparison purposes, to determine their rank in the price.

iv).<u>Validity of Quotation:</u> To be minimum 180 days from the date of opening of tender. This may be extended farther, if required.

v) <u>Job Completion period</u>: The failed assays will be dispatched / issued in one or more lot as per order qty. The delivery of repaired assays will be accepted in staggered manner. The repair work of complete ordered qty is to be completed & delivered to consignee within 04 months from the date of issue of failed assys to you / work order, whichever is latter. Bill will be accepted for individual challan (part bill) or complete ordered qty.

vi) <u>Guarantee period</u>: should be 18 months from the date of receipt & acceptance of the repaired assay or 12 months from the date of commissioning whichever is earlier. The guarantee will be against bad workmanship or faulty material. The performance deposit @ 10% to be deposited as per order terms for the period of warranty for each part / final bill (as per billed quantity). Performance deposit to be deposited separately for each bill (if raised in part) & the period of warranty will be reckoned from the date of receipt & acceptance of the assys of that challan. For single performance deposit for the entire order value, the period of warranty will be reckoned from the receipt & acceptance of the last challan i.e. from the date of completion of delivery of entire order qty.

vii) <u>Payment Terms: -</u> Payment will be made within 30 days after receipt & acceptance of the job & submission of the (part / final) bills whichever is latter. Performance deposit @ 10% of bill value (EVEN IN CASE OF PART BILL) to be deposited in the form of bank guarantee / bank draft or will be deducted from the bill value (in that case 90% payment will be released) & will be returned back after expiry of guarantee period plus additional 06 months beyond expiry of guarantee period without interest. Running / part bill as per actual completed job can be raised.

5. PRICE BID

It will consist of prices with break up as indicated in schedule of supply / work. The breakup should consist of followings.

- a) Material cost
- b) Labour & overhead charges
- c) Taxes (Sales tax, service tax etc) charged
- d) Transportation, packing & forwarding charges
- e) Any other charge

ii) <u>PRICE: Unless otherwise specified elsewhere in this document, the rates should be quoted item wise; Price must be quoted on landed price basis including material, labour cost & taxes.</u>

6. <u>Penalty</u>. In the event of failure of the contractor to complete the job as per terms of order and as per specification in part or full within the stipulated job completion period, BCCL reserves the right at its own option to apply the penalty process as stated below:

" To recover from you as agreed liquidated damage a sum not exceeding 1/ 2% of the price of the item which the supplier has not been able to supply as aforesaid for each week or part of week during which delivery may be in arrear subject to a maximum of 5%. This may be increased up to 15% at discretion of management of BCCL."

7. AFTER SALE SERVICE: The firm has to provide post job service if required.

Contd. to ---- P/3

8. PRICE FALL CLAUSE: i) Price charged for the item/s of this tender/ individual complete job shall in no case exceed the lowest price at which the firm sell/done or offer same item / job to any other customer during the tenure of the order / contract.

ii) In any case if the firm reduce the price or offered lower rate for same item / job to other customer that should be immediately intimated to us to enable us to amend the rate of order.

9. **NEGOTIATION:** Price negotiation shall be done as per CVC circular.

10. INSPECTION: Inspection will be done at our site after completion of each job.

11. <u>Test certificates & documents</u>: All test certificates and documents as per requirement of this NIT to be provided along with delivery challan of the repaired assys.

12. BCCL reserves the right to accept or reject partly or fully or all the tenderer if offers are found not conforming to our NIT requirements. Also this tender may be cancelled with sole discretion of BCCL management in case of any such situation.

General Manager (Excvn) SWS

Amount of guarantee: -

Date of expiry: -

The General Manager (Excav.) Bharat Coking Coal Limited Office of the General Manager (Excav.) Excavation Workshop, Sinidih P.O. Tundu <u>Dist – Dhanbad 828128 (Jharkhand</u>)

We the......Bank having its office at.....do here by undertake to pay the amount due and payable under this guarantee without any demur merely on demand from the BCCL stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the BCCL by reason any breach by the said tenderer or any of the terms and conditions contained in the said agreement/work order or by reason of the tenderer failure to perform the said agreement/work order. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However our liability under this guarantee shall be restricted to an amount not exceeding Rs......)

We undertake to pay the BCCL any money so demanded (i.e. up to Rs....../-) notwithstanding any dispute or disputes raised by the tenderer in any suit or proceeding pending before any court or tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the tenderer shall have no claim against us for making such payment.

We the.....Bank having its office at.....further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement/work order and that it shall continue to be enforceable till all the dues of the BCCL under or by virtue of the said agreement/work order have been fully paid and its claims satisfied or discharged or till pay M/s Bharat Coking Coal Limited, The General Manager (Excav.), Office of the General Manager (Excav.), Excavation Workshop, Sinidih, P.O. Tundu, <u>Dist – Dhanbad 828128 (Jharkhand</u>) office/Department Ministry of Coal certificates that the terms and conditions of the said agreement/work order have been fully and properly carried out by the said tenderer and accordingly discharge this guarantee.

<u>Contd.....P-2</u>

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We the......Bank Further agree with the BCCL that BCCL shall have the fullest liberty without our consent and without effecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement/work order or to extend time of performance by the said tenderer from time to time or to postpone for any time or from time to time any of the powers exercisable by the BCCL against the said tenderer and to forbear or enforce any of the terms and conditions relating to the said agreement/work order and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said tenderer(s) or for any forbearance, act or omission on the part of the BCCL or any indulgence by the BCCL to the said tenderer(s) or by any such matter or anything whatsoever which under the law relating to sureties would not for this provision have effect of so relieving us.

This guarantee will not be discharged due to the change in the constitution of the Bank or the tenderer(s). We the.....Bank Lastly undertake not to revoke this guarantee during its currency except with the previous consent of the BCCL in writing.

Notwithstanding anything contained herein-

i) Our liability under this Bank Guarantee shall not exceed Rs....../-(Rupees...../-

ii) This Bank Guarantee shall be valid upto

iii) We are liable to pay the guarantee amount for any part thereof under this Bank Guarantee only and only if you serve upon a written claim or demand on or before.....

<u>Manager</u>

FOR PAYMENT TO SUPPLIERS/ CONTRACTORS

IN TRIPLICATE

PROFORMA FOR COLLECTING PAYMENT THROUGH ELECTRONIC MODE INCLUDING ELECTRONIC FUND TRANSFER (EFT) & ELECTRONIC CLEARING SYSTEM (ECS)

(To be submitted in triplicate)

1	VENDOB/SUPPLIEB/CONTRACTOB/CUSTOMER'S	
	NAME & ADDRESS	
	(with Telephone No & Fax No) :	
2	PARTICULARS OF BANK ACCOUNT:	
_	A. BANK NAME :	-
	B. BRANCH NAME :	
	(Including RTGS CODE)	
	ADDRESS :	
	TELEPHONE NO AND FAX NO :	
	C. 9-DIGIT CODE NUMBER OF THE :	
	BANK & BRANCH	
	(Appearing on the MICR cheque issued on	
	the bank) or 5- digit code No of SBI	
	D. ACCOUNT TYPE :	
	(S.B. Account/Current Account OR Cash	
	Credit with code10/11/13	
	E. LEDGER NO/LEDGER FOLIO NO :	
	F. ACCOUNT NUMBER(CORE BANKING) &	
	STYLE OF ACCOUNT :	
	(As appearing on the Cheque Book)	

<u>4. DATE OF EFFECT</u>

I hereby declare that the particulars given above are correct and complete. If the transaction is delayed or not effected at all for reasons of incomplete or in correct information, I would act hold the user institution responsibility. I have read the option invitation letter and agree to discharge responsibility expected of me as a participant under the scheme. Any bank charges levelled by the bank of such e-transfer shall be Born by us.

Date:-

(.....) Signature of the Customer/Vendor/ Supplier/Contractor

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

(.....) Signature of the Authorized Officials from the bank

INTEGRITY PACT

Between

BHARAT COKING COAL LIMITED (BCCL) hereinafter referred to as "The Principal"

And

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

Preamble

.....

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

Section 1 – Commitments of the Principal

(1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-

1. No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for him/herself or third person, any material or immaterial benefit which he/she is not legally entitled to.

2. The Principal will, during the tender process treat all Bidders with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidders the same information and will not provide to any Bidder confidential/additional information through which the Bidder could obtain an advantage in relation to the tender process or the contract execution.

3. The Principal will exclude from the process all known prejudiced persons.

(2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the relevant Anti-Corruption Laws of India, or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

Section 2 – Commitments of the Bidder/Contractor

(1) The Bidder/Contractor commits itself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

1. The Bidder/Contractor will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or immaterial benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.

2. The Bidder/Contractor will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.

3. The Bidder/Contractor will not commit any offence under the relevant Anti-corruption Laws of India; further the Bidder/Contractor will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

4. The Bidder/Contractor will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.

(2) The Bidder/Contractor will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 – Disqualification from tender process and exclusion from future contracts

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

1. If the Bidder/Contractor has committed a transgression through a violation of Section 2 such as to put his reliability or credibility into question, the Principal is entitled also to exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case in particular the number of transgressions, the position of the transgressions within the company hierarchy of the Bidder and the amount of the damage. The exclusion will be imposed for a minimum of 6 months and maximum of 3 years.

2. The Bidder accepts and undertakes to respect and uphold the Principal's absolute right to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision to resort to such exclusion is taken. This undertaking is given freely and after obtaining independent legal advice.

3. If the Bidder/Contractor can prove that he has restored/recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal may revoke the exclusion prematurely.

4. A transgression is considered to have occurred if in light of available evidence no reasonable doubt is possible.

Section 4 – Compensation for Damages

1. If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover from the Bidder liquidated damages equivalent to 3 % of the value of the offer or the amount equivalent to Earnest Money Deposit/Bid Security, whichever is higher.

2. If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages equivalent to 5% of the contract value or the amount equivalent to Security Deposit/Performance Bank Guarantee, whichever is higher.

3. The bidder agrees and undertakes to pay the said amounts without protest or demur subject only to condition that if the Bidder/Contractor can prove and establish that the exclusion of the Bidder from the tender process or the termination of the contract after the contract award has caused no damage or less damage than the amount or the liquidated damages, the Bidder/Contractor shall compensate the Principal only to the extent of the damage in the amount proved.

Section 5 – Previous transgression

1. The Bidder declares that no previous transgression occurred in the last 3 years with any other Company in any country conforming to the TI approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.

2. If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

Section 6 – Equal treatment of all Bidders/Contractor/Subcontractors

1. The Bidder/Contractor undertakes to demand form all subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.

2. The Principal will enter into agreements with identical conditions as this one with all Bidders, Contractors and Subcontractors.

3. The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section 7 – Criminal charges against violating Bidders/Contractors/Subcontractors

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

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

1. The Principal appoints competent and credible external independent Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.

2. The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Chairperson of the Board of the Principal.

3. The Contractor accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder/Contractor/Subcontractor with confidentiality.

4. The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.

5. As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or heal the violation, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.

6. The Monitor will submit a written report to the Chairperson of the Board of the Principal within 8 to 10 weeks from the date of reference or intimation to him by the 'Principal' and, should the occasion arise, submit proposals for correcting problematic situations.

7. Monitor shall be entitled to compensation on the same terms as being extended to/provided to Outside Expert Committee members/Chairman as prevailing with Principal.

8. If the Monitor has reported to the Chairperson of the Board a substantiated suspicion of an offence under relevant Anti-Corruption Laws of India, and the Chairperson has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.

9. The word 'Monitor' would include both singular and plural.

Section 9 – Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the respective contract, and for all other Bidders 6 months after the contract has been awarded.

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

Section 10 – Other provisions

1. This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal, i.e. DHANBAD

2. Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.

3. If the Contractor is a partnership or a consortium, this agreement must be, signed by all partners or consortium members.

4. Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intensions.

For the Principal	For the Bidder/Contractor
Place	Witness 1 :
Date	Witness 2 :